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# Graduate/Professional Catalog

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## General Information - West Virginia University

West Virginia University (<https://www.wvu.edu/>) (WVU) was founded in 1867 as a result of the 1862 Land-Grant Act, otherwise known as the Morrill Act. As the state's flagship, land-grant university, WVU's mission reflects its dedication to serving the state and citizens of West Virginia through access to higher education, research and scholarship, and comprehensive health sciences. The WVU System, which includes the flagship campus in Morgantown, WVU Institute of Technology in Beckley, and WVU Potomac State in Keyser. West Virginia University is accredited by the Higher Learning Commission (<https://www.hlcommission.org/>). Many WVU programs hold specialized accreditation.

WVU Morgantown provides programs of instruction through 13 colleges and schools and offers over 190 degree programs at the baccalaureate, master's, doctoral, and professional levels, as well as numerous certificate programs. These programs are offered online and on campuses in Morgantown, Keyser, and Beckley.

WVU Morgantown facilities are built on more than 1,000 acres and include several buildings on the National Register of Historic Places.

The West Virginia University Robert C. Byrd Health Sciences Center (<http://home.hsc.wvu.edu/>) has five schools serving undergraduate, graduate, and professional students at four locations in Morgantown, Charleston, Bridgeport and Martinsburg.

WVU Potomac State College (<https://www.potomacstatecollege.edu/>), situated in West Virginia's Eastern Panhandle in Keyser, offers associate and baccalaureate degree programs and serves both residential and commuting students. WVU Institute of Technology (<https://www.wvutech.edu/>) is located in Beckley, and serves the region and the state by offering technology-intensive baccalaureate degree programs.

The WVU Extension Service (<https://extension.wvu.edu/>) has offices in all of West Virginia's 55 counties, staffed by county agents. WVU operates experimental farms and forests throughout the state, as well as WVU Jackson's Mill, near Weston, WV, home of West Virginia 4-H camping and the West Virginia Fire Academy.

Visit About WVU (<http://about.wvu.edu/>) for updated WVU facts and achievements.

## In this section:

- WVU Mission (p. 10)
- WVU Vision (p. 10)
- WVU Values (p. 10)
- Commitment to Diversity, Equity, and Inclusion (p. 11)
- West Virginia University Center for Excellence in Disabilities (p. 11)
- Office of Accessibility Services (p. 11)

## WVU Mission

As a land-grant institution, the faculty, staff and students at West Virginia University commit to creating a diverse and inclusive culture that advances education, healthcare and prosperity for all by providing access and opportunity; by advancing high-impact research; and by leading transformation in West Virginia and the world through local, state and global engagement.

## WVU Vision

As One West Virginia University, we are purposeful in our studies and our work so that we can partner with our communities-both near and far-to bring needed and valued solutions to real-life problems within the pillars of education, healthcare and prosperity.

## WVU Values

**Service:** We seek opportunities to serve others and are committed to providing the highest quality of service.

**Curiosity:** We ask questions, seek new opportunities, and change through innovation.

**Respect:** We are respectful, transparent and inclusive with each other.

**Accountability:** We perform at our very best every day to create a University that is responsive, efficient and effective.

**Appreciation:** We support and value each other's contributions as we build a community that is One WVU.

## RESEARCH AND SCHOLARSHIP

As West Virginia's flagship research institution, WVU undertakes scholarly activity to improve the lives of West Virginians and others across the globe. WVU is classified as a Doctoral University-Highest Research Activity (R1) in the Carnegie Classification of Institutions of Higher Education.

## SERVICE

West Virginia University's land-grant mission underscores its obligation to serve the public and the state of West Virginia by promoting economic development, enhancing the well-being and the quality of life of the people of West Virginia, and increasing opportunities for the citizens of the state through workforce education, lifelong learning, and outreach to every county.

West Virginia University is the only institution in West Virginia—and one of only 6% of institutions nationwide—to earn the Carnegie Foundation for the Advancement of Teaching "Community Engagement Classification."

WVU's dedication to its service mission is manifested through its instructional programs, educational outreach, and initiatives and centers that engage external constituencies and support public service.

## WVU Extension Service

The Smith-Lever Act of 1914 created a Cooperative Extension Service for each land-grant institution. The purpose of the Extension Service was to disseminate the findings of the universities' agricultural stations and provide training and programs on home economics and other practical subjects. WVU has sustained its commitment to the state by supporting an Extension Service office with a presence in all of West Virginia's 55 counties, staffed by county agents.

The educational programs and initiatives of the WVU Extension Service (<https://extension.wvu.edu/>) focus on service to the state and exemplify West Virginia University's commitment to the public good by connecting the knowledge and research of WVU with citizen and community needs. The Extension Service's programs are driven by four major initiatives: (1) 4-H youth development; (2) family and health; (3) agriculture and natural resource education; and (4) community, workforce, and economic development.

## Commitment to Diversity, Equity, and Inclusion

West Virginia University is committed to fostering a diverse and inclusive culture by promoting diversity, inclusion, equality, and intercultural and intercommunity outreach. Accordingly, the University does not discriminate on the basis of race, color, national origin, ancestry, age, physical or mental disability, marital or family status, pregnancy, veteran status, service in the uniformed services (as defined in state and federal law), religion, creed, sex, sexual orientation, genetic information, gender identity, or gender expression in the administration of any of its educational programs, activities, or with respect to admission or employment.

In keeping with this commitment, members of the academic community are expected to demonstrate civility and mutual respect for all persons as well as understanding and appreciation for all persons, to express that perspective in every dimension of the institution's life and mission, and to work cooperatively, representing not only the interests of their own groups but also those of the wider community.

Individuals believing they may have been illegally discriminated against by any member of the university community at West Virginia University may file a complaint with the Division of Diversity, Equity, and Inclusion (<https://diversity.wvu.edu/>).

## Center for Excellence in Disabilities

The mission of the WVU CED (<http://www.cedwvu.org/>) is to improve the lives of West Virginians with disabilities by supporting more diverse, inclusive communities. The WVU CED is a federally-funded center that provides direct clinical and community disability services; training opportunities; a variety of information on best practices, services throughout the state, and policy; and innovative research.

WVU CED is recognized, and trusted, as a leader and innovative agent in a statewide network of individual and community supports that promote respect, inclusiveness, interdependence, and access for everyone.

## Office of Accessibility Services

The Office of Accessibility Services (<http://accessibilityservices.wvu.edu/>) is dedicated to enhancing educational opportunities for students with temporary or permanent disabilities at West Virginia University and all of its campuses. Our accessibility specialists works individually with students to achieve success by ensuring access to University programs and by authorizing reasonable and effective accommodations.

## Commitment to Assessment

West Virginia University conducts comprehensive and systematic assessment of student learning across all locations and delivery methods. Continuous improvement of student learning is faculty-driven (authentic and embedded), conducted at the course, program, and institutional levels, and grounded in the work of the colleges and individual academic programs, the Provost's Office, the Undergraduate Council, and the Graduate Council.

The Office of Curriculum and Assessment members collaborate with the Faculty Senate's Curriculum Committee to ensure quality and rigor of academic programs and courses, the Teaching and Assessment Committee to ensure quality and rigor across sections of courses regardless of modality of

delivery or location, and the General Education Foundations Committee to conduct assessment of the general education program. The Office works to strengthen the effectiveness of assessment across all programs by:

- Serving as an institutional-level resource for assessment best practices.
- Providing sustained attention on centralized, consistent, and systematic processes and policies across the University to reduce variability in assessment quality and engagement.
- Overseeing, reviewing, and commenting upon program review policies, processes, and reports.
- Facilitating faculty professional development in assessment.
- Providing consulting to departments to enhance their assessment planning and reporting.
- Compiling supporting documentation and evidence of the assessment work at WVU.

## In this section:

- Governor of West Virginia (p. 12)
- West Virginia University Board of Governors (p. 12)
- Equal Opportunity/Affirmative Action Institution (p. 12)
- West Virginia University Administration (p. 13)
- Deans (p. 13)

## Governor of West Virginia

- Jim Justice, *Governor*

## West Virginia University Board of Governors

- Taunja Willis Miller, *Chair, Morgantown*
- Richard A. Pill, *Vice Chair, Martinsburg*
- Dr. Patrice Harris, *Secretary, Atlanta, GA*
- Charles L. Capito, Jr., *Charleston*
- Albert Bray Cary, Jr., *Charleston*
- Elmer F. Coppoolse, *Bethesda, MD*
- Kevin J. Craig, *Huntington, WV*
- Michael D'Annunzio, *Bridgeport, WV*
- J. Thomas Jones, *Chair, Boynton Beach, FL*
- Alan Larrick, *Daniels, WV*
- Susan Lavenski, *Hurricane, WV*
- Paul Mattox, *Hurricane, WV*
- Robert Reynolds, *Concord, MA*
- Dr. Stanley Hileman, *Faculty Representative, Morgantown*
- Frances "Frankie" Tack, *Faculty Representative, Chairperson of the Faculty Senate, Morgantown*
- Shirley D. Robinson, *Classified Staff Representative, Morgantown*
- Madison Santmyer, *Student Representative, Morgantown*

\*Committee list is effective through July 1, 2024

The West Virginia University Board of Governors (the "Board") was created by the West Virginia Legislature as the governing body of the West Virginia University System, including West Virginia University, West Virginia University Potomac State College, and West Virginia University Institute of Technology (collectively the "University"). The Board has the mission of general supervision and control over the academic and business affairs of the University.

## Equal Opportunity/Affirmative Action Institution

West Virginia University is an Equal Opportunity/Affirmative Action Institution. The University does not discriminate on the basis of race, color, national origin, ancestry, age, physical or mental disability, marital or family status, pregnancy, veteran status, services in the uniformed services (as defined in state and federal law), religion, creed, sex, sexual orientation, genetic information, gender identity, or gender expression by the University's non-discrimination policy (BOG Governance Rule 1.6 (<https://policies.wvu.edu/finalized-bog-rules/bog-governance-rule-1-6-rule/>)) in the administration of any of its educational programs or activities or with respect to admission or employment. Further, faculty, staff, students, and applicants are protected from retaliation for filing complaints or assisting in an investigation under the University's Equal Opportunity/Affirmative Action Plan. Inquiries regarding the University's non-discrimination policy may be sent to the Division of Diversity, Equity, and Inclusion (<https://diversity.wvu.edu/>).



## West Virginia University Administration

- E. Gordon Gee, *President*
- Maryanne Reed, *Provost and Vice President for Academic Affairs*

## Deans

- *Benjamin M. Statler College of Engineering and Mineral Resources*, Pedro J. Magro
- *College of Applied Human Sciences*, Autumn Tooms Cyrès
- *College of Business and Economics*, Joshua Hall
- *College of Creative Arts*, H. Keith Jackson
- *College of Law*, Amelia Smith Rinehart
- *Davis College of Agriculture, Natural Resources, and Design*, Darrell W. Donahue
- *Dean of Students*, G. Corey Farris
- *Eberly College of Arts and Sciences*, R. Gregory Dunaway
- *Extension Service*, Jorge H. Atilas
- *Honors College*, Kenneth P. Blemings
- *Reed College of Media*, Diana Martinelli
- *School of Dentistry*, Stephen Pachuta
- *School of Medicine*, Clay Marsh
- *School of Nursing*, Tara Hulsey
- *School of Pharmacy*, William P. Petros
- *School of Public Health*, Sarah Woodrum (Interim)
- *University Libraries*, Karen Diaz
- *WVU Online and Continuing and Professional Education*, Julie Thalman

## Distinguished Professors

- Kashy Aminian, Charles T. Holland Professor in Petroleum and Natural Gas Engineering
- James Anderson, Davis Michael Professor of Forestry and Natural Resources
- Vinay Badhwar, Gordon F. Murray Chair of Cardiothoracic Surgery
- Karl Barth, Samples Professorship of Civil and Environmental Engineering
- Robert M. Bastress, John W. Fisher II Professor of Law
- Debangsu Bhattacharyya, GE Plastics Professor in Chemical and Biomedical Engineering
- Robert E. Blobaum, Eberly Family Distinguished Professor of History
- Forest J. Bowman, Jackson Kelly Professor of Law, Emeritus
- Gregory W. Bowman, William J. Maier, Jr. Dean
- Naomi Boyd, Fred T. Tattershell Chair in Finance
- Laura Brady, Eberly Family Professor of Outstanding Teaching
- John F. Brick, JF Brick Endowed Chair in Neurology
- William I. Brustein, Eberly Family Distinguished Professor of History
- Vincent P. Cardi, Bowles, Rice, McDavid, Graff and Love Professor of Law
- Timothy Carr, Marshall S. Miller Energy Professor of Geology
- Linda M. Carson, Ware Distinguished Professor, Emerita
- Judie F. Charlton, Judie F. Charlton Chair for Glaucoma Outreach
- Shawn A. Chillag, Patricia T. Ayash Distinguished Professorship
- Nigel N. Clark, George B. Berry Chair of Engineering
- Roger Congleton, BB&T Chair of Economics
- Patrick W. Conner, Eberly Centennial Professor in English, Emeritus
- Jody L. Crosno, Joseph E. Antonini Chair in Marketing
- Annie Peng Cui, Kmart Chair in Marketing
- Reagan P. Curtis, Chester E. and Helen B. Derrick Teacher College of Education and Human Services Endowed Professor
- Robert Dailey, Davis Michael Professor of Animal and Nutritional Sciences
- Lisa DeFrank-Cole, Harriet E. Lyon Professorship in Women's and Gender Studies
- Walter Dekeseredy, Anne Deane Carlson Endowed Chair of Social Sciences

- A. Courtney DeVries, John T. and June R. Chambers Chair of Oncology Research
- Lisa DiBartolomeo, Armand E. and Mary W. Singer Professor in the Humanities
- Robert DiClerico, Eberly Family Professor Outstanding Teaching, Emeritus
- Charles R. DiSalvo, Woodrow A. Potesta Professor of Law
- Gregory Dudley, Eberly Family Distinguished Professor of Chemistry
- Richard Dull, GoMart Professor in Accounting Information Systems
- Barry A. Edelstein, Eberly Family Professor of Psychology
- Emma Morton Eggleston, Quad/Graphics Chair in Internal Medicine
- James R. Elkins, Arthur S. Dayton Professor Law
- Eloise Elliott, The Ware Family Distinguished Professorship
- Judith Feinberg, Dr. Edmund B. Flink Chair of Internal Medicine #1
- John W. Fisher, II, William J. Maier Jr. Dean, Emeritus and Robert M. Steptoe and James D. Steptoe Professor of Property Law, Emeritus
- Paula F. Fitzgerald, Nathan Haddad Professor of Business Administration
- Kenneth Fones-Wolf, Stuart and Joyce Robbins Chair in History
- Stephanie Foote, Jackson and Nichols Chair of English
- Mathis P. Frick, O. F. Gabriele Chair of Radiology
- James J. Friedberg, Hale J. and Roscoe P. Posten Professor of Law
- Hota S. GangaRao, Wadsworth Professorship
- Laura Gibson, Alexander B. Osborn Distinguished Professor in Hematological Malignancies Research
- Richard M. Goldberg, Lawrence S. and Jean DeLynn Chair of Oncology
- Alan Goodboy, Peggy Rardin McConnell Chair in Communication Studies
- Rakesh K. Gupta, Berry Chair of Chemical Engineering
- Michael Gutensohn, Ray Marsh and Arthur Pingree Dye Professor
- Joseph D. Hagan, Barnette Professor of Political Science
- Trevor M. Harris, Eberly Family Professor of Geography
- Hannah W. Hazard-Jenkins, Jean and Laurence DeLynn Chair of Oncology
- Erik Herron, Eberly Family Professor of Political Science
- John Hu, Statler Chair in Engineering for Natural Gas Utilization
- Tara Hulsey, E. Jane Martin Professor of Nursing
- James Iovino, Ogden Newspapers Visiting Assistant Professor of Media Innovation
- Glen P. Jackson, Ming Hsieh Teaching Professor of Forensic and Investigative Science
- H. Keith Jackson, Philip J. Faini/Falbo Family Dean of the College of Creative Arts
- Thomas Kammer, Eberly College Centennial Professor, Emeritus
- Vlad Kecojevic, Murray Chair of Mining Engineering
- Peter E. Konrad, JW Ruby Chair for the Study of Neurosciences and Neurosurgery
- Alexander Kurov, Fred T. Tattersall Chair in Finance
- Kennon A. Lattal, Eberly College Centennial Professor of Psychology
- Nathan Lerfald, Anthony G. DiBartolomeo Professorship in Medicine
- Lian Li, Robert L. Carroll Chair of Physics
- Xingbo Liu, Statler Endowed Chair of Engineering
- Paul Lockman, Douglas D. Glover Endowed Chair of the Department of Basic Pharmaceutical Sciences
- Anne Marie Lofaso, Arthur B. Hodges Professor of Law
- Yi Luo, Charles E. Lawall Endowed Chair for Energy and the Environment in Mining Engineering
- Joseph Lupo, J. Bernard Schultz Endowed Professor of Art
- J. Wallis Marsh, The Bernard Zimmerman, MD Chair in Surgery
- Diana Martinelli, Widmeyer Professorship in Public Relations
- Thomas Mauger, Jane McDermott Shott Chair of Ophthalmology
- Marjorie A. McDiarmid, Steptoe and Johnson Professor of Law and Technology
- Patrick C. McGinley, Charles H. Haden, Jr. Professor of Law
- James McGraw, Eberly Family Professor of Biology
- Maura McLaughlin, Eberly Family Distinguished Professor of Physics and Astronomy
- Daniel McNeil, Eberly Family Professor for Outstanding Public Service

- Mark D. Miller, Dana L. & Peggy M. Farnsworth Chair in Educational Psychiatry
- Brijes Mishra, Syd and Felicia Peng Professor of Mining Engineering
- Keith Morris, Ming Hsieh Distinguished Professor of Forensic and Investigative Science
- Tracy Morris, Eberly Family Professorship for Outstanding Teaching
- Charles J. Mullett, Margaret T. & Larry K. Pickering Chair in Pediatrics
- Scott Myers, Peggy Rardin McConnell Chair of Communication Studies
- R. Osvaldo Navia, Grace Kinney Mead Chair of Geriatrics
- Randy J. Nelson, Hazel Ruby McQuain Chair for Neurological Research
- Steven Neuenschwander, Mabel DeVries Tanner Endowed Professor of Theatre
- Peter Ngan, Branson-Maddrell Endowed Professorship in Orthodontics
- Timothy Nurkiewicz, E. J. Van Liere Medicine Professorship
- Daniel Panaccione, Davis Michael Professor of Plant and Soil Sciences
- Syd S. Peng, Charles E. Lawall Chair in Mining Engineering, Emeritus
- William P. Petros, Gates E. Wigner Endowed Deanship
- Jason Phillips, Eberly Family Professor of Civil War Studies
- Ubolrat Piamjariyakul, WVU Evidence Based Research Endowed Professorship
- L. Christopher Plein, Eberly Family Professor for Outstanding Public Service
- Joseph Prudomme, Christopher Cline Chair in Orthopedic Surgery
- Hassan H. Ramadan, Stephen and Patricia Wetmore Chair in Otolaryngology
- Ronald Reed, Arthur I. Jacknowitz Chair for Clinical Pharmacy
- Hayne W. Reese, Centennial Professor of Psychology, Emeritus
- Ali Rezai, John D. Rockefeller IV Chair in Neuroscience
- Larry A. Rhodes, James H. Walker, MD Chair of Pediatric Cardiology
- Patricia Rice, Eberly Family Professor for Outstanding Teaching, Emerita
- Bryan Richmond, William J. Maier, Jr. Chair of Research
- Richard A. Riley, Louis F. Tanner Distinguished Professor of Public Accounting
- Terry L. Rose, Ernest L. Hogan Chair of Life Insurance
- J. Michael Ruppert, Jo and Ben Statler Eminent Scholar and Chair, Breast Cancer Research
- Kathleen "Katy" O'Hearn Ryan, Eberly Family Professorship for Outstanding Teaching
- John P. Saldanha, Sears Chair in Global Supply Chain Management
- Arif R. Sarwari, Dr. Edmund B. Flink Chair of Internal Medicine
- R. Charles Scatterday, Shott Teaching Assistant Professor
- Ludwig Christian Schaupp, David W. and Nancy F. Hamstead Professor of Accounting
- Earl Scime, Oleg D. Jefimenko Professor of Physics
- Mohindar Seehra, Eberly Professor in Physics, Emeritus
- Partho P. Sengupta, Abnash C. Jain Chair in Cardiology
- Sunil Sharma, N. Leroy Lapp Endowed Professorship
- Kenneth Showalter, C. Eugene Bennett Distinguished Chair in Chemistry
- James Simpkins, Barbara B. Highland Chair in Stroke
- Gordon Smith, Stuart and Joyce Robbins Distinguished Professor in Epidemiology
- Xueyan Song, George B. Berry Chair of Engineering
- Samuel F. Stack, Chester E. and Helen B. Derrick Teacher Education Endowed Professor
- Gay Stewart, Eberly Professor of STEM Education
- Michael Strager, Davis Michael Professor of Resources Economics Management
- Donley Studlar, Eberly Family Professor of Political Science, Emeritus
- Timothy Sweet, Eberly Professor of American Literature
- John Taylor, Jackson Kelly Professor of Law
- Angel Tuninetti, Armand E. and Mary W. Singer Professor in the Humanities
- Richard Turton, Russell and Ruth Bolton WVU Professorship for Outstanding Teaching
- Stephen Valentine, Eberly Family Professor of Chemistry
- Kung Wang, Eberly Family Professorship of Chemistry
- Bryan Weaver, Dr. Edward C. Ambrecht Oral and Maxillofacial Surgery Professorship

- Jessica Wilkerson, Stuart and Joyce Robbins Chair in History
- Alison Wilson, Skewes Family Chair for Trauma
- Charles Yuill, Davis Michael Professor of Design and Community Development
- John Zaniwski, Asphalt Technology Professorship
- C. Q. Zhang, Eberly Family Professorship of Mathematics
- Sam Zizzi, Dr. Pat Fehl Endowed Professor

## Academic and Professional Standards

### Academic Rights, Penalties, and Appeals

**The policies described in this section are based on the Board of Governors Rules and Policies (<https://policies.wvu.edu/finalized-bog-rules/>) Academics Rule 2.5, Student Rights and Responsibilities. This section expands the general policy to include procedures for undergraduate, graduate, and professional students at WVU (including the divisional campuses in Beckley and Keyser, but subject to exclusions as defined in individual policies).**

A student, by voluntarily accepting admission to West Virginia University (WVU) or enrolling in a class or course of study offered by WVU, accepts the academic requirements and criteria of the institution. Normally students may finish a program of study according to the requirements under which they were admitted to the program. However, requirements are subject to change at any time with reasonable notice provided to students. It is the student's responsibility to fulfill coursework and degree or certificate requirements and to know and meet criteria for satisfactory academic progress and completion of the program. Students are expected to adhere to academic requirements and standards in all academic settings, such as classrooms, laboratories, and clinics, and during any activities that are part of academic requirements. Further, WVU students are citizens of a broader academic community. As such, the University expects that every member of its academic community share its historic and traditional commitment to honesty, integrity, and the search for truth. To meet these standards, academic dishonesty is prohibited and is subject to both academic and disciplinary penalties. Information on these penalties, as well as all associated procedures, are found on the West Virginia University Office of Academic Integrity (<https://academicintegrity.wvu.edu/>) website. Please note that, to the extent there is any inconsistency with the language in the catalog and the BOG Academics Rule 2.5 or the WVU Policy on Student Academic Integrity, the BOG Rule and the WVU Policy govern; please refer to the BOG Rule and WVU Policy for the most current language.

Any question of interpretation regarding student rights and responsibilities, academic penalties, or appeal processes for final grades or other academic penalties shall be referred to the Provost and Vice President of Academic Affairs, the Vice President for Health Sciences, or the divisional campus President, as appropriate, for final determination.

Any behaviors not academic in nature but related to student conduct should be referred to the Campus Student Code as stipulated in Board of Governors Rules and Policies (<https://policies.wvu.edu/finalized-bog-rules/>) Student Life Rule 6.1.

### Academic Rights

Each student at West Virginia University has the following academic rights (as well as others; see BOG (<https://policies.wvu.edu/finalized-bog-rules/>) Academics Rule 2.5):

1. Right to have their performance evaluated solely upon performance as measured against academic standards. The student shall not be evaluated prejudicially, capriciously, or arbitrarily. The student shall not be graded, nor shall their performance be evaluated on the basis of race, color, national origin, ancestry, age, physical or mental disability, marital or family status, pregnancy, veteran status, service in the uniformed services (as defined in state and federal law), religion, creed, sex, sexual orientation, genetic information, gender identity, or gender expression (see BOG (<https://policies.wvu.edu/finalized-bog-rules/>) Governance Rule 1.6), or other protected status.
2. Right to appeal any final grade, charge of academic dishonesty, or other academic penalty.
3. Right to access a copy of the University catalog and program documents in which all current program requirements and standards are described (e.g. required courses, total credit requirements, time in residence requirements, special program requirements, minimum grade point average, probation standards, professional standards, etc.).
4. Right to receive course syllabi with descriptions of content and requirements for any course in which they are enrolled (e.g., attendance expectations, special requirements, laboratory requirements including time, field trips and costs, grading standards and procedures, professional standards, etc.).
5. Right to assigned grades issued from the instructor of each course to students enrolled in the course consistent with the academic rights set out in the preceding sections.

### Academic Dishonesty

Students are expected to adhere to the academic standards set forth by West Virginia University, and to avoid academic dishonesty in all its forms. West Virginia University defines academic dishonesty as follows:

1. Plagiarism means the theft or unauthorized use of work, typically created by another. It includes but is not limited to:
  - a. the use of another's words, ideas, or media – whether published or unpublished, partial or complete, by paraphrase or direct quotation – without complete and accurate acknowledgement;
  - b. the unacknowledged use of materials prepared by another individual, including an individual engaged in the selling of term papers or other academic materials; or
  - c. repeated submission of one's own work, specifically submission of the same material in multiple courses or iterations of a course, without the instructor's express permission.
2. Cheating means reliance on unauthorized resources, in connection with examinations or academic assignments. It includes but is not limited to:
  - a. collaboration with peers beyond that authorized by the instructor in the completion of an examination or academic assignment;
  - b. cheating on an examination or academic assignment, by either (i) utilizing unauthorized physical or technological resources (e.g., cheat sheets, online resources), or (ii) receiving unauthorized personal assistance (e.g., copying from another student); or
  - c. the acquisition or use, without permission, of examinations or other academic material belonging to a member of the University faculty or staff.
3. Fabrication or Falsification means acts of misrepresentation, forgery, or fraud as they relate to academic or educational matters. It includes but is not limited to:
  - a. fabricating or falsifying citations, data, or other records;
  - b. wrongfully fabricating or falsifying attendance or participation records for a University course or in an experiential or clinical setting;
  - c. wrongfully fabricating or altering an educational record (e.g., admission, grade, or attendance record) after it has been created;
  - d. use of University documents or instruments of identification for fraudulent purposes (e.g., impersonation of another student); or
  - e. knowingly furnishing false statements in any University academic proceeding.
4. Other Prohibited Academic Conduct means:
  - a. engaging in behavior specifically prohibited by a faculty member in the course syllabus; or
  - b. violating other departmental, college, or university academic standards, and/or legal or professional standards.
5. Facilitation means:
  - a. providing unauthorized materials or personal assistance to another student when such assistance allows them to commit academic dishonesty; or
  - b. compelling someone else to commit academic dishonesty on one's behalf.

Information on all associated procedures are found in the WVU Policy on Student Academic Integrity (<https://academicintegrity.wvu.edu/policies/student-academic-integrity/>). Please note that, to the extent there is any inconsistency with the language in the catalog and the Board of Governors Rules and Policies (<https://policies.wvu.edu/finalized-bog-rules/>) or the WVU Policy on Student Academic Integrity, the BOG Rule and the WVU Policy govern; please refer to the BOG Rule and WVU Policy for the most current language.

## Types of Academic Penalties

### In this section:

- Penalties for Failure to Meet Academic Requirements or Standards (p. 17)
- Penalties for Academic Dishonesty (p. 18)

## PENALTIES FOR FAILURE TO MEET ACADEMIC REQUIREMENTS OR STANDARDS

A student at West Virginia University who fails to meet academic requirements or standards will be subject to one or more of the following academic penalties:

1. A lower final grade, including failure of a course. A lower grade or failure of the course can be imposed by the course instructor/coordinator. If a student appeals a final grade, the grade shall remain in effect until the appeal is completed.
2. Exclusion of a student from further participation in class prior to any appeal proceedings requires that the course instructor/coordinator obtain approval of the dean of the college or school offering the course.
3. Required repetition or revision of a program requirement, or termination of the student's participation in specific program-related activities.
4. Failure of a program requirement or failure to meet academic standards. Program requirements and standards must be described in the catalog or other program documents provided or available to students. Program requirements may include such items as passing a qualifying exam, maintaining progress on research, developing required technical skills, or meeting professional standards of conduct (including the avoidance of academic dishonesty).
5. Academic probation or suspension at the program, college, or school level for failure to meet program requirements and academic standards, or at the university level for failure to meet grade point average standards. More information concerning probation and suspension of undergraduate students at the university level (<http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#probationsuspensioncontext>) is available in

the Academic Standards section of undergraduate catalog. More information about probation and suspension of graduate or professional students at the program, college, or school level (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspension>) is in the Academic Standards section of the graduate catalog as well as in program documents. If a graduate or professional student appeals a penalty of program suspension, the dean of the college or school offering the student's program will determine if the student shall be allowed to continue in the program, and the conditions of that continuation, until the case is determined.

6. Dismissal from a program, college, school or the university. Dismissal is defined as termination of student status, including any right or privilege to receive some benefit or recognition or certification. A student may be academically dismissed from any program and remain eligible to enroll in courses in other programs at the institution, or a student may be academically dismissed from the institution and not remain eligible to enroll in other courses or programs at the institution, including other divisional campuses (BOG (<https://policies.wvu.edu/finalized-bog-rules/>) Academics Rule 2.5). If a student appeals a penalty of program dismissal, the dean of the college or school offering the student's program will determine if the student shall be allowed to continue in the program, and the conditions of that continuation, until the case is determined. Dismissal from a program, college, or school must be communicated to the Associate Provost for Undergraduate or Graduate Academic Affairs, the Health Sciences Associate Vice President for Academic Affairs, or the divisional campus President once the time limit for a student appeal has expired or the appeal process has been completed. The Associate Provost, Associate Vice President, or divisional campus President submits a request to the appropriate office to change the student's status to non-degree. Academic dismissal from the university requires consultation and approval from the student's dean, the Associate Vice President for Academic Affairs (Health Sciences students only), and the Provost's or divisional campus President's Office.

## PENALTIES FOR ACADEMIC DISHONESTY

Information for both students and faculty on procedures related to the resolution of allegations of academic dishonesty can be found on the Office of Academic Integrity (<https://studentconduct.wvu.edu/>) website. A student at West Virginia University who is found responsible for academic dishonesty will be subject to one or more of the following academic and/or disciplinary penalties:

1. Remedial and/or educational sanctions.
2. Required repetition or revision of the academic assignment at issue.
3. A lower grade on the academic assignment or course at issue.
4. Failure of the academic assignment or course at issue.
5. Unforgivable failure (UF) of the course. When a UF is assigned, a student may repeat the course at issue, but the undergraduate (and where applicable, the graduate or professional school) D/F repeat process will not be applied. A permanent record will appear on the student's transcript, and the F will be permanently factored into the student's GPA.
6. Failure of the course with exclusion from further participation. The student will receive a final grade of an "F" for the course at issue but will be prohibited from continued enrollment or participation in the course for the duration of the semester.
7. Disciplinary probation, deferred suspension, or disciplinary suspension at the university level. More information concerning disciplinary probation, deferred suspension, and disciplinary suspension of students at the university level is available in the West Virginia University Campus Student Code and in the regional campus handbooks (<https://studentconduct.wvu.edu/campus-student-code/>).
8. Dismissal from a program, college, or school. Dismissal is defined as termination of student status, including any right or privilege to receive some benefit or recognition or certification, from a specific academic program. A student may be academically dismissed from any program and remain eligible to enroll in courses in other programs at the institution.
9. Expulsion. Permanent separation of the student from the University. More information concerning expulsion of students at the university level is available in the West Virginia University Campus Student Code and in the regional campus handbooks (<https://studentconduct.wvu.edu/campus-student-code/>).
10. Other sanctions. Other sanctions may be imposed instead of or in addition to those specified, where those sanctions bear a reasonable relationship to the nature and severity of the violation.

## Appeals

### In this section:

- General Information about Appeals (p. 18)
- The Appeal Process for Failure to Meet Academic Requirements or Standards (p. 19)
- The Appeal Process for Academic Dishonesty (p. 21)

## General Information about Appeals

Students may appeal any final grade, charge of academic dishonesty, or other academic penalty described above and imposed by a course instructor/coordinator, the institution, or its constituent academic units through the procedures described in this section of the catalog with the following exceptions:

- Grades for individual course assignments cannot be appealed except in the context of a final grade appeal or a charge of academic dishonesty.
- University, college/school, or program probation based on failure to meet minimum GPA standards may not be appealed. University suspension of undergraduate students based on GPA may be appealed as described in the Academic Standards section of the undergraduate catalog (<http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#probationsuspension>).



- When imposed for academic dishonesty, disciplinary penalties imposed by the Office of Academic Integrity (<https://academicintegrity.wvu.edu/policies/student-academic-integrity/>), including but not limited to probation, suspension, or expulsion from the university, are appealed as described here. However, disciplinary penalties imposed by the Office of Student Rights and Responsibilities for any other form of misconduct may not be appealed through these processes, and students should refer to the Campus Student Code for appropriate procedures.

The primary purpose of the appeal procedure is to allow review of a final grade, charge of academic dishonesty, or other academic penalty in cases where a student believes that due process was not followed or that the grade, charge, or penalty was imposed unfairly or inconsistently with course, program, and university standards and regulations.

Students are expected to present written grounds (typically via email) for an appeal. Students have the right to appeal a final grade, charge of academic dishonesty, or academic penalty that they believe reflects a capricious, arbitrary, or prejudiced academic evaluation, or reflects discrimination based on criteria listed in BOG (<https://policies.wvu.edu/finalized-bog-rules/>) Governance Rule 1.6, Section 1.2. Additional grounds for appeal may include: unreasonable severity of the penalty; demonstrable prejudice in the decision-making process; a belief that the evidence does not support the finding of responsibility (in the case of academic dishonesty) or the choice of penalty; or additional evidence or new information that was not considered in determining the penalty. Further guidance for students on preparing an appeal is available on the Academic Standards Resources (<https://provost.wvu.edu/governance/academic-standards-resources/>) webpage.

If a student does not appeal a final grade, charge of academic dishonesty, or other academic penalty, fails to follow the appeal procedures described below, or does not attend a scheduled meeting regarding the appeal, the final grade, charge of academic dishonesty, or other academic penalty will be upheld, regardless of whether or not the student is still enrolled in the course or program.

## COMMUNICATION ABOUT APPEALS:

All communication with a student concerning an appeal must come directly from, or be directed to, the student, except in cases of academic dishonesty that proceed through the Office of Academic Integrity (<https://academicintegrity.wvu.edu/policies/student-academic-integrity/>), when communication through attorneys or advisors is explicitly allowed. Otherwise, although students and others involved in the appeal process may consult with third parties, appeals and communication about appeals should be conducted between the student and individuals or committees charged with reviewing the appeal. Communication may take place through written documents, e-mail (using official University e-mail accounts whenever possible), and direct contact (telephone, face-to-face meetings, etc.). Decisions at each level of appeal must be communicated to the student and other individuals involved with the appeal at prior levels in writing transmitted via WVU e-mail.

## RESPONSIBILITY FOR APPEAL DECISIONS:

Detailed information about which individuals or committees are responsible for handling different types and levels of appeals is available on the Academic Standards Resources (<https://provost.wvu.edu/governance/academic-standards-resources/>) webpage. These individuals may delegate this responsibility to a designee or to a standing or ad-hoc committee. In some cases, program, college, or school documents may provide additional guidance on who is charged with reviewing specific types of appeals. If an appeal reviewer was involved in the determination of a sanction, or otherwise has a conflict of interest relevant to the appeal, a different appeal reviewer must be identified. When necessary, decisions about who is responsible for appeal decisions will be made by the Associate Vice President for Academic Affairs in Health Sciences, the Provost, or the divisional campus President, or the designee of any of these.

## EVIDENCE AND MEETINGS CONCERNING APPEALS:

Individuals and committees reviewing appeals may convene individual or joint meetings or request additional materials to collect further evidence. The student may be accompanied to meetings concerning the grade, charge, penalty, or appeal by a person of his or her choice from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the individual or committee conducting the appeal. Attorneys, operating in that capacity, may only participate in appeals in cases of academic dishonesty through the Office of Academic Integrity (<https://academicintegrity.wvu.edu/policies/student-academic-integrity/>), and are subject to limitations imposed by the WVU Policy on Student Academic Integrity.

## The Appeal Process for Failure to Meet Academic Requirements or Standards

### STEPS IN THE APPEAL PROCESS:

The following is a summary of the steps in the appeal process for failure to meet academic requirements or standards. In addition, a detailed list of the steps involved in each type of appeal is available on the Academic Standards Resources webpage on the Detailed Appeal Procedures (<https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/>) tab to assist students, instructors, and administrators in managing the appeal process.

- Students are notified of final grades and other academic penalties.
  - Students are informed of final grades for courses at the end of each academic term through the WVU Portal accessible at <https://portal.wvu.edu>.
  - The individual or chair of the committee who imposed an academic penalty must notify the student in writing via WVU e-mail of the academic penalty.

- Prior to filing an appeal, students are strongly encouraged (but not required) to contact the individual or chair of the relevant committee who reported a final grade or imposed an academic penalty to express their concerns and attempt to resolve the issue. The individual or committee chair, or another informed individual, must meet with the student to provide information and evidence forming the basis for the grade or penalty.
- Level 1 appeal (for final grades and other academic penalties):
  - The student may begin an appeal by submitting a written appeal via WVU e-mail to the Level 1 appeal reviewer named on the Academic Standards Resources (<https://provost.wvu.edu/governance/academic-standards-resources/>) webpage within the time limit provided below. The student's appeal must include the documentation and evidence forming the basis of their appeal.
  - The individual or committee that gave the grade or imposed the penalty must provide all relevant documentation (including the criteria for determining the student's final grade in the case of a final grade appeal) to the Level 1 appeal reviewer upon their request.
  - The Level 1 appeal reviewer assesses the available evidence and makes a decision about the appeal based on that evidence. The sanction(s) under review may be upheld, lessened, or dismissed entirely, but not aggravated, by the Level 1 reviewer.
  - The reviewer communicates the decision in writing via WVU e-mail to the student and other individuals or committees that have been involved in the grade, penalty, or appeal to that point. The reviewer retains all documentation related to the appeal for 5 years. In the case of a final grade appeal, the Level 1 appeal reviewer ensures that a grade modification is submitted if necessary.
  - If the student accepts the Level 1 appeal decision, the appeal is concluded.
- Level 2 appeal (for final grades and other academic penalties):
  - If the student does not accept the Level 1 appeal decision, the student may continue their appeal by submitting a written appeal via WVU e-mail to the Level 2 appeal reviewer named on the Academic Standards Resources (<https://provost.wvu.edu/governance/academic-standards-resources/>) webpage within the time limit provided below.
  - The Level 1 appeal reviewer forwards all materials included in the appeal to the Level 2 reviewer and the student upon request from the Level 2 reviewer. Both the student and other individuals or committees may provide additional information if they wish.
  - The Level 2 appeal reviewer assesses the available evidence and makes a decision about the appeal based on that evidence. The sanction(s) under review may be upheld, lessened, or dismissed entirely, but not aggravated, by the Level 2 reviewer.
  - The reviewer communicates the decision in writing via WVU e-mail to the student and other individuals or committees that have been involved in the grade, penalty, or appeal to that point, including the Level 1 appeal reviewer. The reviewer retains all documentation related to the appeal for 5 years. In the case of a final grade appeal, the Level 2 appeal reviewer ensures that a grade modification is submitted if necessary.
  - If the student accepts the Level 2 appeal decision, the appeal is concluded. If the appeal concerned a final grade or an academic penalty other than program dismissal, the appeal is concluded.
- Level 3 appeal (for dismissal from a program):
  - If the penalty is dismissal from a program, the student may continue their appeal by submitting a written appeal via WVU e-mail to the Level 3 appeal reviewer named on the Academic Standards Resources (<https://provost.wvu.edu/governance/academic-standards-resources/>) webpage within the time limit provided below.
  - The Level 2 appeal reviewer forwards all materials included in the appeal to the Level 3 reviewer and the student upon request from the Level 3 reviewer. Both the student and other individuals or committees may provide additional information if they wish.
  - The Level 3 appeal reviewer may (but is not required to) appoint and convene a Student Academic Hearing Committee (SAHC) to hear the case and review the appeal. SAHC procedures follow.
    - Members are appointed to the SAHC at the discretion of the Level 3 appeal reviewer and shall comprise at least three faculty members. At least one SAHC member should be from the program offering the course or the student's program; at least one should be from outside the program offering the course or the student's program.
    - The SAHC holds a joint hearing with the student and any individuals involved in making the academic dishonesty charge or imposing the academic penalty and may also convene additional individual meetings or request additional materials to collect further evidence. The hearing is set outside of the student's scheduled classes; should the student choose not to appear, the meeting will proceed as scheduled.
    - The student may be accompanied to the hearing or meetings or be advised by a person of his or her choice from the institution. Likewise, the faculty member, academic officer, or committee recommending dismissal may have an advisor from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the individual or committee conducting the appeal.
    - Witnesses may be called by any of the parties involved.
    - A record of the SAHC hearing shall be prepared in the form of summary minutes or an audio recording. This record and relevant attachments and will be provided to the student upon request.
  - The Level 3 appeal reviewer assesses the available evidence, including the recommendation of the Student Academic Hearing Committee, when available, and makes a decision about the appeal based on the evidence and recommendation. The reviewer communicates the decision in writing via WVU e-mail to the student, and other individuals or committees that have been involved in the penalty or appeal to that point, including the Level 1 and 2 appeal reviewers. The reviewer retains all documentation related to the appeal for 5 years.
  - The appeal is concluded.



## TIME LIMITS FOR STEPS IN THE APPEAL PROCESS:

- Level 1:
  - Final Grade Appeal
    - The student files an initial appeal based on the Timeline for Appeals on the Office of the Provost webpage (<https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/appeal-of-a-final-grade/>), after the grade is posted. The timeline on this webpage will indicate the last date the final grade appeals can be filed for each academic term in the current academic year.
    - The decision about the appeal is communicated to the student within 10 academic days\* after the student submits the appeal.
  - Academic Penalty
    - The student files an initial appeal within 10 academic days\* after the penalty is sent to the student.
    - The decision about the appeal is communicated to the student within 10 academic days\* after the student submits the appeal.
- Level 2 (for final grades and other academic penalties):
  - The student files a continuation of the appeal within 10 academic days\* after the decision at Level 1 is sent.
  - The decision about the appeal is communicated to the student within 10 academic days\* after the student submits the Level 2 appeal.
- Level 3 (appeals of program dismissal only):
  - The student files a continuation of the appeal within 10 academic days\* after the decision at Level 2 is sent.
  - The decision about the appeal is communicated to the student at the discretion of the Provost's office.

\*Academic days are defined as days during which the University is open and on-campus classes are officially in session. If classes are canceled for the entire campus, for any portion of a day, the day will not be deemed an academic day.

## The Appeal Process for Academic Dishonesty

### STEPS IN THE APPEAL PROCESS:

The following is a summary of the steps in the appeal process for academic dishonesty. In addition, a detailed list of the steps involved in each type of appeal is available on the Office of Academic Integrity (<https://academicintegrity.wvu.edu/policies/student-academic-integrity/>) webpage.

- A student who has been found responsible for violating the WVU Policy on Student Academic Integrity may initiate an appeal by submitting a written appeal following the instructions provided in the notice of outcome. The student's appeal must include the documentation and evidence forming the basis of their appeal, and must be based on one or more of the recognized grounds for appeal listed in the WVU Policy on Student Academic Integrity. The student may appeal the finding of responsibility, the sanction(s), or both.
- The Office of Academic Integrity must provide all relevant documentation to the Provost upon their request.
- The Provost assesses the available evidence and makes a decision about the appeal based on that evidence. The sanction(s) under review may be upheld, lessened, or dismissed entirely, but not aggravated, by the Provost.
- The Provost communicates the decision in writing via WVU e-mail to the student and other individuals or committees that have been involved in the charge or appeal to that point. The Office of Academic Integrity retains all documentation related to the appeal for 5 years.
- Once the Provost has issued a decision, the matter is final and binding upon all involved.

### TIME LIMITS FOR STEPS IN THE APPEAL PROCESS:

The student must file an appeal within 10 academic days\* from the date the outcome letter is sent. If no appeal is submitted within that time frame, the sanction(s) will be applied, no appeal will be considered, and the matter will be concluded.

The decision about the appeal is communicated to the student within 30 calendar days after the student submits the appeal.

\*Academic days are defined as days during which the University is open and on-campus classes are officially in session. Summer sessions and final exam days are included in this definition. If classes are canceled for the entire campus, for any portion of a day, the day will not be deemed an academic day.

### In this section:

- Probation (p. 21)
- Suspension (p. 22)
- Dismissal from a program (p. 22)
- Sanctions for Campus Student Code Violations (p. 22)

## Probation

Graduate students may be placed on probation by the director of their program or by the dean of their college/school by failing to maintain acceptable grades in their courses or by failing to show acceptable performance in other areas such as research progress or professional behavior (as determined by the program or the University). Graduate students with a cumulative grade point average (GPA) below 2.75 may be subject to probation by the dean

of their college/school and are considered by the University to not be in good standing. Individual academic units may designate a higher GPA or other academic standards required for students to remain in good standing within the program.

Probation, which is not recorded on a student's permanent record, constitutes a warning to the student that standards are not being met. A letter of probation, delivered by the graduate program to the student, must outline the reason for the probation sanction as well as delineate academic or other benchmarks for the student to attain in order to have the probation sanction removed. Students may appeal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#appealstext>) a probation sanction.

At the conclusion of the semester in which a student was placed on probation, the academic program shall review the academic record and performance of the student. If the stipulations set forth in the letter of probation have been met, the student is removed from probation. If the stipulations have not been met, student standing is reassessed by the program. The student may continue on probation or be suspended or dismissed by the program.

## Suspension

Graduate students may be suspended from their program by the director of their program or by the dean of their college/school by failing to maintain acceptable grades in their courses, by failing to show acceptable performance in other areas such as research progress or professional behavior (as determined by the program or the University), or by failing to meet the terms of probation. Suspension from a program normally follows a probation sanction. Typically, students are suspended from a program at the end of an academic term and are notified formally by the department and/or the dean of the college/school of suspension. However, students can be suspended from their program without a prior probation period and at times other than the end of a term in the case of serious violations of academic or professional standards, with approval of the college/school dean and either the Associate Provost for Graduate Academic Affairs or Associate Vice President of Academic Affairs (for Health Sciences programs).

A student who is suspended from their program will not be permitted to register for classes offered by their program or participate in other program activities until the student has been notified that the suspension sanction has been lifted. The normal period of suspension is either one academic semester or one calendar year. Students may appeal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#appealstext>) a suspension sanction. At the end of the suspension period, the program must reinstate or dismiss the student from the program. If appropriate, the student may be reinstated and placed on probation.

## Dismissal from a program

Graduate students may be dismissed from their program by the director of their program or by the dean of their college/school by failing to maintain acceptable grades in their courses, by failing to show acceptable performance in other areas such as research progress or professional behavior (as determined by the program or the University), or by failing to meet the terms of probation. Dismissal from a program normally follows a probation sanction. Typically, students are dismissed from a program at the end of an academic term and are notified formally by the department and/or the dean of the college/school of dismissal. However, students can be dismissed from their program without a prior probation period and at times other than the end of a term in the case of serious violations of academic or professional standards, with approval of the college/school dean and either the Associate Provost for Graduate Academic Affairs or Associate Vice President of Academic Affairs (for Health Sciences programs).

A student who is dismissed from a program will not be permitted to register for classes offered by their program or participate in other program activities. A student who is dismissed from a program will be reclassified as a non-degree student unless they are admitted into a different degree program. Students may appeal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#appealstext>) dismissal from a program.

## Sanctions for Campus Student Code Violations

In some cases of student conduct violations, such as serious academic dishonesty and research misconduct, the program may recommend dismissal from the University (i.e., expulsion) or other University-level sanctions explained in the Campus Student Code (<https://studentconduct.wvu.edu/campus-student-code/>). In these circumstances, the case is referred to the Office of Student Conduct (<https://studentconduct.wvu.edu/>) and Student Conduct processes apply.

## Research Integrity and Compliance

Integrity in research and scholarship is an obligation of all who engage in the acquisition, application, and dissemination of knowledge. Research and scholarly work by West Virginia University faculty, staff, and students is governed by a number of federal, state, and institutional policies. The Office of Research Integrity & Compliance (<https://oric.research.wvu.edu>) provides information related to the Human Research Protections Program, Conflict of Interest, Animal Welfare and IACUC, and Responsible Conduct of Research.

Any graduate student who conducts research involving human subjects must have their protocol approved (or determined exempt) by the Institutional Review Board for the Protection of Human Subjects before starting the research. Any graduate student who conducts research using animals must have their protocol approved by the Animal Welfare and IACUC Committee before starting the research. Any graduate student who is supported by a National Science Foundation research award must complete the Responsible Conduct of Research training. All researchers must disclose any potential conflicts of interest related to their research.

Finally, all members of the University community are obligated to maintain high ethical standards and to report observed, suspected, or apparent misconduct in research.

Reports of research misconduct should be made to the University's research integrity officer. The General Guidance page on the Research Integrity & Compliance website (<https://oric.research.wvu.edu/services/responsible-conduct/>) provides useful links to introductory videos, to the Academic Integrity page (which includes the West Virginia University Research Integrity Procedure), and to an online reporting form (select "Reporting").

## Intellectual Property

The Office of Technology Transfer (<https://techtransfer.research.wvu.edu/>) is responsible for the protection and commercialization of intellectual property for all WVU organizations.

Intellectual property can be protected through patents, copyrights, trademarks, and trade secrets. Graduate students are encouraged to review WVU's Intellectual Property Policy (<https://techtransfer.research.wvu.edu/inventor-resources/ip-policy/>). Other useful information about intellectual property and technology transfer activities at WVU is available at the Intellectual Property website and the WVU Libraries Research Guide on Intellectual Property (<https://libguides.wvu.edu/ip/>).

Graduate students with other concerns about intellectual property, such as ownership and storage of research data, authorship considerations when presenting or publishing, and use of course materials, should discuss these concerns with faculty members and administrators in their discipline as well as with their collaborators in any research activities. Additional information is available from the Office of Research Integrity & Compliance (<https://oric.research.wvu.edu/>).

## Admissions

### In this section:

- Applicants for Degree and Certificate Programs (p. 23)
- Non-Degree Applicants (p. 23)
- Adding or Changing Programs (p. 24)
- Second Graduate Degree/Reapplying Graduate Applicants (p. 24)
- Minimum Admission Standards (p. 24)
- Standardized Tests (p. 24)
- Admission Denial (p. 24)
- Admission Revocation (p. 25)

## Applicants for Degree and Certificate Programs

Prospective graduate students (including transfers) are encouraged to complete an inquiry form (for on-campus programs (<https://graduateadmissions.wvu.edu/academics/graduate-programs/>) or online programs (<https://online.wvu.edu/degrees-and-certificates/?level=graduate-degrees>)) and are urged to contact the relevant academic department regarding specific admissions requirements and opportunities for pursuing graduate study. For a list of available degree and certificate programs, websites, and contacts, see this list of degree programs. (<http://majors.wvu.edu/>) The Office of Graduate Admissions and Recruitment (<https://graduateadmissions.wvu.edu/>) provides information and links relevant to the application process with additional information regarding programs of interest found on individual programs' websites.

To be considered for admission to a WVU graduate program, prospective students must complete the WVU graduate admissions application found under the WVU Graduate Admissions How to Apply (<https://graduateadmissions.wvu.edu/how-to-apply/>) website. Some professional programs may require application through another central service before or after completing the WVU Application.

Each degree or certificate program has specific admission requirements that should be carefully reviewed prior to submitting an application. Even if applicants meet the minimum University requirements, admission to degree and certificate programs is determined by each academic program. Final admission cannot be granted until all final transcripts have been received and successful completion of the student's bachelor's degree (or master's degree, if required) has been verified by the Office of Graduate Admissions and Recruitment. (<https://graduateadmissions.wvu.edu/>)

If both the student and the program agree, an admission term can be changed as long as it is within a year from the original admission decision. An admission term can not be changed more than two times for a previously submitted application. If more than two admission term changes are requested, the admit must reapply. Applicants who fail to enroll within a year after acceptance must reapply. Students admitted to and enrolled in a degree program who have not been enrolled in course work for two or more years also must reapply for admission. Students classified as non-degree must apply for admission if they wish to pursue a degree or certificate program. Applicants who wish to pursue more than one degree must apply separately to each degree program. Because some programs may not allow simultaneous enrollment in another program, both programs will be asked to approve the simultaneous enrollment arrangement.

## Non-Degree Applicants

Students not wishing to pursue an advanced degree may apply for admission as a non-degree graduate student. A student who wishes to take courses as a non-degree graduate student after completing a degree at WVU must submit a new graduate admissions application.

Admission as a non-degree student does not guarantee admission to any course or program. Not all programs allow non-degree students to enroll in their courses; students should check with the program of interest. No more than 12 credits earned as a non-degree student may be applied to a degree (see section on Credit Sharing Limitations for Graduate Degrees and Majors under the Rules for Attaining Multiple Credentials (<http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#Rules>) information).

## Currently Enrolled Students: Adding or Changing Programs

A current WVU graduate student who wishes to pursue a different or additional graduate degree, or to pursue a certificate, must first contact the program to determine the admissions process and procedures. In most cases, the student must formally apply to the other program by completing the WVU graduate admissions application found under the WVU Graduate Admissions How to Apply (<https://graduateadmissions.wvu.edu/how-to-apply/>) website.

When a student changes from one program to another within the University, the faculty of the new program determines if any credit (up to 12 credits) earned while enrolled in the prior program may be applied to the new program (see section on Credit Sharing Limitations for Graduate Degrees and Majors under the Rules for Attaining Multiple Credentials (<http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#Rules>) information).

## Second Graduate Degree/Reapplying Graduate Applicants

Students who have previously applied and attended West Virginia University for graduate school are considered a second graduate degree applicant. Students who have previously applied, but did not attend West Virginia University for graduate school, are considered a re-applying applicant. Information can be found on the Second Degree/ReApplying Graduate Application link on the Graduate Admissions website (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/second-degree-reapplying-graduate-applicant/>).

A graduate student who is now a second degree applicant may, if certain conditions are met, apply for and receive a retroactive withdraw for a given term even if the 12-month time limit has passed. As with all retroactive withdraw requests, retroactive withdrawals may not be requested for coursework in a degree that has already been awarded. To request such a retroactive withdrawal, the student must not have been enrolled for a period of two years or longer. Additional information can be found in the Course Withdrawal and University Withdrawal Policy (p. 30) in this catalog. The student should meet the standards for a contractual or non-contractual retroactive withdrawal. The student must qualify for admission (regular or provisional) to a different graduate program than any in which they have previously been enrolled. The student may not have been dismissed from a previous graduate program at WVU for reasons unrelated to GPA or grades in individual programs (e.g. failing to meet professional standards or academic dishonesty). A student may utilize this policy only once. For more information or to initiate a request, the student should contact the Office of Graduate Education and Life (GradEd@mail.wvu.edu).

## READMISSION

Students who have been inactive for two or more years who exceed eight years following their term of admission are required to apply for readmission to the University and their graduate program.

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## Minimum Admission Standards

The WVU Graduate Council (<https://graduateeducation.wvu.edu/faculty-and-staff/graduate-council/>) establishes the minimum standards for admission to graduate study detailed in the Classifications (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) tab. Beyond this point, however, specific graduate programs control who is to be admitted to their graduate program of study. While a student may be admitted to the University to enroll in advanced coursework as a non-degree graduate student, only graduate programs may grant permission for the pursuit of a graduate degree.

## Standardized Tests

Many programs at WVU require specific graduate admission standardized test scores from applicants. These admission requirements are found in the admissions section of each program description in the Academics (<https://graduateadmissions.wvu.edu/academics/graduate-programs/>) page on the Graduate Admissions website. If standardized test scores are required, the applicant should ask the testing agency to send the scores to WVU. In addition, applicants are encouraged to upload a copy of their test scores, if available, as part of their online application in order to facilitate the WVU evaluation process.

## Admission Denial

If an application for admission into a graduate program is denied, the applicant may request the reasons for refusal of admission by writing to the specific graduate program coordinator (see Academics (<https://graduateadmissions.wvu.edu/academics/graduate-programs/>) page). Note that meeting the minimum requirements for admission into a graduate program does not ensure admission. Many programs restrict the number of admissions by selecting among the qualified applicants. An applicant may appeal to the graduate program coordinator for reconsideration if the applicant can document either factual errors in processing the application or that the decision was arbitrary, capricious, or discriminatory in nature. Appeals must be submitted within 30 calendar days of the date of the admission denial.

If the matter is not resolved satisfactorily within 30 calendar days of the receipt of the appeal by the graduate program coordinator, the applicant may appeal to the dean of the college or school. The decision of the dean, as the provost's designee, shall be rendered within 20 calendar days of the receipt of the appeal and is final.

## Admission Revocation

An offer of admission can be revoked if an applicant's application materials are found to be falsified or if an admitted student engages in behavior that is not in compliance with the WVU Student Conduct Code (<https://studentconduct.wvu.edu/campus-student-code/>) or degree program's published professional standards prior to the first day of classes in the term of admission. If admission is revoked prior to the first day of classes, the admitted student may appeal the action to the Associate Provost for Graduate Academic Affairs. An enrolled student may be dismissed from the program or University if the student's application materials are found to be falsified, consistent with applicable policies or procedures on Academic and Professional Standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>).

## In this section:

- Regular Graduate Students (p. 25)
- Provisional Graduate Students (p. 25)
- Non-Degree Graduate Students (p. 25)
- Reclassification of Graduate Students (p. 25)

## Regular Graduate Students

Regular graduate students are degree- or certificate-seeking students who meet all the criteria for regular admission to a program of their choice. Regular graduate students must have earned a baccalaureate, graduate, or professional degree from a regionally accredited college or university (or an international institution approved by the Ministry of Education or other appropriate agency in the institution's country); must have had an undergraduate or graduate grade point average of 2.75 or higher on a 4.0 scale; and must have met all the criteria established by the degree or certificate program. International applicants (<https://graduateadmissions.wvu.edu/information-for/international-students/>) must meet WVU's English language proficiency (<https://graduateadmissions.wvu.edu/information-for/international-students/>) requirements.

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## Provisional Graduate Students

Provisional graduate admission may be offered to students when they have earned a baccalaureate, graduate, or professional degree from a regionally accredited college or university (or an international institution approved by the Ministry of Education or other appropriate agency in the institution's country) but do not meet the criteria for regular admission. Provisionally admitted graduate students may have incomplete credentials, program-defined deficiencies, or an undergraduate or graduate scholastic record that shows promise but is below the 2.75 grade point average required for regular admission. The offer of provisional admission from the graduate program must specify the requirements that must be met for a student to be re-classified as a regular graduate student.

In addition, undergraduate students who have not yet completed their baccalaureate degree may be given provisional admission to allow them to take graduate courses as part of an approved combination program that allows simultaneous undergraduate and graduate work (such as accelerated bachelor's/master's programs ([http://catalog.wvu.edu/undergraduate/programs\\_courses\\_enrollment/#ABM](http://catalog.wvu.edu/undergraduate/programs_courses_enrollment/#ABM)), pathway programs, and other combination programs that include graduate work prior to completion of the baccalaureate degree).

International students may not be admitted provisionally because such students are not eligible to receive a student visa. WVU will only submit visa paperwork for regularly admitted graduate students.

## Non-Degree Graduate Students

To be admitted as a non-degree graduate student, students must present evidence of a baccalaureate degree from a regionally accredited college or university (or an international institution approved by the Ministry of Education or other appropriate agency in the institution's country). International applicants must also meet English proficiency requirements. Non-degree graduate students must also earn a 2.5 grade point average in the first twelve credit hours of coursework taken at WVU and then maintain this average to continue to enroll as non-degree graduate students.

## Reclassification of Graduate Students

Provisional graduate students who are not in an approved combination program may be reclassified as regular graduate students when they meet the program requirements specified in the offer of admission from the student's program and the WVU minimum grade point average of 2.75 in all coursework taken while a provisional graduate student. A unit must review provisional students' records no later than the end of the term in which the students complete 18 credit hours. Provisional graduate students who fail to meet the provisions of admission or who fail to achieve the required grade point average will be dismissed from the program and reclassified as non-degree. Dismissed students may reapply for admission to another program or continue as non-degree students. Further registration by provisional graduate students who have completed 18 or more credit hours will only be

permitted when students are in an approved combination program, or are reclassified as regular graduate students, provisional graduate students in a different program, or non-degree graduate students. An exception may be granted by an academic dean.

Students admitted provisionally to a certificate program must be reclassified as specified in the Graduate Certificate guidelines. Guideline information can be found on the Graduate Certificates page of this catalog (p. 42).

Provisional graduate students in approved combination programs (such as accelerated bachelor's/master's programs ([http://catalog.wvu.edu/undergraduate/programs\\_courses\\_\\_enrollment/#ABM](http://catalog.wvu.edu/undergraduate/programs_courses__enrollment/#ABM)), pathway programs, and other combination programs that include graduate work prior to completion of the baccalaureate degree) may continue in the provisional status until they are reclassified as regular graduate students when their baccalaureate degrees are completed.

Non-degree graduate students must have earned a 2.75 or higher-grade point average in all coursework taken since admission as a non-degree graduate student to be eligible to be admitted to a degree program as a regular graduate student.

Regular and provisional students may become non-degree graduate students by choice.

Regular graduate students who are dismissed or suspended from a program will be reclassified as non-degree graduate students.

## International Student Admission

WVU is authorized under federal law to enroll non-immigrant foreign nationals as students. International students wishing to enroll for graduate study at WVU must comply with the academic requirements for admission listed on the Classifications (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) tab and with certain additional academic and nonacademic requirements listed on the Information For International Graduate Students (<http://graduateadmissions.wvu.edu/information-for/international-students/>) page.

Details regarding application requirements for international graduate students are provided by the Office of Graduate Admissions and Recruitment (<https://graduateadmissions.wvu.edu/>). Applicants are encouraged to contact the academic program of interest for program-specific information about requirements other than the general admissions criteria listed above, and to begin the process of applying for admission well in advance of the desired admission deadline.

International students who are seeking or who have been offered financial support as graduate teaching assistants (GTAs) may need to pass the TrueNorth test. Students required to demonstrate proficiency for admission must also pass this test administered through WVU (or demonstrate proficiency with an acceptable score from another approved source). The TrueNorth test must be passed before a student may begin any classroom instruction. Information can be found on the WVU ELLI English Proficiency for GTAs (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>) page.

## Advising, Enrollment & Evaluation

### IN THIS SECTION:

- Advisors (p. 26)
- Plan of Study (p. 26)
- Advising of Non-Degree Students (p. 27)
- Yearly Evaluation (p. 27)
- Degree Works (p. 27)

### Advisors

Academic and scholarly advising varies by graduate program across the University. Each graduate academic unit has one or more graduate advisors, and every graduate student must be assigned an advisor throughout their graduate study and training. This advisor may also be the student's thesis or dissertation advisor. The advisor and student typically meet soon after the student's admission to the program to develop a plan of study and on a regular basis thereafter to monitor and review progress.

### Plan of Study

All graduate students must have a Plan of Study, which is a formal agreement between the student and their program or committee regarding the conditions the student must meet to earn the desired degree. The Plan of Study usually lists required courses and activities and may describe the timeline for these requirements. The Plan of Study may also include suggested or optional courses and activities. Each college or school determines the mechanisms for establishing, changing, and monitoring students' progress on plans of study. The Plan of Study should be in place no later than the end of the student's first semester.

Degree Works is the online advising and degree auditing tool at WVU. Plan of Study requirements must be included in students' Degree Works audits. Some programs may choose to use Degree Works as students' plans of study.



## Advising of Non-Degree Students

Each college or school establishes a mechanism to advise non-degree graduate students who intend to take the majority of their coursework in that college or school. Non-degree students with an interest in programs in two colleges or schools may be assigned to either by the Office of Admissions. Students are responsible for understanding the policies of each program and facilitating any needed communication between advisors.

## Yearly Evaluation

All graduate students enrolled in at least one credit hour during the academic year must be provided with a written evaluation from their program following the end of each spring term. This requirement may be waived for students in good standing who are expected to graduate in spring or summer.

## Degree Works

Degree Works is the online advising and degree auditing tool at WVU. All students are required to have a completed audit for graduation. Students can access Degree Works through the WVU Portal accessible at <https://portal.wvu.edu>. More information is available in the Degree Works section of the Academic Records tab on the Office of the University Registrar website (<https://registrar.wvu.edu/academic-records/degreeworks/>).

All degree requirements must be verified by a student's college prior to graduation. Students are responsible for complying with all academic policies published in the University catalog and relevant program documents. If students have any questions about the information presented in the Degree Works audit, they are encouraged to contact their advisor.

## In this section:

- Registration (p. 27)
- Credit Hour Loads and Limits (p. 28)
- Minimum Enrollment (p. 28)
- Leave of Absence (p. 28)
- Non-Degree Students (p. 28)
- Auditing courses (p. 28)
- Attendance Policy (p. 29)
- Emergency Leave Policy (p. 30)
- Withdrawal Policy (p. 30)

## Registration

Students must use STAR to register for each course they attend in person or online.

1. Athletes, Graduate and Professional Students register first.
2. Undergraduate Students: undergraduate students register by classification, starting with Seniors, then, Juniors, Sophomores, and, finally, Freshmen.
3. Advanced Registration. Certain populations of undergraduate students defined below can register 24 hours before other students with the same classification.
  - Veterans and contracted ROTC students
  - Students who receive advanced registration as part of their ADA accommodations
  - Honor students
4. Proposed plan for Advanced Registration Status
  - Advanced Registration Seniors (seniors who are Veterans, contracted ROTC, Honors, ADA students)
  - All Seniors (including non-priority Seniors)
  - Advanced Registration Juniors (juniors who are Veterans, contracted ROTC, Honors, ADA students)
  - All Juniors
  - Advanced Registration Sophomores (sophomores who are Veterans, contracted ROTC, Honors, ADA students)
  - All Sophomores
  - Advanced Registration Freshmen (freshmen who are Veterans, contracted ROTC, Honors, ADA students)
  - All Freshmen
  - General registration (students who have not utilized their priority dates above)
5. Students will be assigned a preferred time period for registration on the appropriate day through the time ticketing process. The first registration slot will occur each day at 8:30 am. The advanced registration window will open at 12:01 am, giving students 32 hours before the first student of the same class standing (i.e., freshman, sophomore, junior, senior) without advanced status is able to register..

## Credit Hour Loads and Limits

To be considered full-time, a graduate student must enroll in at least nine credit hours in a fall or spring term and six credit hours in the summer term, including audited courses. Graduate students are not permitted to take more than 17 credit hours in a term without approval by their college or school and by the Office of Graduate Education and Life. No overload requests will be considered for the summer term. Requests for more than 18 credit hours in a fall or spring term will not normally be approved. Although students may enroll for up to 17 credit hours in the summer term, they are strongly discouraged from enrolling in more than 12 credit hours.

## Minimum Enrollment

In any term during which a graduate student is using University research facilities, consulting with graduate committee members, or completing a thesis or dissertation (including the thesis or dissertation defense and submission of the Electronic Thesis and Dissertation, or ETD), the student must enroll for at least one credit hour of graduate credit. These students are assumed to be utilizing University services, facilities, and other resources, including faculty expertise, even if they are not enrolled in formal coursework.

In addition, students formally admitted to candidacy for graduate degrees are required to register for at least one credit hour each fall and spring term as a condition of their continued candidacy. Individual programs may also require summer enrollment to maintain candidacy. Students admitted to candidacy who fail to maintain continuous enrollment may be dropped from candidacy.

Students who are not admitted to candidacy may enroll in courses intermittently if allowed by their program and if they are not using University facilities or consulting with faculty while they are not enrolled.

Students who have completed all requirements for a degree (including the thesis or dissertation defense and submission of the ETD) prior to the first day of classes of the term of graduation do not need to enroll during that term.

Students who are veterans should refer to the Veterans section of this catalog (p. 78) to determine minimum enrollment requirements.

## Leave of Absence

Graduate students in good standing who wish to be away from their academic endeavors at WVU for one or more semesters but intend to return at a later date may request a leave of absence. Students should consult with their program or school/college concerning the required procedure to request a leave of absence. Some programs (such as some master's programs or part-time programs) may not require students to request a leave of absence in order to enroll intermittently and remain in good standing. Doctoral students admitted to candidacy who do not wish to enroll for one or more semesters must be granted a leave of absence in order to maintain their candidacy. Leaves of absence are not required for summer terms unless otherwise specified by a student's program.

When possible, requests for leaves of absence should be submitted in writing to students' program directors or department chairs prior to the beginning of the semester for which the leave is desired. Program directors or department chairs (or their designees) determine whether or not to grant leaves of absence, the length of time granted, and any conditions students must meet to return to their program following the leave of absence (including a date by which students must inform their program that they plan to return). Students are informed in writing of the outcome of their requests, and copies of the outcomes are retained in students' departmental or program records.

Information concerning military deployments during a semester is available under the Military Leave section of the undergraduate catalog ([http://catalog.wvu.edu/undergraduate/enrollmentandregistration/#Military\\_Credit](http://catalog.wvu.edu/undergraduate/enrollmentandregistration/#Military_Credit)).

## Non-Degree Students

Non-degree students may enroll in any course in the University for which they meet the prerequisites and any other restrictions on the course. Some departments restrict enrollments to majors only or require non-degree students to obtain instructor permission to enroll.

A non-degree graduate student may accumulate unlimited graduate credit hours. Non-degree students may not apply more than 12 credit hours of previously earned credit toward a degree (see section on Credit Sharing Limitations under the Rules for Attaining Multiple Credentials section of this catalog (p. 71)). If a non-degree student is later admitted to a degree program, the faculty of that program will decide whether any credit earned as a non-degree student may be applied toward the degree.

## Auditors

A student who audits a course must register and pay full fees for the course but does not receive credit for the course. A student who audits a course must let one semester pass before enrolling in the same course for credit. A student may only change their status from audit to grade or grade to audit through their advisor, during the registration period. Advisors will notify the Office of the University Registrar or Enrollment Services at the Keyser location of the student's intention prior to the end of the drop/add period. Attendance requirements for auditors are determined by the instructor of the course. The instructor may direct the Office of the University Registrar or Enrollment Services at the Keyser location to remove an auditor from a class list or grade report if attendance requirements are not met.



## Attendance Policy

Instructors or programs set attendance requirements and policies that are appropriate for the goals and instructional strategies of their courses. Instructors are responsible for keeping accurate attendance records when attendance is used in grading. Students who are absent from class for any reason are expected to take full responsibility for their own academic work and progress and are required to complete missed work or equivalent work, as deemed appropriate by the instructor.

## UNIVERSITY SANCTIONED ABSENCES

University sanctioned absences are absences in which instructors provide opportunities to make up missed substantial class work or activities (e.g., assignments, exams) and will not penalize students for those absences. University sanctioned absences include mandatory military obligation, mandatory court appearances, and participation in university activities at the request of university authorities. Instructors are expected to be flexible in allowing students to make up work missed due to university sanctioned absences. Instructors and students may consult with their Dean's Office on events that constitute official university sanctioned events.

WVU supports its students who are also members of the United States armed forces, reserve units, and National Guard. Absences of less than three weeks of course work for military obligation (i.e., drill or training) are university sanctioned absences. WVU's Center for Veteran, Military, and Family Programs website (<https://wvuveterans.wvu.edu/>) has additional information on the drill schedule for the West Virginia National Guard and can provide official verification of a student's military orders upon request.

For university sanctioned absences totaling more than three weeks of course work resulting from military obligation, see WVU's Military Leave section of the undergraduate catalog ([http://catalog.wvu.edu/undergraduate/enrollmentandregistration/#Military\\_Credit](http://catalog.wvu.edu/undergraduate/enrollmentandregistration/#Military_Credit)).

Students who will miss more than a week of course work due to health condition or personal trauma should refer to WVU's Emergency Leave Policy (p. 30).

Students wishing to appeal an instructor decision regarding an absence for a university sanctioned event may appeal to the Dean of the college/school for the relevant course.

Final course grades affected by attendance in an individual course may be appealed using the normal course grade appeal process located on the Appeals tab of the Academic Standards section of this catalog (p. 18).

## EXCUSED ABSENCES

Other events may justify an excused absence at the discretion of the instructor or program, school, or college. Instructors appropriately notified regarding anticipated absences that are not university sanctioned may use their judgment as to whether to allow make-up work.

Examples of events that may justify an excused absence include religious observances, illness of the student including Covid-19 related absence, illness of an immediate family member, death of an immediate family member, or extreme weather. Quarantined students are expected to complete class work and activities as assigned.

Students may miss class or assignments due to a variety of medical and health-related issues. There are two broad categories for such absences: those resulting from unexpected injuries and illnesses, and those related to a disability(ies) and/or chronic condition. When a student must be absent from class due to an unexpected and medical illness they should contact their instructors directly. For an extended illness the WVU Division of Student Life can assist the student in notifying his or her instructors. Students missing class due to a disability should contact the Office of Accessibility Services for assistance.

Students who will miss more than a week of course work due to health condition or personal trauma should refer to WVU's Emergency Leave Policy (p. 30).

Several high holy days have been added to the academic calendar for instructors to reference in their academic planning. Instructors may consult the Division of Diversity, Equity, and Inclusion website (<https://diversity.wvu.edu/about/staff/>) for support regarding religious observances.

The Office of Accessibility Services can serve as a resource to discuss student absences related to accommodations. Contact Information can be found on the About Us tab of the Office of Accessibility Services website (<https://accessibilityservices.wvu.edu/about/>).

Absences stemming from work duties other than military obligation (e.g., unexpected changes in shift assignments) and traffic/transit problems are not university sanctioned and should not typically qualify for excused absences.

If an instructor chooses to allow excused absences for these other events, the stated attendance policy for the course should specify the number of days that may be missed and instructions for contacting the instructor for the excused absence.

Instructors may request third party documentation.

## PROCEDURES

All attendance policies must be made available to students in writing (typically within the course syllabus) within the first week of class.

Students are responsible for notifying their instructors of expected university sanctioned absences within two weeks of the event or as soon as possible. Instructors may require written documentation in advance of the university sanctioned absence from the academic or athletic unit sponsoring the activity for students participating in official activities. Instructors may request additional verification from the Center for Veteran, Military, and Family Programs website (<https://wvuveterans.wvu.edu/>) for students serving military obligation.

Students who are absent from class for any reason are responsible for contacting their instructors promptly, unless the instructors' policies require otherwise.

Students wishing to appeal an instructor decision regarding an absence for a university sanctioned event may appeal using the final grade appeal process (<https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/appeal-of-a-final-grade/>) for the relevant course.

Final course grades affected by attendance in an individual course may be appealed using the normal course grade appeal process located on the Appeals tab of the Academic Standards section of this catalog (p. 18).

## Emergency Leave Policy

During any semester, students may experience serious emergencies that will prevent them to be present in class or participate in a course for more than a week.

### SHORT TERM LEAVE

Upon presentation of documentation, students who will miss between one and three weeks of classes will work with their instructor to develop a plan to catch up on the work that they have missed.

1. Up to the 13<sup>th</sup> week of instruction, students have the ability to withdraw from one or several classes.
2. If the event and its subsequent related absences takes place after the 13<sup>th</sup> week of instruction, students may petition the Dean of the College, found on the Office of the Provost website under the Level 2 Reviewers webpage, (<https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/appeal-of-a-final-grade/level-2-reviewers/>) where the course is housed to obtain a late withdrawal from a single class. Students who wish to withdraw from all their classes can petition the Dean of the College where their major is housed for a full, retroactive withdrawal. Students unable to attend or participate after the 13<sup>th</sup> week for a relatively short duration (which may include exam week) may arrange for an Incomplete with provision to make up the final exam.

### LONG TERM LEAVE

Students who will miss more than three weeks of course work due to a health condition or personal trauma should notify the appropriate Dean of the College, found on the Office of the Provost website under the Level 2 Reviewers webpage (<https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/appeal-of-a-final-grade/level-2-reviewers/>), where their major is housed. The student should explain the circumstances of their absence and, with the assistance of the Dean, work with each of faculty members to agree upon a plan of action. In most cases, students will be asked to provide documentation or other evidence.

If necessary, these students may withdraw from the university and will go through one of the two following processes depending upon when the student withdraws.

1. Withdraw from the University up to and including the 13<sup>th</sup> week of instruction. Students who withdraw before the end of the 13<sup>th</sup> week of instruction may need to return portions of their financial aid award. A W will be placed on all courses.
2. Withdraw from the University after the 13<sup>th</sup> week of instruction. Students who leave the University after the 13<sup>th</sup> week of instruction should work with their home college/school's Dean's Office.

The relevant Dean's Office will assist the student in reviewing the student's eligibility for credit for their courses on a course-by course basis with the instructors.

- If the course is substantially complete and the student has done passing work, the student should receive the grade earned at that time.
- If the instructor establishes that the course is not quite substantially complete and the student requests it, the instructor can follow the procedure for an Incomplete, with the agreement of the department chair and the Dean of the College where the course is housed.
- When it is deemed that no credit can be awarded, the student can be administratively withdrawn from the course.

## Course Withdrawal and University Withdrawal Policy

There are three time periods during which students may withdraw from courses. The tuition refund policy can be reviewed on the Refunds tab on the Student Accounts website (<https://studentaccounts.wvu.edu/refunds/>). The specific term deadlines can be found on the Withdrawal section of the Refunds tab on the Student Accounts website (<https://studentaccounts.wvu.edu/refunds/withdrawal/>).

## WITHDRAWAL DURING THE DROP/ADD PERIOD

Students may withdraw from an individual course or all courses during the drop/add period, which runs until the end of the first week of a standard fall or spring 16-week term. Withdrawals from courses beginning on different parts of term or in the summer must be within the deadline as indicated on the Add and Drop Dates section of the Calendars tab on the Office of the University Registrar website (<https://registrar.wvu.edu/calendars/add-and-drop-dates/>). Courses dropped during the appropriate drop/add period will not be recorded on the student's transcript.

## WITHDRAWAL BY THE WITHDRAWAL DEADLINE

Generally, students can withdraw from one or more courses after the Drop/Add period but prior to the withdrawal deadline published in the University Calendar (during the 13th week of instruction for 16-week courses during the spring and fall terms). A grade of W will be recorded on the transcript, indicating the student withdrew from the course. The grade point average is not affected, but student progress within an identified major may be impacted, as well as the ability to retain financial aid. Additional information can be found about Withdrawing from Courses in the Maintaining Your Aid section of the Home tab on the Student Financial Services website (<https://financialaid.wvu.edu/home/maintain/withdrawing/>). "Attempted Hours" on the transcript include all courses for which a W is recorded. If a student does not follow the university's withdrawal procedures, the final grades earned by the student will be recorded on the transcript.

NOTE: No longer attending a course does not constitute withdrawal. Students who do not formally drop or withdrawal from a course they are no longer attending will receive a failing grade for the course.

## WITHDRAWAL FROM ALL COURSES AFTER THE WITHDRAWAL DEADLINE (RETROACTIVE WITHDRAWAL)

Withdrawing from all courses after the withdrawal deadline is considered a retroactive withdrawal from the University for the approved term. A retroactive withdrawal must be requested within 12 months after grades have posted for the term in question. If the withdrawal is granted, a grade of W will be recorded on the transcript for each course. Retroactive withdrawals may not be requested for coursework in a degree that has already been awarded. Students may not request a withdrawal from a specific course or courses after the deadline for withdrawing from that term.

A retroactive withdrawal may be approved in one of two ways: contractual or non-contractual. The student's current college or school determines if a student qualifies for a retroactive withdrawal and then determines the type of withdrawal.

- Contractual retroactive withdrawal: students may request a contractual withdrawal for one semester only. Students will be approved by their current college or school and will receive a contract. If they fulfill all the terms of the contract, the withdrawal will be granted.
  - To qualify for a request for a contractual withdrawal, students must be able to demonstrate the following:
    - Unusually poor academic performance
    - An identifiable event or circumstances that explains the academic performance
    - Demonstrated evidence that corrective steps have been undertaken
- Non-contractual retroactive withdrawal: students may request a non-contractual withdrawal for up to one academic year. Non-contractual withdrawals are granted for extreme circumstances and require the approval of the student's current academic college or school.

**IMPORTANT NOTICE:** A retroactive withdrawal does not carry a tuition refund and may result in the recalculation of aid or other educational benefits received. Granted retroactive withdrawals may change a student's probation or suspension status. Financial aid recipients who withdraw from all courses before sixty percent of the term is completed may be required to return a portion of any financial aid disbursed for the term. Grades of W are counted in Attempted Hours and affect student completion rate, one of the standards for determining financial aid satisfactory academic progress. Students who do not receive at least one passing grade in a term may be required to return a portion of any financial aid disbursed for that term according to their last date of attendance or participation on record. If a student, whose financial aid has been impacted, believes this date is incorrect, they may provide documentation that supports attendance or participation beyond the last date of attendance or participation on record.

**MILITARY NOTE:** Students who are called to active military service during a term must submit a copy of their deployment orders to the appropriate institutional officer. For additional information relative to military withdrawals, or if students are being deployed after the 13th week of instruction of the fall or spring terms and want to keep their grades earned at the time of deployment, please refer to the Military Leave section of the undergraduate catalog.

## PROCEDURES

### Withdrawal during Drop/Add period or by the Withdrawal Deadline

To withdraw from one or more courses by the withdrawal deadline, students should log on to the WVU Portal accessible at <https://portal.wvu.edu> and drop their courses through STAR.

### Retroactive Withdrawal

To withdraw from the term after the withdrawal deadline, a student must request the retroactive withdrawal in writing from the dean (or designee) of the college of the student's current major. A successful petition should demonstrate that the student's performance was uncharacteristic and that the atypical circumstances interfered with the student's ability to withdraw. Students who are considered for a contractual retroactive withdrawal will need to demonstrate that they can now make satisfactory degree progress. Students may be required to present third party documentation of the qualifying

event and/or evidence of corrective steps. If the petition is granted, the dean or designee will request the withdrawal from all courses for the approved term at the appropriate time directly to the designated institutional officer.

## GENERAL CONSIDERATIONS WHEN WITHDRAWING FROM COURSES

- Students who wish to withdraw from one or more courses are encouraged to meet with their academic adviser.
- Students should determine if their course load would be reduced below the minimum requirement set by their program.
- Students should contact the appropriate office to determine if their course load might be reduced below the minimum hours required to qualify for financial aid, scholarships, international full-time student status, or a graduate assistantship or fellowship..
- If a student is enrolled in two co-requisite courses (courses that must be taken and completed simultaneously) and withdraws from one of those courses, the student will be automatically withdrawn from the other co-requisite course as well.
- If withdrawal from the University for a semester would jeopardize the student's standing in a particular program or major.
- Students who receive financial aid, veteran benefits, or scholarships should consult with the appropriate unit to see if the withdrawal will affect their status for the current or subsequent terms.
- It is the student's responsibility to ensure that all outstanding financial obligations to the University are satisfied and all required forms are received and processed. The withdrawal becomes official only after the request is received and processed by the appropriate institutional officer.
- Students withdrawing from all of their courses in a term who are living in university residential housing should vacate housing and turn in keys via the proper procedure. Check with the main desk at the residential hall for procedural details.

## In this section:

- Grades in Graduate Courses (p. 32)
- Grading System (p. 32)
- Satisfactory/Unsatisfactory-Pass/Fail (p. 33)
- Grade Point Average (GPA) (p. 33)
- Incompletes (p. 34)
- Repeated Courses (p. 34)
- Official Transcripts (p. 34)

## Grades in Graduate Courses

Letter grades are assigned in many graduate courses. Grades of C or below are considered substandard. Some programs allow credit toward the degree for courses in which any grade of C is earned; others do not. No credit is earned for graduate courses in which a grade of D is earned; individual programs determine if credit is earned toward the degree for professional courses in which a grade of D is earned.

## Grading System

Grade	Description
A	Excellent
B	Good
C	Fair
D	Poor (College of Law only)
F	Failure
I	Incomplete
W	Withdrawal from a course before the date specified in the University calendar.
P	Pass (See Pass/Fail grading below)
X	Auditor, no grade and no credit.
CR	Credit but no grade
PR	Progress; final grade to be issued at end of second semester (used by Health Sciences only)
S	Satisfactory
U	Unsatisfactory
H	Honors (used by Professional courses only)
IF	Incomplete grade not removed by next regular term (computed as an F)
UF	Unforgivable F
FNA	Failure Never Attended
FSA	Failure Stopped Attending (Last date of attendance required)

Note: Grades that are not reported by faculty at the end of a term will be designated with an NR on the official transcript. All grades of NR must be resolved in order to graduate from West Virginia University.

## Satisfactory/Unsatisfactory and Pass/Fail Grading

At the graduate level, the satisfactory-unsatisfactory ("S/U") is the only grading option for the Research common course numbers 697/797. The "S" and "U" grades for 697/797 are not applied to the calculation of the GPA.

Other courses for which faculty wish to use a binary grading option use the pass-fail ("P/F") grading option. Grades of "F" earned using this option do apply to the GPA.

## Grade Point Average (GPA)

### GRADE POINTS

Each letter grade has a numeric value. Grade points are based on this number value and the credit hour value of the course.

- A = 4
- B = 3
- C = 2
- D = 1 (College of Law only; 0 points for all others)
- F/FNA/FSA/IF/UF = 0

The GPA is computed on all work for which a student registers, with the following exceptions:

- Courses with a grade of CR, H, PR, P, S, W, I, U, and X carry no grade value.
- When a student receives the grade of "I" and the incomplete grade is replaced, the grade point average is calculated on the basis of the replacement grade. If the "I" grade is not changed within the next semester, the grade is replaced with an IF, which is included in the grade point average.

### GRADE POINT AVERAGE

To be eligible to receive a graduate degree, a student must have an overall GPA of at least 2.75 at the time of graduation. To be eligible to receive a graduate certificate, a student must have an overall GPA of at least 2.75 in courses applied to the certificate.

Some graduate degrees or graduate certificates require an overall grade point average higher than a 2.75. Graduate degrees or certificates also may require higher or specifically defined grade point averages. Refer to the specific program for more information.

Probation and most financial aid eligibility are determined by the institutional grade point average. Please review information on the Student Financial Services (<https://financialaid.wvu.edu/>) page for detailed information regarding financial aid eligibility.

### GPA CALCULATION

The example below illustrates how to calculate a GPA.

Assume a student registered for the following courses and earned the following grades:

- HIST 700 (3 credits) - A
- HIST 718 (3 credits) - B
- HIST 793 (3 credits) - C
- HIST 795 (1 credit) - F
- HIST 797 (1 credit) - S

Multiply the credit by the grade value to get the grade points earned for each course using the values for letter grades as described in the Grade Points section.

(Number of Credit Hours) multiplied by the (Letter Grade Value) = Grade Points

- HIST 700 with a grade of A (**3 credits**) \* (Letter Grade Value for an A) (**4 points**) = **12 Grade Points**
- HIST 718 with a grade of B (**3 credits**) \* (Letter Grade Value for a B) (**3 points**) = **9 Grade Points**
- HIST 793 with a grade of C (**3 credits**) \* (Letter Grade Value for a C) (**2 points**) = **6 Grade Points**
- HIST 795 with a grade of F (**1 credit**) \* (Letter Grade Value for an F) (**0 points**) = **0 Grade Points**
- HIST 797 with a grade of S (**1 credit**) \* (N/A Letter Grade Value for a S - not calculated in grade points) = **N/A**

Add the total grade points earned: 12 + 9 + 6 + 0 + N/A = **27**

Add the total number of credit hours attempted:  $3 + 3 + 3 + 1 + 0$  (S grade credits not included) = **10**

Divide the total number of grade points earned divided by the total number of credit hours attempted

GPA calculation = **27** (total number of grade points earned) / **10** (total number of credit hours attempted) = **2.7 semester GPA**

Students may also login to Degree Works to utilize the GPA Calculator.

## Incomplete Grade Policy

A grade of I (Incomplete) is a temporary grade assignment used when unforeseen, non-academic circumstances arise that prohibit students from completing the last course assignments or examinations at the end of the semester. The grade of Incomplete is typically assigned because of an excused absence from the final examination, or because assignments are unavoidably incomplete, as determined by the instructor. Generally, the student will have been active in the course up until the last day of the 13th week of classes and earned at least a D- to be eligible to request an incomplete.

- An instructor may not assign a grade of I without the student's agreement and an Incomplete Contract (<https://undergraduate.wvu.edu/strategies/academic-policy-committee/forms/>). If a student has not requested an Incomplete, or the request for an Incomplete grade has been denied, the instructor should assign the grade earned in the course.
- Within the Incomplete Contract, the instructor is required to indicate a grade earned for the course assuming no additional work will be completed. Should the signed contract not be fulfilled, the instructor must either submit a grade of F or the grade indicated in the contract.
- If the student is unable to complete the work during the following term for non-academic reasons, the term of the contract may be extended with permission of the Dean. Additionally, the term of the contract can be extended if the instructor is not available for a portion of the course, for some legitimate reason, cannot be completed within the original time frame.
- An Incomplete grade not changed by the end of the next regular term, (fall and spring semesters) will be replaced with a grade of IF, and the class must be retaken to satisfy degree requirements as necessary. Under legitimate, extraordinary circumstances, with supporting documentation and the approval of the Dean, an instructor can submit a grade change for an IF within five years of when the course was taken.
- All grades of I must either be resolved or replaced with an IF in order to graduate from West Virginia University.

## PROCEDURES

- Students who wish to be considered for an Incomplete must request the incomplete grade prior to the end of the term. If instructors agree, they will set the contractual conditions under which the grade of I will be changed to a letter grade, and students will sign their online contracts. The grade of incomplete is not granted until the Incomplete Contract has been approved by the department and college.
- The instructor should establish the date by which all work must be completed. Ideally, the date will be prior to the mid-semester point of the following regular term but may not be later than the last day of class of that term.
- If the student does not complete the terms of the contract, the instructor will assign the earned grade recorded on the contract at the time the Incomplete was assigned.
- The student is not permitted to re-register for the course to complete the missing work and remove the grade of I.
- Students may appeal any final grade imposed by a course instructor/coordinator, institution, or its constituent academic units through the procedures described in the Academic Standards (<http://catalog.wvu.edu/undergraduate/coursecredittermsclassification/>) section of the catalog.

## Repeated Courses

The process below is for courses that are not designated as repeatable for credit.

1. Both the original course grade and the second course grade are included in determining the overall GPA. The original course is excluded from earned or degree hours and is marked with an (A).
2. The original grade is not deleted from the student's permanent record.
3. The second grade is entered on the student's transcript and marked as included (I) in the semester that the course was repeated.
4. Courses repeated more than once are handled the same way with the final attempt carrying earned or degree hours. All attempts are used for determining the GPA.

## Official Transcripts

A West Virginia University transcript is a complete record of a student's enrollment at WVU that includes all undergraduate, graduate, and professional courses. A WVU Potomac State College transcript is a complete record of a student's enrollment at Potomac State College. A WVU Institute of Technology College transcript is a complete record of a student's enrollment at WVU Tech.

Students can order official transcripts through the Request Transcript webpage (<https://registrar.wvu.edu/academic-records/request-transcript/>) for students at the Morgantown campus location, Transcript Request Procedures webpage (<https://admissions.potomacstatecollege.edu/forms/transcript-request-procedures/>) for students at the Keyser campus location, or the Transcript Request webpage (<https://techregistrar.wvutech.edu/academic-records/transcript-request/>) for students at the Beckley campus location. Before ordering transcripts, students should ensure that all grades and degrees



have been posted. Transcript requests are processed immediately on the Morgantown Campus. All financial obligations to West Virginia University must be cleared before transcripts can be released.

## Academic Calendar

### Academic Calendar 2023-2024

The publication of the Fall 2023, Spring 2024 and the 12-Week Summer Session 2024 can be found on the Office of the Provost website.

\*The annual academic calendar dates are subject to change. Please refer to the academic calendar on the Office of the Provost website for most up-to-date information.

## Degree Regulations

### STATEMENT ON AWARDING DEGREES

All degrees are conferred by the WVU Board of Governors as recommended by the faculties of the various colleges and schools. A degree is granted at the end of the semester or summer term in which a student completes all the requirements for that degree, provided the student has submitted an application for graduation and the Dean has certified completion of all degree requirements.

Students become eligible to graduate when they complete the requirements of the University, college or school, and major degree program according to the Undergraduate or Graduate/Professional Catalog in effect at the time they first entered WVU, although these requirements are subject to change at any time with reasonable notice provided to students. With the consent of the student's advisor and Dean, a student may choose to meet the conditions published in a later catalog. If a student entered WVU more than 7 years previously, the student must complete the requirements in a catalog that is no more than 7 years old.

Students must comply with any program changes that are enacted by the West Virginia University Graduate Council, West Virginia University Faculty Senate, West Virginia University Board of Governors, or by local, state, or federal law.

WVU will not issue a diploma or a transcript to any student until payment of all tuition, fees, and other indebtedness to any unit of the University is made.

### HONORARY DIPLOMAS AWARDED POSTHUMOUSLY

West Virginia University honors the memory of deceased students who did not have the opportunity to complete their degree by awarding a posthumous honorary diploma. After approval of the Dean of the student's college, the diploma can be awarded to a student who has made progress toward a WVU degree.

### Time Limits

#### IN THIS SECTION:

- Master's Degree (p. 35)
- Doctoral Degree (p. 36)
- Professional Degrees (p. 36)

### MASTER'S DEGREE

Master's degree students are permitted to continue in a program for a maximum of eight years following their term of admission to the program. Students who have been inactive for two or more years or who exceed eight years following their term of admission are required to apply for readmission to the University and their graduate program.

Graduate course work used to meet master's degree requirements must be satisfactorily completed within a period of eight years immediately preceding the conferring of the degree to ensure that students earning a master's degree have current knowledge in their field. Courses completed in the same term as degree conferral (fall, spring, summer) eight years previously are considered to fall within the eight-year limit (e.g., a course completed in fall 2016 would fall within the limit for fall 2024 degree conferral). A course completed more than eight years prior to the term of degree conferral must be revalidated if it is to be used toward meeting degree requirements. Revalidation can be accomplished through the following procedure:

- The current instructor of the course determines the method used to revalidate the course.
- The student may be required to complete specific activities, such as repeating all or some of the course or completing a set of readings.
- The instructor must assess the student's knowledge of course material through a written or oral examination, a paper, a project, or some other assessment and determine if the student's knowledge is adequate to justify revalidation of the course.
- The instructor submits a description of the revalidation method and results of the assessment to the college or school dean or designee.

- The college or school dean or designee submits a letter of support describing the revalidation process and assessment results to the Associate Provost for Graduate Academic Affairs.
- The Associate Provost informs the Office of the Registrar that the course has been revalidated.

## DOCTORAL DEGREE

Doctoral candidates are allowed no more than five years in which to complete the remaining requirements of their program after being admitted to doctoral candidacy to ensure that students earning a doctoral degree have current knowledge in their field. Admission to doctoral candidacy is normally expected to precede work on the dissertation (check program guidelines for exceptions to this expectation).

The five-year time limit begins with the start of the semester following the completion of a program's requirements for doctoral candidacy. Each student will be assigned the first full semester after they have completed their program's requirement to become a doctoral candidate (e.g. passing an exam, being voted to candidacy, successfully defending a proposal or a different activity) as their semester of admission to candidacy. The semester of admission is used to calculate the five-year time limit, or deadline, for completing all graduation requirements.

Once a student has been assigned a semester of admission to doctoral candidacy, they must meet all graduation requirements no later than the term that precedes their deadline in five years' time. For example:

- A student who fulfills all requirements for doctoral candidacy in Fall of 2024 will have Spring 2025 as their semester of admission to candidacy. Their deadline must precede the Spring 2030 semester. At the latest, they must meet the graduation deadlines of Fall 2029.
- A student who fulfills all requirements for doctoral candidacy in Spring 2025 will have Fall of 2025 as their semester of admission to candidacy. Their deadline must precede the Fall 2030 semester. At the latest, they must meet graduate deadlines of Summer 2030.
- A student who fulfills all requirements for doctoral candidacy in Summer of 2025 will have Fall 2025 as their semester of admission to candidacy. Their deadline must precede the Fall 2030 semester. At the latest, they must meet the graduate deadlines of Summer 2030.

Completion of the requirements for admission to doctoral candidacy must precede the semester of graduation.

In the event a student anticipates failing to complete the doctorate within five years after admission to candidacy, an extension of up to 12 months may be requested. Prior to requesting an extension, the student must repeat the program's candidacy examination or an alternate procedure (approved by the college or school dean or designee) for assessing the student's academic competence and current knowledge in their field of study. If appropriate, the student may be expected to retake or revalidate courses (using the procedure described for master's students) in order to ensure that the student's subject knowledge is up-to-date. A request for an extension of time in order to complete degree requirements must be submitted by the college or school dean or designee to the Associate Provost for Graduate Academic Affairs and must include the following:

- A statement documenting the circumstances that justify the request, including information about any leaves of absence approved for the student.
- A description of the procedures followed to ensure the student's academic competence and up-to-date knowledge in the field of study (repetition of the candidacy examination or alternate procedure).
- A timeline by which the student is expected to complete remaining degree requirements, including a final deadline by which all degree requirements must be completed. The extension may not exceed 12 months.
- Evidence of endorsement of the request from the student's advisory committee and the office of the dean.

If the initial candidacy period expires, a student will be changed to non-degree status and must be readmitted to the program before an extension can be requested.

## PROFESSIONAL DEGREES

Professional degree programs may set their own time limits for completion.

### In this section:

- GPA Standards (p. 36)
- Master's Degree Requirements (p. 37)
- Doctoral Degree Requirements (p. 37)

## GPA Standards

A minimum GPA of 2.75 based on all courses taken while a graduate student (including undergraduate level courses) is required for conferral of a degree (although some professional programs use different grading systems and standards; see individual listings). Individual academic units may designate a higher GPA or other academic standards required for students to receive a degree.

A minimum GPA of 2.75 based on courses applied to a certificate is required for the award of a certificate. Some certificates may have higher or additional standards.



## Master's Degree Requirements

Students in a master's program must complete a minimum of 30 total credits, of which at least 24 credits must be coursework other than research, thesis, project, internship, etc. Many programs set requirements for higher numbers of coursework credits to earn the master's degree. Some, but not all, master's programs require completion of a thesis.

## Doctoral Degree Requirements

The doctorate is a research or performance degree and does not depend solely on the accumulation of credit hours. The requirements of the degree are admission to candidacy, residency, completion of the program of doctoral study (plan of study ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#Plan\\_of\\_Study](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#Plan_of_Study))), and completion and defense of a dissertation.

## ADMISSION TO DOCTORAL CANDIDACY

Admission to graduate study and enrollment in graduate courses do not imply acceptance of the student as a candidate for a doctoral degree. Admission to doctoral candidacy is accomplished only by satisfactorily passing a candidacy examination (which may have a certain label in different programs) and by meeting other requirements specified by the program.

Because the candidacy examination attests to the academic competence of the student and is the formal mechanism for admitting the student to candidacy, it cannot precede the conferring of the degree by more than 5 years (refer to the section on time limits for the doctoral degree ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree\\_regulations/#timelimittext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree_regulations/#timelimittext))).

The candidacy examination typically assesses the student's knowledge of the important issues in their field of study, as well as their ability to engage in research. The examination is intended to determine whether the student has the academic competence to undertake independent research in the discipline and to ensure that the student possesses a thorough grasp of the fields outlined in the plan of study. The exam is generally taken after a student has completed the major portion of the program course requirements and other program-specific requirements (such as the acceptance of a prospectus, a grant exercise, or other forms of student evaluation).

Candidacy examinations are evaluated by a faculty examining committee consisting of at least three members. If two or more members vote to fail the student, all or part of the candidacy examination must be repeated. A candidacy examination may not be administered more than three times; many programs limit administration to two times.

## RESIDENCY

Doctoral education involves many learning experiences that take place outside the formal classroom setting. These involve observing and participating in activities conducted by the graduate faculty, using departmental and University libraries, attending lectures presented by visiting scholars, informally debating other students, and similar activities. To ensure that graduate students experience this kind of informal learning, doctoral programs at WVU generally require at least two semesters in residence on campus. However, an individual student or graduate committee may propose an alternative plan by which the student can gain equivalent educational experience. This plan must be submitted in writing, approved by the college or school dean or designee, and placed in the student's program file.

## PROGRAM OF DOCTORAL STUDY

Plan of Study ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#advisingtext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#advisingtext))

The program of doctoral study ("plan of study") is planned with the student's graduate advisor and committee to combine any or all of the following: graduate courses of instruction, special seminars, independent study, supervised research, and supervised training designed to promote a broad and systematic knowledge of the major field and to prepare the student to complete the requirements for admission to candidacy and to successfully complete the dissertation.

## PROFESSIONAL DEGREE REQUIREMENTS

Professional program degree requirements are determined by the program, and often are determined or guided by accreditation standards.

## Committees

### In this section:

- General Requirements for All Graduate Committees (p. 37)
- Master's Thesis Committees (p. 38)
- Doctoral Dissertation Committees (p. 38)

## General Requirements for All Graduate Committees

The chair of the graduate thesis or dissertation committee must be a regular member of the graduate faculty and a current WVU faculty member at the time of the defense. Co-chairs of committees are allowed, but at least one of the co-chairs must be a regular member of the graduate faculty and at least one of the co-chairs must be a current WVU faculty member at the time of the defense. The committee may include a nonmember of the graduate

faculty, and associate members of the graduate faculty, as long as there is no more than one nonmember, and the nonmember and associate members together do not constitute the majority of the committee (i.e., the majority of the committee must be regular members of the graduate faculty). No family member may serve on the graduate committee of his or her relative. Committee members who are not graduate faculty members are normally expected to hold the same or higher degree (or equivalent professional experience) as that sought by the student. All graduate thesis and dissertation committees are subject to the approval of the chair/director or designee of the department/program and the dean or designee of the college or school.

Once a graduate thesis or dissertation committee has been officially established, it will not be necessary to alter it if the graduate faculty membership role changes. Any changes in the membership of a graduate thesis or dissertation committee require approval of the dean or designee of the college or school. Depending on circumstances and the judgment of the dean or designee, replacement of the chair may require that activities already completed (such as a prospectus approval meeting) be repeated.

Membership of graduate committees other than thesis or dissertation committees is subject to the rules of individual programs. It is recommended that such committees include a majority of graduate faculty members (regular or associate). The graduate faculty guidelines (<https://graduateeducation.wvu.edu/graduate-council/graduate-faculty-information/graduate-faculty-guidelines/>) can be found on the Graduate Education and Life webpage under the Graduate Faculty Information tab.

## Master's Thesis Committees

Master's thesis committees consist of no fewer than three members. It is recommended that at least one member of the committee be from outside the student's department/program.

## Doctoral Dissertation Committees

Doctoral dissertation committees consist of no fewer than four members. At least one member of the committee must be from a department/program other than the one in which the student is seeking a degree. Programs may set their own standards for these "external" committee members. Qualified individuals from outside WVU are allowable, as long as the general requirements for committee membership are followed.

### IN THIS SECTION:

- Theses and Dissertations (p. 38)
- Defense (p. 38)
- Submission (p. 39)

## THESES AND DISSERTATIONS

Many master's degrees and all research doctoral degrees require the completion of a research project under the direction of the faculty of the University on some topic in the field of the major subject. The thesis must present the results of the master's degree candidate's investigation. The dissertation must present the results of the doctoral candidate's individual investigation and must embody a definite contribution to knowledge. Regulations concerning the constitution of thesis and dissertation committees are in the Committees section of this catalog (p. 37).

## DEFENSE

Only after the thesis or dissertation committee has tentatively approved the student's written thesis or dissertation, can the final defense be scheduled. If ensuring committee participation requires scheduling a defense further in advance, the committee must give its tentative approval of the document no less than two-weeks prior to the defense. Otherwise, the defense should not proceed. The defense is usually held in the term in which all other requirements for the degree are to be met. At the discretion of the faculty responsible for doctoral degree programs, a comprehensive final written examination also may be required of doctoral students.

The student's committee chairperson must obtain approval of the time, place, and committee members for the defense from the college or school dean or designee at least two weeks before the defense date. All dissertation defenses are open to the public and the university community and must be posted on the University calendar by the college or school dean or designee.

The student cannot be considered as having satisfactorily passed their defense if there is more than one unfavorable vote among members of the committee. All committee members, including the chair, are considered equal voting members. Results of each defense must be reported to the college or school dean or designee within two business days. If the defense is not passed, a repeat of the defense may be scheduled only with approval from the college/school dean or designee.

The student and all committee members are normally expected to be physically present for a defense. In extraordinary circumstances, and only with the approval of the college or school dean or designee, individuals may attend by audio or video conference (with videoconferencing preferred). Anyone attending the defense electronically must remain available during the entire time of the defense.

In extraordinary circumstances, the dean or designee may permit another person to attend the defense as a substitute for one of the committee members, provided that the original committee member was not the chair. There can be no substitute at the defense for the chair. Only one substitute at the defense is allowed, and the request for a substitute must be made in writing to the dean or designee prior to the defense. The request for a substitute at the defense should be signed by the committee chair, the student, and both the original member (if available) and the substitute member. A substitute committee member must have the same or higher graduate faculty membership role as the original committee member and represent the

same academic discipline or specialization. If a substitute committee member attends the defense, the substitute signs the form indicating whether the student passed or failed the defense. However, the original committee member should provide written comments to the student on the thesis or dissertation and sign the Thesis and Dissertation Signature Form required for submission of the document to the University Libraries. This paragraph applies only to a substitution for a committee member at the defense; see the section on General Requirements for All Graduate Committees ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree\\_regulations/#committeetext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree_regulations/#committeetext)) for information on changing the formal membership of a committee.

## SUBMISSION

Once approved by a student's graduate committee, the final version of all WVU theses and dissertations must be submitted electronically through the University Libraries Electronic Theses and Dissertations (<https://etd.lib.wvu.edu/>) website. Information about formatting, submission, and approval of electronic theses and dissertations is provided at this website.

## IN THIS SECTION:

- Graduation (p. 39)
- Diploma Retention Policy (p. 39)

## GRADUATION

Students anticipating completion of all degree requirements by the end of a term must submit an Application for Graduation by the posted deadline for that term. The candidate must then complete all requirements by posted deadlines. If the degree is not earned during that term, the student must submit a new Application for Graduation by the posted deadline for the term in which completion is again anticipated. Information can be found on the Graduation & Diploma tab on the Office of the University Registrar website (<https://registrar.wvu.edu/graduation-diploma/>).

Colleges and schools are responsible for certifying that certificate, master's, doctoral, and professional students meet the minimum requirements of the University as well as any additional college or school requirements.

Participation in commencement ceremonies is a public recognition of students' academic efforts and accomplishments but does not necessarily imply that all degree requirements have been met. Students who have completed all requirements for their degree may participate even if final degree certification is still pending at the time of the ceremony. The dean of the relevant college/school determines which students may participate in their college/school's commencement ceremonies.

In some cases, a student who is likely to complete all degree requirements in the academic term following the commencement ceremony *may* be allowed to participate with the dean's permission. However, when a ceremony for a certain degree includes hooding, only candidates for those degrees who have successfully defended their thesis or dissertation can participate in the ceremony. The dean may allow graduate students to participate and be hooded if they have successfully defended the thesis or dissertation work, even if all follow-up work has not yet been completed, as long as the dean believes that the work will be completed in the academic term following the commencement ceremony. Students should be hooded by an individual who holds the same or higher degree as that being awarded. Other individuals may hood or assist with hooding only if approved by the dean of the student's college or school.

## Diploma Retention Policy

Diplomas retained by or returned to the Office of the University Registrar will be held for two years. This includes diplomas that are retained in the office for financial holds, that have been returned to sender. After two years of the conferral date, any request for a diploma by the student will incur fees and fall under all policies associated with ordering a replacement diploma.

## FERPA

### In this section:

- Notice to Students Regarding FERPA (p. 39)
- Designation of Directory Information (p. 40)
- Designation of Limited Use Directory Information (p. 40)
- Withholding Directory Information (p. 40)
- Parent/Guest Access to Online Student Records (p. 40)

## Notice to Students Regarding FERPA

Students at West Virginia University (WVU) have rights according to the Family Educational Rights and Privacy Act (FERPA) of 1974. This Act, was designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data. A more detailed explanation of rights afforded to students by FERPA can be found at the WVU FERPA (<http://ferpa.wvu.edu/home/>) website.

## Designation of Directory Information

Directory Information is public and may be disclosed at West Virginia University's discretion for any purpose. WVU designates the following categories of student information as "Directory Information".

- Name of Student
- Official Address
- Telephone Number
- Place of Birth
- Age of Student
- Names and Addresses of Parents
- Major and Minor Fields of Study
- Class Status (e.g., freshman)
- Enrollment Status (e.g., full time or part time)
- Dates of Attendance
- Previous Educational Institution(s) Attended
- Degree(s) and Date(s) Conferred, including anticipated graduation dates
- Awards
- Honors
- Participation in Officially Recognized Activities and Sports
- Weight and Height of Members of Athletic Teams
- Duties and Responsibilities, including Dates of Service, of Graduate Assistants, Student Workers, Interns, or Student Volunteers

## Designation of Limited Use Directory Information

WVU designates the following categories of student information as "Limited Use Directory Information":

- University issued student electronic mail addresses ("Email Addresses")
- Photographs, videos or other media containing a student's image or likeness (collectively "Student Images")

Use and disclosure of this information shall be limited to (1) those officials within the University who have access, consistent with FERPA, to such information and only in conjunction with an official institutional purpose; and (2) publication on websites hosted by, on behalf of, or for the benefit of the University, including the online directory available at: <http://directory.wvu.edu>.

Limited Use Directory Information may only be provided to external parties that are contractually affiliated with the University.

## Withholding Directory Information

Students who do not request withholding of Directory Information are assumed to have approved disclosure of this information. Currently enrolled students, using the official West Virginia University Student Confidentiality Form, (listed under Records of the Forms tab), may withhold disclosure of Directory Information under the FERPA. To withhold disclosure, completed forms must be submitted in the Mountaineer Hub or mailed or emailed to the Office of the University Registrar.

A request to withhold Directory Information shall have no effect on disclosures made prior to receipt of the Student Confidentiality Form, and will not revoke third-party access to student records granted through the Parent/Guest Portal. Students may reinstate disclosure of Directory Information by completing the Release Confidentiality (Reinstate Directory Information) form.

## Parent/Guest Access to Online Student Records

The Parent/Guest Portal (<https://parent-guest.portal.wvu.edu/>) is the exclusive method by which a University student may grant third-party access to their records. Information that is protected from disclosure pursuant to FERPA, such as grades, financial aid details, and student account/billing information is maintained in a secure online environment. A student may grant permission to a parent or guest to access this information and make payments through this portal. A student may restrict the information that a parent or guest is able to access or may revoke access at any time.

For FERPA updates and more information on West Virginia University's FERPA policy, please visit the WVU FERPA (<http://ferpa.wvu.edu/home/>) website, or contact the applicable office:

- Office of the University Registrar for the Morgantown location
- Office of Enrollment Services for the Keyser location
- Office of Enrollment Services for the Beckley location

## Financial Aid

Department website: <http://financialaid.wvu.edu/>

### In this section:

- Application Process (p. 41)
- Aid Offer Notification (p. 41)
- Employment Opportunities (p. 41)

To receive an aid offer, a student must be admitted as a degree-seeking student within the WVU System. Students who take courses at a WVU campus but who are not pursuing a degree may be eligible for limited Federal Direct Loans if they meet certain criteria (<https://financialaid.wvu.edu/students/non-degree-student/>). Students with financial needs should apply as early as possible.

## APPLICATION PROCESS

To apply for federal and some state and institutional aid, students must submit the Free Application for Federal Student Aid (FAFSA). For steps that need taken in preparation, see our Preparing for the FAFSA (<https://financialaid.wvu.edu/applying-for-aid/preparing-for-fafsa/>). See our Complete the FAFSA (<https://financialaid.wvu.edu/applying-for-aid/fafsa/>) webpage for information on how to submit the FAFSA and priority deadlines. WVU will only receive students' FAFSA information electronically, if students include the WVU System school code (003827) on the FAFSA.

## AID OFFER NOTIFICATION

WVU will receive students' FAFSA information electronically if students include the WVU System's school code (003827) on the FAFSA when they submit. Students should monitor their MIX email account after submitting the FAFSA - that is where they will be notified of any additional tasks they may need to complete and also where financial aid offers will be sent once available.

## EMPLOYMENT OPPORTUNITIES

Students are encouraged to use the job search database (<https://studentemployment.wvu.edu/>) on the WVU Career Services Center (<https://careerservices.wvu.edu/>) website to search for on- and off-campus part-time employment opportunities.

### In this section:

- Satisfactory Academic Progress (p. 41)
- Consequences of Withdrawal (p. 41)

## Satisfactory Academic Progress

Students must make measurable academic progress toward degree completion to remain eligible for most financial aid programs. Federal regulations require that students meet minimum standards for grade point average, successfully complete a minimum percentage of attempted credit hours, and complete their degree within a certain amount of attempted credit hours. The complete Satisfactory Academic Progress Policy (<https://financialaid.wvu.edu/home/maintain/academic-progress/>) is available online.

## Consequences of Withdrawal

If a student receives federal, state, or institutional financial aid and withdraws from all classes during the semester, the student may be required to return all or a portion of their financial aid even if it has already disbursed as payment on the student's account. Refer to our Withdrawing from Courses (<https://financialaid.wvu.edu/home/maintain/withdrawing/>) webpage for more information. Withdrawing from one or more classes may also impact future financial aid eligibility per the Satisfactory Academic Progress Policy (<http://financialaid.wvu.edu/home/maintain/academic-progress/>).

## Additional Information

For more information on applying for financial aid and maintaining aid eligibility, visit the Financial Aid website (<https://financialaid.wvu.edu/>).

## Financial Assistance for Graduate and Professional Students

WVU graduate and professional students may be eligible for financial assistance through scholarships and internships (<https://graduateeducation.wvu.edu/finances/scholarships-and-internships/>), graduate assistantships (<https://graduateeducation.wvu.edu/grad-life/graduate-assistantships/>), tuition waivers (<https://graduateeducation.wvu.edu/faculty-and-staff/tuition-waivers/graduate-assistantship-tuition-waivers/>), loans (<https://financialaid.wvu.edu/loans/#GRLOANS>), and other forms of aid. In addition, students can use the job search database on the WVU Career Services (<https://careerservices.wvu.edu/>) website to search for on- and off-campus part-time employment opportunities.

Fellowships (<https://graduateeducation.wvu.edu/finances/fellowships/>) and scholarships provide students with funds that do not require employment. Fellowships managed by the Office of Graduate Education and Life usually include a stipend, University tuition waiver, College tuition scholarship,

and student health insurance, and may also provide funds for research and travel. Scholarships provide students with gift aid to help pay for students' educational expenses.

Graduate assistantships (<https://graduateeducation.wvu.edu/grad-life/graduate-assistantships/>) (teaching, research, or service) may be available through a student's own department/program or other units on campus. Regular graduate assistantships require 20 hours per week of work and at least 9 credit hours per semester. Partial graduate assistantships require 10 hours per week of work and at least 9 credit hours per semester. Assistantships provide the student with a stipend and a full or partial waiver of University tuition (but typically not college tuition or University fees; see the Tuition, Fees, and Residency (<http://catalog.wvu.edu/graduate/graduateeducationexpenses/>) webpage and the Student Insurance Office (<https://talentandculture.wvu.edu/student-insurance/>) webpage).

Tuition waivers (<https://graduateeducation.wvu.edu/faculty-and-staff/tuition-waivers/graduate-assistantship-tuition-waivers/>) may be provided to some students based on merit, employment with the University, or prior participation in certain programs such as McNair Scholars (<https://graduateeducation.wvu.edu/faculty-and-staff/tuition-waivers/mcnair-scholars/>) or the Health Science and Technology Academy (HSTA (<http://www.wv-hsta.org/resources-events/graduate-resources/>)).

The WVU Hub (<https://mountaineerhub.wvu.edu/>) provides information and instruction to students interested in obtaining federal and private loans (<https://financialaid.wvu.edu/loans/#GRLOANS>) to help cover educational expenses.

## Graduate Certificates

### Graduate Certificates

#### ACADEMIC CERTIFICATE POLICIES

A graduate certificate program comprises 12 to 21 credits and can be completed either independently or along with a degree program. Credits earned as a non-degree student may be applied to a graduate certificate. Admission to a certificate program may be required prior to enrollment in specified certificate courses. Students must be admitted to the certificate program in order to be awarded the certificate.

Students who have been provisionally admitted to a certificate program must be reclassified as regular admitted students no later than the semester in which they complete 50 percent of the total credits required for the certificate. With approval from the certificate program, up to 6 of the required credits for a graduate certificate can be transferred from a different institution or applied from another previous or concurrent WVU degree or certificate. Individual course credits may be applied to no more than two degrees, majors, or certificates. Courses applied to a certificate must have been completed no more than eight years prior to certificate conferral as stated on the Time Limits tab of the Degree Regulations section of this catalog ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree\\_regulations/#timelimittext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree_regulations/#timelimittext)).

See information on Graduate Multiple Curricula on the Academic Definitions tab under the Programs, Courses & Credits section of this catalog (<http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#academicdefinitiontext>) for rules concerning the application of credits from a completed certificate to a subsequent WVU degree.

#### Certificates offered, by college/school:

- Academic Affairs (p. 42)
- Benjamin M. Statler College of Engineering and Mineral Resources (p. 42)
- College of Applied Human Sciences (p. 43)
- College of Creative Arts (p. 43)
- Davis College of Agriculture, Natural Resources, and Design (p. 43)
- Eberly College of Arts and Sciences (p. 43)
- John Chambers College of Business and Economics (p. 43)
- Reed College of Media (p. 43)
- School of Medicine (p. 43)
- School of Public Health (p. 44)

#### Academic Affairs

- University Teaching (p. 68)

#### Benjamin M. Statler College of Engineering and Mineral Resources

- Software Engineering (p. 66)

## College of Applied Human Sciences

- Health Professions Education (p. 56)
- Online Teaching (p. 60)

## College of Creative Arts

- Artist Diploma in Music Performance (p. 45)
- Music Industry (p. 59)
- Therapeutic Art (p. 67)

## Davis College of Agriculture, Natural Resources, and Design

- Sustainable Trails Development (p. 67)

## Eberly College of Arts and Sciences

- Applied Statistics (p. 198)
- Community Development Policy and Practice (p. 218)
- Cultural Resource Management (p. 221)
- GIS and Spatial Analysis (p. 255)
- Healthcare Administration (p. 258)
- Leadership (p. 268)
- Linguistics (p. 273)
- Quantitative & Qualitative Social Science Research Methods (p. 314)
- Spanish (p. 335)
- Teaching English to Speakers of Other Languages (p. 344)
- Women's and Gender Studies (p. 345)

## John Chambers College of Business and Economics

- Business Cybersecurity Data Analytics (p. 46)
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- Business Cybersecurity Management (p. 47)
- Business Data Analysis (p. 48)
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- Business Operations Research (p. 49)
- Forensic Accounting and Fraud Examination (p. 53)

## Reed College of Media

- Creative Strategy (p. 50)
- Data Marketing Communications (p. 51)
- Digital and Social Media (p. 52)
- Healthcare Communication (p. 55)
- Higher Education Marketing (p. 57)
- Integrated Marketing Communications (p. 58)
- Media Solutions and Innovation (p. 58)
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## School of Medicine

- Clinical and Translational Science (p. 50)

## School of Nursing

- Post-MSN Certificate AGAC (p. 61)
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- Post-MSN Certificate PMHNP (p. 63)
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## School of Public Health

### Applied Biostatistics

#### Graduate Certificate in Applied Biostatistics

##### CERTIFICATE CODE - CG32

The Applied Biostatistics Certificate is designed for those individuals who lack formal training in biostatistics and would like to gain skills needed to understand and apply standard statistical techniques. It is a **fully online program** that is available to practitioners and/or students at WVU and elsewhere.

The primary objectives of the program are to:

- Describe basic concepts of probability and statistical inference
- Demonstrate standard techniques of database management and analysis
- Compare and contrast study designs common to health research
- Recognize the primary sources of bias observed in health research
- Interpret appropriate inferences from data based on strengths and limitations of major epidemiologic study designs as well as the results of descriptive and inferential statistical analyses

Individuals who would be interested in such a Certificate include clinical and translational researchers at varying levels of their career (faculty, fellows, residents, basic scientists) as well as public health practitioners, in the state of West Virginia or beyond. Interested individuals in the program should have a desire to be more self-sufficient with their research, specifically being able to know basic study design principles, analyze their data, and interpret their results.

The entire curriculum is available **online**, thus being accessible to individuals from a variety of backgrounds, locations, and experiences. All course notes, homework, programs, etc. are available online, and the instructor is available in a number of formats (online chat, email, phone) to accommodate distance-learning students.

Applied Biostatistics Certificate Program students will typically take one or two classes per semester. Completion of the program will typically take one to two years.

Code	Title	Hours
BIOS 601	Applied Biostatistics 1	4
BIOS 603	Applied Biostatistics 2	3
BIOS 604	Applied Biostatistics 3	3
BIOS 605	Applied Biostatistics Capstone	2
EPID 601	Public Health Epidemiology	3
Total Hours		15

#### Certificate Learning Outcomes

##### APPLIED BIOSTATISTICS

Upon completion of the certificate students should be able to:

- Describe basic concepts of probability and statistical inference
- Demonstrate standard techniques of database management and analysis
- Compare and contrast study designs common to health research
- Recognize the primary sources of bias observed in health research
- Interpret appropriate inferences from data based on strengths and limitations of major epidemiologic study designs as well as the results of descriptive and inferential statistical analyses

# Artist Diploma in Music Performance

## Artist Diploma in Music Performance

### CERTIFICATE CODE - CG40

The **Artist Diploma in Music Performance** is a one-year graduate certificate designed for the artistic refinement of highly advanced performers. With an emphasis on applied and ensemble study, the program offers a uniquely focused opportunity to further develop both professionalism and artistry in musicians gifted with the ability and motivation to succeed in the contemporary world. The program is an elite offering for a limited number of qualified students.

The 18-credit program consists of two semesters of applied study, two full-length recitals, and participation in two music ensembles. Students who have completed an undergraduate or graduate degree in Music are eligible to apply, and are evaluated for admission on the basis of transcripts and audition before a faculty committee.

All international students whose first language is not English must achieve a TOEFL Internet-Based of 79, TOEFL Paper-Based of 550, or IELTS of 6.5 to be admitted into this program.

Code	Title	Hours
<b>Recital *</b>		<b>8</b>
MUSC 689	Master's Recital	
<b>Performance</b>		<b>8</b>
MUSC 700	Performance: Bassoon	
MUSC 700A	Performance: Cello	
MUSC 700B	Performance: Clarinet	
MUSC 700C	Performance: Horn	
MUSC 700D	Performance: Percussion	
MUSC 700E	Performance: Piano	
MUSC 700F	Performance: Pipe Organ	
MUSC 700G	Performance: Saxophone	
MUSC 700H	Performance: Trumpet	
MUSC 700I	Performance: Voice	
MUSC 700J	Performance: Conducting	
MUSC 700K	Performance: Euphonium	
MUSC 700L	Performance: Flute	
MUSC 700M	Performance: Guitar	
MUSC 700N	Performance: Harpsichord	
MUSC 700O	Performance: Oboe	
MUSC 700P	Performance: String Bass	
MUSC 700Q	Performance: Trombone	
MUSC 700R	Performance: Tuba	
MUSC 700S	Performance: Viola	
MUSC 700T	Performance: Violin	
MUSC 700U	Performance: Applied Jazz	
<b>Ensemble</b>		<b>2</b>
MUSC 640	Chamber Music: Brass	
MUSC 641	Chamber Music: Guitar	
MUSC 642	Chamber Music: Jazz	
MUSC 643	Chamber Music: Percussion	
MUSC 644	Percussion-Experiential Ensemble	
MUSC 645	Chamber Music: Percussion-Gamelan	
MUSC 646	Chamber Music: Percussion Steel Band	
MUSC 647	Chamber Music: Piano	
MUSC 648	Chamber Music: String	
MUSC 649	Chamber Music: Voice	
MUSC 650	Chamber Music: Woodwind	

MUSC 651	Chamber Music: Other	
MUSC 501	Music Ensemble	
MUSC 704	Opera Theatre	
Total Hours		18

\*

A minimum grade of B- is required in the first recital for continuation purposes.

## Suggested Plan of Study

First Semester	Hours
MUSC 689	4
MUSC 700	4
Ensemble	1
	9
Second Semester	Hours
MUSC 689	4
MUSC 700	4
Ensemble	1
	9

Total credit hours: 18

## Business Cybersecurity Data Analytics

### Graduate Certificate in Business Cybersecurity Data Analytics

#### CERTIFICATE CODE - CG54

Cybersecurity and data analytics have a symbiotic relationship where data of all types relies on robust cybersecurity management for security and accuracy. This certificate program orients both data and technology analysts to the demands and requirements of both securing and analyzing data.

**Course Requirements:** Students must have a cumulative GPA of 3.0 to graduate from the program. Each required class must be completed with a grade of a C- or better. Graduate students with a cumulative grade point average (GPA) below 2.75 will be placed on academic probation.

Code	Title	Hours
CYBR 530	Business Data Communications	3
BUDA 520	Data Management	3
CYBR 540	Information Ethics and Legal Procedures	3
ACCT 582	Fraud Data Analysis	3
or BUDA 550	Business Data Visualization	
Total Hours		12

## Certificate Learning Outcomes

### BUSINESS CYBERSECURITY DATA ANALYTICS

Upon completion of this certificate, students will be able to:

- Establish and maintain robust data collection and warehousing infrastructure.
- Develop ethical and legal frameworks for storing and using data within databases and digital systems.
- Analyze and draw conclusions about the accuracy and validity of data within databases and digital systems.

## Business Cybersecurity Foundations

### Graduate Certificate in Business Cybersecurity Foundations

#### CERTIFICATE CODE - CG55

**Course Requirements:** Students must have a cumulative GPA of 3.0 to graduate from the program. Each required class must be completed with a grade of a C- or better. Graduate students with a cumulative grade point average (GPA) below 2.75 will be placed on academic probation.

Code	Title	Hours
BUDA 510	Foundations of Business Intelligence	3
BUDA 520	Data Management	3
CYBR 525	Information Security Assurance Management	3
CYBR 530	Business Data Communications	3
Total Hours		12

#### Certificate Learning Outcomes

#### BUSINESS CYBERSECURITY FOUNDATIONS

Upon completion of this certificate, students will be able to:

- Develop and maintain data-driven justification for cybersecurity management in firms of any size or in any industry.
- Identify cybersecurity management vulnerabilities and suggest strategies to eliminate or mitigate such vulnerabilities.
- Establish and maintain robust data collection and warehousing infrastructure.

## Business Cybersecurity Management

### Graduate Certificate in Business Cybersecurity Management

#### CERTIFICATE CODE - CG56

**Course Requirements:** Certificate completion requires a 3.0 GPA overall. Minimum grade of a C- is required in all courses applied toward the certificate. Students whose cumulative GPA falls below 2.75 will be placed on academic probation. If the GPA is not brought up to 2.75 by the end of the following semester, the student will be suspended from program.

Code	Title	Hours
CYBR 525	Information Security Assurance Management	3
CYBR 530	Business Data Communications	3
CYBR 535	Business Network Security	3
CYBR 540	Information Ethics and Legal Procedures	3
or CYBR 545	Business Cybercrime Management	
Total Hours		12

#### Certificate Learning Outcomes

#### BUSINESS CYBERSECURITY MANAGEMENT

Upon completion of this certificate, students will be able to:

- Conduct enterprise-level cybersecurity risk assessments.
- Describe the underlying communication protocols relevant to cybersecurity management.
- Identify cybersecurity management vulnerabilities and suggest strategies to eliminate or mitigate such vulnerabilities.

# Business Data Analysis

## Graduate Certificate in Business Data Analysis

### CERTIFICATE CODE - CG44

The Certificate in Business Data Analysis requires 12 credit hours, the coursework is intended to prepare students to extract insights and knowledge from data. The courses in this certificate are focused on advanced analytical methods and visualizations to help students make the most of their data and communicate their findings.

**Course Requirements.** In order to satisfy the requirements of the certificate, a student must complete the required courses below. Note, that a cumulative GPA of 3.0 is required for completion of the certificate (a C or better is required in courses, with an overall cumulative GPA of 3.0).

Code	Title	Hours
BUDA 525	Business Statistical Methods 1	3
BUDA 530	Business Statistical Methods 2	3
BUDA 535	Business Data Mining	3
BUDA 550	Business Data Visualization	3
Total Hours		12

## Certificate Learning Outcomes

### BUSINESS DATA ANALYSIS

Upon completion of this certificate, students will be able to:

1. Perform advanced predictive analytics techniques using statistical software and communicate their results.
2. Deploy machine learning for mining big data.
3. Communicate data inferences visually using data visualization software packages.

# Business Data Science

## Graduate Certificate in Business Data Science

### CERTIFICATE CODE - CG45

The Certificate in Business Data Science requires 12 credit hours, the coursework unifies statistics, machine learning and information technology to make discoveries otherwise out of sight. The methods emphasized in this certificate are capable of discovering hard-to-find trends in large, population-sized data sets.

**Course Requirements.** In order to satisfy the requirements of the certificate, a student must complete the required courses below. Note, that a cumulative GPA of 3.0 is required for completion of the certificate (a C or better is required in courses, with an overall cumulative GPA of 3.0).

Code	Title	Hours
BUDA 515	Ethics and Data Collection	3
BUDA 525	Business Statistical Methods 1	3
BUDA 530	Business Statistical Methods 2	3
BUDA 535	Business Data Mining	3
Total Hours		12

## Certificate Learning Outcomes

### BUSINESS DATA SCIENCE

Upon completion of the certificate, students will be able to:

1. Organize and securely retrieve data from data warehousing infrastructure.
2. Perform advanced predictive analytic techniques using statistical software and communicate their results.
3. Deploy machine learning for mining big data.

# Business Data Technology Management

## Graduate Certificate in Business Data Technology Management

### CERTIFICATE CODE - CG46

The Certificate in Data Technology Management requires 12 credit hours, the coursework focuses on building, managing and applying the technological infrastructure that supports a solid and robust data collection as the foundation underpinning newer statistical techniques for business.

**Course Requirements.** In order to satisfy the requirements of the certificate, a student must complete the required courses below. Note, that a cumulative GPA of 3.0 is required for completion of the certificate (a C or better is required in courses, with an overall cumulative GPA of 3.0).

Code	Title	Hours
BUDA 510	Foundations of Business Intelligence	3
BUDA 515	Ethics and Data Collection	3
BUDA 520	Data Management	3
BUDA 525	Business Statistical Methods 1	3
Total Hours		12

### Certificate Learning Outcomes

#### BUSINESS DATA TECHNOLOGY MANAGEMENT

Upon completion of the certificate, students will be able to:

1. Establish and maintain robust data collection and warehousing infrastructure.
2. Explain the role of data analytics in business intelligence and operations.
3. Perform predictive analytical techniques using statistical software and communicate their results.

# Business Operations Research

## Graduate Certificate in Business Operations Research

### CERTIFICATE CODE - CG47

The Certificate in Business Operations Research requires 12 credit hours, the coursework focuses on the rigorous evaluation of different scenarios to help firms find the optimal scenario to pursue.

**Course Requirements.** In order to satisfy the requirements of the certificate, a student must complete the required courses below. Note, that a cumulative GPA of 3.0 is required for completion of the certificate (a C or better is required in courses, with an overall cumulative GPA of 3.0).

Code	Title	Hours
BUDA 520	Data Management	3
BUDA 525	Business Statistical Methods 1	3
BUDA 540	Decision Sciences and Analytics	3
BUDA 545	Business Simulation Modeling	3
Total Hours		12

### Certificate Learning Outcomes

#### BUSINESS OPERATIONS RESEARCH

Upon completion of this certificate, students will be able to:

1. Establish and maintain robust data collection and warehousing infrastructure.
2. Perform predictive analytics techniques using statistical software and communicate their results.
3. Conduct data simulation experiments of business scenarios and make inferences based on the results.

## Clinical and Translational Science

### Graduate Certificate in Clinical and Translational Science

#### CERTIFICATE CODE - CG28

Information on the 15-credit **graduate Certificate in Clinical & Translational Science** is available at <http://wvctsi.org/programs/education-mentoring-career-development/certificate-in-clinical-translational-science/>

Mentored research opportunities exist with faculty in the Health Sciences schools of Dentistry, Medicine, Nursing, Pharmacy, and Public Health. The WVCTSI facilitates the recruitment and support of physician-scientists, who may serve as faculty mentors to students.

Code	Title	Hours
<b>Required Courses</b>		
BIOS 601	Applied Biostatistics 1	4
EPID 601	Public Health Epidemiology	3
EPID 625	Principles of Clinical Trials	3
Research/Grant Preparation		
WVCTSI Research Seminar Series		
CTS 697	Research	2
Electives		3
Total Hours		15

### Certificate Learning Outcomes

#### CLINICAL AND TRANSLATIONAL SCIENCE

Upon completion of the certificate students will be able to:

- convey knowledge and skill in the areas of clinical and translational research, manuscript preparation, and communication of research findings;
- become clinical and translational researchers who can integrate findings, information, and observations across basic, population, and clinical sciences, to accelerate and transform how we improve the health of individuals and populations;
- be well prepared to engage in their own career in clinical or translational science in academia, government, industry, etc.

## Creative Strategy

### Graduate Certificate in Creative Strategy

#### CERTIFICATE CODE - CG48

The Creative Strategy Certificate is offered exclusively online with no on-campus classroom attendance required.

The Creative Strategy certificate champions creative strategy and execution as our students engage in building strategic and relevant marketing campaigns. Emphasis is placed on creative thinking as it is applied to writing, discussion, conception and presentation. In writing, it plays a significant role in paraphrasing, fine-tuning ideas and avoiding plagiarism. In coursework and classroom discussion, creative thinking allows students to take risks and more fully express their ideas and opinions while building creative and insight driven marketing campaigns.

Students will be exposed to course work focused in advanced creative concepts, digital storytelling, visual information design and content creation.

The program is taught by a diverse faculty who are recognized leaders in their fields.

### Program Format

The program's academic year consists of five accelerated terms corresponding to the University's existing parts of term: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

### Certificate Requirements

Code	Title	Hours
Minimum cumulative GPA of 2.75 required.		
Minimum grade of C- required in all courses provided that a cumulative 2.75 GPA is maintained.		
IMC 525	Advanced Creative Concepts	3



IMC 534	Digital Storytelling	3
IMC 535	Visual Information Design	3
IMC 539	Content Marketing	3
Total Hours		12

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
Early Fall Term		Early Spring Term	
IMC 534		3 IMC 525	3
Late Fall Term		Late Spring Term	
IMC 535		3 IMC 539	3
		6	6

Total credit hours: 12

## Certificate Learning Outcomes

### CREATIVE STRATEGY

1. Design marketing and communications branding to create a visual identification for an IMC brand strategy.
2. Explore branding in terms of mission, voice, color psychology and visual identity.
3. Convey and learn to express complex visual ideas and concepts.
4. Research, analyze and recommend appropriate media from a selection of print, digital and social media vehicles used by contemporary publishers for content delivery and brand marketing.
5. Conceive, develop and express complex visual ideas and concepts, translating them into a coherent visual identity that builds a brand and reinforces its marketing objectives.
6. Explore how the role of content is evolving in the modern marketing landscape and how to apply different types of content generation to new and traditional marketing channels.
7. Create storyboards for content development and develop script writing techniques for production. Understand how color, layout, and typography can be used to create a compelling visual message and brand.
8. Apply professional creative direction and art direction techniques across print, digital and social media.

## Data Marketing Communications

### Graduate Certificate in Data Marketing Communications

#### CERTIFICATE CODE - CG49

The Data Marketing Communications Certificate is offered exclusively online with no on-campus classroom attendance required.

The Data Marketing Communications certificate is intended to provide access to data-driven coursework for professional students whose career aspirations include utilizing available data as part of a greater integrated marketing communications strategy. Students will be exposed to course work focused in overarching data marketing communications strategy, audience segmentation, campaign planning and programmatic media buying, and campaign metrics and assessment.

The program is taught by a diverse faculty who are recognized leaders in their fields.

### Program Format

The program's academic year consists of five accelerated terms corresponding to the University's existing parts of term: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

### Certificate Requirements

Code	Title	Hours
Minimum cumulative GPA of 2.75 required.		
Minimum grade of C- required in all courses provided that a cumulative 2.75 GPA is maintained.		
DMC 460	Introduction to Data Marketing Communications	3
DMC 561	Audience Segmentation	3

DMC 572	Campaign Planning & Programmatic Media Buying	3
DMC 573	Campaign Metrics and Assessment	3
Total Hours		12

\*

Completion of DMC 460 is required before students can proceed to the rest of the certificate courses. Students must also pass the quantitative assessment exam prior to moving on to upper level courses in the certificate.

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
Early Fall Term		Early Spring Term	
DMC 460		3 DMC 561	3
Late Fall Term		Late Spring Term	
DMC 572		3 DMC 573	3
		6	6

Total credit hours: 12

## Certificate Learning Outcomes

### DATA MARKETING COMMUNICATIONS

1. Explain the basic principles of marketing, media and digital analytics.
2. Discover how metrics and analysis inform business decision making.
3. Describe how marketers use current analytic methods such as segmentation, profiling, and RFM to deliver ROI for their clients.
4. Distinguish between the different types of primary and secondary data available to marketers from response data, to compiled and crowdsourced data.
5. Compare B2B and B2C data requirements and available data modules for targeting, segmentation, data append ? not sure what "append" is and Account Based Marketing.
6. Define the programmatic ecosystem and the resources required to execute programmatic buying.
7. Evaluate and recommend various buying approaches that deliver on campaign objectives and align with brand goals.
8. Identify key performance indicators from a variety of metrics to track the results of a marketing communications campaign.
9. Design campaign tracking methods and dashboards to assess and improve effectiveness during the marketing communications campaign and communicate with key stakeholders.

## Digital and Social Media

### Graduate Certificate in Digital and Social Media

#### CERTIFICATE CODE - CG50

The Digital and Social Media Certificate is offered exclusively online with no on-campus classroom attendance required.

The Digital and Social Media certificate intends to prepare students for careers utilizing digital and social media as part of a greater integrated marketing communications strategy. Students will be exposed to course work focused in social media, web metrics and search engine optimization, digital storytelling and video production.

The program is taught by a diverse faculty who are recognized leaders in their fields.

### Program Format

The program's academic year consists of five accelerated terms corresponding to the University's existing parts of term: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

### Certificate Requirements

Code	Title	Hours
Minimum cumulative GPA of 2.75 required.		
Minimum grade of C- required in all courses provided that a cumulative 2.75 GPA is maintained.		
IMC 534	Digital Storytelling	3

IMC 541	Social Media and Marketing	3
IMC 542	Web Metrics and Search Engine Optimization	3
IMC 543	Digital Video Production	3
Total Hours		12

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
Early Fall Term		Early Spring Term	
IMC 534		3 IMC 543	3
Late Fall Term		Late Spring Term	
IMC 541		3 IMC 542	3
	6		6

Total credit hours: 12

## Certificate Learning Outcomes

### DIGITAL AND SOCIAL MEDIA

1. Identify, incorporate and implement digital and social media marketing tactics in an integrated marketing communications strategy.
2. Define legal and ethical considerations and federal guidelines associated with digital and social media marketing activities.
3. Develop a comprehensive social media marketing communications plan.
4. Plan digital content to utilize on social media sites: i.e. vlogging, video news letters, short video for social media site production, podcasts, etc.
5. Develop digital content relevant to the target audience for owned, earned, and paid digital and social media channels.
6. Interpret key social media metrics and demonstrate knowledge in tracking social media sites. Learn to utilize web analytics tools and SEO in campaign assessment.
7. Evaluate ROI for digital and social media marketing plans.

## Forensic Accounting and Fraud Examination

### Graduate Certificate in Forensic Accounting and Fraud Examination (FAFE)

#### CERTIFICATE CODE - CG31

Code	Title	Hours
<b>A minimum GPA of 3.0 is required.</b>		
ACCT 581	Fraud Investigation	3
ACCT 582	Fraud Data Analysis	3
ACCT 583	Fraud: Criminology/Legal Issues	3
ACCT 584	Advanced Fraud Investigation	3
Total Hours		12

\*

The program also requires students to attend two on-campus residencies.

## Certificate Learning Outcomes

### FORENSIC ACCOUNTING AND FRAUD EXAMINATION

Upon completion of the certificate students will be able to:

- apply electronic techniques and data-mining to identify fraud and other irregularities;
- analyze and interpret evidentiary material;
- make decisions using analytical techniques and principles;
- complete fraud examinations that meet judicial standards of investigation;
- document and effectively communicate the results of forensic analysis related to valuations, financial reporting fraud and other litigation issues.

# Health Data Science

## Graduate Certificate in Health Data Science

### CERTIFICATE CODE - CG59

Health Data Science is the science of applying data analytic and visualization methods to address questions or problems in a variety of public health and healthcare related areas. The Health Data Science Certificate is designed to develop a basic understanding of standard analytic techniques, data visualization tools, practical methods for modeling problems and interpreting data content. This program is especially useful for public health practitioners and positions where health data is collected and utilized in a practical setting.

### PROGRAM OVERVIEW

The Health Data Science Certificate program is offered in two formats:

- In-Person/On Campus
- Online/Blended Synchronous

By offering the curriculum in both formats, WVU's program is accessible to individuals from a variety of backgrounds, locations and experiences. The program will take advantage of existing course technology where courses are taught in a synchronous fashion in which the instructor presents a lecture in-class, and the lecture (along with associated slides or other files) is broadcast online. The video or audio recording of the lecture is archived and available on the course for access at any time.

All course notes, homework assignments and programs are available online, and the instructor is available in a number of formats (online chat, email, phone) to accommodate distance-learning students.

Students in the Health Data Science Certificate program typically take one to two classes per semester. Completion of the 16-credit-hour program usually takes two years.

### ADMISSIONS GUIDELINES

To apply to the Health Data Science Certificate program, student must complete the WVU graduate application for code CG59, and pay the processing fee and submit a statement of purpose, official GRE test scores, two letters of reference, a current resume/curriculum vitae, and all university transcripts.

To be considered for the fall, students should submit their applications by July 1. Completed applications are sent to the Health Policy, Management, and Leadership department for review. Students will receive an e-mail from the department regarding their recommendation for acceptance.

Interested students must apply online for admission consideration. Students currently enrolled at WVU should also submit the online application but need to contact Dr. Robert Duval (rduval2@hsc.wvu.edu) prior to application.

Code	Title	Hours
A minimum GPA of 3.0 is required.		
BIOS 601	Applied Biostatistics 1	4
HPML 622	Analytic Methods for Health Policy, Management, and Leadership	3
HPML 661	Health Services Research Informatics	3
HPML 671	Population Health Policy Analysis Informatics 1	3
HPML 675	Healthcare and Insurance Policy: Medicaid, Medicare, and the Affordable Care Act	3
Total Hours		16

### Suggested Plan of Study

First Semester	Hours
BIOS 601	4
	4
Second Semester	Hours
HPML 661	3
HPML 671	3
	6
Third Semester	Hours
HPML 622	3
	3

**Fourth Semester****Hours**

HPML 675

3

3

Total credit hours: 16

## Certificate Learning Outcomes

### HEALTH DATA SCIENCE

The purpose of this certificate is to prepare professionals across a variety of public health and healthcare-related disciplines to skillfully use data in an increasingly data-driven industry. In particular, the proposed program has the following educational outcomes for its students, which will be refined as the program is developed:

- Enhance understanding of the way data is used within the health care system and (including privacy protections)
- Collect, interpret, and visualize a variety of types of commonly-used health-related data
- Develop analytic skills that inform health care policy analysis and management
- Use basic data analytic knowledge to design and implement studies that answer important health care questions oriented for practitioners in the field.
- Use common analytic and statistical software to implement analysis and description for health oriented organizational decision-making underpinning studies

## Healthcare Communication

### Graduate Certificate in Healthcare Communication

#### CERTIFICATE CODE - CG51

The Healthcare Communication Certificate is offered exclusively online with no on-campus classroom attendance required.

The Healthcare Communication certificate is intended to prepare students for careers focusing on implementing a comprehensive integrated marketing communications strategy within the healthcare industry. Students will be exposed to course work focused on legal and ethical issues as they apply to healthcare communications via content marketing and utilizing new technologies, including augmented and virtual reality.

The program is taught by a diverse faculty who are recognized leaders in their fields.

### Program Format

The program's academic year consists of five accelerated terms corresponding to the University's existing parts of term: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

### Certificate Requirements

Code	Title	Hours
Minimum cumulative GPA of 2.75 required.		
Minimum grade of C- required in all courses provided that a cumulative 2.75 GPA is maintained.		
IMC 524	Cause Marketing	3
IMC 527	Healthcare Marketing	3
IMC 539	Content Marketing	3
IMC 546	Augmented Reality & Virtual Reality in IMC	3
Total Hours		12

### Suggested Plan of Study

**First Year**

Fall	Hours	Spring	Hours
Early Fall Term		Early Spring Term	
IMC 546		3 IMC 527	3
Late Fall Term		Late Spring Term	

IMC 524	3 IMC 539	3
	6	6

Total credit hours: 12

## Certificate Learning Outcomes

### HEALTHCARE COMMUNICATION

1. Effectively develop healthcare communication campaign plans using an integrated marketing communications strategy.
2. Identify the latest ethical considerations and federal guidelines associated with digital and social media marketing activities within the health care space.
3. Plan content to utilize in web and social media assets: i.e. b/vlogging, video news letters, short video for social media site production, podcasts, etc. for public education, advocacy and/or corporate purposes.
4. Identify target audiences and understand behavior change theories as they relate to healthcare marketing campaign planning for these audiences.
5. Recognize how to brand, build credibility, and effectively manage public relations efforts.
6. Demonstrate the benefit of cause marketing strategies for corporations, nonprofits and consumers.
7. Recognize how AR/VR can be used in IMC campaigns to enhance user experience.
8. Develop strategy and learn tactics and techniques that relate to the use of AR/VR technologies within a healthcare marketing communications campaign.
9. Evaluate ROI for healthcare communications activities and public interest communication plans.

## Health Professions Education

### Graduate Certificate in Health Professions Education

#### CERTIFICATE CODE - CG34

Code	Title	Hours
"Orientation to HPE" Module - To be completed before or during first semester		
Professional Development Plan - To be posed on the Health Sciences program portfolio site during the first course		
<b>HPE Core Content</b>		
Must maintain a 3.0 GPA for all coursework		
EDP 600	Educational Psychology	3
EDP 640	Instructional Design	3
EDP 612	Introduction to Research	3
EDP 617	Program Evaluation	3
Total Hours		12

### PROGRAM FEATURES FOR GRADUATE CERTIFICATE IN HEALTH PROFESSIONS EDUCATION

The Certificate in Health Professions Education consists of the following major features: (1) Required online orientation module: This online "Orientation to HPE" module provides an overview of the Certificate program, opportunities in the HPE field, and educational/medical education terminology. This module, housed on Health Science's SOLE platform, must be completed before or during the semester in which the first course is taken. (2) Professional Development Plan: This written document helps to identify a student's HPE career interests and goals, learning products developed through each course, and how each product meets the student's career goals. (3) 4 three-credit hour courses from CEHS: Educational Psychology (see table above). (4) Capstone experience: An educational plan and program evaluation plan to address a health care need is developed in EDP 617, Program Evaluation.

## Certificate Learning Outcomes

### HEALTH PROFESSIONS EDUCATION

Upon completion of the certificate, students should be able to:

- Use a systematic process to conduct a needs assessment of learners in healthcare education, design educational interventions and materials, integrate emerging technologies.
- Design face-to-face, blended, and online learning environments incorporating research-based learning principles that address teaching and assessment decisions.
- Evaluate the efficiency, effectiveness, and appeal of healthcare learning environments.

- Design studies and disseminate impacts of designed learning environments to prepare healthcare professionals to translate skills and knowledge for benefit of patient care and healthcare systems.
- Develop an educational intervention plan for a healthcare environment.

## Higher Education Marketing

### Graduate Certificate in Higher Education Marketing

#### CERTIFICATE CODE - CG52

The Higher Education Marketing is offered exclusively online with no on-campus classroom attendance required.

The Higher Education Marketing certificate is intended to prepare students for careers focusing on implementing a comprehensive integrated marketing communications strategy for institutions of higher learning. Students will be exposed to course work focused on marketing to higher education audiences, ensuring multicultural/inclusive ethical considerations are intrinsically tied to campaign planning, development of content to engage with prospective student audiences, and reach them via social media channels.

The program is taught by a diverse faculty who are recognized leaders in their fields.

### Program Format

The program's academic year consists of five accelerated terms corresponding to the University's existing parts of term: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

### Certificate Requirements

Code	Title	Hours
Minimum cumulative GPA of 2.75 required.		
Minimum grade of C- required in all courses provided that a cumulative 2.75 GPA is maintained.		
IMC 539	Content Marketing	3
IMC 541	Social Media and Marketing	3
IMC 545	Diversity & Inclusion in IMC	3
IMC 547	Higher Education Marketing	3
Total Hours		12

### Suggested Plan of Study

#### First Year

Fall	Hours	Spring	Hours
Early Fall Term		Early Spring Term	
IMC 545		3 IMC 547	3
Late Fall Term		Late Spring Term	
IMC 539		3 IMC 541	3
		6	6

Total credit hours: 12

### Certificate Learning Outcomes

#### HIGHER EDUCATION MARKETING

1. Research target markets, and develop an understanding of cross-cultural marketing communications.
2. Develop branding strategies that speak to consumers cross culturally.
3. Define ethical marketing in a multicultural society.
4. Create a strong multicultural IMC campaign.
5. Explain how to track social media metrics.
6. Develop a strong social media IMC campaign for higher education.
7. Estimate ROI for social media.
8. Define federal guidelines associated with social media channels and networks.
9. Demonstrate how to target specific markets through social media campaigns.
10. Develop content for higher education IMC campaigns.



11. Recognize strategies involved with creating strong content for marketing.
12. Describe how to utilize technology in content creation.
13. Define the difference between Owned, Earned & Paid media and demonstrate how to write for each.

## Integrated Marketing Communications

### Graduate Certificate in Integrated Marketing Communications (IMC)

The 12-credit IMC graduate certificate provides students with a broad overview of IMC, focusing on several integral aspects of the discipline.

The program's academic year consists of five eight-week terms:

- Early Fall (Aug. – Oct.)
- Late Fall (Oct. – Dec.)
- Early Spring (Jan. – March)
- Late Spring (March – May)
- Summer (May – July)

Students working toward their IMC certificate take one course per term for one calendar year (four terms). Certificate-seeking students can begin coursework in any term.

Code	Title	Hours
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
IMC 519	Emerging Media and the Market	3
Total Hours		12

## COURSE REQUIREMENTS

Admission requirements to the IMC certificate track are the same as for the master's degree track. For certificate students who may be interested in applying courses to the full master's degree: University Policy states that a maximum of 12 credits obtained by a non-degree student can be applied toward any degree. The IMC graduate certificate programs are 4 classes/12 credits and our master's degree in IMC is 10 classes/30 credits. If you complete the IMC graduate certificate, all 12 credits would apply toward our IMC master's degree.

## Certificate Learning Outcomes

### INTEGRATED MARKETING COMMUNICATIONS

1. Illustrate critical thinking, creativity and innovation in collaboration with colleagues and in the completion of written assignments.
2. Demonstrate a global and multicultural awareness in the development and implementation of marketing communications strategies.
3. Compare and contrast the benefits and limitations of various qualitative and quantitative research methods relevant to marketing communications.
4. Recognize the roles and implications of law and ethics in marketing communications.
5. Design and organize marketing communications materials in a professional manner consistent with contemporary industry-specific standards.

## Media Solutions and Innovation

### Graduate Certificate in Media Solutions & Innovation

#### CERTIFICATE CODE - CG70

The Media Solutions & Innovation certificate is offered exclusively online with no on-campus classroom attendance required.

The Media Solutions & Innovation certificate intends to prepare students to become media strategists and futurists who can function as change agents and adaptive leaders within the industry. This certificate program helps students learn about the disruptions in the media industry and how to build industry partners to assist in research and development, discovery, and creating targeted solution pathways to address some of the most challenging media problems.

The program is taught by a diverse faculty who are recognized leaders in their fields.

## Program Format

The program's academic year consists of five accelerated terms corresponding to the University's existing parts of term: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

## Certificate Requirements

Code	Title	Hours
Minimum GPA of 2.75 is required.		
Minimum grade of C- required in all courses provided that a cumulative 2.75 GPA is maintained.		
MDIA 614	Audience Development	3
MDIA 618	Community Journalism	3
MDIA 620	Next Gen News Analytics	3
Select one of the following:		3
MDIA 619	Product Development for Newsrooms	
MDIA 689	Community Based Field Experience	
Total Hours		12

### First Year

Fall	Hours	Spring	Hours
Early Fall Term		One of:	3
MDIA 614		3 Early Spring Term:	
Late Fall Term		MDIA 620	
MDIA 618		3 Late Spring Term:	
MDIA 619		3 MDIA 689	
			9
			3

Total credit hours: 12

## Certificate Learning Outcomes

### MEDIA SOLUTIONS AND INNOVATION

Upon completion of this certificate program students will be able to:

1. Understand the basic principles of innovation theories as applied to media practice.
2. Understand current and emerging technology and digital platforms and their implications for media practice.
3. Understand problems in law and ethics in media practice related to new technology.
4. Solve problems in content acquisition and creation in media production using new technology.
5. Solve problems in audience development, monetization and distribution using new technology.
6. Practice advanced project management across diverse teams in media organizations.
7. Produce innovative media products using advanced digital storytelling techniques such as Virtual Reality, Augmented Reality, Artificial Intelligence, and other interactive media.
8. Design and conduct research to solve current and emerging industry problems.
9. Communicate key insights and forecasting data regarding adoption of new technology and new digital practice to decision makers.
10. Explain how media organizations use current methods such as social media, mobile-first content, algorithms, AI and 'bots', and a range of industry-standard analytics tools to conduct audience-building.

## Music Industry

### Graduate Certificate in Music Industry

#### CERTIFICATE CODE - CG36

Code	Title	Hours
<b>Required Courses</b>		
MUSC 611	Music Industry Regulations	3
MUSC 612	Music Product Advancement	3
MUSC 613	Music Performance Organization and Commerce	3

MUSC 614	Advanced Recording Industry	3
MUSC 615	Advanced Music Publishing	3
Total Hours		15

## Certificate Learning Outcomes

### MUSIC INDUSTRY

Upon completion of the certificate, students should be able to:

- Delineate and analyze current music industry regulations regarding their commercial implications, business opportunities, and appropriate music industry management practices across the industry income streams.
- Perform and manage standard and management level music business procedures and processes utilized in the music publishing, recording, and live music industries, including conception and management of various music product development and placement strategies and plans.
- Construct and evaluate budgets and financial projections across the music industry income streams based on the project parameters, and the relevant market level, regulations, indicators and trends.
- Plan and manage organizational processes and activities in live music business sectors including scheduling, budgeting, equipment, personnel, union issues, and regulatory requirements.

## Online Teaching

### Graduate Certificate in Online Teaching

#### CERTIFICATE CODE - CG66

The Certificate in Online Teaching is designed to meet the needs of educators looking to gain the knowledge and skills necessary to teach in an online setting. The program consists of five courses in Instructional Design & Technology and provides participants with real world experience in designing and creating a course within a course management system (CMS). All courses are available online to maximize flexibility for working professionals.

A minimum undergraduate GPA of 2.75 is required for admission to the certificate program. In order to earn the Certificate in Online Teaching, a student must maintain a GPA of at least 3.0 while completing the required 15 graduate credit hours of coursework. The five required courses are as follows:

Code	Title	Hours
EDP 640	Instructional Design	3
IDT 735	Technology Integration	3
IDT 650	Multimedia Learning	3
or IDT 620	Social Network Media	
IDT 610	Distance Education	3
IDT 675	Online Teaching and Learning	3
Total Hours		15

## Certificate Learning Outcomes

### ONLINE TEACHING

Students will:

- Describe the history and major theories of online education
- Explain current research underlying online teaching and learning
- Use the principles of instructional design to modify course components for online course delivery
- Evaluate existing online systems & services for online instruction
- Analyze external legal and ethical factors that affect online instruction
- Implement an online class in a current course management system

## Post-MSN Certificate Adult Gerontology Acute Care Nurse Practitioner

### Graduate Certificate in Post-MSN Certificate Adult Gerontology Acute Care Nurse Practitioner

#### CERTIFICATE CODE - CG58

Code	Title	Hours
<b>Students are required to maintain a 3.0 in all work attempted in the program.</b>		
NSG 755	Acute Care Professional Role Development	1
NSG 756	Intro to Acute Care Practicum	1
NSG 757	Acute Care Practicum	5
NSG 758	Acute Care 1	5
NSG 759	Acute Care 2	5
Total Hours		17

#### First Year

Fall	Hours	Spring	Hours	Summer	Hours
NSG 755		1 NSG 756		1 NSG 757	3
NSG 758		5 NSG 757		2	
		NSG 759		5	
		6		8	3

Total credit hours: 17

## Certificate Learning Outcomes

### POST-MSN CERTIFICATE ADULT GERONTOLOGY ACUTE CARE NURSE PRACTITIONER

1. Conduct a comprehensive and systematic assessment of health and illness in complex situations, incorporating individualized and culturally sensitive approaches.
2. Design, implement, and evaluate therapeutic interventions based on nursing and other sciences.
3. Develop and sustain therapeutic relationships and partnerships with patients (individual, family, or population) and other professionals to facilitate optimal care and patient outcomes.
4. Demonstrate advanced levels of clinical judgement and accountability in designing, delivering, and evaluating evidence-based care to improve patient outcomes.
5. Guide, mentor, and support other nurses to achieve excellence in nursing practice.
6. Educate and guide individuals and groups through complex health and situational transitions.

## Post Master's Family Nurse Practitioner

### Graduate Certificate in Post Master's Family Nurse Practitioner

#### CERTIFICATE CODE - CG21

Code	Title	Hours
Minimum 3.0 GPA		
<b>Required Courses</b>		
NSG 701	Advanced Pharmacotherapeutics	3
NSG 705	Advanced Lifespan Assessment	3
NSG 706	Advanced Pathophysiology	3
NSG 712	Primary Care of Families 1	3
NSG 714	Primary Care of Families 2	3
NSG 720	Family Practicum 1	5
NSG 721	Family Practicum 2	5
Complete a minimum of 600 supervised clinical hours.		
Total Hours		25

## Certificate Learning Outcomes

### POST MASTER'S FAMILY NURSE PRACTITIONER

Upon completion of the certificate, students should be able to:

- Conduct a comprehensive and systematic assessment of health and illness in complex situations, incorporating individualized and culturally sensitive approaches.
- Design, implement, and evaluate therapeutic interventions based on nursing and other sciences.
- Develop and sustain therapeutic relationships and partnerships with patients (individual, family, or population) and other professionals to facilitate optimal care and patient outcomes.
- Demonstrate advanced levels of clinical judgement and accountability in designing, delivering, and evaluating evidence-based care to improve patient outcomes.
- Guide, mentor, and support other nurses to achieve excellence in nursing practice.
- Educate and guide individuals and groups through complex health and situational transitions.

## Post-MSN Certificate in Nurse Executive Leadership

### Graduate Certificate in Post-MSN Nurse Executive Leadership

#### CERTIFICATE CODE - CG68

Code	Title	Hours
Students are required to maintain a 3.0 in all work attempted in the program.		
NSG 600	Financial Management in Healthcare Organizations	3
NSG 611	System Based Decision Making	2
NSG 616	Role Seminar for Leadership MSN	2
NSG 617	Leadership Practicum 1	3
NSG 618	Leadership Practicum 2	3
NSG 704	Health Care Leadership	3
NSG 724	Health Research Statistics 1	3
NSG 754	Transforming Health Care Through Information Technology	3
Total Hours		22

#### First Year

Fall	Hours	Spring	Hours
NSG 616		2 NSG 600	3
NSG 704		3 NSG 611	2
		5	5

#### Second Year

Fall	Hours	Spring	Hours
NSG 617		3 NSG 618	3
NSG 724		3 NSG 754	3
		6	6

Total credit hours: 22

## Certificate Learning Outcomes

### POST-MSN CERTIFICATE IN NURSE EXECUTIVE LEADERSHIP

1. Conduct a comprehensive and systematic assessment of organizational systems and/or communities and/or population groups to identify aggregate health or systems needs, incorporating diverse and culturally sensitive approaches.
2. Collaborate with diverse stakeholders for inter- or intra-organizational achievement of health-related organizational or public policy goals.
3. Utilize complexity science and systems theory in the design, delivery, and evaluation of health care.
4. Develop the leadership skills required to guide, mentor, and support other nurses to achieve excellence in nursing practice.

5. Evaluate outcome data using current communication technologies, information systems, and statistical principles to develop strategies to reduce risks and improve health outcomes in systems, communities, and/or identified population groups.
6. Advocate for the value and role of the professional nurse as member and leader of interprofessional healthcare and organizational teams.

## Post-MSN Certificate Psychiatric Mental Health Nurse Practitioner

### Graduate Certificate in Post-MSN Certificate Psychiatric Mental Health Nurse Practitioner

#### CERTIFICATE CODE - CG67

Code	Title	Hours
<b>Students are required to maintain a 3.0 in all work attempted in the program.</b>		
NSG 774	Neuro-Psychopharmacology	3
NSG 775	PMHNP Role and Foundations	3
NSG 776	Psychotherapy Modalities	3
NSG 777	PMHNP Management of Adults	3
NSG 779	PMHNP Management of Child/Adolescent	3
NSG 782	PMHNP Clinical Practicum	6
Total Hours		21

### Certificate Learning Outcomes

#### POST-MSN CERTIFICATE PSYCHIATRIC MENTAL HEALTH NURSE PRACTITIONER

1. Conduct a comprehensive and systematic assessment of health and illness in complex situations, incorporating individualized and culturally sensitive approaches.
2. Design, implement, and evaluate therapeutic interventions based on nursing and other sciences.
3. Develop and sustain therapeutic relationships and partnerships with patients (individual, family, or population) and other professionals to facilitate optimal care and patient outcomes.
4. Demonstrate advanced levels of clinical judgment and accountability in designing, delivering, and evaluating evidence-based care to improve patient outcomes.
5. Guide, mentor, and support other nurses to achieve excellence in advanced nursing practice.
6. Educate and guide individuals and groups through complex health and situational transitions.

## Post Master's Pediatric Nurse Practitioner

### Graduate Certificate in Post Master's Pediatric Nurse Practitioner

#### CERTIFICATE CODE - CG24

Code	Title	Hours
A minimum GPA of 3.0 is required.		
NSG 701	Advanced Pharmacotherapeutics	3
NSG 705	Advanced Lifespan Assessment	3
NSG 706	Advanced Pathophysiology	3
NSG 770	Pediatric Primary Care 1	3
NSG 771	Pediatric Primary Care 2	3
NSG 772	Pediatric Practicum 1	5
NSG 773	Pediatric Practicum 2	5
Total Hours		25

### Certificate Learning Outcomes

#### POST MASTER'S PEDIATRIC NURSE PRACTITIONER

Upon completion of the certificate, students should be able to:

- Conduct a comprehensive and systematic assessment of health and illness in complex situations, incorporating individualized and culturally sensitive approaches.
- Design, implement, and evaluate therapeutic interventions based on nursing and other sciences.
- Develop and sustain therapeutic relationships and partnerships with patients (individual, family, or population) and other professionals to facilitate optimal care and patient outcomes.
- Demonstrate advanced levels of clinical judgement and accountability in designing, delivering, and evaluating evidence-based care to improve patient outcomes.
- Guide, mentor, and support other nurses to achieve excellence in nursing practice.
- Educate and guide individuals and groups through complex health and situational transitions.

## Program Evaluation

### Graduate Certificate in Program Evaluation

#### CERTIFICATE CODE - CG41

The Certificate in Program Evaluation (PE) meets the needs of academics and professionals looking to gain knowledge and skills in the practice of program evaluation. The program consists of four courses in Educational Psychology including a capstone project and provides participants real world experience in performing evaluation studies. All courses are available online to maximize flexibility for working professionals.

Code	Title	Hours
<b>Students must maintain minimum GPA of 2.75 throughout program.</b>		
EDP 611	Measurement/Evaluation in Educational Psychology	3
EDP 612	Introduction to Research	3
EDP 617	Program Evaluation	3
EDP 680	Capstone Seminar in Program Evaluation	3
Total Hours		12

**Prospective students.** The Certificate in Program Evaluation is designed for individuals who (1) perform program evaluations as part of their job, (2) may desire evaluation knowledge and skills in their respective fields, and (3) are in or are preparing for program evaluation duties, but may lack formal training and/or certification. This certificate will provide foundational practitioner-oriented training in the theory and application of evaluation, assessment, and measurement. All evaluators or potential evaluators will be encouraged to apply to this program.

**Non-degree program.** Because credit hours taken under the certificate program frequently are not also used to satisfy the requirements of a degree program, the certificate program course of study is usually taken by non-degree graduate students. The academic records of these non-degree graduate students will be maintained in the college graduate records office as well as in the files of the department. Should any of these non-degree students later decide to pursue a graduate degree in the department awarding the certificate, they must formally apply to the degree program and their credentials must conform to the limits established for the transfer of credit obtained by non-degree students. Namely, a maximum of 12 credits obtained by a non-degree student can be applied toward any degree.

**Admissions.** Students can apply to the program online at <http://admissions.wvu.edu/admissions> (<http://admissions.wvu.edu/admissions/>) as a non-degree student (CEHS 4597 – Non-Degree Certificate). To be admitted as a non-degree student, a student must present evidence of a baccalaureate degree. The student must also maintain a 2.75 grade point average for the 12 credit hours of course work, a CEHS requirement. This average must be maintained as long as the student is enrolled.

**Program features.** The Certificate in Program Evaluation will consist of the following major features:

1. Online delivery: The program will be delivered in a 100% online format within the WVU eCampus environment.
2. Student Professional Development Plan: A plan will be developed to support students' Program Evaluation career interests and goals. This plan will document learning products developed out of each course and how each product meets the student's career goals.
3. Courses from CEHS: Educational Psychology: Four three-credit hour (total of 12 credits) will be utilized to address core content areas within the field of program evaluation.
4. Group evaluation experience: Within a group setting, students will locate and conduct a program evaluation in EDP 617: Program Evaluation.
5. Individual evaluation experience: To mimic how most evaluations are conducted, a student, with guidance from an instructor, will individually develop and implement a program evaluation to be performed by the conclusion of the capstone course.

**Student Learning Objectives:** students in the Program Evaluation Certificate will learn how to:

- Conduct program evaluations in both a group setting and as a sole evaluator. (EDP 617, EDP 680)
- Understand the criteria, standards and indicators used in evaluation and research. (EDP 611, EDP 617, EDP 680)
- Assess the efficiency, effectiveness, and appeal of program evaluations. (EDP 617, EDP 680)



- Design studies and develop tools utilizing modern research methods and current instruments. (EDP 611, EDP 612, EDP 617, EDP 680)
- Develop writing skills to be used in evaluation studies and reports. (EDP 611, EDP 612, EDP 617, EDP 680)

## Public Relations Leadership

### Graduate Certificate in Public Relations Leadership

#### CERTIFICATE CODE - CG53

The Public Relations Leadership Certificate is offered exclusively online with no on-campus classroom attendance required.

The Public Relations Leadership Certificate intends to prepare professional students for careers leading the public relations department for a company or running their own PR firm. Students will be exposed to course work focused in applied public relations, crisis communication, internal communications and C-suite leadership.

The program is taught by a diverse faculty who are recognized leaders in their fields.

### Program Format

The program's academic year consists of five accelerated terms corresponding to the University's existing parts of term: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

### Certificate Requirements

Code	Title	Hours
Minimum cumulative GPA of 2.75 required.		
Minimum grade of C- required in all courses provided that a cumulative 2.75 GPA is maintained.		
IMC 528	Applied Public Relations	3
IMC 531	Crisis Communication	3
IMC 537	Internal Brand Communication	3
IMC 648	Executive Communication & Leadership	3
Total Hours		12

### Suggested Plan of Study

First Year			
Fall	Hours	Spring	Hours
Early Fall Term		Early Spring Term	
IMC 537		3 IMC 648	3
Late Fall Term		Late Spring Term	
IMC 528		3 IMC 531	3
		6	6

Total credit hours: 12

### Certificate Learning Outcomes

#### PUBLIC RELATIONS LEADERSHIP

1. Define the role of public relations in executive leadership, including methods to analyze an organization, identify and develop favorable messages to persuade a variety of internal and external publics, and disseminate messaging through available digital, social and traditional media.
2. Develop a comprehensive organizational public relations plan to support C-suite thought leadership and business objectives.
3. Utilize market research and data analysis to plan PR activities and improve PR effectiveness.
4. Plan and develop content, including research briefs, SWOT analyses, speech writing, account pitches, and media relations materials.
5. Learn to anticipate and differentiate among different types of crisis and how to communicate effectively about them to both internal and external stakeholders/audiences.
6. Incorporate crisis and internal communication planning into IMC campaign strategy.
7. Explain digital and social media effectiveness as it relates to reputation management and persuasion. Learn how to manage negative opinions and feedback online.
8. Evaluate and report ROI results of PR, crisis and other communication campaign efforts, including executive communications.

# Software Engineering

## Graduate Certificate in Software Engineering

### CERTIFICATE CODE - CG10

The certificate in software engineering program provides further education to individuals who are currently working in the computer and information technology industry. This program is offered online at evening times convenient for the working professional.

Students may apply for admission as non-degree students to complete the certificate requirements. These students may then optionally apply for transfer to the M.S.S.E. program. In addition, students already admitted to the M.S.S.E. may elect to receive the certificate after completing the necessary requirements.

### ADMISSION REQUIREMENTS

Applicants for the certificate in software engineering must meet the following requirements:

- Hold a bachelor's degree in any field from an accredited University.
- Submit a resume documenting at least one year of software development experience.
- By the semester in which the certificate is to be awarded, students must meet the following additional requirements:
  - a. Submit a resume documenting at least **three** years of software development experience.
  - b. Submit three letters of reference from persons familiar with the student's professional work.

Students working toward the certificate in software engineering are not degree candidates and are admitted as non-degree students. However, they may apply for admission to the M.S.S.E. program (see below) after satisfactory completion of most of the certificate requirements.

Students initially admitted to the M.S.S.E. program may elect to receive the certificate after satisfactory completion of the five core courses and the certificate paper (see below). In this case the resume and letters of reference are not required.

### PROGRAM REQUIREMENTS

The certificate program consists of completing five approved courses and a certificate term paper. Students who achieve a B- or higher in each of the first four courses of the certificate program may qualify to enter the M.S.S.E. program, as described below.

The Software Engineering certificate is designed to allow a pathway to graduate for students who have completed the core M.S.S.E. requirements but have decided to not continue with the M.S.S.E. studies. Students in this program would have initially been admitted to the M.S.S.E. program.

### Admissions

Students seeking admission to the Certificate in Software Engineering program must meet the following requirements to be admitted:

- Submit an official transcript showing completion of a Bachelor's degree in Computer Science, Computer Engineering, Software Engineering, or a closely related field from an accredited University with a minimum cumulative grade point average of 3.00 (on a 4-point scale).
- Submit a resume, three professional/academic letters of recommendation and a personal statement.
- International applicants must submit proof of English language proficiency.
- The GRE is not required.

Students may enroll in core courses in the M.S.S.E. program to complete the certificate. They may apply to the M.S.S.E. program; WVU policies on residency and credit sharing by programs should be considered for planning multiple programs.

### Certificate Learning Outcomes

#### SOFTWARE ENGINEERING

Upon completion of the certificate students should be able to:

- Achieve proficiency in the area of Software Project Management.
- Achieve proficiency in Software Analysis and Design.
- Understand the process of software Validation and Verification.
- Understand the process of Software Evolution.
- Achieve proficiency in Object-Oriented Design of software.

## Sustainable Trails Development

### Graduate Certificate in Sustainable Trails Development

#### CERTIFICATE CODE - CG69

Code	Title	Hours
A minimum grade of C- is required in all coursework applied to the certificate.		
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	3
LARC 532	Recreation, Trails, and Community Development	3
LARC 534	Sustainable Trails: Design Concepts	3
LARC 535	Sustainable Trails: Design Detailing & Drainage	3
LARC 537	Sustainable Trails: Practicum Experience	3
RPTR 536	Sustainable Trails: Engagement	3
Total Hours		18

### Certificate Learning Outcomes

#### SUSTAINABLE TRAILS DEVELOPMENT

1. Summarize the benefits (economic, public health, social) of investing in trails development and outline funding strategies for trail development and facilitate meaningful stakeholder engagement.
2. Assess trail networks for skills progression, responding to site topography and aesthetics and recognizing design features that reduce soil erosion and control hazards from trail construction.
3. Select appropriate construction materials and construction details to minimize environmental impacts and adhere to regulatory requirements.
4. Estimate construction costs related to trail construction, demonstrate understanding of effective written contract agreements, and suggest measures for quality control during construction.
5. Design informative and effective interpretive signs for greenspace.
6. Identify key components of an effective management plan for a trail system, and plan effective strategies for: volunteer management, trail maintenance, greenspace programming, special event planning and broad civic engagement.
7. Strategize for post-build promotion and marketing, ongoing fundraising, and post-build research / assessment.
8. Apply principles of sustainable trail design / development to a real trails project.

## Therapeutic Art

### Graduate Certificate in Therapeutic Art

#### CERTIFICATE CODE - CG57

The Graduate Certificate in Therapeutic Art program will help to provide additional training for art teachers that the Bachelor of Fine Arts and/or Masters of Arts in Art Education currently do not offer. As such, this field offers new professional opportunities to art educators who are trained, knowledgeable, and versed in therapeutic art concepts and technical skills within their teaching practice in the PreK-21 classroom.

To be considered for admission, the applicant must have a bachelors' degree in studio art or art education with a minimum cumulative GPA of 3.0 or better. Students in the post bachelors' certificate program must maintain a 3.0 GPA to progress. Additionally, any student currently enrolled in a Graduate school at WVU may also take courses.

For those interested in a therapeutic art graduate certificate, students should apply to the Graduate School and the School of Art and Design Graduate School.

Note: Admission criteria are subject to change. Please see the School of Art and Design website for the most up-to-date criteria on how to apply.

The required courses for a graduate certificate in Therapeutic Art are as follows:

Code	Title	Hours
A minimum GPA of 3.0 is required.		
<b>Required Courses</b>		
ART 610	Introduction to Visual Arts Therapy	3
ART 611	Theory of Art Education & Art Therapy	3

ART 612	Art Methods/Materials for Special Populations	3
ART 620	Advanced Problems in Art Making	3
Total Hours		12

## Certificate Learning Outcomes

### THERAPEUTIC ART

Upon completion of the certificate students will be able to:

- Provide an integrated, interdisciplinary approach to understanding and mastering Therapeutic Art systems, methods, and practices that place emphasis on the interdependence between teaching art and the whole being of the child;
- Integrate concepts and skills from Therapeutic Art to benefit all students, but especially those coming from special needs and at risk student populations;
- Help practicing art educators gain a foundational understanding of the current field of Therapeutic Art in order to understand how it complements the therapeutic value of art within art education;
- Widen practicing art teachers' perspectives of the visual arts to help improve student learning, interpersonal skills and behavior, and/or physical abilities within the education environment;
- Supplement practicing art educators with new skills that enhance positive student behaviors, increase self-esteem, augment cognitive abilities and improve social skills through visual arts therapy approaches, art activities, assessments and evaluation;
- Engage current practicing art educators in exercise and project level art-making that focuses on expression, while still considering technical skills and concepts.

## University Teaching

### Graduate Certificate in University Teaching

#### CERTIFICATE CODE - CG17

##### Overview

The Certificate in University Teaching is a fifteen credit hour program for graduate students. It includes

- mentored teaching experience
- syllabus development
- instructional design for a diverse set of students
- implementation of instructional theory and techniques
- development of a teaching portfolio

It helps to prepare graduate students for teaching at the college or university level. In this program, students learn to design and teach courses in their discipline while implementing effective instructional techniques, assessment, and self-reflection.

##### Requirements

Your plan of study for this Certificate includes the following:

1. Pedagogy course
2. Diversity course
3. Instructional excellence course
4. Teaching practicum (student must arrange for a course to teach)
5. Teaching capstone course

However, the curriculum for the Certificate is flexible. You can choose from a large selection of courses. Potentially, a maximum of 6 credit hours from your Master's or PhD coursework can be counted towards this Certificate.

##### More Information

More information about the Certificate and its requirements can be found here (<https://tlcommons.wvu.edu/programs-services/certificate-in-university-teaching/>). If you are interested in pursuing the Certificate in University Teaching, contact the Teaching & Learning Commons at 304-293-5824 or [tlcommons@mail.wvu.edu](mailto:tlcommons@mail.wvu.edu). We will meet with you to talk through the requirements and help you develop your plan of study.

##### To Apply

You must be enrolled in a graduate program and in good standing (meeting the minimum GPA for your graduate program). You may apply to enter this Certificate program at any time. To be considered for the Certificate, you will need to complete the following:

- Online application ([https://wvu.qualtrics.com/jfe/form/SV\\_55vr2ZMUgBwvCLP/](https://wvu.qualtrics.com/jfe/form/SV_55vr2ZMUgBwvCLP/)) (please include your CV or resume)
- Approval from your advisor ([https://wvu.qualtrics.com/jfe/form/SV\\_6Vj2ihQeqczFhB4/](https://wvu.qualtrics.com/jfe/form/SV_6Vj2ihQeqczFhB4/)) for you to pursue this Certificate

**Questions?**

Contact WVU's Teaching & Learning Commons at 304-293-5824 or [tlcommons@mail.wvu.edu](mailto:tlcommons@mail.wvu.edu)

Code	Title	Hours
<b>Pedagogy Course</b>		<b>3</b>
ART 590	Teaching Practicum/Professional Practice	
C&I 789	Teaching in Higher Education	
ENGL 609	College Composition Pedagogy	
GRAD 695	Independent Study (Requires departmental approval)	
GRAD 710	Scholarly Teaching	
HIST 789	Teaching History Online	
LANG 421	The Teaching of Foreign Languages	
LANG 521	English as a Second Language Methods	
LANG 621	Teaching Foreign Language in College	
MUSC 671	Music History Pedagogy	
MUSC 762	Pedagogy of Theory	
NSG 735	Principles: Nursing Education	
PET 583	Principles of Effective Teaching	
PHAR 743	Teach to Learn: Learn to Teach	
PHAR 744	Education Journal Club	
PSIO 790	Teaching Practicum	
PSYC 606	Seminar on Teaching Psychology	
SOC 710	Teaching Sociology	
<b>Diversity Course</b>		<b>3</b>
ART 612	Art Methods/Materials for Special Populations	
C&I 689	Cultural Diversity in the Classroom	
COUN 634	Cultural Issues	
ESL 630	American Culture	
HIED 651	College Student Development	
HIED 693	Special Topics	
HIED 750	Diversity Issues in Higher Education	
HIED 754	Women and Gender Issues in HIED	
HIED 763	International Higher Education	
<b>Instructional Excellence</b>		<b>3</b>
GRAD 670	Readability in the Online & Blended Course (1 credit hour)	
GRAD 671	Accessible Teaching Online (1 credit hour)	
GRAD 672	Designing Engaging Scenarios (1 Credit Hour)	
GRAD 673	Careers in Higher Education	
GRAD 674	Teaching Different Cultures (1 credit hour)	
GRAD 695	Independent Study (Requires departmental approval)	
GRAD 710	Scholarly Teaching	
C&I 789	Teaching in Higher Education	
EDP 600	Educational Psychology	
EDP 640	Instructional Design	
HIED 760	Curriculum Development and Reform in Higher Education	
IDT 675	Online Teaching and Learning	
IDT 735	Technology Integration	
PET 575	Effective Teaching in Physical Education - Advanced Laboratory (2 credit hours)	
PET 745	Higher Education Curriculum in Kinesiology	
<b>Teaching Experience &amp; Teaching Practicum</b>		<b>3</b>

GRAD 690	Teaching Practicum	
or a departmental Teaching Practicum Course (590, 690, or 790)		
<b>Teaching Capstone</b>		<b>3</b>
GRAD 685	Teaching Capstone	
Total Hours		15

## Certificate Learning Outcomes

### UNIVERSITY TEACHING

Upon completion of the certificate students should be able to:

- Apply principles and theories of learning to your teaching.
- Explain diversity issues in higher education.
- Assess the needs of diverse learners and develop strategies to meet them.
- Design a course with appropriate learning outcomes, assessment methods, instructional strategies, and course materials.
- Integrate learning technologies effectively to meet learning goals.
- Develop and apply appropriate active-learning and assessment techniques to meet specific course objectives.
- Document effective teaching through a professional teaching portfolio.

## Programs, Courses & Credits

### In this section:

- Academic Definitions (p. 70)
- Rules for Attaining Multiple Credentials (p. 71)
- Modality Definitions (p. 72)

## Academic Definitions

The following definitions are applicable to West Virginia University, WVU Potomac State College, and WVU Institute of Technology.

### DEGREE DESIGNATION

A degree, which is an award signifying a rank or level of educational attainment and which is conferred on students who have successfully completed a degree program. The degree is represented by the official degree designation, e.g. B.A. - Bachelor of Arts, B.S. - Bachelor of Science, A.A. - Associate of Arts, etc. The degree designation is noted on the student's diploma and transcript.

### DEGREE PROGRAM

A degree program is defined by the combination of its degree designation (e.g., Bachelor of Science) and a program title that represents the overarching content areas the program's major or majors covers (e.g., Chemistry). Degree programs are approved by the institution and the Board of Governors (BOG) and listed on the official inventory of degree programs. An associate's degree program requires a minimum of 60 credits. A bachelor's degree program requires a minimum of 120 credits. A master's degree program requires a minimum of 30 credits. For a doctoral degree, the minimum number of required graduate credits is set by the program. A degree program must include at least one major.

### MAJOR

A major is a field of study within an approved degree program with its own curriculum. Typically, an undergraduate baccalaureate major requires a minimum of 30 credits with the majority of credits at the upper-division level. WVU includes major(s) on the students' diplomas and transcripts.

### MINOR

Minors are only available at the undergraduate level. A baccalaureate minor is an area of study outside of the major that encourages students to pursue a secondary field. A minor comprises at least 15 credits, 9 of which must be upper-division level. Minors are noted on the transcript but not on students' diplomas.

### AREA OF EMPHASIS

An area of emphasis (AoE) is a focused curriculum within an approved major. An area of emphasis adds a specialization within a major area of study. Undergraduate areas of emphasis comprise 12-18 credits, 9 of which must be upper-division level. Graduate areas of emphasis comprise 6-15 credits. If a course is used by all required Areas of Emphasis offered in a major, that course is part of the major's core requirements and cannot be included in the

Areas of Emphasis. Areas of emphasis associated with certification or licensure requirements may exceed the credit limit. Areas of emphasis are noted on the transcript but not on the students' diplomas.

## TRACK

A track serves the purpose of allowing students to select among different pathways to complete their major. Tracks are not included on the transcript or on the students' diplomas.

## UNDERGRADUATE CERTIFICATE PROGRAM

An undergraduate certificate program is a specialized curriculum designed for students seeking expertise in a specific area for personal or career development. A certificate is awarded with or without an undergraduate degree and comprises 12 to 18 credits of course work, with a minimum of nine hours at the upper-division level (courses numbered 300 or above). Each certificate must have a minimum of 9 unique credit hours, distinct from any other academic credential. The certificate appears on the student's transcript and the institution issues an official certificate of completion. Students who are pursuing an undergraduate certificate without also being enrolled in a bachelor's degree program will not be eligible to receive Title IV federal financial aid.

## GRADUATE CERTIFICATE PROGRAM

A graduate certificate program is a specialized curriculum designed for students who have previously earned a baccalaureate degree or who are enrolled in a WVU graduate or professional program and who are seeking a specific body of knowledge for personal/career development. A graduate certificate program can be completed either independently or along with a degree program and comprises 12 to 21 credits. See the Academic Certificate Policies (<http://catalog.wvu.edu/graduate/graduatecertificates/>) page for credit limitations applicable to earning a certificate. The certificate appears on the student's transcript and the institution issues an official certificate of completion.

## TEACHER SPECIALIZATION

Teacher specialization is a state-approved curriculum that prepares students to meet teaching certification standards in a specialized content area and at a specific programmatic level. Teacher specializations may be a major, minor or area of emphasis. Teacher specializations are added to a student's transcript only at the time of graduation.

## BACHELOR'S TO JURIS DOCTOR (JD)

Students accepted into an approved 3+3 Program will start the JD at the beginning of what would have been their fourth year of undergraduate studies. By coordinating the plan of study for both degrees via the 3+3 Program, students who successfully complete the program obtain both their bachelor's and JD degrees in 181 credit hours and six years, instead of the 211 credit hours and seven years that a student normally must complete to receive both degrees.

## Rules for Attaining Multiple Credentials

### UNDERGRADUATE MULTIPLE CURRICULA

Multiple curricula refers to the completion of minors, areas of emphasis, or majors in addition to the primary major. If these areas of study are related, some of the credit hours must be unique to each major or minor.

Requirements for multiple curricula include:

- Each baccalaureate major must have a minimum of 50% unique credit hours. Students pursuing a second bachelor's degree after the conferral of a first bachelor's degree must complete a minimum of 30 additional credits.
- Each associate major must have 15 unique credit hours.
- A maximum of 6 credits may be shared between multiple areas of emphasis.
- Each minor must have a minimum of 9 unique credit hours distinct from any other academic credential.

### GRADUATE MULTIPLE CURRICULA

Graduate and professional students may simultaneously or sequentially pursue more than one degree or major (although no more than one PhD degree), one or more certificates in addition to degrees or majors, or more than one area of emphasis within their major(s) according to rules specified below and elsewhere in the Graduate/Professional Catalog. Applicability of courses and credits to degree, major, certificate, or area of emphasis requirements is the decision of the program offering the curriculum. Individual course credits may be applied to no more than two degrees, majors, or certificates.

***Students pursuing multiple curricula are urged to consult with their advisor(s) to ensure adherence to credit sharing limitations.***

***Credit Sharing Limitations for Graduate Degrees and Majors***



No more than a total of 12 of the credits required for a graduate degree (other than PhD degrees, which are not dependent on credit accumulation) can be:

- earned prior to admission to the degree program,
- earned prior to graduation with another WVU degree,
- earned at another institute, OR
- simultaneously applied to other degree programs or certificates (e.g., while enrolled in the degree program).

Students who simultaneously earn credits toward two or more WVU degrees must, in most cases, graduate with all degrees in the same term to ensure that all credits, including up to 12 credits shared by the degrees, can be applied. Once a student is awarded a graduate degree, only 12 credits earned to that point in time can be applied to a subsequent degree or major.

**Exceptions:** Doctoral programs that require or allow students to earn a master's degree in the same discipline may count the courses earned in the master's degree program toward the doctoral program without credit limitations. In addition, some approved dual degree programs (<http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#programstext>) are allowed to share more than 12 credits.

### **Credit Sharing Limitations for Graduate Certificates**

See Academic Certificate Policies (<http://catalog.wvu.edu/graduate/graduatecertificates/>) for credit limitations applicable to earning a certificate. See Credit Sharing Limitations for Graduate Degrees and Majors (p. 71) for limitations on applying credits earned as part of a completed certificate to a graduate degree or major.

### **Credit Sharing Limitations for Areas of Emphasis**

Normally, students may share a maximum of 3 credits between areas of emphasis with the same major.

## **Modality Definitions**

Contingent upon the needs of the unit, faculty/instructors must consult with their respective departmental chairs/college to select the most appropriate instructional delivery modality for their specific course section(s) as noted below. Distance Education Courses are credit-bearing courses in which 50% or more of the course is delivered through distance learning technologies.

All courses should be taught in the modality indicated in the schedule of courses at the time of student registration. In the case of instructor illness or other emergency a course may shift to online instruction with the approval of the appropriate Dean.

## **COURSE DELIVERY OPTIONS**

- **Asynchronous Online:** (100% online + asynchronous only) 100% of class sessions are delivered via distance education technologies. There are no campus visits or visits to designated sites. No synchronous events, including lectures, examinations, etc. can be required, as all students must have the same access to key components of the course. If synchronous events are offered, they must be optional and for enrichment purposes only (guest speakers, office hours, etc.), the core benefits of which must also be offered in an asynchronous format. Cannot be self-paced. Substantive instructor-initiated interaction is present.

Examinations in undergraduate courses are administered fully online asynchronously.

- **Synchronous Online:** (100% online + synchronous events) 100% of class sessions are delivered via distance education technologies. There are no campus visits or visits to designated sites. May have *both* synchronous and asynchronous elements. Synchronous learning events may be required throughout the course. Cannot be self-paced. Substantive instructor-initiated interaction is present.

Examinations in undergraduate courses are fully online, either synchronously (at the regularly scheduled class time) or asynchronously.

- **Arranged Low Residency Online:** (75-99% online\*) At least 75% of class sessions are delivered via distance education technologies. This type of course may require students to travel to attend an orientation, take exams, or participate in other on-site experiences. May have *both* synchronous and asynchronous elements. Substantive instructor-initiated interaction is present.

Examinations in undergraduate courses can be offered online or face-to-face.

- **Correspondence:** (100% online) Course content and exams are usually delivered via distance education technologies. Interaction between the instructor and the student is limited, is not regular, or is not substantive, or is primarily initiated by the student. Can be self-paced.

Examinations in undergraduate courses are administered fully online asynchronously.

- **Hybrid:** (50-74% online\*) At least 50% but less than 75% of instruction is delivered via distance education technologies, but some visits to a classroom or designated instructional site are required. The instructor decides which portions of the class are offered in person vs. online.

Examinations in undergraduate courses may be administered face-to-face or online at the discretion of the instructor.

- **HyFlex:** All core class content is available both face-to-face and online. Students can choose to attend on campus, online, or move back and forth between the two based on their preference. May have both synchronous and asynchronous online elements.

Examinations in undergraduate courses must be made available to students online, but a face-to-face option may also be offered at the discretion of the instructor.

- **Traditional/ On-Campus:** (less than 50% online\*) The majority of instruction is provided in a face-to-face classroom setting and physical attendance is expected. However, students may be expected to regularly supplement their learning through the use of distance learning technology.

Examinations in undergraduate courses are available either synchronously and in-person at the regularly scheduled class time or asynchronously online.

\*Percentage is provided as a general guideline and is not intended to be a precise measurement.

## DISTANCE AND EXTENDED EDUCATION PROGRAM DEFINITIONS

<https://online.wvu.edu/>

At WVU, Distance Programs are categorized in one of the following three ways:

- **Fully Online – (100% distant) –** No residency requirement - All required credit-bearing and any non-credit bearing courses and activities are conducted at a distance with NO required campus attendance and/or visits to designated locations. Optional campus visits and/or visits to designated locations are permissible.
- **Low residency (75-99% distant) –** Limited residency requirement - A majority of the credit-bearing and non-credit bearing courses and activities are either entirely online or mostly online. Some credit- or non-credit-bearing activities may require campus visits and/or visits to designated locations. Example activities could be program orientations or cohort-based site visits.
- **Blended (50-74% distant) -** Extensive residency requirement – At least 50% of the credit-bearing and non-credit bearing courses or activities are delivered entirely online. The remaining credit-bearing courses may be offered as face-to-face, partially at a distance, or as distance delivery courses.

### IN THIS SECTION:

- Graduate Certificate Programs (p. 73)
- Approved Dual Degree Programs (p. 73)
- Accelerated Bachelor's/Master's Programs (p. 74)

## GRADUATE CERTIFICATE PROGRAMS

For a complete list of certificates and information on WVU's graduate certificates, please see our Graduate Certificates Page (p. 42).

## APPROVED DUAL DEGREE PROGRAMS

West Virginia University offers several approved dual degree programs. Approved dual degree programs allow specific courses or credits to be accepted for credit by both programs.

Approved dual degree programs allow students to concurrently pursue a specific combination of two WVU degrees following an established plan. The two degrees may include a master's degree with another graduate degree (master's, Ph.D., or a professional doctorate) or a Ph.D. with a professional doctorate. Approved dual degree programs are listed below, and their requirements are included in this Catalog.

The guidelines described in this section apply only to approved dual degree programs. Students may also independently pursue or complete two or more graduate/professional degrees or certificates (except that students may only complete one Ph.D. degree from WVU) with approval from both programs and following the rules described in this catalog (<http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#Limitations>).

### ADMISSION:

An approved dual degree program must specify when students may be admitted. Students admitted to a dual degree program must meet the admission standards for both programs, and both programs must approve the student for dual degree admission. Students may not be admitted provisionally for a dual degree program. Students with University Fellowships are not eligible for dual degree programs without the Associate Provost for Graduate Academic Affairs' permission.

### REQUIREMENTS:

Students in approved dual degree programs complete all requirements for both degrees and are subject to all relevant University and program rules in place for students in either degree program. Students are conferred both degrees simultaneously after completing the requirements for both degrees.

An approved dual degree program may allow students to count some course or milestone activities toward the requirements of both degrees as described in the approved curriculum for the dual degree program. More than two programs, including graduate certificate programs, may not share

individual course credits. A maximum of 20% of the sum of the credits required for the two degrees may be shared by the two degrees, not to exceed 24 total shared credits.

## ENROLLMENT:

Students accepted to an approved dual degree program will be enrolled in both programs. Unless given specific permission by the relevant deans, students admitted to an approved dual degree program must maintain full-time continuous enrollment during fall and spring terms. Individual programs determine enrollment requirements in the summer term. Students pursuing a dual degree will not be approved for course overloads to accelerate completing the dual degree program.

## CONTINUED ELIGIBILITY & TERMINATION:

Students in an approved dual degree program must maintain a cumulative GPA and specified criteria for good standing in each program. Grades in all courses taken will contribute to a student's cumulative GPA. However, students enrolled in a dual program that includes a professional program may have independently calculated GPAs for each program. Student eligibility for program continuation will be evaluated at the end of each semester.

Probation in one program may impact credit sharing agreements or a student's standing in the remaining program. Students who are terminated from one program remain in good standing in the other program unless the other program takes some action to change the student's standing. The remaining program will determine whether or not any courses taken in the terminated program can be counted toward degree requirements.

## GRADUATION:

Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees. If a student chooses to receive one degree before the other in the dual degree program, the rules for sequential degrees apply, and up to 12 previously earned credits can be applied to the subsequent degree (see Rules for Attaining Multiple Credentials (<http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#academicdefinitionstext>)).

## APPROVED DUAL DEGREE PROGRAMS:

- Doctor of Dental Surgery/Master of Business Administration
- Doctor of Pharmacy/Master of Business Administration
- Master of Science in Nursing (Executive Focus)/Master of Business Administration
- Doctor of Jurisprudence/Master of Business Administration
- Doctor of Jurisprudence/Master of Science in Business Cybersecurity Management
- Doctor of Jurisprudence/Master of Public Administration
- Doctor of Jurisprudence/Master of Social Work

## Accelerated Bachelor's/Master's Programs

Accelerated Bachelor's/Master's degree programs (ABM programs) offer WVU students the opportunity to pursue both a bachelor's and a master's degree at WVU in the same or related disciplines in an accelerated time frame. Students in approved programs can take required courses for the master's degree at the 400 or 500 levels prior to completion of the bachelor's degree.

Students admitted to an ABM program will have their bachelor's and master's degrees conferred simultaneously upon completing all requirements for both degrees.

The bachelor's degree in an ABM program must require at least 120 credits, and the master's degree must require at least 30 credits, including any courses (up to 14 credits) approved to count for both degrees. For additional information, see the section below on Attaining Multiple Curricula.

## ADMISSIONS, ENROLLMENT, AND PROGRAM STANDARDS

All ABM students are expected to work closely with an academic adviser.

- Regular admission may not be any earlier than the semester in which an undergraduate student is expected to complete 60 credits or later than the semester after which the student needs two additional semesters to complete the bachelor's degree.
  - The minimum standard for regular admission is a cumulative undergraduate GPA of 3.0, with no provisional admission allowed. The individual programs determine additional admissions criteria (such as completion of specific courses, entrance exam scores, letters of recommendation, or personal statements).
  - Students must complete at least 24 undergraduate credits in residence to be eligible for admission into an ABM program.
- Each ABM program will determine when students begin taking graduate-level courses; students should consult the WVU Catalog for the ABM plan of study. ABM students do not need to complete a Senior Petition to enroll in graduate-level courses.
  - Courses taken and credits earned while enrolled as an undergraduate student will be recorded on the undergraduate transcript even when used to fulfill graduate requirements.
- Undergraduate ABM students will have their academic status updated to graduate as prescribed by their ABM program.

- Students must maintain academic standards set forth by the academic unit corresponding to their status (i.e., undergraduate or graduate).
- Students must be switched to graduate status effective the semester after they have reached 120 credits and have met all other undergraduate graduation requirements. The ABM program coordinator will request the change of status during the semester when the undergraduate requirements are expected to be completed, effective the following semester. If students fail to complete the undergraduate requirements, their status for the following semester will be changed back to undergraduate.
- Students admitted to an ABM program must maintain full-time continuous enrollment during fall and spring terms unless given specific permission by the appropriate dean. Individual programs determine enrollment requirements in the summer term.
- Students admitted to an ABM program may not pursue a dual degree, double major, or certificate unless approved by the appropriate dean(s). They may pursue minors and areas of emphasis as approved by their advisor.
- Students' eligibility to remain in the ABM program will be evaluated at the end of each semester. Students failing to meet academic standards of the university, college, school, or program will be placed on program probation for no more than one semester, after which they will be terminated from the ABM degree program. Terminated students and students who choose not to continue in the ABM degree program will be eligible to receive their bachelor's degree when they have completed the bachelor's degree requirements and earned a minimum of 120 credit hours. The credits earned in graduate-level courses apply to the minimum credits required by the bachelor's degree program.

## TUITION AND FINANCIAL AID

Students in an ABM degree program are charged undergraduate tuition and are eligible for undergraduate financial aid as defined by each program in the Catalog. Once the student's academic status has been updated to graduate level, students are charged graduate tuition. They are eligible for graduate assistantships (with permission of their program) or other graduate student funding opportunities and financial aid.

## APPROVED ABM PROGRAMS:

- Bachelor of Science in Physical Education & Kinesiology and Master of Science in Physical Education Teacher Education
- Bachelor of Science/Master of Science in Sport Management
- Bachelor of Science in Sport and Exercise Psychology and Master of Science in Sports Management
- Bachelor of Science/Master of Science in Journalism
- Bachelor of Science in Journalism and Master of Science in Integrated Marketing Communications
- Bachelor of Science/Master of Science in Integrated Marketing Communications
- Bachelor of Science in Advertising & Public Relations and Master of Science in Integrated Marketing Communications
- Bachelor of Science in Business Administration-Accounting and Master of Science in Forensic and Fraud Examination
- Bachelor of Science/Master of Science in Economics
- Bachelor of Arts in French and Master of Arts in Linguistics
- Bachelor of Science in Immunology and Medical Microbiology and Master of Science in Biomedical Sciences
- Bachelor of Science in Environmental Microbiology and Master of Science in Applied & Environmental Microbiology
- Bachelor of Science in Health Services Management and Master of Health Administration
- Bachelor of Science in Public Health and Master of Public Health

## In this section:

- Degree Program Credit Limitations (p. 75)
- Credit Hour Definition (p. 75)
- Prior Learning Experience (p. 77)

## Degree Program Credit Limitations

Credit toward a graduate degree may be obtained only for courses listed in the graduate catalog and numbered 400–799 (although some professional programs allow credit for lower-level courses). No more than forty percent of course credits counted toward any graduate degree may be at the 400-level. Graduate credit is obtained only for courses in which the grade earned is A, B, C, P or S. Courses taken as audits or courses in which the grade earned is D, F, or U do not count toward a graduate degree.

See Credit Sharing Limitations for Graduate Degrees (<http://catalog.wvu.edu/graduate/advisingcoursesdegrees/>) on the Academic Definitions tab and the Graduate Certificates (<http://catalog.wvu.edu/graduate/graduatecertificates/>) page for more information on sharing credits between degrees and certificates.

## Credit Hour Definition

West Virginia University courses offered for credit are based on semester hours. Semesters are fifteen weeks long plus one week for final exams. A single credit hour is equivalent to fifty minutes per week of guided instruction within the classroom. An hour of preparation, or related activity outside of the classroom, is equivalent to sixty minutes per week.

- **Full semester lecture:** Fifty minutes (~one hour) of classroom or direct faculty instruction and a minimum of 120 minutes of out-of-class student work each week for approximately fifteen weeks for one semester hour of credit.
  - 1 credit over 15 weeks = (1 hour in class per week x 15 weeks) + (2 hours of homework per week x 15 weeks) = 45 hours of coursework
  - 3 credits over 15 weeks = (3x15) + (6x15) = 135 hours of coursework
- **Part Semester Courses:**
  - Courses delivered in a part of term no shorter than 5 weeks long should require an equivalent amount of work
    - 3 credits over 8 weeks = (6 in class per week x 8 weeks) + (11 hours of homework per week x 8 weeks) = 136 hours of course work
  - Courses delivered in a compressed format (typically 4 weeks or less) need not adhere to the definition above but, instead, demonstrate equivalent student outcomes via assessment.
- **Full semester non-lecture courses:** For other activities as established by an institution, including laboratory work, practica, studio work, and other academic work leading to the award of credit hours, where outside of class work is very limited, the calculation typically should still reflect the overall hours of coursework for the length of the semester
  - A lab that meets twice a week for 4 hours would have the following calculation:  
3 credits over 15 weeks = (8 hours in lab per week x 15 weeks) + (1 hour outside of class per week x 15 weeks) = 135 hours of coursework

## FACE-TO-FACE CLASSROOM LEARNING

One credit hour is equivalent to one hour of guided instruction (fifty minute class) and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester. The amount of work students engage in remains the same regardless of term duration (e.g., summer, 8 week). The equivalent amount of work may take place over a different amount of time. One credit hour in other academic activities, as established by the institution, such as laboratory work, internships, practicums, studio work, study abroad, experiential learning opportunities, and online learning, must include an equivalent amount of required work.

## ONLINE LEARNING

One credit hour of online learning is equivalent to a total of fifteen hours of direct instruction and thirty hours of additional student work. Direct instruction can occur via computer-assisted (modules), multi-media interaction, discussions, and/or completion of exams/quizzes/assessments as documented in the course syllabus. Student work includes activities like readings and supplemental assignments. Students must fulfill these hours to complete the course requirements as set forth by the course instructor. Online courses developed from existing face-to-face instruction adhere to the defined learning outcomes and assessments of the original face-to-face format for the course. All WVU online programs are reviewed for nationally accepted standards for online learning.

## EXPERIENTIAL LEARNING

Experiential learning, includes opportunities associated with laboratory/lecture courses, research (with or without laboratory), professional development internships, clinical experiences, and service learning. Three hours of experiential learning per week over a period of fifteen weeks receives one credit hour. Students are required to document progress during the course and completion of the stated learning objectives for each experience. Experiential learning courses are expected to adhere to and follow the institutional policy for reporting midterm and final grades. All credit-bearing courses require a syllabus.

## AWARDING MILITARY CREDIT

West Virginia University awards college credit for military service listed on a student's Joint Services Transcript (JST). Veterans and current student service members may request credits be articulated in coordination with guidance from their academic advisor and the approval of the Dean of their academic college. Care will be taken to ensure that articulating JST credits is in the student's best academic interest. When approved, WVU will award equivalent course credit. Otherwise, elective credit at the lower (100 level) and upper (300 level) division may be awarded based on the American Council on Education (ACE) recommended credit totals for each ACE ID on a student's JST.

## STUDY ABROAD

Study Abroad programs include exchange programs (<https://educationabroad.wvu.edu/why-study-abroad/wvu-exchange/>), short-term programs (<https://educationabroad.wvu.edu/why-study-abroad/short-term/>), affiliate programs (<https://educationabroad.wvu.edu/why-study-abroad/affiliates/>) and other programs (<https://educationabroad.wvu.edu/why-study-abroad/other/>) that are outside of WVU's pre-approved programs requiring special approval. One credit hour is equivalent to fifteen hours of guided instruction and thirty hours of cultural, linguistic or other types of engagements as described by the syllabus and approved by the faculty, department Chair, Dean, and Associate Provost. Exceptions to this general rule would need to be justified and approved on an individual basis.

## STUDIO/ENSEMBLE WORK

In studio courses in the arts, design, and theatre, one credit hour is equivalent to one and a half hours of guided instruction and three hours for studio class practice or projects each week for fifteen weeks as defined by the National Association of Schools of Art and Design (NASAD). In accordance with the National Association of Schools of Music standards, one credit hour of ensemble work in the music field represents three hours of practice each week, on average, for a period of fifteen weeks plus the necessary individual instruction as defined by the major subject.

## VARIABLE CREDIT OFFERINGS

Variable credit courses often represent student experiences that range in credit hours based on the focus and discipline of the experience. Practicums (teaching and research), field experience, research and laboratory rotations and credit, and independent studies offer a range of contact. One credit hour is equivalent to 15 contact hours of guided instruction (e.g., student progress meetings, mentoring) and thirty hours of student work to complete the requirements set forth by the advisor or course instructor (e.g., team meetings, review sessions, thesis/dissertation preparation) over a 15-week period. Instructors/mentors and students should discuss the appropriate number of total credit hours for a given course based on the time needed to attain outcomes of the particular endeavor.

## Prior Learning Experience

In certain cases, and at the discretion of an academic unit, currently enrolled students with documented but untranscribed prior learning experiences such as military training, licensure, software certification, and professional training may seek to receive major specific credit for those experiences.

Students should present documentation to their academic adviser to determine if any previous experiences, prior to enrollment at WVU, may receive transcribed credit in their program and to evaluate the potential benefits and financial aid implications of receiving prior learning credit.

## Tuition, Fees & Residency

### In this section:

- Cost of an Academic Year's Work (p. 77)
- Identification Card (p. 77)

### Cost of an Academic Year's Work

Tuition and fee structures (<http://revenueservices.wvu.edu/tuition-and-fees/>) vary by residency classification and academic program at WVU locations. Students are charged for University tuition, college tuition, and University fees. Some programs may require additional charges. Students may also be charged an additional fee for WVU Online courses or programs. Senior citizens (<https://admissions.wvu.edu/how-to-apply/senior-citizen-students/>) of West Virginia (age 65 and older) may take courses at WVU for reduced tuition and fees.

Additional cost may include room and board, books and supplies, transportation, and personal expenses.

### Identification Card

Registered students are eligible for an identification card and can find more information at Mountaineer Card Services (<https://mymountaineercard.wvu.edu>). The Mountaineer Card gives access to certain activities and privileges on campus. For example, students are given access to the Student Recreation Center, the PRT, and athletic events, and may ride the local bus system, Mountain Line Transit Authority (<https://www.busrider.org/>), by using their ID card.

WVU reserves the right to refuse issuance of an identification card. Misuse may result in confiscation of the card. Lost or broken cards can be replaced for a fee.

### Residency Status

The Residency Policy is established by and can be found at the BOG Academics Rule 2.4, Residency Status for Admission, Tuition, and Fee Purposes webpage (<https://policies.wvu.edu/finalized-bog-rules/bog-academics-rule-2-4-residency-status-for-admission-tuition-and-fee-purposes/>). The WVU Office of Admissions assigns students a residency status for admission, tuition, and fee purposes. Students who are determined to be residents of West Virginia pay "resident" tuition and fees at WVU; students who are residents of other states and nations pay "non-resident" tuition and fees.

### Academic Common Market

West Virginia University participates in the Academic Common Market (ACM) of the Southern Regional Education Board (SREB) for graduate programs. ACM eligible graduate programs are available at WVU for residents of SREB states. The ACM program is not competitive or merit-based, but applicants must meet state residency and college program requirements.

For more information about the ACM at WVU, visit the Graduate Academic Common Market webpage (<https://graduateeducation.wvu.edu/finances/financial-support/academic-common-marketplace/>).

For further information regarding specific state requirements, students should contact the WVU ACM coordinator ([shirley.robinson@mail.wvu.edu](mailto:shirley.robinson@mail.wvu.edu)).

### Tuition and Fee Regulations

Policies concerning late fees, financial holds, removal from classes, and collections can be found on the Student Accounts Financial Responsibilities (<https://studentaccounts.wvu.edu/policies/>) page. Students can review their charges, waivers (university tuition, housing, or dining), scholarships, and payments online through the WVU MyAccount, which can be accessed through the WVU Portal at [portal.wvu.edu](https://portal.wvu.edu) (<https://portal.wvu.edu>).



Payments of tuition and fees and other charges can be made through the WVU Portal. A processing fee is added to credit card payments. Excess payments or financial aid remaining in a student's account after all University charges are paid are returned to the student via a refund (<https://studentaccounts.wvu.edu/refunds/>).

WVU places restrictions on students who have outstanding debts to the University. Restrictions may include, but are not limited to, the withholding of a student's registration, diploma, or transcript. Transcripts will not be issued to any student before payment is made for all tuition, fees, and other indebtedness to any unit of the University.

Students who fail to drop courses prior to the end of the add/drop period are responsible for tuition and fees whether or not they attend those courses. Withdrawal Policies (<https://registrar.wvu.edu/registration/withdrawal-policies/>) are explained on the Office of the University Registrar website.

## SECTION 103 INFORMATION FOR STUDENTS USING U.S. DEPARTMENT OF VETERAN AFFAIRS BENEFITS

On December 31, 2018, the President signed into law the Veterans Benefits and Transition Act of 2018. It contains a provision (Section 103) that took effect on August 1, 2019. Therefore, despite any policy to the contrary, for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA, WVU will not:

- Prevent their enrollment;
- Assess a late penalty fee to;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

## Veterans

### In this section:

- Center for Veteran, Military and Family Programs (p. 78)
- Credit Hours for Full Time Status (p. 79)
- Registration for Veterans (p. 79)
- Student Account Policies (p. 79)

## Center for Veteran, Military and Family Programs

The Center for Veteran, Military and Family Programs (<https://wvuveterans.wvu.edu/home/>) (CVMF) at WVU assists in providing academic, personal and professional support for all military connected students in a safe and welcoming environment. The center is open to all veterans, armed forces personnel and dependents of current and former military service members.

For information on how to start your VA benefits:

U.S. Department of Veteran Affairs (<https://www.va.gov/>)

WV Educational Encouragement Program (<https://apps.wv.gov/WVEEP/>)

## FEDERAL TUITION ASSISTANCE VETERANS

All students receiving VA benefits for the first time will need to apply by going to U.S. Department of Veteran Affairs (<https://www.va.gov/>). If you are approved, you will be sent a Certificate of Eligibility (CoE) in the mail. Please note this process may take 30-45 days. Visit the Center for Veteran, Military and Family Programs (<https://wvuveterans.wvu.edu/home/>) to view additional documentation needed for benefit certification.

Undergraduate students who wish to receive the full stipend of VA Educational benefits in the fall and spring semesters, must maintain a minimum of 12-degree pursuant credit hours for the full semester. Degree pursuant coursework can be defined as courses recorded as degree requirements, degree electives, course prerequisites, required general education courses, military science credit for ROTC and minors **required** by a chosen major as stated in the WVU Catalog (<http://catalog.wvu.edu/>). Students must request to be certified for terms other than fall/spring by contacting the Center for Veteran, Military and Family Programs (<https://wvuveterans.wvu.edu/>).



Students receiving Chapter 33 (Post 9/11) benefits need to be aware that charges for housing and meal plans will be the student's responsibility to pay up front.

Undergraduate students receiving benefits must declare a major or non-exploratory pathway by the time they reach 29 earned hours. Students must matriculate into their intended degree program by 59 earned hours. If this does not happen, the student cannot be certified for benefits.

For VA purposes, students receiving benefits will be certified as on-campus, hybrid (low-modality) or online. On-campus and hybrid programs receive a higher rate for Monthly Housing Allowance (MHA) than online. Visit the GI Bill Comparison Tool (<https://www.va.gov/education/gi-bill-comparison-tool/>) to compare rates. Hybrid programs are those in which on-campus student attendance is required at least one time per term. Students must sign in for the academic session and inform the professor to send proof of attendance to the certifying official on campus. The certifying official will recertify benefits at the higher MHA rate. Meetings that take place before or after the class begins or ends (such as orientations), will not count toward hybrid certification. \*MHA will not be affected for active duty students receiving Federal Tuition Assistance.

For more information on modality definitions, visit WVU Catalog ([http://catalog.wvu.edu/undergraduate/programs\\_courses\\_\\_enrollment/#Modality](http://catalog.wvu.edu/undergraduate/programs_courses__enrollment/#Modality)).

## Credit Hours for Full Time Status

For information concerning full time status, eligibility of benefits, book stipends, and housing rates for WVU, call the VA Education Hotline at 888-442-4551 or visit the GI Bill Comparison Tool. (<https://www.va.gov/education/gi-bill-comparison-tool/>)

\*Graduate hours needed for full time status may change depending on how many weeks the class is in session.

\*GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <https://www.benefits.va.gov/gibill> (<https://www.benefits.va.gov/gibill/>).

## Registration for Veterans

West Virginia University offers priority registration to veterans as part of the Forever GI Bill - Harry W. Colmery Veterans Educational Assistance Act.

Additional information regarding attendance, leave policies for activations and withdrawal policies can be found under the Enrollment tab of the Advising, Enrollment and Grades (<http://catalog.wvu.edu/undergraduate/enrollmentandregistration/>) section of the catalog.

### Contact Information:

The Center for Veteran, Military, and Family Programs (CVMF)  
Aka "Mountaineer Bunker"  
WVU Mountainlair, Room 214  
Email: [veterans@mail.wvu.edu](mailto:veterans@mail.wvu.edu)  
Phone: 304-293-8825  
Website: <https://veterans.wvu.edu/>  
Facebook: WVUVeteransHQ  
Twitter: @WVUVeterans

## Student Account Policies

Policies are in place concerning late fees, financial holds, removal from class and collections. Students should review the Student Accounts Financial Responsibility (<https://studentaccounts.wvu.edu/policies/>) page for the most up to date information about Payment Due Dates, Late Payment Fees, Financial Holds and the Collection Policy.

## SECTION 103

On December 31, 2018, the President signed into law the Veterans Benefits and Transition Act of 2018. It contains a provision (Section 103) that took effect on August 1, 2019. Therefore, despite any policy to the contrary, for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA, WVU will not:

- Prevent their enrollment;
- Assess a late penalty fee to;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;

- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

# Agriculture, Natural Resources, and Design- Davis College of

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As WVU's oldest academic unit, the Davis College is central to the University's mission to advance the people and places of West Virginia and beyond. The College offers a wide range of undergraduate and graduate degree programs that cover life sciences, applied and basic research, and economic and social relationships among people as they live and work in a wide variety of settings. With an extensive research portfolio in areas related to food, water quality, natural resource and landscape management, the College is a leader in making discoveries that change lives as it works toward the vision of a world sustainably fed, clothed, and housed.

The Davis College is named for two Morgantown sisters, Gladys Gwendolyn Davis and Vivian Davis-Michael, in recognition of their \$18.4 million gift. The College offers 22 undergraduate majors, as well as 18 masters programs and seven doctoral degree programs. It maintains thousands of acres of farmland and forests throughout the state which provide opportunities for learning beyond the classroom, research and facilitate valuable community service.

## Degrees Offered

- Master of Agriculture
- Master of Landscape Architecture
- Master of Science
- Master of Science in Forestry
- Doctor of Philosophy

## School of Agriculture and Food

- Animal and Food Science
- Animal Physiology
- Applied and Environmental Microbiology
- Entomology
- Environmental, Soil and Water Sciences
- Genetics and Developmental Biology
- Horticulture
- Nutritional and Food Science
- Plant and Soil Sciences
- Plant Pathology

## School of Design and Community Development

- Agricultural and Extension Education
- Human and Community Development
- Landscape Architecture

## School of Natural Resources

- Forestry
- Natural Resource Economics
- Natural Resources Science
- Recreation, Parks, and Tourism Resources
- Resource Economics and Management
- Resource Management
- Wildlife and Fisheries Resources

## College Wide Degrees

- Agriculture, Natural Resources and Design
  - Energy Environments
-

## **ADMINISTRATION**

### **DEAN**

- Darrell Donahue - Ph.D. (North Carolina State University)  
Director, West Virginia Agricultural and Forestry Experiment Station

### **ASSOCIATE DEAN FOR ACADEMIC AFFAIRS**

- Kimberly M. Barnes - PhD (University of Nebraska)

### **ASSOCIATE DEAN FOR RESEARCH AND OUTREACH**

- Matthew Wilson - Ph.D. (Iowa State University)  
Associate Director, West Virginia Agricultural and Forestry Experiment Station

### **SCHOOL/DIVISION DIRECTORS**

- Robert Burns - Ph.D. (Pennsylvania State University)  
Division of Forestry and Natural Resources
- Peter Butler - MLA (Iowa State University)  
School of Design and Community Development
- Alan Collins - Ph.D. (Oregon State University)  
Division of Resource Economics and Management
- Christopher Ashwell - Ph.D.  
Division of Animal and Nutritional Science
- Sven Verlinden - Ph.D. (Purdue University)  
Division of Plant and Soil Science

## **Degree Designation Learning Outcomes**

### **MASTER OF AGRICULTURE (MAGR)**

The Master of Agriculture, Natural Resources and Design is an interdisciplinary degree that offers advanced study in all areas of agriculture, natural resources, and design. This program provides an opportunity for students to expand on the knowledge and skills they acquired during their undergraduate studies and enables students to tailor their education to fit individual career goals. The Master of Agriculture, Natural Resources and Design may benefit individuals who are seeking a higher paying position, wish to improve chances for admission to a professional school, want to make a career change, start an entrepreneurship, or improve their skills to enhance their current careers.

Students earning an MAGR degree will be able to:

- Communicate professional concepts orally and in writing.
- Explain the holistic nature of opportunities and problems pertaining to agriculture, natural resources, or design.
- Explain the role of inquiry and research in addressing opportunities and problems pertaining to agriculture, natural resources, or design.
- Construct a theoretical framework that addresses a particular opportunity or problem in agriculture, natural resources, or design and generalize that framework to aid in understanding similar opportunities or problems.
- Apply research skills to analyze agriculture, natural resources, or design opportunities or problems.

### **MASTER OF LANDSCAPE ARCHITECTURE (MLA)**

The MLA program provides students with the knowledge necessary to develop the skills and abilities in design, planning, and management that are pivotal to effectiveness and success in the workforce, and that are responsive to the unique qualities of the state and the region. The program prepares students to become effective professionals and citizens by emphasizing a philosophy of responsibility and commitment to ethical standards regarding the natural environment, professional practice, and personal relationships.

Students earning an MLA degree will be able to:

- Demonstrate a solid professional educational foundation that encompasses knowledge and skills of design, construction, problem-solving, plant materials, landscape management, and professional practice and that is responsive to the needs of the environment, society, and the landscape architecture profession.
- Understand ethical standards regarding the environment, the profession, personal relationships, and social responsibility.
- Proficiently communicate professional concepts graphically, orally, and in writing.
- Incorporate professional information through the study of real-life problems in Morgantown, the state of West Virginia, and the region.

## MASTER OF SCIENCE (MS)

The Davis College of Agriculture, Natural Resources, and Design offers numerous MS programs.

Students earning an MS degree will be able to:

- Communicate professional concepts orally and in writing.
- Explain the holistic nature of opportunities and problems pertaining to agriculture, natural resources, or design.
- Explain the role of inquiry and research in addressing opportunities and problems pertaining to agriculture, natural resources, or design.
- Construct a theoretical framework that addresses a particular opportunity or problem in agriculture, natural resources, or design and generalize that framework to aid in understanding similar opportunities or problems.
- Apply research skills to analyze agriculture, natural resources, or design opportunities or problems.
- Produce and defend original research in their major area of study.

## MASTER OF SCIENCE IN FORESTRY (MSF)

This program prepares students for careers in professional forestry ranging from consulting for private woodland owners to managing vast tracts of public forestlands. Students are trained in life sciences—biology, ecology, tree identification, sustainable forestry—and specialized sciences such as forest biometrics, forest economics, geographic information systems (GIS), and remote sensing of forest resources.

Students earning an MSF degree will be able to:

- Understand taxonomy and identify forest and other tree species, their distribution, and associated vegetation and wildlife.
- Understand soil properties and processes, hydrology, water quality, and watershed functions.
- Understand ecological concepts and principles including the structure and function of ecosystems, plant and animal communities, competition, diversity, population dynamics, succession, disturbance, and nutrient cycling.
- Demonstrate the ability to make ecosystem, forest, and stand assessments.
- Understand tree physiology and the effects of climate, fire, pollutants, moisture, nutrients, genetics, insects and diseases on tree and forest health and productivity.
- Identify and measure land areas and conduct spatial analysis.
- Design and implement comprehensive inventories that meet specific objectives using appropriate sampling methods and units of measurement.
- Analyze inventory data and project future forest, stand, and tree conditions.
- Develop and apply silvicultural prescriptions appropriate to management objectives, including methods of establishing and influencing the composition, growth, and quality of forests, and understand the impacts of those prescriptions.
- Analyze the economic, environmental, and social consequences of forest resource management strategies and decisions.
- Develop management plans with specific multiple objectives and constraints.
- Understand valuation procedures, market forces, processing systems, transportation and harvesting activities that translate human demands for timber-based and other consumable forest products into the availability of those products.
- Understand valuation procedures, market, and non-market forces that avail humans the opportunities to enjoy non-consumptive products and services of forests.
- Understand administration, ownership, and organization of forest management enterprises.
- Understand forest policy and the processes by which it is developed.
- Understand how federal, state, and local laws and regulations govern the practice of forestry.
- Understand professional ethics, including the Society of American Foresters Code, and recognition of the responsibility to adhere to ethical standards in forestry decision making on behalf of clients and the public.
- Understand the integration of technical, financial, human resources, and legal aspects of public and private enterprises.
- Communicate professional concepts orally and in writing.
- Explain the holistic nature of forestry opportunities and problems.
- Explain the role of inquiry and research in addressing opportunities and problems pertaining to forestry.
- Construct a theoretical framework that addresses a particular opportunity or problem in forestry and generalize that framework to aid in understanding similar opportunities or problems.
- Apply research skills to analyze forestry opportunities or problems.
- Produce and defend original research in their major area of study within forestry.

## DOCTOR OF PHILOSOPHY (PHD)

The Davis College of Agriculture, Natural Resources, and Design offers numerous doctoral programs.

Students earning a doctoral degree will be able to:

- Conduct independent and original research of publishable quality in agriculture or natural resources
- Effectively communicate, orally and in writing, the state of knowledge in the student's discipline, field, sub-field, and specific research area.
- Teach, at any undergraduate level or beyond, core courses in the student's discipline and field and specialized courses in the student's sub-field and research area.
- Write research manuscripts and technical reports that lead to refereed publications.

## Admissions

### REGULAR

A regular graduate student is a degree-seeking student who meets all of the criteria for regular admission to a program of his/her choice. The student must possess a baccalaureate degree from a college or university, have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours), meet all criteria established by the degree program, and be under no requirements to make up deficiencies.

The student must:

- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT) for some programs.
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree.
- International applicants must submit proof of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).
- The specific graduate programs may have additional requirements for admission.

### PROVISIONAL

A student may be admitted as a provisional graduate student when the student possesses a baccalaureate degree but does not meet the criteria for regular admission. The student may have incomplete credentials, deficiencies to make up, or may have an undergraduate scholastic record that does not meet grade point requirements for regular admission. After successful fulfillment of the deficiencies, the student will be granted regular graduate student status.

### NON-DEGREE

A non-degree student is a student not admitted to a program. Admission as a non-degree student does not guarantee admission to any course or program.

A student must present evidence of a baccalaureate degree. A maximum of twelve credit hours of work as a non-degree student may be applied to a graduate degree if the student is later accepted into a graduate program.

## Certificate Program

- GIS and Spatial Analysis (p. 255)
- Sustainable Trails Development (p. 67)

## School of Agriculture and Food

Christopher M. Ashwell, Division Director of Animal and Nutritional Sciences

e-mail: [christopher.ashwell@mail.wvu.edu](mailto:christopher.ashwell@mail.wvu.edu)

Sven Verlinden, Division Director of Plant and Soil Sciences

e-mail: [sverlind@wvu.edu](mailto:sverlind@wvu.edu)

## Degrees Offered

- Master of Science
- Doctor of Philosophy

## Nature of the Program

The master of science allows maximum flexibility in courses and research problems. Students may major in animal physiology, applied and environmental microbiology, entomology, environmental, soil and water sciences, genetics and developmental biology, horticulture, nutrition and food science, or plant pathology. A master of science degree is available as a thesis or coursework option. Research problems in plants and animals of agricultural importance, laboratory organisms, and human subjects form the basis for many studies, but a comparative approach is emphasized. The

school offers the registered dietetic certification (RD) preparation internship program to qualified students as a component of the nutritional and food science master of science program.

A student seeking admission to work toward the degree of doctor of philosophy in the School of Agriculture and Food may choose from one of the following **majors: animal, food, and nutrition sciences, genetics and developmental biology, or plant and soil science**. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

A limited number of graduate research assistantships are available to highly qualified students on a competitive basis.

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## FACULTY

### DIRECTOR

- Christopher M. Ashwell - Ph.D. (Wake Forest University)  
Functional Genomics
- Sven Verlinden - Ph.D. (Purdue University)  
Horticulture, Post Harvest Physiology, Molecular Biology

### PROFESSORS

- Vagner Benedito - Ph.D. - (Wageningen University, The Netherlands)  
Genetics and developmental biology, plant genomics, functional genetics and plant physiology
- Kenneth P. Blemings - Ph.D. (University of Wisconsin)  
Nutritional Biochemistry
- Scott A. Bowdridge - Ph.D. - (Virginia Tech)  
Food animal production, parasite immunology
- Mirjana Butalovic-Danilovich - Ph.D. (University of Ljubljana, Slovenia)  
Extension Specialist, Consumer Horticulture, Master Gardener Program Coordinator
- Rakesh Chandran - Ph.D. (Virginia Tech)  
Weed management in horticultural systems, IPM, Innovative strategies for weed control
- Robert A. Dailey - Ph.D. (University of Wisconsin)  
Reproductive Physiology
- Cindy Fitch - Ph.D. (Case Western Reserve University)  
Dietetics
- Jason Hubbard - Ph.D. (University of Idaho-Moscow)  
Fresh water supply regimes, Biogeochemical cycling, and ecohydrology
- Jacek Jaczynski - Ph.D. (Oregon State University)  
Food science and technology
- P. Brett Kenney - Ph.D. (Kansas State University)  
Meat Science
- Hillar Klandorf - Ph.D. (British Council for National Academic Awards)  
Physiology
- Kristen E. Matak - Ph.D. (Virginia Tech)  
Food science and human nutrition
- Louis M. McDonald - Ph.D. (University of Kentucky)  
Soil Science, Soil Chemistry
- Joseph S. Moritz - Ph.D. (Kansas State University)  
Nutrition and feed manufacture
- Daniel Panaccione - Ph.D. (Purdue State University)  
Plant Pathology, Mycology, Mycotoxins, Molecular Biology
- Yong-Lak Park - Ph.D. (Iowa State University)  
Entomology, Geospatial Ecology of Insects, Integrated Pest Management, Spatial Interaction between Insect and Plant Diseases
- Jeffrey Skousen - Ph.D. (Texas A&M University)  
Soil Science, Land Reclamation, Soil and Water Conservation, Watershed Restoration
- Robert L. Taylor, Jr. - Ph.D. (Mississippi State University)  
Immunogenetics of Poultry Disease Resistance
- James A. Thompson - Ph.D. (University of Minnesota)  
Soil science, Pedology, and Land use
- Janet C. L. Tou - Ph.D. (University of Toronto, Canada)



Nutrition in bone health and chronic diseases

- Matthew E. Wilson - Ph.D. (Iowa State University)  
Reproductive Physiology
- Jianbo Yao - Ph.D. (McGill University)  
Functional genomics

## **ASSOCIATE PROFESSOR**

- Kimberly M. Barnes - Ph.D. (University of Nebraska)  
Lipid metabolism
- Eugene E. Felton - Ph.D. (University of Missouri)  
Animal science and ruminant nutrition
- Michael Gutensohn - Ph.D. - (University of Cologne, Germany)  
Plant biochemistry and genetics, metabolic engineering, plant-insects interactions
- Matthew Kasson - Ph.D. (Pennsylvania State University)  
Forest pathology, fungal-insect interactions, fungal phylogenetics
- James B. Kotcon - Ph.D. (University of Wisconsin)  
Plant Pathology, Agroecology, Nematology, Organic Farming Practices
- K. Marie Krause - Ph.D. (University of Wisconsin-Madison)  
Ruminant nutrition
- Ember Morrissey - Ph.D. - (Virginia Commonwealth University)  
Environmental microbiology
- Melissa D. Olfert - Dr.P.H., M.S., R.D. (Loma Linda University)  
Human Nutrition and Foods
- Kevin Shaffer - Ph.D. - (West Virginia University)  
Livestock Production
- Cangliang Shen - Ph.D. (Colorado State University)  
Safety of meat and fresh produce
- Melissa D. Ventura-Marra - R.D., Ph.D. (Florida International University)  
Diet related health disparities
- Nicole Waterland - Ph.D. (Ohio state University)  
Horticulture, Flower Senescence
- Eugenia M. Pena-Yewtukhiw - Ph.D. (University of Kentucky)  
Soil Science
- Amy Welsh - Ph.D. (University of California-Davis)  
Conservation genetics

## **ASSISTANT PROFESSOR**

- Teiya Kijimoto - Ph.D. (Tokyo Institute of Technology)  
Evolutionary developmental biology of morphological diversification, Evolution of novel traits
- Joseph Lynch - Ph.D. - (Washington State University)  
Plant biochemistry
- Ibukun Ogunade - Ph.D. - (University of Florida)  
Livestock production
- Carlos Quesada - Ph.D. - (Purdue University)  
Entomology, Extension specialist
- Elizabeth Rowen - Ph.D. - (Penn State)  
Entomology

## **RESEARCH ASSOCIATE PROFESSOR**

- Domingo Jose Mata Padrino - Ph.D. (Universidad Central de Venezuela)  
Agronomy

## **TEACHING PROFESSOR**

- Margaret A. Minch - D.V.M. (Ohio State University)  
Veterinary Medicine
- Crystal Smith - Ed.D. - West Virginia University  
Equine management

## TEACHING ASSOCIATE PROFESSOR

- Nettie Freshour - R.D., Ph.D. (West Virginia University)  
Dietetics (L.D.N)
- Youyoun Moon - Ph.D. (Ohio State University)  
Molecular plant science

## TEACHING ASSISTANT PROFESSOR

- Sean Collins - Ph.D. - (University of Cincinnati)  
Freshwater ecology
- David Davis - Ph.D. (Virginia Tech)  
Landscape, turf, specialty crops
- Kelli George - Ph.D. (Florida State University)  
Dietetics
- Cassandra Lamb - Ph.D. - (Cornell University)  
Biochemistry

## SERVICE ASSISTANT PROFESSOR

- Nikki Byrne-Hoffman - Ph.D. - (West Virginia University)  
WVU Campus Food Garden Co-Director

## VISITING ASSISTANT PROFESSOR

- John Hando - Ph.D. (West Virginia University)  
Environmental health and safety specialist, Genetics and developmental biology

## FACULTY EMERITI

- Barton Baker
- John A. Balasko
- John F. Baniecki
- Bradford C. Bearce
- Alan R. Biggs
- Gary K. Bissonnette
- William B. Bryan
- Linda Butler
- William E. Collins
- Betty J. Forbes
- Mannon E. Gallegly, Jr.
- Thomas C. Griggs
- Henry W. Hogmire
- William H. Hoover
- Robert F. Keefer
- Paul E. Lewis
- William L. MacDonald
- Joseph B. Morton
- M. Zafar Alam Nomani
- Phillip Osborne
- Ronald A. Peterson
- Edward C. Prigge
- John C. Sencindiver
- Alan Sextstone
- Rabindar N. Singh
- Paul M. Smith
- Charles B. Sperow, Jr.
- Wayne R. Wagner

- John Warren
- Richard K. Zimmerman

## ADJUNCT FACULTY

- Kayla Bridges - Nutrition and Dietetics
- Jesse Fallon - Veterinary medicine
- Janet Fulton - Animal Genetics
- Joseph Gigliotti - Cellular and molecular physiology
- Michael Glenn - Soil Science
- Ann Hubbs - Veterinary medicine
- Cynthia Huebner - Invasive Plants and Ecology
- Matthew Jenks - Plant and Soil
- Lee Kass - Plant and Soil Sciences, History of Genetics
- Tracy Leskey - Plant and Soil
- Barbara Jean Meade - Veterinary sciences
- Stephen S. Miller - Horticulture
- Donald Nuss - Plant Pathology
- Tong-Man Ong - Genetics
- Dale W. Porter - Toxicology
- Umesh Reddy - Genetics
- George R. Seiler - Veterinary sciences
- Chris Skinner - Nutrition
- Alfred H. Stiller - Chemistry
- Richard Turcotte
- Derek Warren - Nutritional Biochemistry
- Richard Z. Woodworth - Agriculture
- Paul F. Ziemkiewicz - Land Reclamation
- Thomas van der Zwet - Plant Pathology

## Animal, Food, and Nutrition Sciences, Ph.D.

Christopher Ashwell, Division Director of Animal and Nutritional Sciences  
e-mail: christopher.ashwell@mail.wvu.edu

Sven Verlinden, Division Director of Plant and Soil Sciences  
e-mail: sverlind@wvu.edu

## Degree Offered

- Doctor of Philosophy

## Nature of the Program

The Davis College of Agriculture, Natural Resources, and Design offers graduate studies leading to the degree of doctor of philosophy in agricultural sciences with a major in Animal and Food Science. The objective of the degree program is to provide doctoral students an opportunity to study and conduct research with faculty in areas of excellence within the college. Students entering this program may select research and classes in areas of emphasis including: agricultural biochemistry, animal nutrition, animal physiology, and production management.

## Admissions

Applicants must hold a bachelor's to be eligible for admission into the program. The following admission and performance standards are usually required in the Ph.D. in Agriculture Sciences program:

- An applicant must possess a grade point average (GPA) of 3.0 or above (on a 4.0 scale).
- The graduate record examination is required for the major in plant and soil sciences but not for the major in animal, food, and nutrition sciences.
- International students must meet WVU's minimum score requirement for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

- An applicant must provide three letters of reference.
- A one to two-page letter of intent from the student describing their research and professional aspirations is required.

After a student is admitted into the doctoral program, the student will select a major professor who will provide and direct an appropriate research opportunity. Doctoral students will conduct research supporting projects approved by the West Virginia Agricultural and Forestry Experiment Station (WVAFES) or externally funded grants. In consultation with the major professor, the student will select a graduate committee within the first semester of study. The committee will consist of five or more members; the majority must be WVU faculty and at least one member representing a discipline outside the college. Each student and their committee will formulate a plan of study, which will be filed in the Office of the Associate Dean for Academic Affairs of the College. WVU regulations concerning committee membership will apply.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0749

A candidate for the Ph.D. degree in Animal, Food, and Nutrition Sciences must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate catalog.

## Program Requirements

All Ph.D. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
	A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.	
	Course Requirements as determined by the Plan of Study	
	Research *	
	Candidacy Exam	
	Dissertation	
	Dissertation Defense	

Doctoral students must satisfactorily complete a set of core courses before they will be admitted to candidacy for the Ph.D. degree. Certain course requirements may be waived if the student has received equivalent training in prior coursework. Additional coursework pertaining to the student's area of specialization will be determined by the student's major professor and graduate committee. Although not required, presentation of research results at meetings of a professional society and submission of manuscripts for publication are encouraged.

\*

Students are expected to be involved in research throughout their graduate career, and enrollment in A&VS 797 Research, should reflect this activity. Most students complete an average of 45 credit hours of research.

## Major Learning Outcomes

### ANIMAL, FOOD, AND NUTRITION SCIENCES

1. Students will demonstrate an appropriate depth and knowledge of their research topic and fundamental knowledge of relevant associated fields.
2. Students will demonstrate the ability to identify, read, and critically interpret relevant valid, peer-reviewed scientific literature.
3. Students will employ laboratory or field technical skills (as dictated by the nature of their research project) to acquire novel, high-quality data.
4. Students will employ analytical skills to interpret their data and draw valid, meaningful conclusions.
5. Students will communicate effectively in writing and orally about scientific concepts and the results of their research studies.
6. Students will ask original research questions relevant to their particular area of animal and nutritional sciences that will address those questions in a scientifically valid way.
7. Graduates of the program will be employed in a relevant postdoctoral or professional position within one year of completing their degrees.

## Animal Physiology, M.S.

Christopher Ashwell, Division Director of Animal and Nutritional Sciences  
e-mail: christopher.ashwell@mail.wvu.edu

Degree Offered

- Master of Science

Nature of the Program

The master of science in animal physiology in the Davis College of Agriculture, Natural Resources and Design allows maximum flexibility in courses and research problems. They may work with beef and dairy cattle; sheep, swine, poultry, or laboratory animals. Research problems in farm animals and laboratory animals form the basis for many studies, but a comparative approach is emphasized. A master of science degree is available as a thesis or coursework option. For additional information, contact Dr. Hillar Klandorf, at (304) 293-1897 or Hillar.Klandorf@mail.wvu.edu.

Admissions

Requirements are similar to those in other biological sciences. The student should have completed basic courses in the physical and biological sciences, including genetics, nutrition, and physiology. Deficiencies may prolong the time needed to complete degree programs.

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.

\*International students must meet WVU's minimum score requirement for English language proficiency (<https://graduateadmissions.wvu.edu/information-for/international-students/>).

\*\*A standardized graduate examination score (GRE or MCAT) is not required for admission to this degree, however, it is strongly encouraged.

Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0757

A candidate for the M.S. degree in Animal Physiology must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
Thesis Option: *		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Core Courses		
STAT 511	Statistical Methods 1	3
STAT 512	Statistical Methods 2	3
ANNU 696	Graduate Seminar	1
Additional Coursework Requirements		17
Research		
ANPH 697	Research	6
Plan of Study		
Thesis **		
Total Hours		30

Code	Title	Hours
<b>Non-Thesis Option: *</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Core Courses</b>		
STAT 511	Statistical Methods 1	3
STAT 512	Statistical Methods 2	3
ANNU 696	Graduate Seminar	1
<b>Additional Coursework Requirements</b>		<b>29</b>
Plan of Study		
Total Hours		36

\*

Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits. The thesis option will require 30 credit hours, 24 hours of regular course work plus 6 hours credit for a thesis. The non-thesis option will require 36 hours of course work. There is a common core curriculum for both options. All additional course requirements will be determined by the student in consultation with the major advisor and graduate committee members and presented in the student's Plan of Study. No more than three hours of research/problem report credits can be applied to the Non-Thesis option.

Students in either the thesis or the non-thesis option must pass an oral examination to be approved for graduation.

\*\*

Students in the MS-Thesis Option will be required to complete a thesis. They may identify a problem for study on their own, with approval from their graduate committee or they may work on a faculty member's research study. The scope of the research problem must be approved by the student's graduate committee. Students are required to defend their thesis in an open seminar presentation.

## Major Learning Outcomes

### ANIMAL PHYSIOLOGY

1. Critically evaluate the literature in their field of study as new knowledge is accumulated.
2. Identify research needs germane to providing answers to societal problems. Answer research questions that enhance fundamental knowledge and/or solve societal problems.
3. Apply research findings to professional practice in their fields.
4. Effectively use oral and written communication to share information and ideas.
5. Be qualified to take advanced-level professional positions in their respective fields.
6. Be qualified for doctoral studies in their field.

## Applied and Environmental Microbiology, M.S.

Sven Verlinden, Division Director of Plant and Soil Sciences  
email: sven.verlinden@mail.wvu.edu

Daniel Panaccione, Assistant Director of Graduate Programs  
email: danpan@mail.wvu.edu

### Degree Offered

- Master of Science

\*For Ph.D. option, see Applied and Environmental Microbiology area of emphasis under Ph.D. in Plant and Soil Sciences

### Nature of the Program

From plants to animals to air, microorganisms inhabit every facet of the world. Both beneficial and harmful, microorganisms play important roles in the areas of public health, plant disease, pollution and ecology. This program is ideal for students who want to have a career at the forefront of these industries. Gain professional development and research experience as you further your education in our graduate program.

### Admissions

#### M.S. APPLIED AND ENVIRONMENTAL MICROBIOLOGY

In order for a student to be admitted to the program, the applicant normally must fulfill the following admission criteria to be considered:

- Possess a baccalaureate degree.
- Have a minimum undergraduate grade point average of 3.0.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or other tests/evidence.
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of approximately 500 words indicating the applicant's goals and objectives relative to receiving a graduate degree.

International students must meet WVU's minimum score requirement for English language proficiency. (<https://graduateadmissions.wvu.edu/information-for/international-students/>)

## ACCELERATED B.S./M.S.APPLIED AND ENVIRONMENTAL MICROBIOLOGY

The ABM-AEM program will directly admit first year students (early admission) or admit students after the completion of at least 60 credit hours.

### EARLY ADMISSION

For early admission, entering WVU first-year students must have a minimum high school GPA of 3.0 and SAT or ACT test scores at or above the 70th percentile. Early admitted students must meet the standards described below for regular admission to continue in the ABM-AEM program after the completion of 60 credits. Students must provide a personal statement of no less than 500 words identifying the applicant's goals and objectives in obtaining the ABM-AEM degree and three letters of reference, at least two of which are required from persons familiar with the applicant's academic performance including those serving in an advisory role such as teachers, school administrators, or a guidance counselor.

### REGULAR ADMISSION

Only currently enrolled WVU students may be considered for regular admission to the program. Transfer students must complete at least 24 credit hours as degree-seeking students at WVU before applying to the program. ABM-AEM is not available to students seeking a second (or subsequent) bachelor's degree. Regular admission may not be any earlier than the semester in which an undergraduate student is expected to complete 60 credits or any later than the semester after which the student needs two additional semesters to complete the bachelor's degree. The minimum standard for regular admission is a cumulative undergraduate GPA of 3.0, with no provisional admissions allowed. Students must provide a personal statement of no less than 500 words identifying the applicant's goals and objectives in obtaining the ABM-AEM degree and three letters of reference, at least two of which are required from persons familiar with the applicant's academic performance including those serving in an advisory role such as teachers, school administrators, or a guidance counselor.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0772

A candidate for the M.S. degree in Applied and Environmental Microbiology must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
<b>Thesis Option:</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
BIOS 601	Applied Biostatistics 1	
<b>Select one of the following:</b>		<b>3</b>
STAT 512	Statistical Methods 2	
BIOS 603	Applied Biostatistics 2	
<b>Seminar</b>		<b>3</b>
PPTH 796	Graduate Seminar	
<b>Research</b>		<b>6</b>
AEM 797	Research	
<b>Discipline-Oriented Coursework</b> *		<b>15</b>
(AEM, AGBI, AGRN, BIOL, ENTO, GEN, HORT, IMMB, MICB, PLSC, PPTH)		



Plan of Study

Thesis	
Total Hours	30

Code	Title	Hours
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**Non-Thesis Option:**

A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.

<b>Select one of the following:</b>	<b>3</b>
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STAT 511	Statistical Methods 1
STAT 512	Statistical Methods 2
BIOS 601	Applied Biostatistics 1
BIOS 603	Applied Biostatistics 2

<b>Graduate Chemistry/Biochemistry Course</b>	<b>3</b>
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AGBI 512	Nutritional Biochemistry
AGBI 610	General Biochemistry
AGBI 612	General Biochemistry
ESWS 516	Soil Chemistry
PLSC 560	Plant Biochemistry

<b>Seminar</b>	<b>3</b>
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PPTH 796	Graduate Seminar
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<b>Teaching Practicum</b>	<b>2</b>
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AEM 790	Teaching Practicum
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<b>Discipline-Oriented Coursework *</b>	<b>15</b>
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(AEM, AGBI, AGRN, BIOL, ENTO, GEN, HORT, IMMB, MICB, PLSC, PPTH)

<b>Independent Study</b>	<b>3</b>
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AEM 795	Independent Study
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<b>Electives</b>	<b>7</b>
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Plan of Study	
Total Hours	36

\*

Excludes 797 and limit 590, 690, and 790 to no more than 3 credit hours

\*\*

Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## Accelerated BS/MS Applied Environmental Microbiology

### CURRICULUM REQUIREMENTS

Code	Title	Hours
University Requirements		26
Environmental Microbiology Program Requirements		22
Environmental Microbiology Major Requirements		60
M.S. Applied and Environmental Microbiology Requirements		36
Total Hours		144

### UNIVERSITY REQUIREMENTS

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ANRD 191	First-Year Seminar	1
General Electives		7
Total Hours		26

**ENVIRONMENTAL MICROBIOLOGY PROGRAM REQUIREMENTS**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (GEF 8)	4
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (GEF 8)	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
Select one of the following (GEF 3):		3
MATH 150	Applied Calculus	
MATH 153	Calculus 1a with Precalculus	
MATH 155	Calculus 1	
STAT 211	Elementary Statistical Inference	3
Total Hours		22

**ENVIRONMENTAL MICROBIOLOGY MAJOR REQUIREMENTS**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
AEM 216	Living in a Microbial World	3
AEM 341	General Microbiology	3
AEM 341L	General Microbiology Laboratory	1
AEM 401	Environmental Microbiology	3
AEM 401L	Environmental Microbiology Laboratory	1
AEM 470	Microbes and Global Change	3
AGBI 410	Introductory Biochemistry	3
BIOL 219	The Living Cell	3
BIOL 219L	The Living Cell Laboratory	1
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
GEN 371 & 371L	Principles of Genetics and Principles of Genetics Laboratory	4
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory (GEF 8)	4
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory (GEF 8)	4
PPTH 401	General Plant Pathology	3
PPTH 401L	General Plant Pathology Laboratory	1
<b>Restricted Electives</b>		<b>15</b>
AEM 445	Food Microbiology	
AEM 449	Food Microbiology Lab	
AEM 493	Special Topics	
AEM 495	Independent Study	
AGBI 514	Animal Biotechnology	
AGBI 514L	Animal Biotechnology Laboratory	
BIOL 312	Introduction to Virology	
ESWS 202	Principles of Soil Science	
ESWS 202L	Principles of Soil Science Laboratory	
ESWS 410	Soil Fertility	
ESWS 425	Environmental Soil Management	
ESWS 425L	Environmental Soil Management Laboratory	

ARE 382	Agricultural and Natural Resources Law
BIOL 312	Introduction to Virology
BIOL 454	Immunology
BIOL 455	Evolution of Infectious Diseases
BIOL 456	Microbial Symbiosis
BIOL 463	Global Ecology
WRIT 305	Technical Writing
ENTO 404	Principles of Entomology
ENTO 404L	Principles of Entomology Laboratory
ENTO 412	Pest Management
ESWS 355	Environmental Sampling and Analysis
ESWS 460	Environmental Impact Assessment
ESWS 460L	Environmental Impact Assessment Laboratory
PPTH 409	Nematology
PPTH 409L	Nematology Laboratory
PPTH 470	Forest Pest Management
PPTH 470L	Forest Pest Management Laboratory
PPTH 493	Special Topics
PPTH 495	Independent Study
PPTH 503	Mycology
PPTH 503L	Mycology Laboratory

Total Hours

60

## M.S. APPLIED AND ENVIRONMENTAL MICROBIOLOGY REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required.		
<b>Choose from the following courses:</b>		<b>12</b>
AEM 445 or AEM 545	Food Microbiology	
AEM 593	Special Topics	
GEN 521	Basic Concepts of Modern Genetics	
PPTH 409 & 409L or PPTH 509 & 509L	Nematology and Nematology Laboratory	
PPTH 503 & 503L	Mycology and Mycology Laboratory	
STAT 511	Statistical Methods 1	
<b>Seminar</b>		<b>2</b>
PPTH 796	Graduate Seminar	
Electives		22
Oral Examination		
Total Hours		36

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
ANRD 191		1 CHEM 116 & 116L (GEF 8)	4
BIOL 115 & 115L		4 BIOL 117 & 117L	4
CHEM 115 & 115L (GEF 2)		4 STAT 211 (GEF 8)	3

ENGL 101 (GEF 1)		3 GEF 4	3
MATH 150 (GEF 3)		3 GEF 5	3
		15	17
<b>Second Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
AEM 216		3 AEM 341 & 341L	4
CHEM 233 & 233L		4 CHEM 234 & 234L	4
ENGL 102 (GEF 1)		3 BIOL 219 & 219L	4
PHYS 101 & 101L		4 PHYS 102 & 102L	4
		14	16
<b>Third Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
AGBI 410		3 AEM 470	3
GEN 371 & 371L		4 GEF 6	3
Restricted Electives		3 GEF 7	3
General Electives		4 Restricted Electives	6
		General Elective	3
		14	18
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
PPTH 401 & 401L		4 AEM 401 & 401L	4
Restricted Elective		3 Graduate Course 3	3
Graduate Course 1		3 Graduate Course 4	3
Graduate Course 2		3 Restricted Elective	3
		13	13
<b>Fifth Year</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
Graduate Electives		11 Graduate Electives	11
PPTH 796		1 PPTH 796	1
		12	12

Total credit hours: 144

## Major Learning Outcomes

### APPLIED AND ENVIRONMENTAL MICROBIOLOGY

Students will acquire fundamental knowledge of applied and environmental microbiology and associated fields such as biochemistry, genetics, and biology.

Students will acquire detailed knowledge of their particular subdiscipline or research area, including the scientific literature fundamental to their discipline and the ability to stay current on scientific literature.

Students will acquire technical skills in the laboratory.

Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.

Students will develop the ability to design, conduct, and interpret the results of experiments.

## Entomology, M.S.

Sven Verlinden, Division Director of Plant and Soil Sciences

email: sven.verlinden@mail.wvu.edu (sverlind@wvu.edu)

Daniel Panaccione, Assistant Director of Graduate Programs  
email: danpan@mail.wvu.edu

## Degree Offered

- Master of Science

\*For Ph.D. option, see Entomology area of emphasis under Ph.D. in Plant and Soil Sciences

## Nature of the Program

M.S. in Entomology provides students the opportunity to take courses and conduct original, master's-level research. The educational experience obtained through courses and research is expected to provide students with the background and expertise to excel. Entomology is critical to maintaining agriculture and forest productivity, solving environmental problems, and promoting economic development in the state.

## Admissions

In order for a student to be admitted to the program, the applicant normally must fulfill the following admission criteria to be considered:

- Possess a baccalaureate degree.
- Have a minimum undergraduate grade point average of 3.0.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or other tests/evidence.
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of approximately 500 words indicating the applicant's goals and objectives relative to receiving a graduate degree.

International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/information-for/international-students/>)

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0723

A candidate for the M.S. degree in Entomology must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
<b>Thesis Option:</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
BIOS 601	Applied Biostatistics 1	
<b>Select one of the following:</b>		<b>3</b>
STAT 512	Statistical Methods 2	
BIOS 603	Applied Biostatistics 2	
<b>Seminar</b>		<b>3</b>
ENTO 796	Graduate Seminar	
<b>Research</b>		<b>6</b>
ENTO 797	Research	
<b>Discipline-Oriented Coursework *</b>		<b>15</b>
(AEM, AGBI, AGRN, BIOL, ENTO, GEN, HORT, IMMB, MICB, PLSC, PPTH)		
Plan of Study		

Thesis		
Total Hours		30
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Non-Thesis Option:</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
STAT 512	Statistical Methods 2	
BIOS 601	Applied Biostatistics 1	
BIOS 603	Applied Biostatistics 2	
<b>Graduate Chemistry/Biochemistry Course</b>		<b>3</b>
AGBI 610	General Biochemistry	
AGBI 612	General Biochemistry	
ESWS 516	Soil Chemistry	
<b>Seminar</b>		<b>3</b>
ENTO 796	Graduate Seminar	
<b>Teaching Practicum</b>		<b>2</b>
ENTO 790	Teaching Practicum	
<b>Discipline-Oriented Coursework *</b>		<b>15</b>
(AEM, AGBI, AGRN, BIOL, ENTO, GEN, HORT, IMMB, MICB, PLSC, PPTH)		
<b>Independent Study</b>		<b>3</b>
ENTO 795	Independent Study	
<b>Electives</b>		<b>7</b>
Plan of Study		
Total Hours		36

\*

Excludes 797 and limit 590, 690, and 790 to no more than 3 credit hours

\*\*

Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## Major Learning Outcomes

### ENTOMOLOGY

Students will acquire fundamental knowledge of entomology and associated fields.

Students will acquire detailed knowledge of their particular subdiscipline or research area, including the scientific literature fundamental to their discipline and the ability to stay current on scientific literature.

Students will acquire technical skills in the field and laboratory.

Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.

Students will develop the ability to design, conduct, and interpret the results of experiments.

## Environmental, Soil and Water Sciences, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

M.S. in Environmental, Soil, & Water Sciences provides students the opportunity to take courses and conduct original, master's-level research in their areas of specialization. The educational experience obtained through courses and research is expected to provide students with the background and expertise to enter doctoral programs or professional careers as agronomists, entomologists, microbiologists, horticulturists, and plant pathologists or

soil scientists. These disciplines are critical to maintaining agriculture and forest productivity, solving environmental problems, and promoting economic development in the state.

## Admissions

In order for a student to be admitted to the program, the following admission criteria will be considered. The applicant normally must:

- The student must possess a baccalaureate degree from a college or university, have at least a grade point average of 3.0 on a 4.0 scale,
- The student must have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE).
- The student must provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- The student must submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree.
- International students must meet WVU's minimum score requirement for English language proficiency. (<https://graduateadmissions.wvu.edu/information-for/international-students/>)

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0782

A candidate for the M.S. degree in Environmental, Soil, and Water Sciences must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
<b>Thesis Option:</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
BIOS 601	Applied Biostatistics 1	
<b>Select one of the following:</b>		<b>3</b>
STAT 512	Statistical Methods 2	
BIOS 603	Applied Biostatistics 2	
<b>Seminar</b>		<b>3</b>
ESWS 796	Graduate Seminar	
<b>Research</b>		<b>6</b>
ESWS 797	Research	
<b>Discipline-Oriented Coursework *</b>		<b>15</b>
(AEM, AGRN, BIOL, CE, ENGR, ENVP, ESWS, FHYD, FMAN, FOR, GEN, GEOG, GEOL, MINE, PLSC, RESM)		
Plan of Study		
Thesis		
Total Hours		30

Code	Title	Hours
<b>Non-Thesis Option:</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
STAT 512	Statistical Methods 2	
BIOS 601	Applied Biostatistics 1	
BIOS 603	Applied Biostatistics 2	
<b>Graduate Chemistry/Biochemistry Course</b>		<b>3</b>



AGBI 610	General Biochemistry	
AGBI 612	General Biochemistry	
ESWS 516	Soil Chemistry	
<b>Seminar</b>		<b>3</b>
ESWS 796	Graduate Seminar	
<b>Teaching Practicum</b>		<b>2</b>
ESWS 790		
<b>Discipline-Oriented Coursework *</b>		<b>15</b>
(AEM, AGRN, BIOL, CE, ENGR, ENVP, ESWS, FHYD, FMAN, FOR, GEN, GEOG, GEOL, MINE, PLSC, RESM)		
<b>Independent Study</b>		<b>3</b>
ESWS 795	Independent Study	
<b>Electives</b>		<b>7</b>
Plan of Study		
Total Hours		36

\*

Excludes 797 and limit 590, 690, and 790 to no more than 3 credit hours

\*\*

Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## Major Learning Outcomes

### ENVIRONMENTAL, SOIL AND WATER SCIENCES

Students will demonstrate detailed knowledge of their particular research area and fundamental knowledge of other areas relevant to environmental soil and water sciences.

Students will demonstrate the ability to read and understand, peer-reviewed scientific literature relevant to their work.

Students will employ technical skills in the laboratory, greenhouse, and/or field to acquire novel, high-quality data, and analytical skills to interpret the data to draw conclusions that are valid and meaningful.

Students will communicate effectively in writing and orally about scientific concepts and the results of their research.

Graduates of the program will gain skills that will help them be employed in a relevant professional position.

## Genetics and Development Biology, M.S., Ph.D.

Sven Verlinden, Division Director of Plant and Soil Sciences  
email: sven.verlinden@mail.wvu.edu (sverlind@wvu.edu)

Daniel Panaccione, Assistant Director of Graduate Programs  
email: danpan@mail.wvu.edu

## Degrees Offered

- Master of Science
- Doctor of Philosophy

## Nature of the Program

The objective of this program is an increased level of understanding of modern concepts and methodologies employed in genetic and developmental biological work and to prepare a student to pursue a career in teaching and/or research. Responsibility for a student's program is vested in a graduate committee charged with arranging the student's coursework, conducting examinations, and supervising the research.

## Concentrations

The degree is offered in genetics and developmental biology, an interdisciplinary program involving the faculty and facilities of a number of departments in the various colleges and schools of the university. A student may concentrate in genetics or developmental biology. The areas in which emphases are offered are as follows:

## GENETICS

Biochemical and molecular genetics, developmental genetics, plant genetics, and population and quantitative genetics.

## DEVELOPMENTAL BIOLOGY

Molecular aspects of development.

## Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and be under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 3.0 on a 4.0 scale.
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT).

\* International students must meet WVU's minimum score requirement for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0731

For specific information on the following program please see the link to the right:

- Genetics and Developmental Biology, M.S.

For specific information on the following program please see the link to the right:

- Genetics and Developmental Biology, Ph.D.

## Genetics and Developmental Biology, M.S.

A candidate for the M.S. degree in Genetics and Developmental Biology must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College. For a more complete statement of requirements, the student is referred to the program's Guidelines for Graduate Students in the Genetics and Developmental Biology Program.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
BIOS 601	Applied Biostatistics 1	
<b>Select one of the following:</b>		<b>3</b>
STAT 512	Statistical Methods 2	
BIOS 603	Applied Biostatistics 2	
<b>Select three of the following: *</b>		<b>9</b>
AGBI 512	Nutritional Biochemistry	
AGBI 514 & 514L	Animal Biotechnology and Animal Biotechnology Laboratory	
AGBI 612	General Biochemistry	

BIOL 611	Epigenetics	
BIOL 658	Systems Biology	
GEN 535	Population Genetics	
GEN 726	Advanced Biochemical Genetics	
PLSC 560	Plant Biochemistry	
WMAN 630	Conservation Genetics	
<b>Seminar</b>		<b>3</b>
GEN 796	Graduate Seminar	
<b>Research</b>		<b>6</b>
GEN 797	Research	
<b>Required Coursework</b>		
GEN 521	Basic Concepts of Modern Genetics	3
AGBI 512	Nutritional Biochemistry	3
or AGBI 610	General Biochemistry	
or PLSC 560	Plant Biochemistry	
Plan of Study		
Total Hours		30

\*

Substitution of a course containing some genetics and of special interest to the student may be allowed when approved by the student's committee.

## Major Learning Outcomes

### GENETICS AND DEVELOPMENT BIOLOGY

- Students will acquire fundamental knowledge of genetics and associated fields such as biochemistry, chemistry, and biology.
- Students will acquire detailed knowledge of their particular subdiscipline or research area, including the scientific literature fundamental to their discipline and the ability to stay current on scientific literature.
- Students will acquire technical skills in the laboratory.
- Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.
- Student will develop the ability to design, conduct, and interpret the results of experiments.

## Genetics and Developmental Biology, Ph.D.

A candidate for the Ph.D. degree in Genetics and Developmental Biology must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate catalog.

### Program Requirements

All Ph.D. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College. Students are expected to maintain at least a 3.0 (B) grade point average in all work offered in fulfillment of the degree program. For a more complete statement of requirements, the student is referred to the program's Guidelines for Graduate Students in the Genetics and Developmental Biology Program.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study		
<b>Seminar</b>		<b>5</b>
GEN 796	Graduate Seminar	
<b>Research</b>		<b>6</b>
GEN 797	Research	
Candidacy Exam		
Dissertation		
Dissertation Defense		
Total Hours		11

\*

A student must be enrolled in Seminar all semesters in residence.

## Major Learning Outcomes

### GENETICS AND DEVELOPMENT BIOLOGY

- Students will acquire fundamental knowledge of genetics and associated fields such as biochemistry, chemistry, and biology.
- Students will acquire detailed knowledge of their particular subdiscipline or research area, including the scientific literature fundamental to their discipline and the ability to stay current on scientific literature.
- Students will acquire technical skills in the laboratory.
- Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.
- Student will develop the ability to design, conduct, and interpret the results of experiments.

## Horticulture, M.S.

Sven Verlinden, Division Director of Plant and Soil Sciences  
email: sven.verlinden@mail.wvu.edu (majenks@mail.wvu.edu)

Daniel Panaccione, Assistant Director of Graduate Programs  
email: danpan@mail.wvu.edu

### Degree Offered

- Master of Science
- For Ph.D. option, see Horticulture area of emphasis under Ph.D. in Plant and Soil Sciences

### Nature of the Program

Master of Science in Horticulture provides students the opportunity to take courses and conduct original, master's-level research in their areas of specialization. The educational experience obtained through courses and research is expected to provide students with the background and expertise to enter doctoral programs or professional careers as agronomists, entomologists, microbiologists, horticulturists, and plant pathologists or soil scientists. These disciplines are critical to maintaining agriculture and forest productivity, solving environmental problems, and promoting economic development in the state.

### Admissions

In order for a student to be admitted to the program, the applicant normally must fulfill the following admission criteria to be considered:

- Possess a baccalaureate degree.
- Have a minimum undergraduate grade point average of 3.0.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or other tests/evidence.
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of approximately 500 words indicating the applicant's goals and objectives relative to receiving a graduate degree.

International students must meet WVU's minimum score requirement for English language proficiency. (<https://graduateadmissions.wvu.edu/information-for/international-students/>)

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0739

A candidate for the M.S. degree in Horticulture must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

### Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
<b>Thesis Option:</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
BIOS 601	Applied Biostatistics 1	
<b>Select one of the following:</b>		<b>3</b>
STAT 512	Statistical Methods 2	
BIOS 603	Applied Biostatistics 2	
<b>Seminar</b>		<b>3</b>
HORT 796	Graduate Seminar	
<b>Research</b>		<b>6</b>
HORT 797	Research	
<b>Discipline-Oriented Coursework</b> *		<b>15</b>
(HORT, PLSC, GEN, BIOL, AGRN, AGBI, ENTO, PPTH, AEM, RESM, AGEE, GEOG, HN&F)		
Plan of Study		
Thesis		
Total Hours		30

Code	Title	Hours
<b>Non-Thesis Option:</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
STAT 512	Statistical Methods 2	
BIOS 601	Applied Biostatistics 1	
BIOS 603	Applied Biostatistics 2	
<b>Graduate Chemistry/Biochemistry Course</b>		<b>3</b>
AGBI 610	General Biochemistry	
AGBI 612	General Biochemistry	
ESWS 516	Soil Chemistry	
<b>Seminar</b>		<b>3</b>
HORT 796	Graduate Seminar	
<b>Teaching Practicum</b>		<b>2</b>
HORT 790	Teaching Practicum	
<b>Discipline-Oriented Coursework</b>		<b>15</b>
(HORT, PLSC, GEN, BIOL, AGRN, AGBI, ENTO, PPTH, AEM, RESM, AGEE, GEOG, HN&F)		
<b>Independent Study</b>		<b>3</b>
HORT 795	Independent Study	
<b>Electives</b>		<b>7</b>
Plan of Study		
Total Hours		36

\*

Excludes 797 and limit 590, 690, and 790 to no more than 3 credit hours.

\*\*

Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## Major Learning Outcomes

### HORTICULTURE

Students will acquire fundamental knowledge of horticulture and associated fields of plant and soil science.

Students will acquire detailed knowledge of their particular subdiscipline or research area, including the scientific literature fundamental to their discipline and the ability to stay current on scientific literature.

Students will acquire technical skills in the field, greenhouse, or laboratory.

Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.

Students will develop the ability to design, conduct, and interpret the results of experiments.

## Nutritional and Food Sciences, M.S.

Christopher Ashwell, Division Director of Animal and Nutritional Sciences  
e-mail: christopher.ashwell@mail.wvu.edu

### Degree Offered

- Master of Science

### Nature of the Program

The master of science in nutritional and food science in the Davis College of Agriculture, Natural Resources and Design allows maximum flexibility in courses and research problems. They may work with issues in human or animal health and nutrition. Research problems in human nutrition issues form the basis for many studies, but a comparative approach is emphasized. A master of science degree is available as a thesis or coursework option. For additional information, contact Dr. Hillar Klandorf (Hillar.Klandorf@mail.wvu.edu), at (304) 293-1897.

The division offers the graduate dietetic internship program as a component of the masters of science degree program (see below). For additional information, contact Dr. Nettie Freshour (Nettie.Freshour@mail.wvu.edu) at (304) 293-2651.

### Graduate Dietetic Internship

The Graduate Dietetic Internship is a two-year combined master's/internship program for individuals who have completed at least a bachelor's degree, as well as the Accreditation Council for Education in Nutrition and Dietetics (ACEND) coursework requirements from a Didactic Program in Dietetics (DPD). The dietetic internship provides the supervised practice experience that is required to be eligible to take the registration examination for dietitians. The combined program offers interns the opportunity to complete a Master of Science degree in addition to the required supervised practice component. There is a thesis as well as a non-thesis option for the master's degree. The program will provide interns with at least 1,000 hours of supervised practice experience. Students will be required to complete the necessary degree requirements for the college. Additionally, to receive a verification statement to sit for the registered dietitian examination, all students will need to complete the course work listed below. Substitutions of classes will need the approval of the faculty adviser and the Dietetic Internship Director. For additional information contact the program director Dr. Nettie Freshour (Nettie.Freshour@mail.wvu.edu) at (304) 293-2651.

### Admissions

Requirements are similar to those in other biological sciences. The student should have completed basic courses in the physical and biological sciences, including genetics, nutrition, and physiology. Deficiencies may prolong the time needed to complete degree programs.

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.

\* International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0758

A candidate for the M.S. degree in Nutritional and Food Science must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

*Thesis option:* The thesis option will require 30 credit hours, 24 hours of regular course work plus 6 hours credit for a thesis. A student must maintain a grade point average of 3.0 or better to remain in good standing. There will be a common core curriculum for the two majors. All additional course requirements will be determined by the student in consultation with the major advisor and graduate committee members.

Code	Title	Hours
<b>Core Courses</b>		
STAT 511	Statistical Methods 1	3
STAT 512	Statistical Methods 2	3
ANNU 696	Graduate Seminar	1
<b>Additional Coursework Requirements</b>		<b>17</b>
<b>Research</b>		<b>6</b>
Select one of the following:		
HN&F 697	Research	
ANRD 697	Research	
A&VS 797	Research	
Total Hours		30

*Non-Thesis option:* The non-thesis option will require 36 hours of course work. A student must maintain a grade point average of 3.0 or better to remain in good standing. There will be a common core curriculum for the non-thesis masters. Additional courses to meet the degree requirements will be determined by the student in consultation with the major advisor and the graduate committee members and presented in the student's Plan of Study.

Code	Title	Hours
<b>Core Courses</b>		
STAT 511	Statistical Methods 1	3
STAT 512	Statistical Methods 2	3
ANNU 696	Graduate Seminar	1
<b>Additional Coursework Requirements</b>		<b>29</b>
Total Hours		36

Students in the MS-Thesis Option will be required to complete a thesis. They may identify a problem for study on their own, with approval from their graduate committee or they may work on a faculty member's research study. The scope of the research problem must be approved by the student's graduate committee. Students are required to defend their thesis in an open seminar presentation. Students in either the thesis or the non-thesis option must pass an oral examination to be approved for graduation. No more than three hours of research/problem report credits can be applied to the Non-Thesis option.

\*

Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## Major Learning Outcomes

### ANIMAL AND NUTRITIONAL SCIENCES

Catalog: Primary objectives for this program include:

1. Critically evaluate the literature in their field of study as new knowledge is accumulated.
2. Identify research needs germane to providing answers to societal problems. Answer research questions that enhance fundamental knowledge and/or solve societal problems.
3. Apply research findings to professional practice in their fields.
4. Effectively use oral and written communication to share information and ideas.



5. Be qualified to take advanced-level professional positions in their respective fields.
6. Be qualified for doctoral studies in their field.

## Plant and Soil Science, Ph.D.

Sven Verlinden, Division Director of Plant and Soil Sciences  
email: sven.verlinden@mail.wvu.edu (sverlind@wvu.edu)

Daniel Panaccione, Assistant Director of Graduate Programs  
email: danpan@mail.wvu.edu

### Degree Offered

- Doctor of Philosophy with a major in Plant and Soil Science

### Nature of the Program

The educational experience obtained through courses and research is expected to provide students with the background and expertise to enter professional careers as agronomists, entomologists, microbiologists, horticulturists, and plant pathologists or soil scientists. These disciplines are critical to maintaining agriculture and forest productivity, solving environmental problems, and promoting economic development in the state.

### Areas of Emphasis

The doctor of philosophy in plant and soil sciences degree is offered to students who wish to study crops agronomy, entomology, applied and environmental microbiology, horticulture, plant pathology, or soil sciences.

### Admissions

In order for a student to be admitted to the program, the applicant normally must fulfill the following admission criteria to be considered:

- Possess a baccalaureate degree.
- Have a minimum undergraduate grade point average of 3.0.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or other tests/evidence.
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of approximately 500 words indicating the applicant's goals and objectives relative to receiving a graduate degree.

International students must meet WVU's minimum score requirements for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0711

A candidate for the Ph.D. degree in Plant and Soil Science must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate catalog.

### Program Requirements

All Ph.D. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study		
	Seminar (AEM, AGRN, ENTO, GEN, HORT, PPTH) *	5
	Research (AEM, AGRN, ENTO, GEN, HORT, PPTH)	6
	Candidacy Exam	
	Dissertation	
	Dissertation Defense	
Total Hours		11

\*

A student must be enrolled in Seminar all semesters in residence.

Doctoral students must satisfactorily complete a set of core courses before they will be admitted to candidacy for the Ph.D. degree. All core courses will be at the 600 or 700 level, except where indicated below. Certain course requirements may be waived if the student has received equivalent training in prior coursework. Additional coursework pertaining to the student's area of specialization will be determined by the student's major professor and graduate committee.

## Major Learning Outcomes

### PLANT AND SOIL SCIENCE

1. Students will acquire fundamental knowledge of their area of emphasis and associated fields in plant and soil science.
2. Students will acquire detailed knowledge of their particular subdiscipline or research area, including the scientific literature fundamental to their discipline and the ability to stay current on scientific literature.
3. Students will acquire technical skills in the field or laboratory.
4. Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.
5. Students will develop the ability to design, conduct, and interpret the results of experiments.

## Plant Pathology, M.S.

Sven Verlinden, Division Director of Plant and Soil Sciences  
email: Sven.Verlinden@mail.wvu.edu

Daniel Panaccione, Assistant Director of Graduate Programs  
email: danpan@mail.wvu.edu

### Degree Offered

- Master of Science

\*For Ph.D. option, see Plant Pathology area of emphasis under Ph.D. in Plant and Soil Sciences

### Admissions

In order for a student to be admitted to the program, the applicant normally must fulfill the following admission criteria to be considered:

- Possess a baccalaureate degree.
- Have a minimum undergraduate grade point average of 3.0.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or other tests/evidence.
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of approximately 500 words indicating the applicant's goals and objectives relative to receiving a graduate degree.

International students must meet WVU's minimum score requirements for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0747

A candidate for the M.S. degree in Plant Pathology must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

### Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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#### Thesis Option:

A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.

<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
BIOS 601	Applied Biostatistics 1	
<b>Select one of the following:</b>		<b>3</b>
STAT 512	Statistical Methods 2	
BIOS 603	Applied Biostatistics 2	
<b>Seminar</b>		<b>3</b>
PPTH 796	Graduate Seminar	
<b>Research</b>		<b>6</b>
PPTH 797	Research	
<b>Discipline-Oriented Coursework</b> *		<b>15</b>
(AEM, PPTH, AGRN, ENTO, AGBI, BIOL, GEN, HORT, PLSC)		
Plan of Study		
Thesis		
Total Hours		30

Code	Title	Hours
<b>Non-Thesis Option:</b>		
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Select one of the following:</b>		<b>3</b>
STAT 511	Statistical Methods 1	
STAT 512	Statistical Methods 2	
BIOS 601	Applied Biostatistics 1	
BIOS 603	Applied Biostatistics 2	
<b>Graduate Chemistry/Biochemistry Course</b>		<b>3</b>
AGBI 610	General Biochemistry	
AGBI 612	General Biochemistry	
ESWS 516	Soil Chemistry	
<b>Seminar</b>		<b>3</b>
PPTH 796	Graduate Seminar	
<b>Teaching Practicum</b>		<b>2</b>
PPTH 790	Teaching Practicum	
<b>Discipline-Oriented Coursework</b> *		<b>15</b>
(AEM, PPTH, AGRN, ENTO, AGBI, BIOL, GEN, HORT, PLSC)		
<b>Independent Study</b>		<b>3</b>
PPTH 795	Independent Study	
<b>Electives</b>		<b>7</b>
Plan of Study		
Total Hours		36

\*

Excludes 797 and limit 590, 690, and 790 to no more than 3 credit hours

\*\*

Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## Major Learning Outcomes

### PLANT PATHOLOGY

1. Students will acquire fundamental knowledge of plant pathology.
2. Students will acquire detailed knowledge of their particular subdiscipline or research area, including the scientific literature fundamental to their discipline and the ability to stay current on scientific literature.
3. Students will acquire technical skills in the field or laboratory.

4. Students will develop the ability to communicate in writing and orally about scientific concepts and the results of their research.
5. Students will develop the ability to design, conduct, and interpret the results of experiments.

## School of Design and Community Development

Peter Butler, Director of the School of Design and Community Development  
email: Peter.Butler@mail.wvu.edu

### Degrees Offered

- Master of Landscape Architecture
- Master of Science
- Doctor of Philosophy

The School of Design and Community Development's primary mission is to prepare leaders, who influence the economic, social, aesthetic, and functional development of communities, states, and nations, dedicated to the improvement of quality of life for all members of society in harmony with the natural environment.

The School offers curricula in agricultural and extension education, design and merchandising, and landscape architecture. The mission of the agricultural and extension education program is to empower their majors for the choices and challenges of the twenty-first century. The faculty members in this program bring their love of the profession to students in an educational setting.

The graduate program in landscape architecture at WVU provides study opportunities for students entering the program from disciplines other than landscape architecture as well as advanced study opportunities for students who already have a design background. Our students work closely with faculty members and practicing professionals in the field to develop the skills essential to their professions and to examine the underlying theories on which they will ground their practice. The landscape architecture graduate program provides students with real world experiences and research opportunities. Graduate students are also exposed to faculty who have doctoral or advanced degrees in their field and who work collaboratively with national, state, and community agencies or organizations. Our faculty members are engaged in extensive research and are considered experts in their field of study.

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## FACULTY

### DIRECTOR

- Peter Butler - M.L.A. (Iowa State)  
Landscape Architecture - Cultural landscape planning and interpretation, Community design

### PROFESSORS

- Michael J. Dougherty - Ph.D. (Virginia Tech)  
Landscape Architecture-Environmental design and planning
- Judith Wasserman - M.L.A. and M.R.P. (Cornell University)  
Designing healthy places, Urban Design, Historic landscape architecture preservation planning, Modernist landscapes, Cultural meaning and place-making

### ASSOCIATE PROFESSORS

- Jessica Blythe - Ph.D. (University of Florida)  
Agricultural & Extension Education - Agricultural education, STEM education, Teaching methods, Effective teacher professional development, Quantitative and qualitative research methods
- Ronald Dulaney Jr. - M. Arch. (Virginia Tech)  
Interior Design-Architectural design, Design and culture, Design media, Material and fabrication processes, Poetics of construction
- Hodjat Ghadimi - Ph.D. (Ohio State University)  
Design Studies-Intelligent build environment, Innovation economics, Energy-environment-economy interaction modeling, Sustainable development planning, GeoDesign
- Vaike Haas - M.L.A. (University of Michigan)  
Landscape Architecture - Native species, Stormwater management, Regional greenspace
- J. Chris Haddox - M.S. (West Virginia University)  
Design Studies - LEED AP, Green advantage certified, Sustainable design and construction, Green building theory and practice
- Michael Hasenmyer - M.L.A. (North Carolina State University)  
Landscape Architecture-Virtual simulation and design education
- Katie Baker Jones - Ph.D. (University of Missouri)  
Fashion, Dress & Merchandising-Fashion media, Fashion studies, Sustainable fashion, Fashion as material culture

- Colleen Moretz - M.F.A. (Marywood University)  
Fashion Design - Transformative and sustainable practices, Design process; experimental, couture, and market-oriented, Teaching methods-traditional and digital approaches
- Lee Mullett - M.S. (West Virginia University)  
Interior Design - Teaching, Design
- Elisabeth Orr - M.L.A. (University of California, Berkeley)  
Landscape Architecture-Vernacular and cultural landscape analysis and theory, Landscape architectural graphics and representation
- Stefania Staniscia - Ph.D. (IUAV University of Venezia, IT)  
Landscape Architecture-Landscape Design with focus on brownfields and energy landscape

## ASSISTANT PROFESSOR

- Stacey Bowers - M. Arch (University of Illinois at Chicago)  
Interior Architecture - teaching, Architecture and Design
- Debanjan Das - Ph.D. (University of Missouri)  
Omni Channel Retailing, Global Issues and Fashion, Sustainability Issues in Fashion, Fashion Promotion and Merchandise Planning and Control
- Aaron J. Giorgi - Ph.D. (The Ohio State University)  
Quality Teaching Pedagogy, Statistical Analysis, Quantitative and Qualitative Research, First-Generation College Student Success
- Danielle Grant
- Rachel Hendrix - Ph.D. (Mississippi State)  
Agricultural & Extension Education - Agricultural education, Agricultural communications, STEM education, Teacher education, Teaching Methods
- Sunidhi Mehta - Ph.D. (Punjab Agricultural University)  
Fashion, Dress & Merchandising - High-performance technical textiles; Consumer behavior; Artificial Intelligence and merchandising technologies for the fashion industry
- Craig Nelson - M.I.D. (North Carolina State University)  
Design Studies-Designing consumer products, Industrial design, Prototyping, Brand identity
- Emily Perdue - Ph.D. (Texas A&M)  
Agricultural & Extension Education-Extension Education, Leadership Development, Community Engagement, P-20 Education
- Haley Rosson - Ph.D. (Oklahoma State University)  
Agricultural and Extension Education - Extension education, leadership, 4-H and youth development, ATV and shooting sports safety
- Elizabeth Shorrock - M.A. (Rhode Island School of Design)  
Fashion, Dress & Merchandising-Sustainable Fashion, Textiles, Fashion Design, Farm to Fashion
- Angela Uriyo - Ph.D. (University of Missouri)  
Fashion, Dress and Merchandising - Elements and principles of design, Fashion Illustration and Technical Design, Apparel Production, Patternmaking, and Functional Design

## VISITING ASSISTANT PROFESSORS

- Elijah Pollard - M.F.A. (SUNY)  
Fashion, Dress & Merchandising-Fine arts, Design

## PROFESSORS EMERITI

- Donald R. Armstrong
- Deborah Boone
- Stacy Gartin
- William H. Hagerty
- Mary Rose Jones
- Harry Boone, Jr.
- Layle D. Lawrence
- Marian B. Liddell
- George W. Longenecker
- Nora MacDonald
- Kerry Odell
- Janice Yeager
- Charles Yuill

# Agricultural and Extension Education, M.S., Ph.D.

Elizabeth McConnell, Administrative Assistant  
e-mail: agee@mail.wvu.edu

## Degrees Offered

- Master of Science
- Doctor of Philosophy

## Nature of the Program

There are two graduate options available in Agricultural and Extension Education. Individuals desiring advanced study in teaching agriculture either in school-based agriculture programs or in extension education may earn a master of science in agricultural and extension education. For individuals interested in the opportunity to study and conduct research with faculty in agricultural and extension education, a Ph.D. in resource management and sustainable development with an emphasis in agricultural and extension education is available.

Candidates for the master of science degree may be admitted on a regular or provisional basis. A student who does not have a B.S. in agriculture with a major in agricultural and extension education may be required to complete undergraduate courses in agriculture and professional education if they plan to obtain teacher certification. Students take graduate courses in both technical and professional education. Programs are planned to ensure that candidates develop competence in the following areas:

- The informed design of agricultural and extension education programs
- The effective operation of agricultural and extension education programs
- The evaluation of agricultural and extension programs
- The philosophy and execution of action research
- The active teaching and learning process

## Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and be under no requirements to make up deficiencies.

## DOCTORAL

**For regular admission, a student must:**

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT).

\* International students must meet WVU's minimum score requirement for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

## MASTERS

**For regular admission, a student must:**

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.

\*International students must meet WVU's minimum score requirement for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

\*\*A standardized graduate examination score (GRE or MCAT) is not required for admission to this degree, however, it is strongly encouraged.

## MASTERS - TEACHER CERTIFICATION OPTION

To be admitted to the teacher certification option, a prospective student must meet the following qualifications:

- Bachelor's Degree in an agricultural field from an Accredited College/University
- Undergraduate GPA of 2.75 or higher
- Achieved minimum scores established by the West Virginia Department of Education on the following:
- PRAXIS I : (Praxis® Core Academic Skills for Educators (CASE) Tests)
  - Core Academic Skills for Educators: Reading
  - Core Academic Skills for Educators: Writing
  - Core Academic Skills for Educators: Mathematics
- PRAXIS II: Agriculture

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2023-2024 Academic Year.

MS Major Code: 0734

PhD Major Code: 0787

For specific information on the following programs please see the link to the right:

- Agricultural and Extension Education, M.S.

For specific information on the following programs please see the link to the right:

- Agricultural and Extension Education, Ph.D.

## Agricultural and Extension Education, M.S.

### Overview

A Master's degree in AGEE indicates that the person earning the degree has gained additional knowledge and the necessary skills in the field in order to engage in research and other scholarly activities, to teach, and to become practitioners. Candidates are expected to have a broad knowledge and specific expertise in an area of specialization. All candidates complete foundational work in research and theories of Agricultural and Extension Education.

For Teacher Education area of emphasis, students will complete advanced courses in teaching and learning principles. For Extension Education area of emphasis, students will complete advanced courses in program evaluation and change theory. All programs of study will include a minimum of three (3) credits of research.

### Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with his/her graduate committee. The plan must be approved by the candidate's graduate committee, Director of the School for Design and Community Development and the Associate Dean for Academic Affairs of the Davis College.

All students must select one of three options when they are admitted to the program: Teacher Education AOE, Extension Education AOE, or the Teacher Certification option.

### TEACHING VO-AG AND AG. EXTENSION EDUCATION AOE

All students entering the teacher education or extension education AOE will conduct a research study and submit the results in the form of a thesis to the WVU ETD Repository. Students with an Ag. Extension Education Area of Emphasis must complete AGEE 650 (Program Development in Community Education) and AGEE 651 (Program Evaluation in Comm Ed.). All students in the Teaching Vo-Ag or Ag. Extension Education AOE will complete at least 30 hours of coursework of which at least 24 hours must be coursework other than research, projects, or internships, etc.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study *		24
AGEE 642	Agriculture Education Research Methods and Design	3
AGEE 644	Data Analysis/Interpretation	3
Total Hours		30



\*

Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## Teacher Certification Option

Code	Title	Hours
AGEE 488	Professional Agricultural Internship	12
AGEE 489	Agriculture and Extension Education Reflective Seminar	1
AGEE 520	Laboratory Teaching Methods	2
AGEE 521	Laboratory Teaching Methods Practicum	1
AGEE 526	Leadership Development FFA/SAE	2
AGEE 527	Leadership Development FFA/SAE Practicum	1
AGEE 530	Teaching Agriculture	2
AGEE 531	Teaching Agriculture - Practicum	1
AGEE 534	Effective Learning Environments	2
AGEE 535	Effective Learning Environments - Practicum	1
AGEE 538	Program Planning in HS AG Education	2
LE 622	Disciplinary Literacy	3
SPED 500	Legal/Educational Foundations: Special Education	3
SPED 601	Academic Interventions for Special Needs	3
Total Hours		36

\*In order to complete the teacher certification option, the student must meet all requirements for teacher certification in agricultural education by the West Virginia Department of Education.

## Major Learning Outcomes

### AGRICULTURAL AND EXTENSION EDUCATION

1. The student will enhance their knowledge of the agricultural industry, teaching agriculture in public schools, communications and leadership, and/or extension education by completing a minimum of 18 hours of coursework in an area of emphasis selected by the student and his/her advisor.
2. The student will develop basic social science research skills by completing a minimum of 3 hours of coursework in research methods.
3. The student will develop basic data analysis skills by completing a minimum of 3 hours of coursework in data analysis.
4. The student will demonstrate basic social science research and data analysis skills by conducting a research study on an "agricultural education" topic of interest to the student and presenting the research finding in a professional manner.

## Agricultural and Extension Education, Ph.D.

A candidate for the Ph.D. degree in Agriculture and Extension Education must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate catalog.

### Program Requirements

All Ph.D. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the candidate's graduate committee, Director of the School of Design and Community Development, and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the plan of study. The plan of study must include:		
AGEE 642	Agriculture Education Research Methods and Design	3
AGEE 644	Data Analysis/Interpretation	3
AGEE 650	Program Development in Community Education	3
AGEE 651	Program Evaluation in Comm Ed	3
Candidacy Exam		
Research		12

Dissertation

Dissertation Defense

## Agriculture and Extension Education Requirements

The doctoral program in Agricultural and Extension Education (AGEE) is designed to develop scholars and researchers in philosophical areas of education and extension. To meet that broad goal, Doctoral Students build program a program of study coursework focusing on foundational AGEE philosophy, research and analysis, and at least one outside concentrate area or cognate. Foundational coursework includes topics related to the diverse areas of education, communication and extension within the context of agriculture. Research coursework includes methods, quantitative and qualitative analysis. Additional cognate courses should include teaching and learning theory, educational psychology, supervision, administration and leadership, and advanced data collection and analysis. The plan of study must include a minimum of 12 hours of research.

The AGEE faculty guiding the program believe that being a scholar includes more than consumption of knowledge. The program is also designed to develop researchers who explore and build an understanding of the world and profession. Student lead research is expected, as is engagement in teaching within the program. A Doctoral Student's program of study will reflect those expectations with research and independent study hours.

## Human and Community Development, Ph.D.

Contacts: Peter Butler, Associate Professor, Extension Specialist, Director, School of Design and Community Development [Peter.Butler@mail.wvu.edu](mailto:Peter.Butler@mail.wvu.edu)

Alan R. Collins, Ph.D., Professor, Resource Economics and Management [Alan.Collins@mail.wvu.edu](mailto:Alan.Collins@mail.wvu.edu)

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The Ph.D. in Human and Community Development (HCD) is intended for applicants with a professional background in community development and design, landscape architecture, interior architecture, fashion design, design and merchandising, or applicants who have significant prior experience improving the social, cultural, and/or economic conditions of communities by working with government or educational institutions. The program provides students with access to a variety of courses and faculty expertise to help candidates develop an interdisciplinary perspective of human and community development, through research in two or more fields. To this end, the program is flexible and relies on the intellectual maturity and curiosity of the student and the guidance of the student's graduate committee, to develop a student-centered curriculum.

The Ph.D. degree is the most advanced degree offered and prepares students for careers at the highest level of the profession as a faculty member, staff in a research organization or governmental and non-governmental agencies, or as a consultant. This program is currently administered by the School of Design and Community Development in partnership with the Resource Economics and Management Division within School of Natural Resources.

### Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and be under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT).
- A design portfolio (physical or digital) is encouraged for applicants who come with a design background, such as environmental planning and design, landscape architecture, interior architecture, fashion design, industrial design, and so on.
- Either a master degree in design discipline relevant to human and community development, or a master's degree in a social science or humanities discipline relevant to human and community development.
- At least two years equivalent of full-time relevant professional experience.

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0789

A candidate for the Ph.D. degree in Human and Community Development must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate catalog.

## Program Requirements

All Ph.D. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study		
Research		
Candidacy Exam		
Dissertation		
Dissertation Defense		

## Major Learning Outcomes

### HUMAN AND COMMUNITY DEVELOPMENT

Learning outcomes for this degree program include:

- Complete a core consisting of quantitative and qualitative research methods, graduate seminars, and teaching practicum;
- Demonstrate competency in their chosen field(s);
- Demonstrate the capacity to produce research that can be accepted for publication in interdisciplinary journals of the social sciences;
- Be proficient in oral and written communication skills in order to have research accepted by and presented at professional conferences; and
- Show the ability to organize and to assess a community engagement project.

## Landscape Architecture, M.L.A.

Stefania Staniscia (Stefania.Staniscia@mail.wvu.edu), Program Coordinator

### Degree Offered

- Master of Landscape Architecture (MLA)

### Nature of the Program

The Landscape Architecture Program within the School of Design and Community Development of the Davis College of Agriculture, Natural Resources and Design at West Virginia University offers an accredited Master of Landscape Architecture (MLA) degree program. The MLA was granted continued full accreditation as evaluated by the Landscape Architectural Accreditation Board (LAAB) of the American Society of Landscape Architects (ASLA) in 2019.

Demand for professional landscape architects is increasing due to emerging environmental markets and projected shortages of graduates from accredited landscape architecture programs. The MLA focuses on environmental and community design and planning, in addition to providing the primary skills and methods of landscape architecture. The curriculum is flexible for students who may want to develop specialized knowledge in areas such as health care facility design, environmental restoration, community design, cultural or historic landscape planning, or environmental resource analysis methods.

The MLA is three academic years of full-time graduate enrollment. The program allows for advanced placement of up to one academic year of study — which counts towards the minimum three year requirements — in case students enrolling in the MLA have a background education in landscape architecture (BLA or BSLA) or a bachelor degree in a related design field.

### Mission

Landscape Architecture is the art of design, planning, and arranging natural and man-made elements on the land. It applies cultural and scientific knowledge with concern for the conservation and stewardship of natural, cultural and aesthetic amenities to create an environment that serves a useful and enjoyable purpose. This involves consideration of the quality of life in urban and natural settings, as well as the interaction of humans with nature. The Landscape Architecture Program at WVU strives to equip students with knowledge and skills in problem solving, design theory, site

construction, land use planning, and planting design. It emphasizes a philosophy of responsibility and commitment to ethical standards regarding the natural environment, personal relationships, and professional practice.

The faculty represents a multi-disciplinary team with practical experience in creative and scientific research, design, consultation, and public service. This diversity is the nucleus of the Program, allowing for a strong graduate curriculum supplemented by related courses in the arts, sciences, engineering, and planning, reflecting the needs of the Appalachian region, both urban and rural, and current trends within the profession. Three of the faculty are licensed. Graduates of the program can assume traditional landscape architectural roles, e.g., positions with design consulting firms, governmental planning departments, construction firms, transportation planning agencies, etc. In addition, WVU MLA graduates are prepared for design and planning positions meeting the needs common to West Virginia and other rural areas.

## Objectives

- To provide students with a solid professional educational foundation encompassing knowledge and skills of multi-scaled site design, construction, problem-solving, plant materials, geographic information systems, and professional practice responsive to the needs of the environment, society, and the landscape architecture profession.
- To instill ethical standards in the students regarding the environment, the profession, personal relationships, and social responsibility.
- To prepare students to be proficient in communicating professional concepts graphically, orally, and in writing.
- To provide students with cognitive opportunities to incorporate professional information through the study of real-life problems in Morgantown, the state of West Virginia, and the region.
- To enhance course offerings, collaborative faculty research opportunities, and avenues for scholarly activities by increasing and diversifying ties with other disciplines across campus.
- To provide design and planning expertise to West Virginians in the areas of community development, and improvement of the quality of life by offering the skills of the faculty and students of the Landscape Architecture Program.

## Program Disclosure

### STUDENT RETENTION AND GRADUATION RATES, AND DEGREES GRANTED

The MLA program regularly tracks student retention through the program from admittance until graduation. From Fall 2017 to Spring 2022, 23 students began the program, 12 students graduated (52.2%), and 7 students dropped (30.4%). The program granted an average of 2.4 degrees per year. The graduation time varied depending on the students' background. It went from a minimum of 2.5/3 semesters for students with a background education in landscape architecture or a bachelor's degree in a related design field, to 6 semesters for students with a background education other than the ones listed above. Considering students who took extra semesters for the completion of the degree, the average graduation time has been 6.3 semesters.

### POST-GRADUATION EMPLOYMENT

The MLA program regularly surveys graduates in order to get a picture of their employment status. From academic year 2016-2017 to academic year 2021-2022, 4 alumni are pursuing their graduate education and 11 are working in private practice. They correspond to 26.6% and 73.3% of the respondents respectively.

### ESTIMATED COST OF ATTENDANCE

Information about fees, tuition and other expenses can be found at <https://tuition.wvu.edu/graduate/morgantown-oncampus#table-4> (<https://tuition.wvu.edu/graduate/morgantown-oncampus/#table-4>).

The School of Design and Community Development graduate research assistantships are competitive and limited in availability. Research and teaching assistantships for the MLA program include nine months of pay in the amount of \$14,250. Assistantships include University tuition waivers and payment of health insurance.

MLA student research conference travel can be subsidized by the School of Design and Community Development through USDA Hatch funding. The Davis College offers competitive grant funds to support student travel.

Travel to communities for project work is generally supported by external funds and USDA Hatch funding.

Further fellowship opportunities can be found here: <https://graduateeducation.wvu.edu/finances/fellowships> (<https://graduateeducation.wvu.edu/finances/fellowships/>)

Further graduate scholarship opportunities can be found here: <https://graduateeducation.wvu.edu/finances/scholarships-and-internships> (<https://graduateeducation.wvu.edu/finances/scholarships-and-internships/>)

Upon enrollment students are required to buy a kit of drafting supplies for a cost of around \$300. At the end of the first year studio sequence, students are required to purchase a computer that is capable of efficiently running programs with graphic intensive applications extensively used during the following years studio sequences. The approximate cost of a computer of this capability is around \$2,500.

Opportunities for study abroad include the LARC 444 Summer Semester: International Experience Western European Gardens, Landscapes and Architecture (6 credits) for an approximate cost of \$6,000. The course qualifies for student financial aid.

In accordance with the Higher Education Act the program meets the educational requirements for licensure eligibility in each U.S. state.

## Admissions

In applying for the MLA, the following admissions requirements should be met:

**Bachelor’s degree to include:**

- Four credits of biology or plant science (including a laboratory); this requirement can be made up during the first year in the program
- College algebra and trigonometry (or pre-calculus or calculus or equivalent); this requirement can be made up during the first year in the program
- Undergraduate GPA of 3.00 or higher on a scale of 4.00; this requirement can be considered on an individual applicant basis

**Additional Requirements:**

- Portfolio demonstrating creative expression (can be written or graphical)
- Graduate Record Exam (GRE); recommended but not required
- Writing sample: professional publication or a multi-page essay on environmental or community design
- Three letters of recommendation

\* International students must meet WVU's minimum score requirement for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0759

A candidate for the M.L.A. degree in Landscape Architecture must meet all University, College, School, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.L.A. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the School and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study *		30
Total Hours		30

\*  
Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## COURSEWORK

A total of thirty-eight credit hours are required for the post-professional M.L.A. program. The requirements for the first professional degree may include an additional twenty-eight undergraduate and graduate credits prior to commencing with subsequent graduate courses.

## THESIS OR TERMINAL PROJECT

Students will be required to complete either a research thesis on a problem in environmental or community design or landscape architecture or to complete an applied comprehensive professional project. Each student selecting the thesis option will defend their thesis in a public forum before their committee. The comprehensive project option will result in a professional submission that includes a written report and appropriate professional drawings documenting the design project for a project subject to realistic conditions. It will also include a formal public presentation/defense before the student's committee.

The composition of graduate advisory committees will follow Davis College and WVU guidelines and must have at least two landscape architecture faculty members and one outside member. Two of the committee members must be full members of the graduate faculty, and the third may be an associate member.

## Major Learning Outcomes

### LANDSCAPE ARCHITECTURE

- To provide students with a solid professional educational foundation that encompasses knowledge and skills of design, construction, problem-solving, plant materials, landscape management, landscape history and theory, and professional practice and that is responsive to the needs of the environment, society, and the landscape architecture profession.
- To instill ethical standards in the students regarding the environment, the profession, personal relationships and social responsibility.
- To prepare students to be proficient in communicating professional concepts graphically, orally, and in writing.
- To provide students with cognitive opportunities to incorporate professional information through the study of real-life problems in Morgantown, the state of West Virginia, and the region.
- To enhance course offerings, collaborative faculty research opportunities, and avenues for scholarly activities by increasing and diversifying ties with other disciplines across campus.
- To strengthen the Landscape Architecture Program's role as an integral part of the Davis College of Agriculture, Natural Resources & Design's research and scholarly activities regarding landscape design, landscape ecology, landscape planning, cultural and sustainable environments, and geographic information systems.
- To provide design and planning expertise to West Virginians in the areas of community development, and improvement of the quality of life by offering the skills of the faculty and students of the Landscape Architecture Program.

## School of Natural Resources

Robert Burns, Division Director of Forestry and Natural Resources  
email: robert.burns@mail.wvu.edu

Alan Collins, Interim Division Director of Resource Management  
email: alan.collins@mail.wvu.edu

### Degrees Offered

The School of Natural Resources offers master of science degree programs in four areas: forestry; recreation, parks and tourism resources; resource economics and management; and wildlife and fisheries resources. Students wishing to pursue a master of science emphasizing forest resources management or wood science and technology should apply for admission to the master of science in forestry.

The School of Natural Resources offers doctor of philosophy degree programs in three areas: Natural Resource Economics, Natural Resources Science, and Resource Management. A student seeking admission to work toward the degree of doctor of philosophy in natural resources science in the School of Natural Resources may choose from one of the following **Areas of Emphasis** as their major field of study: **forest resources management; recreation, parks, and tourism resources; wood science and technology; or wildlife and fisheries resources**. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

A limited number of graduate research assistantships are available to highly qualified students on a competitive basis.

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## FACULTY

### DIRECTOR

- Robert C. Burns - Ph.D. (Pennsylvania State University)  
Director, Division of Forestry and Natural Resources
- Alan R. Collins - Ph.D. (Oregon State University)  
Director, Division of Resource Economics and Management

### PROFESSORS

- James T. Anderson - Ph.D. (Texas Tech University)  
Wildlife ecology and management
- Robert C. Burns - Ph.D. (The Pennsylvania University)  
Understanding recreational behavior, motivations, and satisfaction levels
- Alan R. Collins - Ph.D. (Oregon State University)  
Resource economics
- Benjamin E. Dawson-Andoh - Ph.D. (University of British Columbia)

Wood chemistry and preservation

- John W. Edwards - Ph.D. (Clemson University)  
Endangered Species Ecology and Management, Forest Wildlife/Habitat Relationships
- Kyle J. Hartman - Ph.D. (University of Maryland)  
Fisheries and Aquatic Ecology, Fish Management, Trophic Ecology
- David W. McGill - Ph.D. (Pennsylvania State University)  
Extension Specialist, Forest Resources, Non-industrial Private Forestry
- Joseph F. McNeel - Ph.D. (Virginia Tech)  
Forest harvest and operations
- J. Todd Petty - Ph.D. (University of Georgia)  
Stream and Watershed Ecology
- Chad Pierskala - Ph.D. (University of Minnesota)  
Wildland recreation management and policy
- Peter V. Schaeffer - Ph.D. (University of Southern California)  
Regional science, Applied microeconomics
- Steven Selin - Ph.D. (University of Oregon)  
Human dimensions and Natural resources management
- Michael P. Strager - Ph.D (West Virginia University)  
Spatial analysis, Decision support
- Jingxin Wang - Ph.D. (University of Georgia)  
Biomass logistics, utilization and bioenergy, forest BMPs

## **ASSOCIATE PROFESSORS**

- Cheryl Brown - Ph.D. (University of California, Berkley)  
Agricultural and food policy and economics, Agribusiness
- Gregory A. Dahle - Ph.D. (Rutgers University)  
Arboriculture and urban forestry
- Jinyang Deng - Ph.D. (University of Alberta)  
Recreation, Parks, and Tourism; Recreation and Leisure Studies
- Levan Elbakidze - Ph.D. (Texas A&M University)  
Shale gas; water and energy economics
- Xiaoli Etienne - Ph.D. (University of Illinois)  
Economic methods in agriculture and energy
- Kathryn Gazal - Ph.D. (Mississippi State University)  
Forest Economics
- Jamie Schuler - Ph.D. (North Carolina State University)  
Forest regeneration and restoration
- Kaushlendra Singh - Ph.D. (University of Georgia)  
Thermo-chemical conversion and bioenergy
- Doolarie Singh-Knights - Ph.D. (University of Georgia)  
Thermo-chemical conversion and bioenergy
- Dave Smaldone - Ph.D. (University of Idaho)  
Environmental and Cultural Interpretation, Nature-based tourism
- Mark Sperow - Ph.D. (Colorado State University)  
Production and resource economics
- Ben D. Spong - Ph.D. (Oregon State University)  
Forest operations, roads, and harvesting
- Amy Welsh - Ph.D. (University of California-Davis)  
Conservation genetics and wildlife forensics
- Nicholas P. Zegre - Ph.D. (Oregon State University)  
Forest and watershed hydrology

## **ASSISTANT PROFESSORS**

- Ana Claudia Sant' Anna - Ph.D. (Kansas State University)  
Agribusiness and Finance
- Donald Brown - Ph.D. (Texas State University)  
Herpetology, wildlife ecology



- Elizabeth Byrd - Ph.D. (Purdue University)  
Energy, Law, Agribusiness
- Sophan Chhin - Ph.D. (University of Alberta)  
Quantitative forest management
- Levan Elbakidze - Ph.D. (Texas A&M)  
Shale gas; water and energy economics
- Xiaoli Etienne - Ph.D. (University of Illinois)  
Econometric methods in agriculture and energy
- Shawn Grushecky - Ph.D. (West Virginia University)  
Energy land management
- Shawn Grushecky - Ph.D. (West Virginia University)  
Energy land management
- Suhyun Jung - Ph.D. (University of Minnesota)  
Environmental and natural resource economics
- Christopher Lituma - Ph.D. (University of Tennessee)  
Ornithology and bird ecology
- Gloria S. Oporto - Ph.D. (University of Maine - Orono)  
Wood-based Composites and Bioproducts
- Christopher Rota - Ph.D. (University of Missouri)  
Applied vertebrate ecology
- Heather Stephens - Ph.D. (Ohio State University)  
Resource and energy economics; regional development

## ADJUNCT PROFESSORS

- Patricia M. Mazik - -- Ph.D. (Memphis State University)  
Aquatic toxicology, fish physiology
- Sheldon Owen - Ph.D. (West Virginia University)  
Extension wildlife specialist
- Stuart A. Welsh - Ph.D. (West Virginia University)  
Ichthyology
- Petra B. Wood - Ph.D. (University of Florida)  
Avian ecology

## VISITING ASSISTANT PROFESSORS

- Charlene Kelly - Ph.D. (Virginia Tech)  
Watershed biogeochemistry
- Kirsten Stephan - Ph.D. (University of Idaho)  
Soil and vegetation management

# Forestry, M.S.F.

## Degree Offered

- Master of Science in Forestry

## Major Fields of Study Offered

- Forest Resources Management
- Wood Science and Technology

## Nature of the Program

Students seeking admission for the degree of Master of Science in Forestry (M.S.F.) should have completed an undergraduate curriculum in forestry. A student whose undergraduate degree is in a field other than forestry will ordinarily be required to take supplemental undergraduate courses. Candidates for the degree may pursue an emphasis in forest resources management or wood science and technology. Within their selected area of emphasis, candidates may focus their studies on arboriculture, bio-energy, bio-fuels, forest biometry, forest business, forest ecology, forest economics, forest hydrology, forest management, forest operations, forest soils, silviculture, wood composites, wood marketing, wood science and technology, or urban forestry.

## Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and be under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.

\* International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

Students seeking admission for the M.S. Forestry degree should have completed an undergraduate curriculum emphasizing Forestry or Wood Science. A student whose undergraduate degree is in a field other than these two areas of study will ordinarily be required to take supplemental undergraduate courses.

Candidates may emphasize study in arboriculture, biocomposites, forest biometry, forest ecology, forest economics, forest hydrology, forest management, forest operations, forest products marketing, silviculture, sustainable construction, or urban forestry.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0729

A candidate for the M.S.F. degree in Forestry must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S.F. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study *		24
Research		6
FNRS 697	Research	
Plan of Study		
Thesis		
Total Hours		30

\* Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, project, internship, etc. credits. Of the 24 credit hours, no more than 3 credit hours of 590, 690, or 790 can be taken.

Candidates for the degree may emphasize in forest biometry, forest ecology, forest economics, forest business, forest management, forest hydrology, silviculture, wood science and technology, forest operations, wood composites, wood marketing, bio-energy, or bio-fuels. The candidate must complete thirty hours of approved study, six hours of which shall constitute a thesis. The program ordinarily requires two years of residence. The Division of Forestry and Natural Resources in the Davis College of Agriculture, Natural Resources, and Design requires three letters of recommendation and a one-page goal statement which identifies the area of specialization the student desires to study.

## Major Learning Goals

### FORESTRY

- Demonstrate mastery in one of the areas of emphasis (Forest Resources Management or Wood Science and Technology)
- Engage in and conduct original research in Forest Resources Management or Wood Science and Technology

# Natural Resource Economics, Ph.D.

Levan Elbakidze, Graduate Program Coordinator  
e-mail: Levan.Elbakidze@mail.wvu.edu

## Degree Offered

- Doctor of Philosophy in Natural Resource Economics

## Nature of the Program

The Ph.D. degree is the most advanced degree offered and prepares candidates for work at the highest level of the profession as a faculty member, staff in a research organization or governmental and non-governmental agencies, or as a consultant.

## Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and be under no requirements to make up deficiencies.

### For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT).

\* International students must meet WVU's minimum score requirements for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0783

## Program Requirements

The requirements for obtaining a Ph.D. degree in Natural Resource Economics are outlined in the graduate handbook available on-line at <http://resourcemanagement.wvu.edu/>. All Ph.D. degree candidates are required to follow a planned program of study. The student develops this plan of study in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
<b>Required Courses</b>		
ARE 621	Quantitative Methods in Resource Economics	3
ECON 701	Advanced Micro-Economic Theory 1	4
ECON 711	Advanced Micro-Economic Theory 2	4
ECON 721	Mathematical Economics	3
ECON 725	Econometrics 1	3
ARE 703	Advanced Natural Resource Economic Theory	3
ARE 710	Advanced Environmental Economics	3
ECON 726	Econometrics 2	3
ECON 727	Econometrics 3	3
or ARE 729	Spatial Econometrics	
<b>Required Field (select one of the following):</b>		<b>6</b>
Economic Development and Regional Economics		
ARE 540	Rural and Regional Development	
ARE 542	International Agricultural Economic Development	

ECON 751	International Trade	
ECON 754	Comparative Economic Systems	
ECON 761	Advanced Regional Economics	
ECON 762	Advanced Urban Economics	
Spatial Economic Analysis		
ARE 729	Spatial Econometrics	
ECON 727	Econometrics 3	
ECON 761	Advanced Regional Economics	
RESM 575	Spatial Analysis for Resource Management	
Macroeconomics		
ECON 702	Advanced Macro-Economic Theory 1	
ECON 712	Advanced Macro-Economic Theory 2	
<b>Seminar</b>		<b>1</b>
ARE 796	Graduate Seminar	
<b>Research</b>		<b>1</b>
ARE 797	Research	
<b>Teaching Practicum</b>		<b>1</b>
ARE 690	Teaching Practicum	
<b>Qualifying Exam</b>		
<b>Mentored Research Paper</b>		
<b>Dissertation Proposal Defense</b>		
<b>Dissertation</b>		
Total Hours		38

## Major Learning Outcomes

### NATURAL RESOURCE ECONOMICS

Learning outcomes for this degree program are that each graduate:

- Demonstrate the capacity to produce economic research that can be accepted for publication in leading academic journals.
- Be proficient in oral and written communication.

## Natural Resources Science, Ph.D.

### Degree Offered

- Doctor of Philosophy

### Major Fields of Study Offered

- Forest Resource Management
- Recreation, Parks, and Tourism Resources
- Wildlife and Fisheries Resources
- Wood Science and Technology

Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

### Nature of the Program

The Ph.D. in Natural Resources Science is an interdisciplinary program that allows doctoral students the opportunity to specialize in a range of competencies. As a graduate student in the School of Natural Resources, you'll advance your research knowledge and prepare to become a leader in your chosen field. With the guidance and support of faculty mentors, you'll develop an advanced understanding of and appreciation for the principles of economics, stewardship and sustainability of our natural resources.

### Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT).

\* International students must meet WVU's minimum score requirement for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

A student seeking admission for a Ph.D Natural Resources Science degree may choose a major field of study in forest resources management; recreation, parks, and tourism resources; wood science and technology; or wildlife and fisheries resources. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0738

A candidate for the Ph.D. degree in Natural Resources Science must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate catalog.

## Program Requirements

All Ph.D. degree students are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study		
Research		
Candidacy Exam		
Dissertation		
Dissertation Defense		

Curriculum requirements for all Ph.D. candidates include a block of graduate courses in the major field, which will constitute a comprehensive review of the significant knowledge in that field and a block of graduate courses in a minor field of study. A minimum of sixty semester hours beyond the bachelor's degree and exclusive of the dissertation is required.

## DISSERTATION AND FINAL EXAMINATION

The research work for the doctoral dissertation must show a high degree of scholarship and must present an original contribution to the field of forest resources science. In addition to coursework and the dissertation, the candidate is required to pass a qualifying examination and a final examination.

## Major Learning Outcomes

### NATURAL RESOURCES SCIENCE

To train students to become leaders in sub-fields within the broad area of Natural Resources Science (in one of four program areas: Forest Resource Management; Recreation, Parks and Tourism Resources; Wildlife and Fisheries Resources; and Wood Science and Technology).

To prepare students for assuming positions in academia, industry, government, or nonprofit agencies. Within this framework the learning outcomes of the PhD in Natural Resources Science are to develop students that demonstrate the following abilities:

1. Conduct independent, novel research in their sub-discipline.
2. Interpret and critically evaluate the existing literature published within their field.
3. Demonstrate critical thinking skills for application of statistics.
4. Effectively communicate their research in oral and written formats.

# Recreation, Parks, and Tourism Resources, M.S.

## Degree Offered

- Master of Science

## Nature of the Program

The Division of Forestry and Natural Resources offers program options leading to the master of science for students who wish to major in Recreation, Parks, and Tourism Resources. Students selecting this graduate program may focus on field-related specialties including (but not limited to) recreation management and policy, environmental interpretation, and natural resource-based tourism. All students are required to complete a total of thirty-five credit hours and complete a thesis.

## Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and be under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT).

\* International students must meet WVU's minimum score requirements for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

Students seeking admission for the M.S. in Recreation, Parks, and Tourism Resources should have completed an undergraduate curriculum emphasizing natural resources recreation. A student whose undergraduate degree is in a field other than this discipline will ordinarily be required to take supplemental undergraduate courses as part of their degree work.

Students selecting this graduate program may emphasize recreation management and policy, environmental education and interpretation, or natural resource-based tourism.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0781

A candidate for the M.S. degree in Recreation, Parks, and Tourism must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College. Students can either complete a traditional research-based thesis, or a more applied Project. The Project option could be completed in as little as 12 months or 3 semesters for students not on a Graduate Research Assistantship.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
<b>Research Methods and Statistics *</b>		<b>6</b>
EDP 612	Introduction to Research	
or AGE 642	Agriculture Education Research Methods and Design	
STAT 511	Statistical Methods 1	
or EDP 613	Statistical Methods 1	
<b>Recreation, Parks, &amp; Tourism Resources courses (take 4 classes from the following list, or other approved RPTR classes) **</b>		<b>12</b>
FNRS 670	Human Dimensions of Natural Resource Management	

RPTR 680	Non-Personal Interpretation	
RPTR 685	Personal Interpretation	
RPTR 714	Outdoor Recreation Behavior	
RPTR 738	Tourism Planning	
RPTR 693	Special Topics	
<b>Cognate Area **</b>		<b>9</b>
400, 500, 600, or 700 level courses in AGEE, EDP, FMAN, FOR, RESM, RPTR, or other approved fields		
FOR 697	Research (Project students take 3 credits of RPTR 792)	3
or RPTR 792	Directed Study	
Total Hours		30

\*

All students are required to take a 3-credit hour Graduate Research Methods class (such as EDP 612, AGEE 642, etc.).

\*\*

Excluding 697 courses and RPTR 792.

A thesis requires collecting a qualitative or quantitative data set for the purpose of conducting action-oriented research (e.g., program or needs assessments), cooperative research (e.g., cooperative problem solving), and/or theory development (e.g., hypothesis testing). The specific requirements for each student are determined by the thesis chair and committee members. A thesis ordinarily requires two years of residence. Students can also complete a Project option, which requires a substantial applied project (e.g., tourism management plan, interpretive management or exhibit plan), planned in conjunction with the student's graduate committee.

## Major Learning Outcomes

### RECREATION, PARKS, AND TOURISM RESOURCES

1. Students will be able to apply a broad range of social science theories and methods to policy, planning, and management challenges and opportunities in the recreation, tourism, and natural resource fields.
2. Students will be able to design and conduct field relevant research to address natural resource based recreation and tourism questions and problems.
3. Students will be able to analyze and interpret research data that addresses natural resource based recreation and tourism questions and problems.
4. Students will communicate effectively in writing and oral presentations to professional and lay audiences about issues in the RPTR field.
5. Students will demonstrate the ability to remain current with contemporary issues within one's field and related areas.

## Resource Economics and Management, M.S.

Levan Elbakidze, Graduate Program Coordinator

e-mail: Levan.Elbakidze@mail.wvu.edu (Alan.Collins@mail.wvu.edu)

### Degree Offered

- Master of Science

### Nature of the Program

The M.S. program in Resource Economics and Management (REM) provides advanced training in the areas of natural resource, environmental, agricultural, energy, agribusiness, and rural development economics. The primary objective of this program is to prepare students for further graduate study or a variety of careers in business and government. A candidate for the degree must comply with University, College, and Program requirements. The M.S. degree in Resource Economics and Management can be obtained under either course work or thesis options.

### Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and be under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.

- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT).

\* International students must meet WVU's minimum score requirement for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

Candidates for the M.S. in Resource and Economics Management degree may be admitted on a regular or provisional basis. Prerequisites for admission include the following:

- Twelve or more semester credits in economics, agricultural and resource economics, statistics, or appropriate social science courses (should include a course in intermediate microeconomics)
- Three or more semester hours of credit in calculus

Students lacking these prerequisites have to complete coursework to acquire them.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Traditional (On-Ground) Major Code: 0735

Online Major Code: 0748

## Program Requirements

- Traditional (On-Ground) Program Requirements (p. 128)
- Online Program Requirements (p. 129)

A candidate for the M.S. degree in Resource Economics and Management must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## TRADITIONAL (ON-GROUND) PROGRAM REQUIREMENTS

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Graduate courses offered toward the degree must be approved by the student's graduate committee. Thesis and non-thesis options are available for the master's degree. Students should select one option by the time twelve hours of coursework are completed (usually by the end of the first semester in the program) and after consulting with their graduate advisor or committee. Candidates with graduate research assistantships must select the thesis option.

Code	Title	Hours
<b>Required Courses</b>		
ARE 601	Applied Microeconomics	4
ARE 621	Quantitative Methods in Resource Economics	3
ARE 624	Econometric Methods in Resource Economics	3
Select one of the following:		3
ARE 632	Natural Resource and Environmental Economics	
ARE 633	Natural Resource Policy Analysis	
<b>Select one of the following Options:</b>		<b>17</b>
<b>Thesis Option *</b>		
ARE 697	Research (6 Hours)	
Electives (11 Hours)		
Written and Oral Exam		
<b>Non-Thesis Option (Coursework)</b>		
Electives (15 Hours)		
ARE 696	Graduate Seminar (2 Hours)	
<b>Non-Thesis Option (Professional Paper)</b>		



## Electives (15 Hours)

ARE 696	Graduate Seminar (1 Hour)	
ARE 697	Research (1 Hour)	
Professional Paper		
Total Hours		30

\*

A minimum of thirty credit hours of approved coursework can include not more than six hours of credit for the thesis. Proficiency in economics plus agricultural and resource economics is expected. Approved courses in closely related areas may be included. The student's graduate committee must approve the student's course of study and thesis topic.

## ELECTIVES

Code	Title	Hours
ARE 440	Futures Markets and Commodity Prices	3
ARE 445	Energy Economics	3
AGEE 642	Agriculture Education Research Methods and Design	3
ARE 585	Economics of Water Resources and Energy	3
ARE 600	Research Methods	1
ARE 620	Adaptation and Mitigation Strategies for Addressing Climate Change	3
ARE 422	New Venture Creation	3
RESM 480	Environmental Regulation	3
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory *	3
RESM 444	Advanced GIS for Natural Resource Management *	3
RESM 575	Spatial Analysis for Resource Management *	3
RESM 585	GIS and Spatial Analysis Project *	3
RESM 540	Geospatial Modeling *	3
ESWS 525	Principles of Water Resources *	3
RESM 560	Advanced Energy Project and Program Management *	3
ARE 461	Agribusiness Finance *	3
ARE 620	Adaptation and Mitigation Strategies for Addressing Climate Change	3

\*

Course is offered in-person and online.

## ONLINE PROGRAM REQUIREMENTS

Code	Title	Hours
<b>Required Courses</b>		
ARE 601	Applied Microeconomics	4
ARE 621	Quantitative Methods in Resource Economics	3
ARE 624	Econometric Methods in Resource Economics	3
Select one of the following:		3
ARE 632	Natural Resource and Environmental Economics	
ARE 633	Natural Resource Policy Analysis	
<b>Select one of the following Options:</b>		<b>17</b>
<b>Thesis Option *</b>		
ARE 697	Research (6 Hours)	
Electives (11 Hours)		
Written and Oral Exam		
<b>Non-Thesis Option (Coursework)</b>		
Electives (15 Hours)		
ARE 696	Graduate Seminar (2 Hours)	
<b>Non-Thesis Option (Professional Paper)</b>		
Electives (15 Hours)		

ARE 696	Graduate Seminar (1 Hour)	
ARE 697	Research (1 Hour)	
Professional Paper		
Total Hours		30

\*

A minimum of thirty credit hours of approved coursework can include not more than six hours of credit for the thesis. Proficiency in economics plus agricultural and resource economics is expected. Approved courses in closely related areas may be included. The student's graduate committee must approve the student's course of study and thesis topic.

## ELECTIVES

Code	Title	Hours
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory *	3
RESM 444	Advanced GIS for Natural Resource Management *	3
RESM 575	Spatial Analysis for Resource Management *	3
RESM 585	GIS and Spatial Analysis Project *	3
RESM 540	Geospatial Modeling *	3
ESWS 525	Principles of Water Resources	3
RESM 560	Advanced Energy Project and Program Management *	3
ARE 461	Agribusiness Finance *	3
ARE 620	Adaptation and Mitigation Strategies for Addressing Climate Change	3

\*

Course is offered in-person and online.

## Major Learning Outcomes

### RESOURCE ECONOMICS AND MANAGEMENT

The primary objective of this major is to prepare students for further graduate study or a variety of careers in business and government. Learning goals are that each graduate:

- Apply economic reasoning to the analysis of selected contemporary economic problems
- Demonstrate proficiency in the use of quantitative tools for the analysis of applied issues in resource economics and management.
- Recognize and formulate effective written and oral communication, giving appropriate consideration to the audience, context and format.

## Resource Management, Ph.D.

Levan Elbakidze, Graduate Program Coordinator  
e-mail: Levan.Elbakidze@mail.wvu.edu

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The Ph.D. degree is the most advanced degree offered and prepares candidates for work at the highest level of the profession as a faculty member, staff in a research organization or governmental and non-governmental agencies, or as a consultant.

### Admissions

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.

\*International students must meet WVU's minimum score requirements for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

\*\*A standardized graduate examination score (GRE or MCAT) is not required for admission to this degree, however, it is strongly encouraged.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0785

A candidate for the Ph.D. degree in Resource Management must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate catalog.

## Program Requirements

All Ph.D. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
Course Requirements as determined by the Plan of Study		
	Research	
	Candidacy Exam	
	Dissertation	
	Dissertation Defense	
	Plan of Study	

## Major Learning Outcomes

### RESOURCE MANAGEMENT

Learning goals for this degree program include:

- Demonstrate the capacity to produce research that can be accepted for publication in leading inter-disciplinary journals that combine ecological or physical sciences with social science disciplines.
- Be proficient in oral and written communication skills in order to have research accepted by and presented at professional conferences.

## Wildlife and Fisheries Resources, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The Wildlife and Fisheries Resources Program at WVU is dedicated to developing the next generation of young fisheries and wildlife professionals. This program offers two levels of advanced degree with a master of science in wildlife and fisheries resources and a Ph.D. in natural resources science available. At the M.S. or Ph.D. level, students work closely with their faculty advisor and mentor to develop a unique research program that will prepare them for a career in this field. Students typically focus on either wildlife or fisheries for these advanced degrees. Coursework for these degrees varies depending upon the career goals of the student, past course history, and educational needs for the intended research project. Since 2011, we have required that all graduates complete necessary coursework to obtain professional certification as a biologist by The Wildlife Society or The American Fisheries Society by the time of graduation. Typically all students take two semesters of statistics (STAT 511 and 512) and an advanced GIS class. Students interested in graduate study in our program can apply online through the graduate admissions office but are encouraged to contact faculty members who may share their research interests.

## Admissions

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of their choice and be under no requirements to make up deficiencies.

For regular admission, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree, and identify a potential faculty advisor.
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or the New Medical College Admissions Test (New MCAT).

\* International students must meet WVU's minimum score requirement for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

Students seeking admission for the M.S. in Wildlife and Fisheries Resources should have completed an undergraduate curriculum emphasizing wildlife and/or fisheries sciences. A student whose undergraduate degree is in a field other than this discipline will ordinarily be required to take supplemental undergraduate courses as part of their degree work.

Students selecting this graduate program may emphasize either wildlife or fisheries resources in their studies.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0708

A candidate for the M.S. degree in Wildlife and Fisheries Resources must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses applied toward degree requirements.		
WMAN 693	Special Topics (Seminar)	1
<b>Wildlife Seminar</b>		<b>2</b>
WMAN 770	Wildlife Seminar	
FNRS 697	Research	6
<b>Additional Coursework</b>		<b>21</b>
500, 600, or 700 level in BIOL, ENVP, ENTO, FNRS, GEN, GEOG, GEOL, RESM, STAT, WMAN		
Thesis Proposal		
Oral Examination		
Thesis		
Thesis Defense		
Plan of Study		
Total Hours		30

\* Students must complete a minimum of 30 total hours, of which at least 24 hours must be coursework other than research, thesis, project, internship, etc. credits.

## Major Learning Outcomes

### WILDLIFE AND FISHERIES RESOURCES

Upon the successful completion of a Wildlife and Fisheries Resources degree students will be able to:

- Demonstrate mastery of historic and contemporary wildlife or fisheries topics.
- Critique and assess peer-reviewed literature and apply research findings to the conservation and management of wildlife and fisheries resources.
- Conduct and defend original research focused on wildlife or fisheries that includes project design, collecting, analyzing and interpreting data, publishing results in scientific journals, and presenting results to scientific audiences.

## College Wide Degrees

### Degrees Offered

- Master of Agriculture, Natural Resources and Design
- Master of Science

### Nature of the Program

As a graduate student in the WVU Davis College, you'll have the opportunity to conduct research on topics important to you (and our world) and work alongside internationally recognized faculty. Be part of a supportive community. Find or fine tune your passion. Further prepare for your future career.

Our Master of Agriculture, Natural Resources, & Design is an interdisciplinary degree that offers advanced study in all areas of agriculture, natural resources, and design. The M.A. in Energy Environments will prepare to go further faster with advanced coursework, practical work and research experience that will equip you for success in professions that are rapidly developing at the intersections of energy and environment.

## Agriculture, Natural Resources and Design, M.Agr.

### Degree Offered

- Master of Agriculture, Natural Resources and Design

### Nature of the Program

The Master of Agriculture, Natural Resources and Design is an interdisciplinary degree that offers advanced study in all areas of agriculture, natural resources, and design. This program provides an opportunity for students to expand on the knowledge and skills they acquired during their undergraduate studies.

Coursework options are varied with a program that enables students to tailor their education to fit individual career goals. This is a non-thesis program, which requires 30 hours of graduate level coursework. A minimum of 15 hours must be selected from graduate courses within the Davis College.

The Master of Agriculture, Natural Resources and Design may benefit individuals who want to expand their skills and increase their competitiveness in the job market, wish to improve their chances for admission to a professional school, want to make a career change, or want to start a business.

### Career Opportunities

Positions for employment are available in numerous settings including private industry, education, and federal and state government agencies. Graduates may find employment as educators, researchers, agriculturalists, extension agents, conservationists, or may start their own business. Many graduates also enter professional schools and doctoral programs.

## Admissions

### REGULAR

A regular graduate student is a degree-seeking student who meets all the criteria for regular admission to a program of his/her choice and be under no requirements to make up deficiencies. To meet minimum requirements for regular admission to a Davis College graduate degree program, a student must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or average a 3.0 or higher in the last sixty credit hours).
- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of approximately 500 words indicating the applicant's goals and objectives relative to receiving a graduate degree.

\*International students must meet WVU's minimum score requirement for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

### PROVISIONAL

A student may be admitted as a provisional graduate student when the student possesses a baccalaureate degree but does not meet the criteria for regular admission. The student must have incomplete credentials, deficiencies to make up, or may have an undergraduate scholastic record that does not meet grade point requirements for regular admission. After successful fulfillment of the deficiencies, the student will be granted regular graduate student status.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0718

A candidate for the MAGR degree of Agriculture, Natural Resources and Design must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
A minimum GPA of 3.0 must be attained in all graduate courses approved by a graduate advisory committee for the major.		
	<b>Coursework within the Davis College (A&amp;VS, AEM, AGEE, AGBI, AGRN, ANNU, ANPH, ARE, DSM, ENTO, FDST, FMAN, FOR, GEN, HN&amp;F, HORT, ID, LARC, PLSC, PPTH, RESM, RPTR, WDSC, WMAN)</b>	<b>15</b>
	<b>Elective Requirements (in consultation with Graduate Advisory Committee) *</b>	<b>15</b>
	Plan of Study	
	Total Hours	30

\*

Students will select additional restricted electives across a range of topics in consultation with the student's Graduate Advisory Committee.

\*\*

Research, Professional Field Experience, Seminar, Independent Study, and Teaching Practicum credits are limited to 12 total credits combined, and only three credits of each may be included on the graduate plan of study.

## Learning Outcomes

Students earning a Masters of Agriculture, Natural Resources & Design degree will be able to:

- Communicate professional concepts orally and in writing.
- Explain the holistic nature of opportunities and problems pertaining to agriculture, natural resources, or design.
- Explain the role of inquiry and research in addressing opportunities and problems pertaining to agriculture, natural resources, or design.
- Construct a theoretical framework that addresses a particular opportunity or problem in agriculture, natural resources, or design and generalize that framework to aid in understanding similar opportunities or problems.
- Apply research skills to analyze agriculture, natural resources, or design opportunities or problems.

## Energy Environments, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The Davis College of Agriculture, Natural Resources & Design at West Virginia University offers a Master's of Science in Energy Environments to complement two popular BS degrees in the College (Energy Land Management and Energy & Environmental Resource Management). The mission of the MS in Energy – Environments is to prepare students with the advanced coursework and practical work and research experience needed to succeed in professions that are rapidly developing at the intersection of energy and the environment. The program will meet this mission by offering students a mix of foundational coursework in science, ethics, project management, and natural resource economics with specialized coursework tailored to the students' interests, including tracks in water resources management, energy and environmental policy, and GIS and spatial analysis.

### Admissions

Students admitted to the Davis College and the MS in Energy Environments degree program must:

- Possess a baccalaureate degree from a college or university and have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last sixty credit hours).

- Provide three letters of reference from persons acquainted with the applicant's professional work, experience, or academic background.
- Submit a written statement of approximately 500 words indicating the applicant's goals and objectives relative to receiving a graduate degree.

\*International students must meet WVU's minimum score requirements for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0750

A candidate for the M.S. degree in Energy Environments must meet all University, College, Division, and Program requirements as outlined in the WVU Graduate Catalog.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student develops the plan of study during their first year in the program in conjunction with the graduate committee. The plan must be approved by the Director of the Division and the Associate Dean for Academic Affairs of the Davis College.

Code	Title	Hours
Minimum GPA of 3.0 is required in major coursework.		
<b>Required Coursework</b>		
DSM 650	The Creative Economies	3
ENLM 500	Advanced Negotiations and Ethics for Energy Land Managers	3
ESWS 525	Principles of Water Resources	3
RESM 560	Advanced Energy Project and Program Management	3
<b>Research or Capstone Experience *</b>		<b>3</b>
Select one of the following:		
ANRD 695 or RESM 695	Independent Study	
ANRD 697 or RESM 697	Research	
<b>Elective Requirements (in consultation with Graduate Advisory Committee) **</b>		<b>15</b>
Plan of Study		
Total Hours		30

\*

Students that register for three credit hours of independent study must complete a capstone project or professional internship. Students electing a professional internship must complete at least 180 hours of paid or voluntary work in a supervised work setting related to their field of study. All students must also submit a problem paper to the graduate committee and defend their work in a public forum to complete the capstone requirement. Students that register for three credit hours of research experience may lead to completion of a thesis, but a formal thesis is not required for this degree. Completion of a formal thesis would be expected to prolong the time it takes to complete the degree.

\*\*

Students will select additional restricted electives across a range of topics in consultation with the student's Graduate Advisory Committee. Independent Study, Professional Field Experience, Research, Seminar, and Teaching Practicum credits are limited to 12 total credits combined, and only three credits of each may be included on the graduate plan of study.

## Learning Outcomes

Upon graduation, graduates of the MS in Energy Environments will:

- Possess in-depth, advanced knowledge in their discipline.
- Possess broad knowledge of related STEM disciplines.
- Understand and be able to articulate the relationships between energy extraction and use, environmental quality, and public policy within the broad context of sustainable development.
- Be able to develop technical solutions to energy and environmental problems that include the impact of law and public policy.
- Assess the economic realities of technical solutions, addressing such economic factors as market externalities, cost-benefit analysis, and the micro- and macroeconomic implications of the solutions produced.

- Exhibit professional communication skills and the ability to communicate effectively to technical audiences, the general public, the media, and policy makers.
- Adhere to codes of responsible conduct of research and behavior.



# Applied Human Sciences

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The College of Applied Human Sciences provides a holistic education that is designed to enrich the whole person – physically, emotionally and intellectually. Graduates are prepared to positively affect the quality of life in the communities in which they live and serve. The College of Applied Human Sciences has an enrollment of over 2,000 students. It is comprised of three schools: the School of Counseling and Well-Being, the School of Education and the School of Sport Sciences, with a selection of undergraduate and graduate degrees offered within each school.

The School of Counseling and Well-Being offers diverse and customizable coursework and expansive partnerships that provide hands-on experience with health-related organizations. The School of Education prepares future through engaging instruction, research endeavors and real-world experiences. The School of Sport Sciences has selection of programs devoted to human performance and the sports industry. Each school is committed to academic excellence, a supportive environment focused on student success and pioneering research. The schools combine to create academic programs that are highly relevant in today's environment that emphasizes personal quality of life.

## Degrees Offered

- Master of Arts
  - Counseling
  - Digital Technologies and Connected Learning
  - Education and Teaching Certification (MAC)
  - Elementary Mathematics Specialist
  - Higher Education Administration
  - Instructional Design and Technology
  - Literacy Education
  - Special Education
- Master of Science
  - Clinical Rehabilitation and Mental Health Counseling
  - Coaching and Sport Education
  - Sport Education
  - Physical Education Teacher Education
  - Sport Management
- Doctor of Education
  - Higher Education Administration
- Doctor of Philosophy
  - Educational Theory and Practice
  - Higher Education
  - Kinesiology

## Facilities

The facilities of the College of Applied Human Services include Allen Hall and the Health and Education Building, both on the Evansdale campus, and the WVU Child Development Laboratory/Nursery School. Allen Hall and the Health and Education building have several technology-based classrooms, conference rooms, an active learning center, a teacher behavior laboratory, a sport psychology consulting laboratory, a fitness room, a computer lab, research space, the Office of Student Success, and faculty and staff offices. It also houses the Collaborative Assistive Technology Education Laboratory, the Teaching and Learning Technologies Center, and four Centers - WVU Center for the Future of Land-Grant Education, Center for Applied Coaching and Sport Sciences, Center for Active West Virginia, and the Russell "Bud" Bolton Center for Sport Ethics. Courses are also taught at the indoor track and sports area in the Shell Building and WVU Recreation Center, outdoor areas including tennis courts, grass and turf fields, and the outdoor track.

Students may obtain additional information about a particular graduate program by writing to the coordinator of that program or by contacting the department.

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## ADMINISTRATION

### DEAN

- Autumn Cypres - Ed.D. (Arizona State University)

### ASSOCIATE DEANS

- Sean Bulger - Ed.D. (West Virginia University)  
Associate Dean for Online Education

- Melissa Luna - Ph.D. (Northwestern University)  
Associate Dean for Engagement and Research
- Jessica Troilo - Ph.D. (University of Missouri)  
Associate Dean for Academic Affairs
- Valerie Wayda - Ed.D. (West Virginia University)  
Associate Dean for Student Success

## SCHOOL DIRECTORS

- Amy Kennedy Root - Ph.D. (University of Maryland)  
Director, Counseling and Well-being
- Nathan Sorber - Ph.D. (Pennsylvania State University)  
Director, Education
- Dana Voelker - Ph.D. (Michigan State University)  
Director, Sport Sciences

## Accreditation

**The following programs have a specialized accreditation through the Council for Accreditation of Counseling and Related Educational Programs.**

- Clinical Rehabilitation and Mental Health Counseling
- Clinical Mental Health Counseling

**The following programs have specialized accreditation through the National Council for Accreditation of Teacher Education and is a Council for the Accreditation of Educator Preparation eligible provider.**

- Education
  - Elementary Education
  - Elementary Math Specialist
  - Literacy Education
  - Secondary Education- Biology Education
  - Secondary Education- Chemistry Education
  - Secondary Education- English
  - Secondary Education- General Science Education
  - Secondary Education- Math Education
  - Secondary Education- Physics Education
  - Secondary Education- Social Studies Education
  - Secondary Education/Multicategorical
- School Counseling

Graduates of our state-approved preparation programs are eligible for recommendations for certification/licensure issued by appropriate state agencies. Since certification requirements are changed periodically by the state, the fulfillment of certification requirements as presented in this catalog cannot guarantee compliance with the most recent requirements. The West Virginia State Department of Education requires that a degree be from an accredited institution of higher education for licensure and salary purposes. Students are, therefore, encouraged to seek the counsel of members of the faculty, their advisors, and the college certification officer on matters pertaining to degree and certification requirements.

## Certificate Programs

- Health Professions Education (<http://catalog.wvu.edu/graduate/graduatecertificates/healthprofessionseducation/>)
- Online Teaching ([http://catalog.wvu.edu/graduate/graduatecertificates/online\\_teaching/](http://catalog.wvu.edu/graduate/graduatecertificates/online_teaching/))
- Program Evaluation (<http://catalog.wvu.edu/graduate/graduatecertificates/programmevaluation/>)

# School of Counseling and Well-being

## Degrees Offered

- Master of Arts
- Master of Science

The School of Counseling and Well-Being is dedicated to the preparation of students and research in areas related to the promotion of well-being, positive development, and healthy relationships in a variety of contexts, including family, school, and workplace. We offer diverse programs that encompass health promotion, human services, and human sciences. There is a focus on global awareness, and graduates are culturally competent and develop ethical foundations to maintain integrity in their academics and professions and to simultaneously inspire others.

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## ADMINISTRATION

### DIRECTOR

- Amy Kennedy Root - Ph.D. (University of Maryland, College Park)  
Human Development

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## FACULTY

### PROFESSORS

- Jeffrey Daniels - Ph.D. (University of Nebraska - Lincoln)  
Counseling Psychology; Counseling
- Margaret Glenn - Ed.D. (The George Washington University)  
Clinical Rehabilitation and Mental Health Counseling
- Amy Kennedy Root - Ph.D. (University of Maryland, College Park)  
Child Development and Family Studies; Youth and Family Sciences

### ASSOCIATE PROFESSORS

- Kimberly Floyd - Ph.D. (Old Dominion University)  
Child Development and Family Studies
- Ed Jacobs - Ph.D. (Florida State University)  
Counseling
- George Mamboleo - Ph.D. (University of Arizona)  
Clinical Rehabilitation and Mental Health Counseling
- Emily Murphy - Ph.D. (West Virginia University)  
Health and Well-Being
- Lisa Platt - Ph.D. (The Pennsylvania State University)  
Counseling; Counseling Psychology
- Christine Schimmel - Ed.D. (Marshall University)  
Counseling
- Jessica Troilo - Ph.D. (University of Missouri)  
Child Development and Family Studies; Youth and Family Sciences

### ASSISTANT PROFESSORS

- Jonathon Beckmeyer - Ph.D. (University of Missouri)  
Child Development and Family Studies; Youth and Family Sciences
- Rawn Boulden - Ph.D. (Old Dominion University)  
Counseling
- Gabrielle Kline - Ph.D. (University of Missouri)  
Child Development and Family Studies; Youth and Family Sciences
- Kristine Ramsay-Seaner - Ph.D. (Auburn University)  
Clinical Rehabilitation and Mental Health Counseling

### SERVICE ASSOCIATE PROFESSOR

- Frankie Tack - MS (Western Carolina University)  
Mental Health and Addiction Studies

## TEACHING ASSISTANT PROFESSOR

- Erin Jordan - Dr.PH (Georgia Southern University)  
Health and Well-being
- Lacey Sawyers - MS (West Virginia University)  
Mental Health and Addiction Studies
- Elisabeth Simpson - Ph.D. (Duquesne University)  
Clinical Rehabilitation and Mental Health Counseling

## TEACHING INSTRUCTOR

- Regina Burgess - MS (West Virginia University)  
Clinical Rehabilitation and Mental Health Counseling; Mental Health and Addiction Studies

# Clinical Rehabilitation and Mental Health Counseling, M.S.

## Degree Offered

- Master of Science

## Nature of the Program

The clinical rehabilitation and mental health counseling program offers a curriculum at the master's degree level. All students complete coursework in core counseling knowledge and skill development as well as knowledge associated with disability, mental health, addiction, and rehabilitation issues. The opportunities for working as a professional counselor are numerous and include working in allied health settings, state-federal systems of vocational rehabilitation, Veterans' Affairs, and delivering counseling services in mental health and/or substance use disorder treatment programs.

The program is available for both full- and part-time students in a hybrid modality that uses asynchronistic online courses coupled with two immersion weeks on campus for counseling skill development. The program is fully accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) for the specializations of Clinical Rehabilitation Counseling and Clinical Mental Health Counseling until 2023 and is a WVU Program of Excellence. In the last ranking by U.S. News & World Report the program was ranked 37th.

For additional information, please email [elisabeth.simpson@mail.wvu.edu](mailto:elisabeth.simpson@mail.wvu.edu), or refer to our program's website (<https://online.wvu.edu/degrees-certificates/graduate-degrees/clinical-rehabilitation-and-mental-health-counseling-m-s/>).

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## FACULTY

### PROFESSOR

- Margaret K. Glenn - Ed.D., CRC (The George Washington University)  
Addictions, vocational rehabilitation, complementary and alternative healthcare practices, service dogs

### ASSOCIATE PROFESSOR

- George Mamboleo - Ph.D. (University of Arizona)  
Rehabilitation counseling, employment and health outcomes, accessibility and accommodations issues, international rehabilitation

### TEACHING ASSISTANT PROFESSOR

- Elisabeth Simpson - Ph.D., CRC, NCC Counselor Education and Supervision (Duquesne University)  
Employment legislation, assistive technology, social justice, and ethics.

### TEACHING INSTRUCTOR

- Regina Burgess - M.S., CRC, LPC (West Virginia University)

## Admissions

## APPLICATION

Applications for admission to the clinical rehabilitation and mental health counseling program must be made to the WVU Office of Admissions. In addition to the admission requirements of the university and the College of Applied Human Sciences, the program has the following admission requirements.

- A baccalaureate degree with coursework in appropriate areas
- A minimum undergraduate grade point average of 2.8 based on a 4.0 system (students with a lower grade point average and otherwise exceptional credentials may be admitted provisionally)
- Three letters of reference (can be submitted within the WVU electronic application system)

- Completion of the WVU Graduate School Application (<https://graduate.wvu.edu/>)
- Completion of the program's supplemental application found on the program's website ([http://counseling.wvu.edu/rehabilitation\\_counseling/future\\_students/](http://counseling.wvu.edu/rehabilitation_counseling/future_students/)) with a personal statement

## ADMISSION

Admission to the program is a two-step procedure.

Step 1 involves a review of credentials presented in the application materials including references, program application (relevant major; general quality of application), and UGPA. In addition to your interest, aptitude, and career goals related to counseling, the personal statement and recommendation letters should include your perspectives, respect for, and/or skills pertaining to cultural differences. The initial screening decision is based upon this information. Successful applicants are then invited to participate in department interviews.

Step 2 is the department interview which considers personal style relevant to working as a counselor, communication skills, capacity for empathic understanding and communication, ability to articulate professional goals, goals congruent with department focus, and knowledge and understanding of rehabilitation counseling as well as an assessment of applicants' capacity to complete the rehabilitation counseling curriculum successfully.

The application deadline for receiving completed materials is February 15 for fall admission and October 1 for spring admission.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5528

## Major Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all graduate coursework and for the major.		
A minimum grade of C- is required in all major coursework. *		
COUN 501	Counseling Theory and Techniques 1	3
COUN 505	Theory and Practice of Human Appraisal	3
COUN 606	Counseling Theory and Techniques 2	3
COUN 609	Group Counseling Theory and Techniques	3
COUN 634	Cultural Issues	3
COUN 640	Addictions Counseling	3
COUN 645	Couples and Family Counseling	3
COUN 664	Ethical Issues in Counseling	3
COUN 665	Diagnosis and Treatment Planning	3
COUN 668	Crisis Trauma Grief Counseling	3
REHB 600	Introduction to Rehabilitation Services	3
REHB 610	Medical Aspects of Rehabilitation	3
REHB 612	Disability Across the Lifespan	3
REHB 620	Career Development and Job Placement	3
REHB 624	Rehabilitation Client Services	3
REHB 672	Counseling Practicum	3
REHB 675	Clinical Practice	12
REHB 680	Seminar	3
Total Hours		63

\*

Language from syllabus regarding remediation for C- grades

## Major Learning Outcomes

### CLINICAL REHABILITATION AND MENTAL HEALTH COUNSELING

The objectives of our program are linked to our mission statement. They are to provide:

- Educational experiences for every student that facilitates the development of knowledge, skills and beliefs necessary to practice as qualified clinical rehabilitation and mental health counselors in a wide variety of circumstances.

- Learning opportunities to support students' ability to implement culturally responsive and ethically sound clinical rehabilitation and mental health counseling practices.
- Clinical training environments that are focused on real world expectations and standards of clinical practice.

## Counseling, M.A.

### Degree Offered

- Master of Arts

### Nature of the Program

The School of Counseling and Well-Being in the College of Applied Human Sciences offers a master's program in counseling. The counseling M.A. program is fully accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). Variations of the curriculum allow for specialization in either school counseling or clinical mental health counseling. All applicants must comply with university and the College of Applied Human Sciences, and school requirements.

The school counseling specialization prepares students to become certified professional educators and mental health specialists who improve success for all students (PreK to Adult) by implementing a comprehensive school counseling program that includes individual counseling, small group counseling, and classroom interventions. The clinical mental health counseling specialization prepares students in individual and group counseling with a diverse population across a wide scope of developmental stages and backgrounds in various community settings such as correctional facilities, treatment centers, mental health agencies, etc. Both counseling degree specialty areas meet all requirements for professional counseling licensure as outlined by the West Virginia Board of Examiners in Counseling.

Students are encouraged to pursue their studies on a full-time basis; however, part-time students are accepted. Part-time admission is meant only for those who plan to take one or two courses a semester. If admitted with part-time status, students will NOT automatically be able to move into the full-time program. There are no summer practicum or internship placements.

For additional information, please email [cls@mail.wvu.edu](mailto:cls@mail.wvu.edu), or refer to our department website: <https://counselingandlearningsci.wvu.edu/>

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## FACULTY

### PROFESSOR

- Jeffrey Daniels - Ph.D.  
University of Nebraska-Lincoln

### ASSOCIATE PROFESSOR

- Ed Jacobs - Ph.D.  
Florida State University
- Monica Leppma - Ph.D.  
University of Central Florida
- Christine Schimmel - Ed.D.  
Marshall University

### ASSISTANT PROFESSOR

- Rawn Boulden - Ph.D.  
Old Dominion University
- Lisa Platt - Ph.D.  
Penn State University

### TEACHING INSTRUCTOR

- Heidi O'Toole - M.S.  
West Virginia University

## Admissions

### APPLICATION

Applications for admission to the counseling program should be made to WVU's Office of Admissions. In addition to the admission requirements of the university and the College of Education and Human Services, the Department of Counseling and Learning Sciences has the following admission requirements:

- A baccalaureate degree with coursework in appropriate areas
- A minimum undergraduate grade point average of 2.8, based on a 4.0 system
- Resume
- Personal Statement
- Three letters of reference
- Completed WVU Graduate School Application

## ADMISSION

The West Virginia University counseling program's admission process is two-step:

Step 1 is a review of paper credentials including references, department application (relevant major, general quality of application), personal references, and GPA. In addition to your interest, aptitude, and career goals related to counseling, the personal statement and recommendation letters should include your perspectives, respect for, and/or skills pertaining to cultural differences. The initial screening decision is based upon this information. Successful applicants are then invited to participate in department interviews.

Step 2 is the department interview, which considers interpersonal style relevant to working as a counselor, communication skills, capacity for empathic understanding and communication, ability to articulate professional goals, goals congruent with department focus, knowledge, understanding of counseling, and assessment of applicant's capacity to complete the counseling curriculum successfully.

Application deadline for fall admission is February 15 with review of completed applications beginning February 1. The program admits students only one time each year.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5517

## Major Requirements

All students who are candidates for a master's in counseling are required to take the following core courses:

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all graduate coursework and for the major.		
A minimum grade of B- is required in all major coursework.		
COUN 501	Counseling Theory and Techniques 1	3
COUN 505	Theory and Practice of Human Appraisal	3
COUN 536	Theories of Human Development	3
COUN 606	Counseling Theory and Techniques 2	3
COUN 609	Group Counseling Theory and Techniques	3
COUN 620	Lifespan Career Counseling	3
COUN 630	Children/Adolescents/Parents	3
COUN 634	Cultural Issues	3
COUN 640	Addictions Counseling	3
COUN 645	Couples and Family Counseling	3
COUN 664	Ethical Issues in Counseling	3
COUN 665	Diagnosis and Treatment Planning	3
COUN 668	Crisis Trauma Grief Counseling	3
COUN 684	Supervision Models/Counseling	3
EDP 512	Research and Evaluation in Counseling	3
<b>Required Area of Emphasis *</b>		<b>15-21</b>
Clinical Mental Health		
School Counseling		
Total Hours		60-66

**\*Note:** Students enrolled in the School Counseling Area of Emphasis without prior teaching certification will also need to complete COUN 660 and C&I 603.

In addition to completing all coursework and the practicum and internship satisfactorily, the candidate must demonstrate the ability to assume the responsibility required of a professional counselor and the personal characteristics and ethical standards essential to effective working relationships with others.

These personal characteristics are assessed throughout the entire program with special emphasis during the clinical coursework components of the program and during the field experience. Students who do not meet professional and clinical standards in these areas are provided feedback, and resources for remediation are recommended. In these cases, successful remediation is required as a prerequisite for successful program completion. Students who violate ACA ethical standards will be evaluated for possible dismissal from the program.

## Areas of Emphasis

- Clinical Mental Health (p. 144)
- School Counseling (p. 144)

### CLINICAL MENTAL HEALTH AREA OF EMPHASIS

Code	Title	Hours
<b>A minimum GPA of 3.0 is required.</b>		
<b>A minimum grade of B- is required in all coursework.</b>		
COUN 622	Introduction to Clinical Mental Health	3
COUN 685	Practicum (Student must take a section of this course that is related to Clinical Mental Health.)	3
COUN 686	Counseling Internship (Student must take a section of this course that is related to Clinical Mental Health.)	9
Total Hours		15

### SCHOOL COUNSELING AREA OF EMPHASIS

Code	Title	Hours
<b>A minimum GPA of 3.0 is required.</b>		
<b>A minimum grade of B- is required in all coursework.</b>		
COUN 608	School Counseling Services	3
COUN 685	Practicum (Student must take a section of this course that is related to School Counseling.)	3
COUN 686	Counseling Internship (Student must take a section of this course that is related to School Counseling.)	9
Alternative Certification Path Courses *		0-6
C&I 603	Counselors & Classrooms	
COUN 660	Field Experience in School Counseling	
Total Hours		15-21

\*

Students enrolled in the School Counseling Area of Emphasis with prior teaching certification will not need to complete COUN 660 and C&I 603.

## Major Learning Outcomes

### COUNSELING

The objectives of our program in School and Clinical Mental Health Counseling are linked to our mission statement. Specifically, they are to provide:

- An environment that fosters the personal growth and development of each student.
- Educational experiences for every student that fosters individual and group counseling skill development.
- Learning opportunities to support students' interests in diverse populations and cultures.
- Training in schools and clinical mental health settings that give students an opportunity to practice and integrate the skills learned in the classroom.

## School of Education

### Degrees Offered

- Master of Arts
- Doctor of Education
- Doctor of Philosophy



The School of Education provides graduate degrees in the area of Education Theory and Practice, Literacy Education Studies, Higher Education, Instructional Design & Technology, and Elementary and Secondary Education. The School of Education prepares students to research, develop and implement innovative educational practices. Students in our academic programs are integrated into the field of education through real-world experiences in diverse settings, such as subject-specific clinics and laboratories, professional development classrooms, and research-based practices.

The School of Education houses several graduate and professional programs. The M.A. with certification program in Elementary and Secondary Education prepares students to teach in K-12 classrooms. Our M.A. literacy education program prepares literacy professionals and certified Reading Specialists to assess and motivate struggling learners. The M.A., Ed.D. and Ph.D. programs in higher education prepare students for positions in colleges and universities as faculty, administrators, and researchers. The Ph.D. in Educational Theory and Practice serves as a source of preparation for students toward careers as higher education faculty, education researchers, policy analysts, and work with other educational organizations (e.g., non-profits). The Master of Arts in Instructional Design and Technology Program is designed for the individual who wants to apply cutting edge instructional technologies and design strategies in business, education, and other educational settings. The Elementary Mathematics Specialist Master of Arts program is designed to prepare currently licensed teachers to be teacher leaders in elementary mathematics, and the M.A. in Digital Technologies and Connected Learning prepares students to employ new technologies and connected learning principles in education settings.

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## ADMINISTRATION

### DIRECTOR

- Nathan M. Sorber - Ph.D. (Pennsylvania State University)

### ASSOCIATE DIRECTOR

- Johnna J. Bolyard - Ph.D. (George Mason University)
- Matthew Campbell - PhD (Oregon State University)

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## FACULTY

### PROFESSORS

- William Beasley - Ed.D. (University of Georgia)  
Instructional Design & Technology
- Reagan Curtis - Ph.D. (University of California at Santa Barbara)  
Educational Psychology
- Allison Swan Dagen - Ph.D. (University of Pittsburgh)  
Literacy Education
- Aimee L. Morewood - Ph.D. (University of Pittsburgh)  
Literacy Education
- Sam Stack, Jr. - Ph.D. (University of South Carolina)  
Foundations of Education

### ASSOCIATE PROFESSORS

- Johnna J. Bolyard - Ph.D. (George Mason University)  
Mathematics Education
- Carla Brigandi - Ph.D. (University of Connecticut)  
Special Education
- Matthew P. Campbell - Ph.D. (Oregon State University)  
Mathematics Education
- John Campbell - Ph.D. (University of Michigan)  
Higher Education
- Jeffrey Carver - Ed.D. (Illinois State University)  
Science Education
- Sharon Hayes - Ph.D. (University of Florida)  
Elementary Education
- Ugur Kale - Ph.D. (Indiana University Bloomington)  
Instructional Design & Technology
- Erin McHenry-Sorber - Ph.D. (Pennsylvania State University)  
Higher Education
- Melissa Luna - Ph.D. (Northwestern University)  
Associate Dean for Research

- Ann M. Richards - Ph.D. (University of Arizona)  
Special education
- Sarah Selmer - Ed.D. (West Virginia University)  
Mathematics Education
- Melissa Sherfinski - Ph.D. (University of Wisconsin, Madison)  
Curriculum Theory and Research
- Nathan M. Sorber - Ph.D. (Pennsylvania State University)  
Higher Education

## ASSISTANT PROFESSORS

- Jake Follmer - Ph.D. (Pennsylvania State University)  
Educational Psychology
- Rodney Hughes - Ph.D. (Pennsylvania State University)  
Higher Education
- Denise Lindstrom - Ph.D. (Iowa State University)  
Education Technology
- Melissa Patchan - Ph.D. (University of Pittsburgh)  
Education Psychology
- Courtney Shimek - Ph.D. (University of Georgia)  
Literacy Education
- Yuanhua Wang - Ph.D. (Texas Tech University)  
Educational Psychology
- Jiangmei (May) Yuan - Ph.D. (University of Georgia)  
Learning, Design, and Technology

## TEACHING ASSISTANT PROFESSOR

- Beth B. Satterfield - M.S. (West Virginia University)  
Early Childhood Education, Child Development
- Colleen Wood-Fields - Ph.D. (Old Dominion University)  
Special Education

## SERVICE ASSOCIATE PROFESSOR

- Ashley Martucci - Ed.D. (West Virginia University)  
Early Childhood Education

## Certificate Programs

- Health Professions Education (<http://catalog.wvu.edu/graduate/graduatecertificates/healthprofessionseducation/>)
- Online Teaching ([http://catalog.wvu.edu/graduate/graduatecertificates/online\\_teaching/](http://catalog.wvu.edu/graduate/graduatecertificates/online_teaching/))
- Program Evaluation (<http://catalog.wvu.edu/graduate/graduatecertificates/programevaluation/>)

# Digital Technologies and Connected Learning, M.A.

## Degree Offered

- Master of Arts

## Nature of the Program

Learning is powerful when teachers connect students' personal interests to real-world opportunities. Curriculum designed using Connected Learning principles focuses on using new digital and networked technologies to expand opportunities for young people. It differs from traditional approaches to technology integration in which technology is viewed as a means toward more efficient and automated forms of education. Instead, Connected Learning puts learner-centered and experiential methods at the center of technology-enhanced learning. More importantly, teachers committed to connected learning design principles prioritize learning that create meaningful connections between their peers and their communities.

## PROGRAM OVERVIEW

- Teacher leaders work collaboratively with educators, and coach/mentor classroom teachers in the use of research-based ambitious teaching practices to design and implement curriculum and classroom instruction.

- Teacher leaders analyze school-based curriculum and district data to create professional development programs that address the current strengths and needs of teachers and students.
- Teacher leaders collaborate and share information with school stakeholders about students, curriculum, instruction, and assessment.

## Admissions

Admission into the Digital Technologies and Connected Learning major is based on the academic accomplishments of the applicant and well as the alignment of the applicant's goals with the goals of the program. Students are selected based on their fulfillment of the specific admissions requirements listed below and the overall strength of their application.

Application requirements:

- Official transcripts verifying completion of an undergraduate degree from an accredited college or university.
- Three official letters of recommendation speaking to the applicant's potential as a teacher leader in *Digital and Connected Learning*.
- Submission of an official goal statement related to the program, including professional goals and interest in this specific program.
- Professional vita.

Applications will be due by April 15 the semester prior to program entrance, although candidates will be reviewed on a rolling basis. Candidates will be admitted for a summer start only.

Applicants will be reviewed by a committee of department faculty using a standardized review rubric in which the reviewer will assess the candidate based on: 1) the applicant's fulfillment of the required admittance criteria; 2) the applicant's fit with the program's goals; and 3) the applicant's potential for success in the program. Reviewers will indicate an overall admissions recommendation for each applicant. Final admissions decisions based on reviewer recommendations will be made by the program coordinator.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5525

## Major Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required for all coursework applied toward the major requirements.		
<b>Core Courses</b>		
C&I 625	Leadership Field Experiences and Clinical Practice	3
C&I 670	Practitioner Inquiry	3
C&I 672	Professional Learning Communities: Creating Spaces for Collaboration, Coaching, and Praxis	3
C&I 673	Teacher Leadership: Transforming Identities, Contexts, and Practices	3
<b>IDT Courses</b>		
IDT 620	Social Network Media	3
IDT 655	Technology for Teachers	3
<b>Technology Education Courses</b>		
C&I 660	Games, Learning, & Design	3
C&I 661	Computational Literacy and Coding for Learning	3
C&I 662	Principles and Practices for Connected Learning	3
C&I 663	Media Literacy and Digital Citizenship	3
Total Hours		30

## Major Learning Outcomes

### DIGITAL TECHNOLOGIES AND CONNECTED LEARNING

Goal 1: Teacher leaders will work collaboratively with educators, and coach/mentor classroom teachers in the use of research-based ambitious teaching practices to design and implement curriculum and classroom instruction.

- Teacher leaders will collaborate with classroom teachers to plan standards-based lessons and units that incorporate a variety of digital technologies to promote active learning among K-12 students, deepen their understandings and improve their learning outcomes.
- Teacher leaders will coach and support teachers in creating an equitable learning environment that respects and values all students and addresses their diverse learning needs.

Goal 2: Teacher leaders will analyze school-based curriculum and district data to create professional development programs that address the current strengths and needs of teachers and students.

- Teacher leaders will evaluate standards, textbooks, and standardized assessments to make recommendations for addressing learning and achievement gaps
- Teacher leaders will explore and analyze school and district data to develop a vision for the professional development of educators and school improvement that disrupts the inequities of the educational status quo.
- Teacher leaders will plan, implement, and evaluate professional development programs at the school and/or district level.
- Teacher leaders will coach/model effective teaching practices, defined by professional organizations, as they engage teachers in ongoing professional development and provide support to educators in their classrooms.

Goal 3: Teacher leaders will collaborate and share information with school stakeholders about students, curriculum, instruction, and assessment.

- Teacher leaders will share critical issues, policy initiatives, and curriculum trends in teaching and learning with colleagues, parents and local and state school boards.
- Teacher leaders will collaborate with teachers, parents and community members to create shared visions and action plans to ensure technology integration enhances/support teaching and learning.

## Educational Theory and Practice, Ph.D.

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The Ph.D. in Educational Theory and Practice meets the interests and professional needs of individuals interested in researching and contributing solutions toward practical and theoretical problems in teaching and learning (across various subjects, in- and out-of-school contexts, and ages/grades); teacher education and development (across various subjects and professional levels); and societal, cultural, and critical studies in education. The program serves as a source of preparation for careers as university faculty, teacher educators, education researchers, policy analysts, and in public, private and non-profit educational organizations.

Program coursework provides opportunities to examine theoretical, philosophical, historical, and critical foundations of education research and practice. Students will also benefit from a core of courses focused on research methodologies and mentoring by graduate faculty around research and teaching activities. Coursework and programmatic experiences leverage the wide-ranging expertise of our program's faculty and intersect with our programmatic commitments to diversity, inclusion, and social justice in education and in communities. Through their work with program faculty, students can further specialize their experience in areas such as: teacher education, critical theories and pedagogies, learning and cognition, education policy, and content-specific fields of education (mathematics education, science education, English education, social studies education, and language/literacy studies).

### Admissions

Admission into the Ph.D. in Educational Theory and Practice program is based on the academic strength of the applicant as well as the fit of the applicant's goals and interests with the program and its faculty. As such, applicants are strongly encouraged to research the nature of the program and the expertise of faculty within the program prior to submitting their applications and to clearly demonstrate in their application the opportunities for connections. Students are selected based on the overall strength of their application, with these considerations in mind.

Applications will be reviewed on a rolling basis until March 1 for Fall admission. Files received by December 15 will receive priority consideration for funding opportunities (i.e., graduate assistantships, University fellowships). Applicants to the Ph.D. in Educational Theory and Practice program must comply with the WVU requirements for admission to graduate studies and the requirements of the College of Applied Human Sciences. Admission is contingent on an assessment of complete official transcripts, including all higher education work attempted, and other evidence the faculty may deem necessary in order to judge students' prospective success within the graduate program.

In addition to the minimum required application materials from the University (e.g., transcripts, English proficiency scores for International applicants), applications to the Ph.D. in Educational Theory and Practice must consist of the following materials:

- **Statement of Goals and Purpose:** All applicants should submit a statement related to their professional and research goals and their interest in this specific program. The statement should be no more than three pages (single-spaced). This statement should be well written, should clearly specify the applicant's goals and scholarly interests, and should articulate the connections between those interests and the ongoing work and expertise of the program's faculty. While this is not an expectation that applicants have their research or dissertation foci finalized, the statement should highlight general questions and issues in education that interest the applicant as well as the applicant's motivations for pursuing those questions and a doctoral program. Statements should also include the explicit identification of 2-3 faculty members who might serve as scholarly mentors. To support this, it is recommended that candidates reach out to faculty members whose interests seem to align and discuss their specific career and research goals with them before crafting this statement.

- **Curriculum vita/resume:** Applicants must provide a history of their academic and professional experience in a vita, serving as evidence that the applicant has appropriate experiences to be able to meet the goals and expectations of the program.
- **Academic Writing Sample:** Applicants must also provide a writing sample (e.g., thesis, submitted or published article, graduate course essay) demonstrating their academic writing abilities, their academic interests, as well as their ability to engage in research and/or scholarship.
- **Three (3) letters of recommendation:** Applicants must provide three letters of recommendation that explicitly address the applicant's potential as a doctoral student. Letter writers should be familiar with the applicant's academic performance and potential for success in the Ph.D. in Educational Theory and Practice program, therefore it is recommended that at least two of the writers be professors.

Note that, as of the start of the 2020-2021 academic year, the Ph.D. in Educational Theory and Practice is a "GRE optional" program, meaning that GRE scores are **not** required for application or admission, though applicants may still choose to submit GRE or other exam scores as part of the application.

Applications will be reviewed by a committee of program faculty. Applicants may be asked to also participate in an interview to seek additional information as part of the admissions decision. All individuals accepted into the program will receive information about their assigned adviser and guidance on the development of a personalized program of study. Admitted students will also receive information on funding opportunities and other support.

## Admissions Requirements 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5538

## Doctor of Philosophy

### MAJOR REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required for all coursework applied toward the major requirements.		
<b>Educational Theory and Practice Program Core</b>		
SCFD 620	Philosophy of Education	3
C&I 706	Theories and Practices of Learning	3
SCFD 610	Foundations of Education	3
C&I 707	Theories, Models and Research of Teaching	3
<b>Research Core</b>		
SCFD 781	Nature of Inquiry 1	1
SCFD 782	Nature of Inquiry 2	1
SCFD 783	Nature of Inquiry 3	1
SCFD 605	Education Research Literacy	3
SCFD 615	Qualitative Research Methods	3
SCFD 715	Advanced Qualitative Research	3
Advanced Research Methods Electives *		6
<b>Research &amp; Teaching Practicum</b>		
C&I 790	Teaching Practicum	3
C&I 797	Research	15
<b>Specialization Track</b>		<b>12</b>
Individualized Plan and specific coursework to be developed with advisor and committee		
Total Hours		60

\*

Advanced Research Methods Electives must be chosen and approved in consultation with the Graduate Advisor/Program Committee.

**Satisfactory Progress Review:** In addition to the program's main benchmarks—program of study (including minimum GPA requirements), comprehensive exams, admission to candidacy, dissertation prospectus, and dissertation defense—students will be reviewed annually (each spring) by their adviser according to the program objectives. This review will confirm students' maintenance of satisfactory academic progress as well as development toward the program objectives. If a student is not deemed to be making satisfactory academic progress and/or fails to meet programmatic benchmarks, the adviser and committee will generate an agreement that outlines the conditions of the student's continued enrollment in the program. Failure to meet those expectations in the time specified in the agreement will result in the dismissal of the student from the program.

**Program of Study:** Students, guided by the faculty adviser, will construct a program committee and articulate and approve an initial program of study by the end of their first year. This program will be modified as needed based on student's trajectory and available course offerings. Students may apply up to 18 hours of prior coursework at the graduate level; however the coursework needs to have been completed within 10 years prior to the program of study meeting. Acceptance of prior work toward program requirements will be based upon approval of the student's advisor in consultation with the doctoral committee. The advisor and/or chair will approve other graduate work only if it is consistent in quality, rigor, and purpose with the coursework provided in the current program.

**Residency Requirement:** Students are expected to complete at least two consecutive terms (fall, spring, and/or summer) of full-time residency (nine or more credits per term).

**Written Comprehensive Exam and Candidacy:** At the completion of the program's core courses, students will take a written comprehensive exam. Comprehensive exams will be administered by and evaluated by the student's program committee. Students who do not pass their comprehensive exams will be given the opportunity to revise their responses and/or retake the exam in the following semester. Students who are unable to pass their comprehensive exams after a second attempt will be dismissed from the program. After a student passes their comprehensive exams and completes their program of study (excluding dissertation credits), the student completes and submits the CEHS Doctoral Admission to Candidacy form. Note that, once admitted to candidacy, the student has five years to defend their dissertation and graduate and must register for at least one credit in each fall and spring semester as a condition of their continued candidacy.

**Dissertation Prospectus:** After admission to candidacy, students need to finalize their doctoral committee, consisting of four members, selected according to university and college requirements and based upon the degree to which they help support the research focus and the line of inquiry of the student's dissertation. The dissertation prospectus is the student's proposal concerning a means of investigating a research problem. It is a major step toward completion of the dissertation, which is an original contribution to one's field of study. The prospectus should clearly indicate why the study is of value in the student's field of study and should defend the theoretical basis of the study as well as the analytic decisions and methods for successful completion of a high-quality dissertation. Upon completion, each committee member must receive a copy of the prospectus at least two weeks prior to a scheduled prospectus meeting. The prospectus defense is closed to the public. At the prospectus defense the doctoral committee can either approve or fail to approve the prospectus, or recommend revisions. Failure to approve the prospectus must be accompanied by a plan that outlines the conditions of the student's continued enrollment in the program.

**Dissertation and Dissertation Defense:** Following the approval of the prospectus, the students must receive Institutional Review Board (IRB) approval before initiating their research activities. After completing the research and writing and finalizing all of the dissertation chapters, the student may schedule the final dissertation defense with their committee. At least three weeks prior to the scheduled defense date, a "request for shuttle sheet" must be received by Allen Hall 806F. Once approved, the dissertation defense will be advertised to the public. The committee must receive the final document at least three weeks prior to the defense date, and all members must be present for the final defense. The dissertation defense is open to the public. Students that successfully defend their dissertation will be recommended for graduation. The final approved dissertation document must be submitted electronically to WVU ETD by the semester deadline published by the university.

## Major Learning Outcomes

### EDUCATIONAL THEORY AND PRACTICE

Objective 1: Students will understand and interpret scholarship on theory, policy, and practice in the fields of teaching and learning, teacher education and development, and/or critical studies in education as the basis for growth over a professional career.

Objective 2: Students will critically evaluate scholarship, policy, and practice in order to promote equity, access, and social justice in educational settings.

Objective 3: Students will plan for, conduct, and report on original research that advances the fields of teaching and learning, teacher education and development, and/or critical studies in education.

Objective 4: Students will demonstrate skills as educators—including designing, implementing, evaluating, and revising educational experiences—as part of preparation for academic careers.

## Elementary Education, M.A.

### Degree Offered

- Master of Arts

## Nature of the Program

The Department of Curriculum & Instruction/Literacy Studies, offers opportunities for graduate study leading to teacher certification and a Master's of Arts degree. This program is designed to prepare individuals to become educators in K-6 public schools. Students in this program will work with faculty who contribute as educational scholars to the profession at university, state, and national levels. Additionally, the program offers opportunities to develop technology rich, culturally responsive, and active learning environments that associated with greater student achievement. This program meets accreditation standards.

## Admissions

**All applicants for the Master of Arts in Elementary Education must:**

- Submit a WVU Graduate application for admission. The application can be found at <https://admissions.wvu.edu/how-to-apply> (<https://admissions.wvu.edu/how-to-apply/>)
- Hold a Bachelor's degree with a 2.75 GPA or above
- Submit a one-page goal statement. The statement should be of professional experiences, career ambitions and will be considered a writing sample.
- Test requirements: Praxis Core Academic Skills for Educators. Student can take the combined test # 5752 which includes all 3 sections (reading #5713, writing #5723 & math #5733).
- The Praxis CORE may be **waived** with
  - \*An ACT combined score in English and Reading of 34 with a minimum score of 17 for each area and a minimum Math score of 21 (**OR**)
  - \*SAT score of 480 using the combined Evidence-Based Reading and Writing (this is the Verbal score) and a score of 530 in Math (**OR**)
  - Graduate Records Examination (GRE) minimum score of 286 (combined score of verbal and quantitative sections) (**OR**)
  - holds a master's degree from an accredited institution of higher education
  - \*Scores can be taken from multiple sittings of test administrations and from superscores.

## PROGRAM REQUIREMENTS

- Retention in the program and/or graduation is based on SATISFACTORY PROGRESS of maintaining a 3.0 GPA with a grade of A or B in ALL required courses.
- C&I 602 must be taken in the first semester after admission into the program.
- A state background check is required before entering a public school classroom.
- Application for transient credit for graduate courses taken at other institutions must be approved by the advisor and the Assistant Dean for Student Services.
- Completion of 125 hours of field experiences embedded in the program
- Passing scores on the Praxis II in content area, by the end of the first semester they begin the program.
- Online application to graduate
- Passing score on the edTPA.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5522

## Master of Arts in Elementary Education

### DEGREE REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required for all coursework applied toward the major.		
A minimum grade of B- is required in all coursework applied toward the major.		
C&I 602	Curriculum and Teaching Principles	3
C&I 631	Mathematics in the Elementary School	3
C&I 640	Science in the Elementary School	3
C&I 650	Social Studies in the Elementary School	3
C&I 689	Cultural Diversity in the Classroom	3
EDP 600	Educational Psychology	3
RDNG 640	Instructing Students Who Have Reading Difficulties	3
EDUC 460	Foundations of Language and Literacy	3
EDUC 461	Promoting Literacy Connections	3



SPED 500	Legal/Educational Foundations: Special Education	3
SPED 601	Academic Interventions for Special Needs	3
<b>Certification Requirements *</b>		
C&I 584	Student Teaching: Elementary K-6	7
C&I 588	Field Experience 2	2
C&I 680		3
Total Hours		45

\*

These courses are required for WV State Certification, but not for the MA in Elementary Education. Students planning to seek certification are advised to complete these courses. Those not seeking certification, will not be required to take these courses.

## SUGGESTED PLAN OF STUDY

<b>First Semester</b>	<b>Hours</b>
C&I 602	3
EDP 600	3
	6
<b>Second Semester</b>	<b>Hours</b>
EDUC 460	3
C&I 689	3
SPED 500	3
	9
<b>Third Semester</b>	<b>Hours</b>
SPED 601	3
EDUC 461	3
RDNG 640	3
	9
<b>Fourth Semester</b>	<b>Hours</b>
C&I 631	3
C&I 640	3
C&I 650	3
	9
<b>Fifth Semester</b>	<b>Hours</b>
C&I 584	7
C&I 588	1
C&I 680	
	8

Total credit hours: 41

**NOTE:** Students seeking state certification should plan to take C&I 588, 584, and 680 (12 credits) in a fifth semester in addition to the 33 hours required for the degree.

## Major Learning Outcomes

### ELEMENTARY EDUCATION

The learning goals for the Master's program in Elementary Education are to prepare students who:

- Have commitment and skills to engage in life-long learning;
- Are effective communicators;
- Recognize that teaching is a professional, moral, and ethical enterprise with well-developed ethical frameworks which facilitate effective teaching;
- Will serve as a facilitator of learning for all students;
- Possess in-depth knowledge of both pedagogy and content, and the relationships between them;
- Are reflective practitioners;
- Are aware of, and have respect for, human diversity;



- Value and integrate knowledge from a wide variety of fields, are creative and open to new ideas, and are able to act constructively in a world characterized by technological, cultural, and societal diversity and change.

## Elementary Mathematics Specialist, M.A.

### Degree Offered

- Master of Arts

### Nature of the Program

The Elementary Mathematics Specialist Master of Arts program is designed to prepare currently licensed teachers to be teacher leaders in elementary mathematics. The design of the coursework in the program includes opportunities for students to engage in: 1) an intensive study of mathematics concepts relevant to the elementary grades, 2) an examination of effective teaching practices for supporting mathematics learning for all students; and 3) targeted study of the knowledge, skills, and dispositions needed to be an effective teacher leader.

The program includes four (4), three-credit hour mathematics courses, four (4), two-credit hour mathematics pedagogy courses, three (3), three-credit hour teacher leadership courses, and (1) three-credit hour field-based practicum. All courses are web-based.

### Admissions

Admission into the Elementary Mathematics Specialist major is based on the academic strength of the applicant as well as the alignment of the applicant's goals with the goals of the program. Students are selected based on their fulfillment of the specific admissions requirements listed below and the overall strength of their application.

Application requirements:

- Official transcripts verifying completion of an undergraduate degree from an accredited college or university. This program utilizes the University GPA requirement (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) for entry to the program.
- Three official letters of recommendation speaking to the applicant's potential as a teacher leader in elementary mathematics.
- Submission of an official goal statement related to the program, including professional goals and interest in this specific program.
- Professional vita.
- Record of initial certification in elementary or early childhood education with 18 months of successful teaching experience.

Note: The year and a half teaching experience must be completed by the end of the program.

Applications will be due by April 15 the semester prior to program entrance, although candidates will be reviewed on a rolling basis. Candidates will be admitted for a summer start only.

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5524

### Major Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required for all coursework applied toward the major.		
<b>Core Courses</b>		
C&I 625	Leadership Field Experiences and Clinical Practice	3
C&I 670	Practitioner Inquiry	3
C&I 672	Professional Learning Communities: Creating Spaces for Collaboration, Coaching, and Praxis	3
C&I 673	Teacher Leadership: Transforming Identities, Contexts, and Practices	3
<b>Mathematics Courses</b>		
MATH 510	Number Systems and Operations	3
MATH 511	Rational Numbers and Proportional Reasoning	3
MATH 512	Geometry and Measurement	3
MATH 513	Functions and Algebraic Reasoning	3
<b>Mathematics Education Courses</b>		
C&I 635	Selecting, Designing, and Using Mathematical Tasks in K-6	2
C&I 636	Learning Trajectories in Elementary Mathematics	2

C&I 637	Classroom Practices for Effective Learning Environments in Elementary Mathematics	2
C&I 638	Planning, Implementing, and Assessing Mathematics Instruction	2
Total Hours		32

## Major Learning Outcomes

### ELEMENTARY MATHEMATICS SPECIALIST

**Goal 1:** Teacher leaders will work collaboratively with educators and coach/mentor classroom teachers in the use of research-based ambitious teaching practices to design and implement curriculum and classroom instruction.

- Teacher leaders will collaborate with classroom teachers to plan standards-based mathematics lessons and units that incorporate a variety of pedagogies and learning tasks to promote active learning and deepen understanding of mathematical concepts and improve learning outcomes among K-12 students.
- Teacher leaders will coach and support teachers in creating an equitable learning environment that respects and values all K-12 students and addresses their diverse learning needs.

**Goal 2:** Teacher leaders will analyze school-based curricula and district data in order to create professional development programs that address the current strengths needs of teachers and K-12 students.

- Teacher leaders will evaluate mathematics standards, textbooks, and standardized assessments to make recommendations for addressing learning and achievement gaps
- Teacher leaders will explore and analyze school and district mathematics data to develop a vision for the professional development of educators and school improvement that disrupts the inequities of the educational status quo.
- Teacher leaders will plan, implement, and evaluate mathematics professional development programs at the school and/or district level.
- Teacher leaders will coach/model effective mathematics teaching practices as defined by professional mathematics organizations as they engage teachers in ongoing professional development and provide support to educators in their classrooms.

**Goal 3:** Teacher leaders will collaborate and share information with school stakeholders about K-12 students, curriculum, instruction, and assessment.

- Teacher leaders will share critical issues, policy initiatives, and curriculum trends in mathematics teaching and learning with colleagues, parents, and local and state school boards.
- Teacher leaders will collaborate with teachers, parents, and community members to create shared visions and action plans to improve mathematics teaching and learning in their schools.

## Higher Education, Ph.D.

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The Doctor of Philosophy in Higher Education is designed to prepare graduates to become future faculty, researchers, and policy analysts in higher education. Students in the program benefit from a:

- Higher Education Core designed to provide breadth across critical areas of HIED;
- Specialization within HIED, which may include: Academic Affairs/Curriculum & Assessment; College Student Development; Administration, Organizations, and Policy; or an Individualized Specialization;
- Cognate outside the Higher Education Administration Program to allow for in-depth study in a field related to student interests and research foci;
- Research Core that emphasizes the importance of producing original research as well as the ability to critically evaluate published scholarship.

### Features

1. Hybrid graduate program with online and face-to-face courses.
2. Part-time or full-time enrollment options.
3. Flexible program of study.
4. Synchronous online courses.
5. Courses taught by full-time faculty and professors.
6. Graduate Assistant positions may be available.

## Career Placement

- Faculty positions;
- Policy Research positions;
- Senior administration positions at colleges, universities, community colleges, and other educational organizations.

## Admissions

The Higher Education Admissions Committee meets on a semester basis to review all complete submitted applications. The priority application deadline for fall admission is January 15, though applications will be reviewed throughout the year, including for Spring admission, if space permits. Once admitted, students will be assigned a faculty advisor, who will remain their advisor until the point at which they find an advisor to guide their dissertation research.

Admission into the Higher Education Ph.D. is a competitive process based upon the academic strength of the applicants as well as the fit of applicants' goals with the goals of the program and faculty. As such, applicants are strongly encouraged to research the nature of the program and the expertise of program faculty prior to submitting their applications in order to clearly demonstrate how their goals fit with the program and its faculty. Students are selected according to the overall strength of their application packets described below. Students may be denied admission if their goals are incongruent with the program goals or areas of specialization. Students may also be denied if faculty members have reached the maximum number of students they are able to advise effectively.

Applicants to the Ph.D. in Higher Education must comply with WVU requirements for admission to graduate studies, the requirements of the College of Education and Human Services, and those that the HIED program has specified. Admission is contingent on an assessment of complete official transcripts, including all higher education work attempted, and other evidence the faculty may deem necessary in order to judge students' prospective success within the graduate program.

All students accepted into the program will receive information about their assigned advisor and guidance on the development of a personalized program of study.

Admissions materials include:

1. **Personal resume/vita:** Applicants to the Ph.D. in Higher Education must provide a chronological history of their education and experience in a vita. The vita should offer evidence that the applicant has appropriate educational training and professional experiences that would support the goals and expectations of the program.
2. **Goals statement (Personal statement):** All applicants should submit a goal statement related to the program, including professional and research goals and interest in this specific program. This statement should be well written and clearly indicate how the applicant's goals fit with the program. Goal statements should be no more than three pages. Applicants should clearly indicate in the statement if they are seeking an assistantship.
3. **Writing sample:** All applicants must provide an academic writing sample with their application packets. The writing sample should provide clear evidence of the applicants' academic writing ability as well as their ability to engage in research and/or scholarship. For example, applicants can submit their best research paper or literature synthesis from previous coursework.
4. **Two current letters of reference:** All applicants must provide two letters of reference that explicitly address the applicant's potential as a doctoral student. References should be familiar with the applicant's academic performance and potential in the WVU Higher Education doctoral program.
5. **Transcripts:** Applicants should submit undergraduate and graduate transcripts from all institutions attended.
6. **International Applicants:** International applicants should consult WVU's International Graduate Admissions page for up-to-date requirements, including English language proficiency at <https://graduateadmissions.wvu.edu/information-for/international-students> (<https://graduateadmissions.wvu.edu/information-for/international-students/>)

## INTERVIEW

The admissions committee may also request an interview to seek additional information in order to judge potential for success in the program.

More information can be found on the Ph.D Higher Education department website (<https://www.wvu.edu/academics/programs/higher-education-administration-phd/#wvu-main-content>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5537

## Doctor of Philosophy

### MAJOR REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.25 is required for all coursework toward the major.		
<b>Core Coursework</b>		
HIED 648	History of American Higher Education	3
HIED 650	Higher Education Administration	3
HIED 651	College Student Development	3
HIED 710	Leadership and Organizations	3
HIED 750	Diversity Issues in Higher Education	3
<b>Specialization Coursework</b>		<b>12</b>
Select from one of the following specializations:		
Curriculum and Academic Affairs		
College Access, Transition, and Success		
Administration, Organizations, and Policy		
Individualized Studies		
<b>Research Coursework</b>		
Quantitative Methods		6
EDP 613	Statistical Methods 1	
or STAT 511	Statistical Methods 1	
EDP 614	Statistical Methods 2	
or STAT 512	Statistical Methods 2	
Qualitative Methods		6
SCFD 615	Qualitative Research Methods	
SCFD 715	Advanced Qualitative Research	
<b>Advanced Methods Course *</b>		<b>3</b>
<b>Additional HIED Coursework</b>		<b>12</b>
<b>Cognate Coursework</b>		<b>12</b>
<b>Teaching Practicum</b>		<b>3</b>
HIED 790	Teaching Practicum	
<b>Research **</b>		<b>18</b>
HIED 797	Research	
Total Hours		87

Note: Additional Coursework in HIED 790 and 797 will not count towards the Specialization, Advanced Methods, Additional HIED and Cognate Coursework.

\*

Advanced Research Methods Electives must be chosen and approved in consultation with the Graduate Advisor/Program Committee.

\*\*

Three (3) credits of HIED 797 will be Mentored Research Experience, the remaining 15 credits will be Dissertation Research.

## Major Learning Outcomes

### HIGHER EDUCATION

Upon completion of the Ph.D. program in Higher Education, graduates will be prepared to:

- Create original research that advances the field of higher education;
- Be reflective, ethical, and effectual professionals in higher education organizations;
- Apply research and theory to higher education issues and policies;
- Critically evaluate scholarship, policy, and practice in order to promote equity, access, and social justice.

# Higher Education Administration, M.A., Ed.D.

## Degrees Offered

- Master of Arts
- Doctor of Education

## Nature of the Program

The Higher Education Administration program is designed to enhance leadership skills and prepare students for executive, administrative (business administration, academic affairs, and student affairs), academic support, and faculty positions.

## MASTER OF ARTS (ONLINE)

The master's program is designed to enhance leadership skills and prepare students for administration positions within college and university settings.

## FEATURES

- Online graduate program
- Part-time or full-time enrollment options
- Courses can be taken from any geographic location
- Flexible program of study
- Synchronous online courses
- Courses taught by full-time faculty and administrators

## CAREER PLACEMENT

- Alumni have been placed in executive, administrative (business administration, academic affairs, admissions, enrollment management) and student affairs (student success, residence life, and student engagement) positions as well as nonprofit and policy organizations, and in doctoral programs.
- According to the U.S. Bureau for Labor Statistics, higher education administration jobs are projected to grow 7% between 2018 and 2028, faster than average for all occupations.
- Higher education administrators work at colleges, universities, community colleges, and technical schools.

## DOCTOR OF EDUCATION

## FEATURES

1. Hybrid graduate program with options for online and face-to-face courses
2. Part-time or full-time enrollment options
3. Flexible program of study
4. Synchronous online courses
5. Courses taught by full-time faculty and professors
6. The degree can be completed entirely online

## CAREER PLACEMENT

- Executive, senior administrative (business administration, academic affairs, and student affairs) and faculty support placements; administrative advancement
- Higher education administration jobs are expected to grow by 7% between 2018 and 2028, according to the U.S. Bureau of Labor Statistics
- Faculty Positions
- Policy Positions
- Senior Institutional Leadership Positions

## Admissions

## ACCEPTANCE POLICY

Applicants for a Master of Arts degree in Higher Education Administration (HIED) and/or Ed.D. must comply with the WVU requirements for admission to graduate studies, the requirements of the College of Education and Human Services, and those that the HIED program has specified. Admission to all programs is contingent on an assessment of complete official transcripts, including all higher education work attempted, and other evidence the faculty may deem necessary in order to judge students' prospective success within the graduate program.

If applicants meet the minimum requirements, they may be invited to an on-campus or virtual interview. Students will receive official notification of acceptance or rejection within one month of the interview. All students accepted into the program will receive information about their assigned adviser and guidance on the development of a personalized program of study.

## ADMISSION PROCEDURE - MASTER OF ARTS

Applicants are required to submit an online application, found at <http://graduateadmissions.wvu.edu/how-to-apply> (<http://graduateadmissions.wvu.edu/how-to-apply/>). The Higher Education Administration Program admits students to the Master of Arts Program on a rolling basis. The following must accompany the online application:

1. **Personal statement, describing past work experience and goals for graduate study in higher education administration:** Be sure to include the specific major to which you are applying, interest in assistantships, relevant experience, and program goals. Please include **contact information and a description of professional or academic relationship for three references** at the end of the personal statement. Note: Students applying to the Student Affairs Area of Emphasis should also include the following in the Personal Statement:
  - a. Indication of intent to apply to the Area of Emphasis
  - b. If interested in applying with a graduate assistantship in student affairs, indication of this intent along with areas of assistantship interest (e.g. housing and residence life, student engagement and leadership, etc.)
2. **Resume:** This should include relevant education and work experiences.
3. **Transcripts:** Applicants should include transcripts from all previous postsecondary coursework, including undergraduate and graduate. This program utilizes the University GPA requirement (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) for entry to the program.
4. **One Academic Writing Sample:** Please include an academic writing sample to showcase your ability to write research or other academic papers in the program. For example, you can include your best paper from your undergraduate program or other graduate program.

## ADMISSION PROCEDURE - DOCTOR OF EDUCATION (ED.D.)

A committee of HIED faculty reviews applications to the program. The priority deadline for Fall admission is January 15; however, applications will be reviewed throughout the year for admission on a rolling basis, including for the Spring and Summer terms, if space allows. Admissions materials include:

1. **Personal resume/vita:** Applicants must provide a chronological history of their education and experience in a vita. The vita should offer evidence that the applicant has appropriate professional experience that would support the goals and expectations of the program.
2. **Goals statement (Personal statement):** Each applicant must provide a clear statement of professional goals. This statement should clearly indicate how the applicant's goals fit with the program. Particular consideration will be given to goal statements that clearly demonstrate that the student has researched the program and faculty and knows how program offerings and faculty expertise meet specific interests and needs.
3. **Writing sample:** All Ed.D. applicants must provide an academic writing sample with their application. The writing sample should provide clear evidence of the applicant's writing ability as well as ability to engage in research.
4. **Two current letters of reference:** All Ed.D. applicants must provide two letters of reference that explicitly address the applicant's potential as a doctoral student. References should know of the applicant's academic performance and potential.
5. **Transcripts:** Applicants should submit all undergraduate and graduate transcripts.
6. **International Applicants:** International applicants should consult WVU's International Admissions information for graduate students for the most up-to-date requirements, including English language proficiency scores: <https://graduateadmissions.wvu.edu/information-for/international-students> (<https://graduateadmissions.wvu.edu/information-for/international-students/>)

**INTERVIEW:** The HIED Ed.D. admissions committee may also request an interview to seek additional information in order to judge potential for success in the program.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MA Major Code: 5516

EdD Major Code: 5514

For specific information on the following program please see the link to the right:

- Higher Education Administration, M.A.

For specific information on the following program please see the link to the right:

- Higher Education Administration, Ed.D

# Higher Education Administration, M.A.

## Curriculum Requirements

Code	Title	Hours
A minimum GPA of 3.25 is required for all coursework applied toward the major.		
A minimum grade of C- is required in all major courses.		
<b>Required Content Core</b>		
HIED 648	History of American Higher Education	3
HIED 649	Contemporary Issues in Higher Education	3
HIED 650	Higher Education Administration	3
HIED 651	College Student Development	3
<b>Research *</b>		<b>6</b>
EDP 612	Introduction to Research	
EDP 613	Statistical Methods 1	
EDP 617	Program Evaluation	
HIED 652	Assessment in Higher Education	
HIED 759	Assessment Research in Higher Education	
HIED 762	College Student Research in Higher Education	
SCFD 615	Qualitative Research Methods	
<b>AOE or Electives **</b>		<b>9</b>
HIED 652	Assessment in Higher Education	
HIED 653	College Students and Courts	
HIED 654	College Student Affairs	
HIED 655	Institutional Advancement	
HIED 656	Higher Education Budget and Planning	
HIED 657	Community College Leadership	
HIED 658	Colleges and Communities	
HIED 693	Special Topics	
HIED 710	Leadership and Organizations	
HIED 750	Diversity Issues in Higher Education	
HIED 751	Academic Affairs Roles	
HIED 752	Governance of Higher Education	
HIED 754	Women and Gender Issues in HIED	
HIED 755	Higher Education Law	
HIED 756	Higher Education Finance	
HIED 760	Curriculum Development and Reform in Higher Education	
HIED 763	International Higher Education	
<b>Capstone</b>		<b>3</b>
HIED 785	Higher Education Internship	
Total Hours		30

\*

Additional/alternative courses may be approved with Graduate Advisor consent.

\*\*

Students electing the AOE option will need to choose take HIED 762 for three (3) credits toward the research requirement.

## Area of Emphasis Offered:

- College Student Affairs

## College Student Affairs Area of Emphasis

Code	Title	Hours
<b>Research *</b>		
HIED 762	College Student Research in Higher Education	3
<b>Specialization **</b>		
HIED 653	College Students and Courts	9
HIED 654	College Student Affairs	
HIED 658	Colleges and Communities	
HIED 750	Diversity Issues in Higher Education	
HIED 754	Women and Gender Issues in HIED	
Total Hours		12

\*

Completion of HIED 762 contributes to the six hours of research required in the Higher Education Administration major requirements.

\*\*

Completion of the nine hours of specialization coursework contributes to the completion of the nine hours of electives required in the Higher Education Administration major requirements.

## Major Learning Outcomes

### HIGHER EDUCATION ADMINISTRATION, M.A.

Students in the program will be able to:

1. Explain the social, political, and economic contexts that have framed higher education developments over time, including mediating factors on participation, institutional diversification, and evolving relationships between institutions and macro contexts.
2. Explicate critical issues in authentic cases of higher education leadership and institutions.
3. Evaluate, using salient theories, the processes by which institutions promote student development across diverse social group identities.
4. Recognize the social, political, and economic contexts that frame current higher education issues.
5. Apply research and theoretical knowledge of contexts, institutions, leadership, and students to solve real-world problems of practice.

## Higher Education Administration, Ed.D.

### Doctor of Education

### MAJOR REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.25 is required for all coursework applied toward the major.		
<b>Core Coursework</b>		<b>15</b>
HIED 648	History of American Higher Education	
HIED 650	Higher Education Administration	
HIED 651	College Student Development	
HIED 710	Leadership and Organizations	
HIED 750	Diversity Issues in Higher Education	
<b>Specialization Coursework</b>		<b>12</b>
Select from one of the following specializations:		
Curriculum & Assessment and Academic Affairs		
College Access, Transition, and Success		
Administration, Organizations, and Policy		
Individualized Studies in Higher Education Administration		
<b>Research Coursework</b>		
Quantitative Methods		6
EDP 613	Statistical Methods 1	
or STAT 511	Statistical Methods 1	
EDP 614	Statistical Methods 2	



or STAT 512	Statistical Methods 2	
Qualitative Methods		6
SCFD 615	Qualitative Research Methods	
SCFD 715	Advanced Qualitative Research	
EDP 617	Program Evaluation	3
<b>Cognate Coursework</b>		<b>12</b>
<b>Internships *</b>		<b>6</b>
HIED 785	Higher Education Internship	
<b>Research</b>		<b>12</b>
HIED 797	Research	
Total Hours		72

Note: Individualized plans of study will be developed in consultation with the student's advisor/program committee. Additional Coursework in HIED 785 and 797 will not count towards the Specialization, Advanced Methods, Additional HIED and Cognate Coursework.

\*

Students are required to take 6 credits of a supervised practicum in higher education administration by enrolling in HIED 785. This internship experience should be conducted after the Qualifying Examination (DQE), and allow the student to apply theoretical concepts to practical situations. The internship experience is designed by the student in consultation with the advisor and proposed supervisor. The student will identify a researchable, complex problem of practice during their internship experience for the Dissertation in Practice (DiP).

## Major Learning Outcomes

### HIGHER EDUCATION ADMINISTRATION, ED.D.

The learning goals for this program are to prepare students who:

1. Articulate the social, political, and economic contexts that have framed higher education developments over time, including mediating factors on participation, institutional diversification, and evolving relationships between institutions and macro contexts.
2. Evaluate, using salient theories, the processes by which institutions of higher education promote and assess student development across diverse social group identities.
3. Apply one or more theoretical frameworks (leadership, organization, student development, etc.) to provide research informed recommendations to solve problems of practice in higher education.
4. Utilize knowledge and skills from program coursework and outside sources, identify a problem of practice in higher education, and create a proposal with potential for actualizable solutions.

## Instructional Design and Technology, M.A.

### Degree Offered

- Master of Arts

### Nature of the Program

The online Master of Arts in Instructional Design and Technology Program is designed for the individual who wants to apply cutting edge instructional technologies and design strategies in business, education, and other educational settings. The Learning Goals for the program are to advance knowledge and critical thinking relative to instructional design and instructional technologies. Features of the program include courses in educational psychology, instructional design and technology, and program evaluation.

Students are encouraged to identify topics of interest and to develop an appropriate topic for inquiry as they take courses. Research in instructional technology is addressed throughout the courses and supplements the college research core requirements. The program features seminar courses that provide opportunities to conduct research and develop instructional interventions, including technological integration of tools. Teaching opportunities may be found working with faculty members, the college's Teaching and Learning Technologies Center (TLTC), and internships in corporate settings in the Morgantown/Fairmont area.

### Admissions

- A cumulative GPA of 3.0 or higher
- An undergraduate degree from an accredited university
- Cover letter describing past work experience and goals for graduate study
- Transcript(s) of completed undergraduate program

- Resume or Vitae
- GRE or GMAT scores **OR** a narrative describing two years of professional work experience (individuals with 2+ years work experience can ask to have the testing requirement waived)
- Three letters of reference commenting on professional background and plans for graduate study
- Given the online nature of the majority of the courses, enrollment in this program is not sufficient to satisfy visa

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5523

## Master of Arts

### MAJOR REQUIREMENTS

Code	Title	Hours
EDP 612	Introduction to Research	3
EDP 617	Program Evaluation	3
EDP 640	Instructional Design	3
IDT 600	Instructional Design and Technology Theories and Models	3
IDT 610	Distance Education	3
Competency Courses		15
IDT 620	Social Network Media	
IDT 630	Instructional Delivery System	
IDT 640	Visual Literacy	
IDT 650	Multimedia Learning	
IDT 655	Technology for Teachers	
IDT 660	Instructional Design and Technology Authoring Systems	
IDT 665	Game & Simulation Design for Instruction	
IDT 670	Digital Tools and Web	
IDT 675	Online Teaching and Learning	
IDT 680	Computational Thinking	
IDT 693	Special Topics	
IDT 720	Instructional Systems Design	
IDT 735	Technology Integration	
IDT 740	Design Studio	
IDT 750	Prototype Studio	
IDT 715	School Networks	
Total Hours		30

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
IDT 610		3 IDT 620		3 EDP 612	3
IDT 600		3 IDT 660		3 IDT 630	3
		6		6	6

### Second Year

Fall	Hours	Spring	Hours
IDT 735		3 EDP 617	3
EDP 640		3 IDT 650	3
		6	6

Total credit hours: 30

- Any IDT courses at the 600-level may be substituted with advisor approval.

## Major Learning Outcomes

### INSTRUCTIONAL DESIGN AND TECHNOLOGY

Major features of the Instructional Design and Technology (IDT) program include course preparation in educational psychology, instructional design, multimedia, and research methods. Three areas of competencies are featured: networks, instructional design and development, and use of software and multimedia.

The IDT program is designed to address the following learning goals:

- *Understand* the context for technology use, history of the field, theoretical foundations, trends and issues, and ethical uses of technology in educational settings.
- *Develop an awareness* of current IT tools and practices.
- *Apply* learning principles to instruction.
- *Design, implement, and evaluate* the use of technology and media in instruction and to support learning.
- *Conduct research on* the design, use, and evaluation of technology, teaching, and educational programs.

## Literacy Education, M.A.

### Degree Offered

- Master of Arts in Literacy Education

### Nature of the Program

The Master of Arts in Literacy Education (LE) is a 30-credit hour graduate degree with reading specialist licensure. This program prepares candidates for advanced reading specialist certification\* and to fulfill the roles of specialized literacy professionals as outlined by the International Literacy Association's (ILA) *Standards for the Preparation of Literacy Professionals (2018)*. These roles include Reading Specialist, Literacy Coach, and Literacy Coordinator/Literacy Leader. The LE graduate program earned National Recognition with Distinction (<https://www.literacyworldwide.org/get-involved/awards-recognition/national-recognition/recipients/>) from ILA.

\*Educational Testing Service (ETS) Praxis 5302 (<https://www.ets.org/praxis/prepare/materials/5301/>), Reading Specialist, is required for state certification.

### Admissions

- Bachelor's degree with a 3.0 GPA or above
- Valid state teaching license
- WVU Graduate application for admission <https://admissions.wvu.edu/how-to-apply> (<https://admissions.wvu.edu/how-to-apply/>)

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5519

### Major Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required for graduation.		
A minimum grade of C- is required in all coursework applied toward the major.		
<b>Required Courses</b>		
LE 620	Specialized Literacy Professionals	3
LE 621	Knowledge of Literacy Instruction	3
LE 622	Disciplinary Literacy	3
LE 623	Early Literacy Instruction	3
LE 624	Foundations of Literacy	3
LE 627	Motivation and Engagement in Literacy Learning	3
LE 640	Literacy Intervention 1	3
LE 682	Literacy Assessments	3
LE 689	Literacy Intervention 2	3

LE 726	Literacy Leadership	3
Total Hours		30

## Suggested Plan of Study

<b>First Semester</b>	<b>Hours</b>	
LE 620	3	
LE 621	3	
		6
<b>Second Semester</b>	<b>Hours</b>	
LE 622	3	
LE 627	3	
		6
<b>Third Semester</b>	<b>Hours</b>	
LE 682	3	
LE 623	3	
		6
<b>Fourth Semester</b>	<b>Hours</b>	
LE 624	3	
LE 640	3	
		6
<b>Fifth Semester</b>	<b>Hours</b>	
LE 689	3	
LE 726	3	
		6

Total credit hours: 30

## Major Learning Outcomes

### LITERACY EDUCATION

The M.A. program in Literacy Education is aligned with the International Literacy Association's *Standards for the Preparation of Literacy Professionals (2018)* and prepares candidates for roles including Reading Specialist, Literacy Coach, Literacy Coordinator/Literacy Leader. Accordingly, the specific outcomes of candidate participation and completion include:

- demonstrate knowledge of major theoretical, conceptual, historical, and evidence-based foundations of literacy and language, the ways in which they interrelate, and the role of the reading/literacy specialist in schools.
- use foundational knowledge to design literacy curricula to meet needs of learners, especially those who experience difficulty with literacy; design, implement, and evaluate small-group and individual evidence-based literacy instruction for learners; collaborate with teachers to implement effective literacy practices.
- understand, select, and use valid, reliable, fair, and appropriate assessment tools to screen, diagnose, and measure student literacy achievement; inform instruction and evaluate interventions; assist teachers in their understanding and use of assessment results; advocate for appropriate literacy practices to relevant stakeholders.
- demonstrate knowledge of research, relevant theories, pedagogies, and essential concepts of diversity and equity; demonstrate an understanding of themselves and others as cultural beings; create classrooms and schools that are inclusive and affirming; advocate for equity at school, district, and community levels.
- demonstrate the ability to meet the developmental needs of all learners and collaborate with school personnel to use a variety of print and digital materials to engage and motivate all learners; integrate digital technologies in appropriate, safe, and effective ways; foster a positive climate that supports a literacy-rich learning environment.
- demonstrate the ability to be reflective literacy professionals, who apply their knowledge of adult learning to work collaboratively with colleagues; demonstrate their leadership and facilitation skills; advocate on behalf of teachers, students, families, and communities.
- complete supervised, integrated, extended practica/clinical experiences that include intervention work with students and working with their peers and experienced colleagues; practica include ongoing experiences in school-based setting(s); supervision includes observation and ongoing feedback by qualified supervisors.

International Literacy Association (2018). *Standards for the Preparation of Literacy Professionals* 2017. Newark, DE: Author.

# Special Education, M.A.

## Degree Offered

- Master of Arts

## Nature of the Program

The graduate program in Special Education at WVU is designed to prepare professional educators to work with children and adolescents with mild/moderate disabilities including learning disabilities, emotional/behavior disorders, autism, and intellectual disabilities. This graduate level program prepares special education teachers and other professionals to engage in current research-based practices to provide high quality educational programs and services to promote academic achievement and post-school outcomes in inclusive elementary or secondary schools.

The program offers these options:

Master's degree in Special Education with emphasis in Multicategorical Special Education

- For individuals holding a WV Professional Teaching Certificate:
  - Adding an Endorsement on the Professional Teaching Certificate with Passing Praxis Scores (Based on Content Proficiency) in Grades K-6 or 5-Adult
  - Adding an Autism Endorsement on the Professional Teaching Certificate
- For individuals not holding a WV Professional Teaching Certificate:
  - To apply for a Professional Teaching Certificate under the pathway WVDE Alternative Certification

## PROGRAM DELIVERY FORMAT

This program is offered entirely online.

## GRADUATION AND COMPLETION REQUIREMENTS

The minimum time to complete most certification or degree programs in special education is:

- Two (2) calendar years at the rate of six (6) credits per semester including summer (part-time study – recommended for students who are working full time and/or have extensive family responsibilities.
- One and one half (1.5) (Three semesters including summer) calendar years at the rate of twelve (12) credits per semester (full-time study-recommended for students who are not employed and/or have minimal family responsibilities.

The maximum time to complete a graduate degree program at WVU (including all transferred courses) is eight (8) years

## Admissions

### REGULAR ADMISSION

REGULAR admission is granted ONLY WHEN ALL these criteria are met:

- Requirements for ALL graduate programs:
  - Bachelor's degree from a regionally accredited institution with minimum GPA\* of 3.00 out of 4.0.

### Master of Arts

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required.		
A grade of B- or higher is required in all graduate coursework		
SPED 500	Legal/Educational Foundations: Special Education	3
SPED 601	Academic Interventions for Special Needs	3
SPED 609	Technology Applications for Special Needs	3
SPED 650	Learning Characteristics:Autism	3
SPED 652	Educational Interventions: Autism	3
SPED 665	Mathematics for Special Needs	3
SPED 666	Reading for Special Needs	3
LE 622	Disciplinary Literacy	3
C&I 602	Curriculum and Teaching Principles	3

C&I 688	Classroom Organization and Management	3
Total Hours		30

## Suggested Plan of Study (Full-time Study)

This plan is designed for full-time students who have no other major responsibilities or other students who wish to complete the program more quickly and believe they can manage the workload.

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
SPED 500		3 LE 622		3 C&I 602	3
SPED 609		3 SPED 601		3 C&I 688	3
SPED 650		3 SPED 652		3 SPED 666	3
		SPED 665		3	
		9		12	9

Total credit hours: 30

NOTE: Courses may be completed in any order and students may start the program in any semester.

## Suggested Plan of Study (Part-time Study)

This plan is designed for part-time students who are working full time and have other family responsibilities.

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
SPED 500		3 SPED 601		3 LE 622	3
C&I 602		3 C&I 688		3 SPED 666	3
		6		6	6

### Second Year

Fall	Hours	Spring	Hours
SPED 650		3 SPED 652	3
SPED 609		3 SPED 601	3
		6	6

Total credit hours: 30

NOTE: Courses may be completed in any order and students may start the program in any semester.

## Major Learning Outcomes

### SPECIAL EDUCATION

The Special Education Program believes that students with mild/moderate disabilities including autism have a right to equitable, appropriate, and high quality education programs and services designed to meet their unique needs in inclusive schools and community settings; special educators play a critical role in the education of children with mild/moderate disabilities including autism as co-instructors in inclusive general education classrooms, primary instructors in resource rooms or special classes, or as consultants to the classroom teacher; and these individuals and families should be empowered to make decisions about services and supports required to succeed academically, socially, and as a part of the citizenry.

This program has been designed so that program graduates can accomplish the following learning outcomes:

1. provide high quality educational services to children and adolescents with mild/moderate disabilities including autism in inclusive classrooms and resource rooms in elementary and secondary schools;
2. demonstrate knowledge and application of current evidence-practices as exemplified by reputable research and professional standards to deliver individualized instruction to develop academic and social skills;
3. collaborate with other professionals and agencies in delivery of services and engage in individual and systems advocacy for individuals and their families, and empower individuals and families to participate in program planning and decision making; and
4. reflect in and on practice and respond responsibly to the legal, ethical, social, and cultural issues encountered when working with individuals with mild/moderate disabilities including autism and their families in today's world.

# Secondary Education, M.A.

## Degree Offered

- Master of Arts

## Nature of the Program

The Department of Curriculum and Instruction/Literacy Studies offers opportunities for graduate study leading to teacher certification and a Master of Arts degree in content areas that include science, social studies, and English. This program is designed to prepare individuals to become educators in grades 5-12 public school classroom. Students in this programs will work with faculty who contribute as educational scholars to the profession at university, state, and national levels. Additionally, the program offers opportunities to develop technology rich, culturally responsive, and active learning environments associated with greater student achievement. This program has met accreditation standards.

## Admissions

**All applicants for the masters in Secondary Education must:**

- Submit a WVU Graduate application for admission. The application can be found at <https://admissions.wvu.edu/how-to-apply> (<https://admissions.wvu.edu/how-to-apply/>)
- Hold a Bachelor's degree with a 2.75 GPA or above
- Submit a **one-page goal statement**. The Statement should be of professional experiences, career ambitions and will be considered a writing sample
- **Test requirements:** Praxis Core Academic Skills for Educators. Student can take the combined test # 5752 which includes all 3 sections (reading #5713, writing #5723 & math #5733)
- The Praxis CORE may be **waived** with
  - \*an ACT combined score in English and Reading of 34 with a minimum score of 17 for each area and a minimum Math score of 21 (**OR**)
  - \*SAT score of 480 using the combined Evidence-Based Reading and Writing (this is the Verbal score) and a score of 530 in Math (**OR**)
  - Graduate Records Examination (GRE), minimum score 286 (combined score of verbal and quantitative sections) (**OR**)
  - holds a master's degree from an accredited institution of higher education.
  - \*Scores can be taken from multiple sittings of test administrations and from superscores.

## PROGRAM REQUIREMENTS

- Retention in the program and/or graduation is based on SATISFACTORY PROGRESS of maintaining a 3.0 GPA with a grade of A or B in ALL required courses.
- C&I 602 must be taken in the first semester after admission into the program. "B" or better is required in C&I 602.
- State background checks are required before entering a public school classroom.
- Application for transient credit for graduate courses taken at other institutions must be approved by the adviser and the Assistant Dean for Student Services.
- Completion of 125 hours of field experience are required before student teaching.
- Passing scores on the Praxis II subject area knowledge assessment are due by the end of the student's first semester in the program.
- Passing scores on the edTPA.
- Online application to graduate

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5521

- Biology Education (p. 169)
- Chemistry Education (p. 169)
- English Education (p. 169)
- Science Education (p. 169)
- Math Education (p. 169) (not accepting applicants at this time)
- Physics Education (p. 169)
- Social Studies Education (p. 170)
- World Language Education (p. 170) (not accepting applicants at this time)

## MAJOR REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required for all coursework applied toward the major.		
A minimum grade of B- is required for all coursework applied toward the major.		
C&I 602	Curriculum and Teaching Principles	3
C&I 688	Classroom Organization and Management	3
C&I 689	Cultural Diversity in the Classroom	3
EDP 600	Educational Psychology	3
LE 622	Disciplinary Literacy *	3
SPED 500	Legal/Educational Foundations: Special Education	3
SPED 601	Academic Interventions for Special Needs	3
Area of Emphasis coursework		9
Total Hours		30

\*

Secondary English education students will take C&I 425 instead of LE 622.

## SUGGESTED PLAN OF STUDY

First Semester	Hours
C&I 602	3
EDP 600	3
	6
Second Semester	Hours
SPED 500	3
LE 622	3
	6
Third Semester	Hours
SPED 601	3
Complete Praxis 2	
AoE course	3
	6
Fourth Semester	Hours
C&I 688	3
C&I 689	3
	6
Fifth Semester	Hours
AoE courses	6
	6

Total credit hours: 30

**NOTE:** In addition to the 30 degree requirements, testing requirements (Praxis 2 & edTPA) are required.

## OTHER REQUIREMENTS

- A WV state background check is required before entering a public school classroom.
- Completion of 125 hours of field experience are required before student teaching.
- Student teaching application must be completed **1 year** in advance if the student teaching semester.
- A standards-based portfolio completed during the student teaching semester.
- Passing scores on the Praxis II in content area, due by the end of the first semester.
- Passing scores on the edTPA completed during the student teaching semester are required for certification and program completion.



**BIOLOGY EDUCATION AREA OF EMPHASIS**

Code	Title	Hours
C&I 644	Science in the Secondary School	3
SCFD 640	History of American Education	3
C&I 648	Science/Technology: Society Perspectives *	3
Total Hours		9

\*

Or another course at the 400-level and above in consultation with advisor.

**CHEMISTRY EDUCATION AREA OF EMPHASIS**

Code	Title	Hours
C&I 644	Science in the Secondary School	3
SCFD 640	History of American Education	3
C&I 648	Science/Technology: Society Perspectives	3
Total Hours		9

\*

Or another course at the 400-level and above in consultation with advisor.

**ENGLISH EDUCATION AREA OF EMPHASIS**

Code	Title	Hours
SCFD 640	History of American Education	3
or SCFD 620	Philosophy of Education	
C&I 424	Approaches to Teaching Language	3
C&I 624		3
Total Hours		9

**GENERAL SCIENCE EDUCATION AREA OF EMPHASIS**

Code	Title	Hours
C&I 644	Science in the Secondary School	3
SCFD 640	History of American Education	3
C&I 648	Science/Technology: Society Perspectives	3
Total Hours		9

\*

Or another course at the 400-level and above in consultation with advisor.

**MATH EDUCATION AREA OF EMPHASIS**

Code	Title	Hours
C&I 634/434	Mathematics in the Secondary School	3
or UTCH 420	Project-Based Instruction in Mathematics and Science	
SCFD 640	History of American Education	3
Elective		3
Elective Course 400 level or higher in C&I, SCFD, MATH or other course approved by advisor		
Total Hours		9

**PHYSICS EDUCATION AREA OF EMPHASIS**

Code	Title	Hours
C&I 644	Science in the Secondary School	3
SCFD 640	History of American Education	3
C&I 648	Science/Technology: Society Perspectives	3
Total Hours		9

\*

Or another course at the 400-level and above in consultation with advisor.

## SOCIAL STUDIES EDUCATION AREA OF EMPHASIS

Code	Title	Hours
SCFD 640	History of American Education	3
C&I 654	Social Studies in the Secondary School	3
C&I 453	Disciplinary Foundations for Social Studies Teaching	3
Total Hours		9

## WORLD LANGUAGE EDUCATION AREA OF EMPHASIS

Code	Title	Hours
SCFD 620	Philosophy of Education	3
or SCFD 640	History of American Education	
LANG 421	The Teaching of Foreign Languages	3
Electives	Taken at the graduate level in foreign language, C&I, and /or related field with advisor approval	3
Total Hours		9

## Major Learning Outcomes

### SECONDARY EDUCATION

The learning goals for this program are to prepare students who:

- Have commitment and skills to engage in life-long learning;
- Are effective communicators;
- Recognize that teaching is a professional, moral, and ethical enterprise with well-developed ethical frameworks which facilitate effective teaching;
- Will serve as a facilitator of learning for all students;
- Possess in-depth knowledge of both pedagogy and content, and the relationships between them;
- Are reflective practitioners;
- Are aware of, and have respect for, human diversity;
- Value and integrate knowledge from a wide variety of fields, are creative and open to new ideas, and are able to act constructively in a world characterized by technological, cultural, and societal diversity and change.

## School of Sport Sciences

### Degrees Offered

- Master of Science
- Doctor of Education
- Doctor of Philosophy

The School of Sport Sciences offers master's degree programs in coaching and sport education (on-campus), sport education (online), physical education teacher education (online), sport management (on campus), executive sport management (online). The online masters degree in sport management offers two areas of emphasis: Comprehensive Sport Industry Management and Interscholastic Athletic Administration. Students can start any of the distance education master's degree programs (i.e., Sport Coaching, Physical Education Teacher Education, or Executive Sport Management) at the start of any semester (i.e., Fall, Spring, and Summer). The Ph.D. program in kinesiology, administered through the School of Sport Sciences, has two major areas: sport, exercise and performance psychology and coaching and teaching studies (designed for students interested in athletic coaching education/coach development or physical education teacher education).

For additional information, email [sportsciences@mail.wvu.edu](mailto:sportsciences@mail.wvu.edu).

## ADMINISTRATION

### SCHOOL DIRECTOR

- Valerie Wayda - Ed.D. (West Virginia University)

## ASSOCIATE DIRECTORS

- Andrea Taliaferro - Ph.D. (University of Virginia)
- Dana Voelker - Ph.D. (Michigan State University)

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## FACULTY

### PROFESSORS

- Gonzalo Bravo - Ph.D. (The Ohio State University)  
Sport Management
- Sean Bulger - Ed.D. (West Virginia University)  
Physical Education Teacher Education, Coaching and Teaching Studies
- Damien Clement - Ph.D. (West Virginia University)  
Sport, Exercise and Performance Psychology
- Kristen Dieffenbach - Ph.D. (University of North Carolina - Greensboro)  
Coaching and Sport Education, Sport Coaching, Coaching and Teaching Studies
- Peter Giacobbi - Ph.D. (University of Tennessee)  
Sport, Exercise and Performance Psychology
- Jack Watson II - Ph.D. (Florida State University)  
Sport, Exercise and Performance Psychology
- Sam Zizzi - Ed.D. (West Virginia University)  
Sport, Exercise and Performance Psychology

### ASSOCIATE PROFESSORS

- Jeanette Garcia - Ph.D. (University of Virginia)  
Sport, Exercise and Performance Psychology
- Cindy Lee - Ph.D. (The Ohio State University)  
Sport Management
- Dana Voelker - Ph.D. (Michigan State University)  
Sport, Exercise and Performance Psychology
- Valerie Wayda - Ed.D. (West Virginia University)  
Coaching and Sport Education, Sport Coaching, Coaching and Teaching Studies

### ASSISTANT PROFESSORS

- Ashley Coker-Cranney - Ph.D. (West Virginia University)  
Sport, Exercise and Performance Psychology
- William (Guy) Hornsby III - Ph.D. (East Tennessee State University)  
Coaching and Sport Education, Sport Coaching, Coaching and Teaching Studies
- Bent Oja - Ph.D. (University of Kansas)  
Sport Management
- Samantha Ross - Ph.D. (Oregon State University)  
Physical Education Teacher Education, Coaching and Teaching Studies
- Emi Tsuda - Ph.D. (The Ohio State University)  
Physical Education Teacher Education, Coaching and Teaching Studies
- James Wyant - Ph.D. (West Virginia University)  
Physical Education Teacher Education, Coaching and Teaching Studies

### SERVICE PROFESSOR

- Eloise Elliott - Ph.D. (Virginia Polytechnic Institute and State University)  
Physical Education Teacher Education, Coaching and Teaching Studies

### TEACHING ASSOCIATE PROFESSOR

- Gary Lhotsky - Ed.D. (Florida State University)  
Sport Management

### TEACHING ASSISTANT PROFESSORS

- Patrick Hairston - Ed.D. (Delaware State University)  
Sport Management

- Peter McGahey - Ed.D. (Minnesota State University - Mankato)  
Coaching and Sport Education, Sport Coaching
- David Rice - Ph.D. (University of Pittsburgh)  
Coaching and Sport Education, Sport Coaching
- Michael Ryan - Ph.D. (West Virginia University)  
Coaching and Sport Education, Sport Coaching, Coaching and Teaching Studies
- Justin Wartella - Ph.D. (University of Nevada - Las Vegas)  
Sport Management
- Joni Williamson - Ed.D. (East Tennessee State University)  
Sport Management
- Jeremy Yeats - Ph.D. (University of Northern Colorado)  
Physical Education Teacher Education, Coaching and Teaching Studies

## **ADJUNCT INSTRUCTORS**

- Jordan Blizzard
- Lynda Bowers
- Clive Brewer
- Richard Buchanan
- Samuel Callan
- Steve Campbell
- Philip Caskey
- Bradford Cox
- Aaron Cunanan
- Kelly Dovey
- Jason Foster
- Ian Gentile
- Erin Gibson
- Lindsay Hammond
- Emily Jones
- Mireia Lizandra
- Kenneth Martel
- Anthony Moreno
- Jack Sager
- Matthew Sams
- Sandra West
- Frank Yeboah

## **PROFESSORS EMERITI**

- William Alsop
- Dana Brooks
- J. William Douglas
- Edward Etzel, Jr.
- Andrew Hawkins
- Lynn Housner
- Andrew Ostrow
- Robert Wiegand

## **ASSOCIATE PROFESSORS EMERITI**

- Dallas Branch
- Linda Carson
- Bruce Wilmoth
- Daniel Ziatz

# Coaching and Sport Education, M.S.

## Degree Offered

- Master of Science

## Nature of the Program

The Master of Science in Coaching and Sport Education (delivered on-campus) is designed for professional learners interested in further developing their technical skills and enriching their capacity to support athletes in high-performance settings. The program is the ideal fit for those looking to better understand the demands of sport coaching and the factors that influence peak athlete performance in individual and team sports. The curriculum incorporates a unique balance of theoretical and applied courses that are designed to meet the needs of coaches in today's dynamic sport industry. The primary goal of the Coaching and Sport Education program is for students to graduate with the essential skills and knowledge necessary to work with athletes in a variety of contexts across their lifetime.

The curriculum builds upon a multi-dimensional framework that outlines the fundamental competencies that sport coaches must master to facilitate the long-term development of their athletes and teams. These competencies address the pedagogy of sport coaching, reflection and critical thinking, professionalism and ethics, and use of technology. In addition to an academic core that includes courses in training theory, motor behavior and sport psychology, movement analysis, coaching administration, healthy competitive environments, and strength/conditioning. In addition, students have the opportunity to further specialize their plan of study by selecting an area of emphasis in Leadership, Sport Science and Technology, or Sport Management.

## Admissions

### CRITERIA

The following supplemental materials will be used to evaluate applications for admission to the Coaching and Sport Education master's program:

- Resume: including coaching background, sport participation, sport-related awards, and employment and/or experience (e.g., athletic administration, officiating, volunteering)
- Personal statement: 1-2 written pages on professional goals and reasons for seeking admission
- Letters of recommendation (2)

Note: Students who do not meet the 2.75 grade point average requirement may be admitted as a provisional graduate student only if their GPA is between 2.50 and 2.75. If a student is admitted as a provisional student they are required to attain a 3.0 GPA in their first 9 hours of adviser approved course work in order to remain in the program and to be reclassified as a regular graduate student.

**Priority** Deadline is December 15th. Any applications submitted after the December 15th deadline will be considered if space is still available in the program.

No more than twelve graduate hours may be taken toward the master's degree as a non-degree seeking graduate student.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5530

## Degree Requirements

Code	Title	Hours
ACE 508	The Sport Coaching Profession	3
ACE 510	Training Theories for Coaches	3
ACE 518 or SEP 640	Psychology of Coaching Sport and Performance Psychology	3
ACE 522	Motor Behavior for Sport Coaches	3
ACE 530	Coaching Education Administration	3
ACE 539	Creating a Healthy Competitive Environment	3
ACE 568	Sport Movement Analysis	3
ACE 569	Strength and Conditioning Methods for Coaches	3
ACE 585	Applied Professional Development	3
<b>Area of Emphasis</b>		<b>9</b>
Sport Science and Technology		

Sport Management	
Leadership	
Total Hours	36

## Areas of Emphasis

- Leadership (p. 174)
- Sport Management (p. 174)
- Sport Science and Technology (p. 174)

## Leadership Area of Emphasis Requirements

Code	Title	Hours
LDR 501	Advanced Leadership Theory and Practice	3
LDR 551	Advanced Problems in Leadership	3
LDR 601	Applied Leadership in the Workplace	3
Total Hours		9

## Sport Management Area of Emphasis Requirements

Code	Title	Hours
Select three of the following:		9
SM 516	Sport Marketing Research Methods	
SM 527	Legal Issues in Sport Administration	
SM 535	Sport Management Processes	
SM 546	Sport Marketing	
SM 570	Sport Finance	
SM 575	Fund-Raising and Development	
SM 621	Sport Publicity/Public Relations	
SM 660	NCAA Compliance and Current Issues	
Total Hours		9

## Sport Science and Technology Area of Emphasis Requirements

Code	Title	Hours
Select three of the following:		9
ACE 573	Advanced Strength and Conditioning Coaching Techniques	
ACE 587	Strength and Conditioning Program Design Coach	
ACE 553	Applied Statistics in Sport Science	
ACE 557	Intro to Sport Technology and Sport Science	
ACE 558	Internship Practicum and Data Collection	
ACE 559	Internship Practicum and Data Analysis	
Total Hours		9

## Major Learning Outcomes

### COACHING AND SPORT EDUCATION

The goal of the program is for students to graduate with the essential skills and knowledge to work with athletes in a variety of contexts across their lifetime.

- **Content Knowledge** – Students will demonstrate knowledge and disciplinary concepts related to the pedagogy of sport coaching.
- **Reflection and Critical Thinking** – Students will demonstrate reflection and critical thinking in order to refine professional practice **and promote lifelong athlete development..**

- **Professionalism and Ethics** – Students will demonstrate professional behaviors, including commitment to excellence, valuing diversity and collaboration, service to others, and techniques for lifelong learning.
- **Technology** – Students will be able to demonstrate the use of different forms of technology to assess skills and provide meaningful feedback.

## Coaching and Teaching Studies, Ph.D., Ed.D.

### Degree Offered

- Doctor of Philosophy
- Doctor of Education

### Nature of the Program

West Virginia University is the only institution in the state of West Virginia to offer a Doctorate degree (Ph.D. and Ed.D.) majoring in Coaching and Teaching Studies. Our doctoral programs provide a high-quality and meaningful educational experience that enables each learner to succeed in achieving their chosen academic and career goals. Furthermore, the related experiences promote the development of learners as analytical thinkers who are confident in the application of the scientific method and who can excel professionally as educators and researchers.

The Ph.D. is a research doctorate, the purpose of which is to prepare program graduates for careers as researchers in university, government, not-for-profit, and industry settings. As its primary learning outcome, program graduates develop the competencies needed to lead innovation in the field through their contributions as independent researchers. Our Ph.D. students also acquire complementary experiences and skill sets that enhance their professional readiness in teaching, service, administration, and clinical practice.

The Ed.D. is a professional doctorate, the purpose of which is to prepare program graduates for careers as organizational leaders across a range of school, university, and community-based settings. As its primary learning outcome, program graduates develop the competencies needed to facilitate organizational change using data-based approaches to problem solving and decision-making. Our Ed.D. students also acquire complementary skill sets that enhance their professional readiness in teaching, service, administration, and clinical practice.

### Admissions

Applicants can seek admission to the doctoral program in Coaching and Teaching Studies with either a baccalaureate degree or master's degree. To be considered for admission, applicants must upload the following documentation within the graduate application:

1. Resume or curriculum vitae
2. Transcripts from all previous institutions
3. Official GRE scores (Ph.D. applicants only)
4. Personal statement (1-2 written pages on professional background, goals, and reasons for pursuing doctoral degree at WVU, and rationale for potential faculty advisor)
5. Letters of recommendation (2)

Potential applicants are strongly encouraged to contact WVU faculty members, schedule an on-campus visit, or conference call prior to submitting application to get a feel for faculty, staff, students, and the WVU experience. You will not be able to submit your application until the above documents are uploaded. Once the application is submitted and (unofficial/official) transcripts are received, your application will be reviewed for an admission decision. International applicants will not be reviewed with unofficial transcripts.

Admission application form deadline: Apply by December 1 for priority consideration. Applications that are incomplete or are submitted after the deadline may be reviewed if openings remain. Admission is limited to fall start only.

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Ph.D. Major Code: 5539

Ed.D. Major Code: 5515

For specific information on the following program please see the link to the right:

- Coaching and Teaching Studies, Ed.D.

For specific information on the following program please see the link to the right:

- Coaching and Teaching Studies, Ph.D.

# Coaching and Teaching Studies, Ed.D.

## Degree Requirements

All students must complete the written and oral qualifying exam within the first two semesters of the program. All students must also pass a comprehensive exam as designated by the candidate's doctoral committee, pass the dissertation prospectus, and successfully defend the dissertation.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
Minimum grade of B- required unless otherwise noted.		
<b>Core Classes</b>		<b>12</b>
PET 735	Critical Thinking in Sport & Physical Education Research	
PET 741	Action Research in Kinesiology	
PET 745	Higher Education Curriculum in Kinesiology	
PET 755	Physical Activity in Schools	
<b>Statistics and Research Methods</b>		<b>15</b>
EDP 613	Statistical Methods 1	
EDP 614	Statistical Methods 2	
SCFD 615	Qualitative Research Methods	
SCFD 715	Advanced Qualitative Research	
SEP 615	Research Methodology in Physical Education	
or EDP 612	Introduction to Research	
<b>Electives (courses must be approved by advisor)</b>		<b>12</b>
<b>Dissertation Research</b>		<b>21</b>
PET 797	Research (18 credit hour required)	
SEP 765	Dissertation and Thesis Seminar (3 credit hours required)	
<b>Benchmarks</b>		
Qualifying Exam		
Comprehensive Exam		
Dissertation Proposal		
Dissertation Defense		
Total Hours		60

## PERFORMANCE STANDARDS

Students who do not meet benchmarks would receive probation notification due to lack of progress at the end of the academic year with remediation required during the summer term. Failure to meet benchmark requirements beyond that point would result in suspension or dismissal from the program. Student research will be graded by the faculty each semester. Research and grades will be satisfactory or unsatisfactory (S/U).

## Major Learning Outcomes

### COACHING AND TEACHING STUDIES

Upon completion of the Ed.D, each graduate should:

1. To develop an in-depth knowledge of the contemporary theoretical concepts within coaching and teaching studies.
2. Develop a critical understanding of the knowledge, research and analytical skills required to be an effective and reflective pedagogue in coaching and teaching studies.
3. Be able to apply, justify, and promote evidence-based practices in varied environments within coaching and teaching studies.
4. Be able to identify, critically analyze and reflect on practice-based problems in teacher and coach preparation to generate and implement informed solutions and directions in professional practice.
5. Critically engage in reflective practice through the development, implementation and reporting of an extended piece of research work.



# Coaching and Teaching Studies, Ph.D.

## Degree Requirements

For the Ph.D. program, the candidate must complete a series of research benchmarks beyond the required coursework. All students must complete the written and oral qualifying exam within the first two semesters of the program. All students must also pass a comprehensive exam as designated by the candidate's doctoral committee, pass the dissertation prospectus, and successfully defend the dissertation. In addition, Ph.D. candidates must submit three publishable articles. The acceptability (publishable) of the articles will be determined by the candidate's doctoral committee.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
Minimum grade of B- required unless otherwise noted.		
<b>Core Classes</b>		<b>12</b>
PET 735	Critical Thinking in Sport & Physical Education Research	
PET 741	Action Research in Kinesiology	
PET 745	Higher Education Curriculum in Kinesiology	
PET 755	Physical Activity in Schools	
<b>Statistics and Research Methods</b>		<b>15</b>
EDP 613	Statistical Methods 1	
EDP 614	Statistical Methods 2	
SCFD 615	Qualitative Research Methods	
SCFD 715	Advanced Qualitative Research	
SEP 615	Research Methodology in Physical Education	
or EDP 612	Introduction to Research	
<b>Electives (courses must be approved by advisor)</b>		<b>12</b>
<b>Dissertation Research</b>		<b>21</b>
PET 797	Research (18 credit hours required)	
SEP 765	Dissertation and Thesis Seminar (3 credit hours required)	
<b>Benchmarks</b>		
Qualifying Exam		
Comprehensive Exams		
Dissertation Proposal		
1st Research Paper Submitted		
2nd Research Paper Submitted		
Dissertation Defense & 3rd Research Paper Submitted (based on dissertation findings)		
Total Hours		60

## PERFORMANCE STANDARDS

Students who do not meet benchmarks would receive probation notification due to lack of progress at the end of the academic year with remediation required during the summer term. Failure to meet benchmark requirements beyond that point would result in suspension or dismissal from the program. Student research will be graded by the faculty each semester. Research and grades will be satisfactory or unsatisfactory (S/U).

## Major Learning Outcomes

### COACHING AND TEACHING STUDIES

Upon completion of the Ph.D., each graduate should:

1. Demonstrate a high level of competence in critically understanding the discipline of Coaching and Teaching Studies.
2. Establish a specific line of scholarship related to Coaching & Teaching Studies.
3. Demonstrate the capacity to conduct research in Coaching & Teaching Studies through the development, implementation and reporting of an extended piece of research work.
4. Demonstrate the capacity to write grant proposals, and to develop curriculum related to Coaching and Teaching Studies.
5. Apply and integrate academic frameworks, theories and understandings to develop and teach within programs in higher education and/or organizations related to coaching and teaching studies.

# Executive Sport Management, M.S.

## Degree Offered

- Master of Science

## Nature of the Program

Students have two options for completing a master's degree in sport management: 1) On-Campus and 2) Distance-Learning with Areas of Emphasis in either Comprehensive Sport Industry Management or Interscholastic Athletic Administration.

This Master of Science in Executive Sport Management program is also designed for individuals seeking employment and career advancement in the exciting, global industry of sport, but it is delivered entirely online. The program focuses on the most contemporary issues in sport management, and is delivered via online courses taught by faculty and industry professionals who are nationally and internationally recognized leaders in their fields. As a student, you will explore the latest research, industry trends, and recommendations for best practice, while also acquiring applied skills. Topics covered include profitability, diversity, legal issues, facilities, ethics and changing markets in sport. In addition to these core courses, students further specialize by selecting an area of emphasis.

The area of emphasis in Comprehensive Sport Industry Management includes a two-course sequence that provides students with additional preparation in sport management research and contemporary issues in sport business. This area of emphasis contributes to one's professional readiness to work across all sectors of the sport industry, including youth sport, collegiate and professional athletics, in either an introductory or advanced position within the job market.

The area of emphasis in Interscholastic Athletic Administration is designed for those individuals who are either currently working or would like to work as athletic directors or faculty managers at the middle or high school level. Students learn the roles, responsibilities, challenges and opportunities associated with a career in sport management, particularly within interscholastic athletic administration. This two-course sequence affords students the opportunity to further differentiate your plan of study and enhance marketability for employment in a range of youth sport settings. Completion of this area of emphasis is intended to prepare students to meet the requirements necessary to obtain the National Interscholastic Athletic Administrators Association (NIAAA) Registered Athletic Administrator (RAA) certification as well as the educational requirements necessary for the NIAAA Certified Athletic Administrator (CAA) certification.

## Admissions

These programs utilize the University GPA requirement (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) for entry to both programs.

Admissions criteria and processes are identical for both the Areas of Emphasis in Comprehensive Sport Industry Management and Interscholastic Athletic Administration. These criteria include:

- Resume: including any professional experiences in the sport industry
- Personal statement: 1-2 written pages on professional goals and reasons for seeking admission

Applications accepted on a rolling basis until May 1 (for summer start, middle of May), August 1 (for fall start, middle of August), and December 1 (spring start, early to mid January).

### Accelerated B.S./M.S. Sport Management

Students must complete an internal application for admission to the accelerated B.S./M.S. (ABM) program. Students may apply for regular admission to the ABM in SM program in the fall semester following the completion of 60 credits, but not later than the semester after which they have completed 95 credits. Only enrolled WVU SM majors may be considered for regular admission to the program. Transfer students must complete at least 24 credit hours as degree seeking students at WVU before applying. The minimum GPA requirement for regular admission into the ABM program is a GPA of 3.25 with no provisional admissions allowed. Regular admission will not be offered to students with less than two semesters to complete the bachelor's degree. The ABM in SM program is not available to students seeking a second (or subsequent) bachelor's degree. Internal application is due by October 15 with program admissions decisions communicated by December 15. Applications will be reviewed by a faculty work group and presented to the program faculty for a final admissions decision.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Online Major Code: 5544

## Degree Requirements: Distance Education Program

Code	Title	Hours
SM 527	Legal Issues in Sport Administration (Online)	3
SM 535	Sport Management Processes	3
SM 540	International Sport Governance (Online)	3
SM 546	Sport Marketing	3
SM 570	Sport Finance	3
SM 575	Fund-Raising and Development (Online)	3
SM 580	Sociocultural and Ethical Dimensions of Sport (Online)	3
SM 586	Facility Planning and Management	3
<b>Area of Emphasis</b>		<b>6</b>
Sport Industry Management		
Interscholastic Athletic Administrator		
Total Hours		30

\*

SM 685 may be substitute for any of the above courses for three credits with approval.

## Areas of Emphasis

- Interscholastic Athletic Administrator (p. 179)
- Sport Industry Management (p. 179)

## Interscholastic Athletic Administrator Area of Emphasis

Code	Title	Hours
<b>All courses will need to be completed with a grade of C- or better.</b>		
SM 571	Interscholastic Sport Organization and Administration	3
SM 578	Leadership in Interscholastic Athletic Administration	3
Total Hours		6

\*

This program can be started in any semester, but the starting point will impact the order in which classes are taken.

## Sport Industry Management Area of Emphasis

Code	Title	Hours
<b>All courses will need to be completed with a grade of C- or better.</b>		
SM 516	Sport Marketing Research Methods	3
SM 545	Current Issues & Applications in Sport Management	3
Total Hours		6

\*

This program can be started in any semester, but the starting point will impact the order in which classes are taken.

## Accelerated Programs

- B.S. Sport and Exercise Psychology and M.S. Sport Management
- B.S. Sport Management and M.S. Sport Management

## Accelerated Bachelors/Masters Degree Requirements

Code	Title	Hours
University Requirements		44
Sport and Exercise Psychology Program Requirements		13
Sport and Exercise Psychology Major Requirements		51

Master of Science Sport Management Requirements	30
Total Hours	138

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 3, 5, 6 and 7		18
PASS 191	First-Year Seminar	2
General Electives		24
Total Hours		44

## Sport and Exercise Psychology Program Requirements

Code	Title	Hours
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 2)	4
PSYC 101	Introduction to Psychology *	3
SOC 101	Introduction to Sociology	3
<b>Sociology (SOCA) 200-400 Level Elective</b>		<b>3</b>
Total Hours		13

## Sport and Exercise Psychology Major Requirements

Code	Title	Hours
ACE 256	Principles and Problems of Coaching	3
COUN 303	Introduction to Helping Professions	3
EXPH 365	Exercise Physiology 1	3
PASS 300	Career Exploration in Physical Activity and Sport Sciences	3
PET 124	Human Body: Structure and Function	2
PET 125	Principles of Human Movement	2
PET 175	Motor Development	2
PSYC 241	Introduction to Human Development (GEF 8)	3
PSYC 251	Introduction to Social Psychology (GEF 8)	3
PSYC 281	Introduction to Abnormal Psychology	3
SEP 271	Sport in American Society (GEF 8) *	3
SEP 272	Psychological Perspectives of Sport (GEF 4) *	3
SEP 383	Exercise Psychology	3
SEP 385	Social Psychology of Sport	3
SEP 420	Sport Performance Enhancement	3
SEP 425	Psychological Aspects of Sport Injury	3
Select one of the following:		3
PASS 489	Capstone Experience in PASS	
SEP 474	Sport Studies Research Methods	
Select one of the following:		3
PASS 359	Mindfulness for Health and Well-being	
SEP 415	Physical Activity Promotion in Diverse Settings	
SEP 430	Cross Cultural Perspectives in Sport Psychology	
SEP 493	Special Topics	
Total Hours		51

## Master of Science in Sport Management Requirements

Code	Title	Hours
Minimum overall GPA of 3.0 or higher required.		
A grade of C or higher must be earned in all major courses		
<b>Core Coursework</b>		
SM 527	Legal Issues in Sport Administration	3
SM 575	Fund-Raising and Development	3
SM 535	Sport Management Processes	3
SM 546	Sport Marketing	3
SM 570	Sport Finance	3
SM 580	Sociocultural and Ethical Dimensions of Sport	3
SM 540	International Sport Governance	3
SM 516	Sport Marketing Research Methods	3
or SM 571	Interscholastic Sport Organization and Administration	
SM 590	Teaching Practicum	3
or SM 578	Leadership in Interscholastic Athletic Administration	
SM 586	Facility Planning and Management	3
Total Hours		30

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)		3 BIOL 102 & 102L (GEF 2)	4
PSYC 101		3 SEP 271 or 272 (GEF 8)	3
SEP 272 or 271 (GEF 4)		3 GEF 5	3
GEF 6		3 PET 124	2
PASS 191		2 ENGL 102	3
		14	15

### Second Year

Fall	Hours	Spring	Hours
ACE 256		3 PET 175	2
GEF 3		3 GEF 7	3
PSYC 241		3 Elective or Minor Course	9
PET 125		2 PSYC 251	3
SOC 101		3	
		14	17

### Third Year

Fall	Hours	Spring	Hours	Summer	Hours
COUN 303		3 EXPH 365		3 SM 535	3
SEP 383		3 SEP 385		3 SM 586	3
PASS 300		3 SM 570		3	
Sociology Elective 200-Level		3 SM 580		3	
PSYC 281		3 Elective or Minor Course		3	
		15		15	6

### Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
SEP 415		3 SEP 474		3 SM 527	3
SEP 420		3 SEP 425		3 SM 540	3
SM 516 or 571		3 SM 546		3	

SM 590 or 578	3 SM 575	3	
Elective or Minor Course	6 Elective or Minor Course	6	
	18	18	6

Total credit hours: 138

## Accelerated B.S./M.S. Degree Requirements

### DEGREE REQUIREMENTS

Code	Title	Hours
University Requirements		39
Sport Management Major Requirements		69
M.S. Sport Management Degree Requirements		30
Total Hours		138

### UNIVERSITY REQUIREMENTS

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, and 6		15
PASS 191	First-Year Seminar	2
General Electives		22
Total Hours		39

### SPORT MANAGEMENT MAJOR REQUIREMENTS

Code	Title	Hours
A grade of C- or higher must be earned in all courses unless otherwise noted.		
A minimum GPA of 2.5 is required in all courses.		
ACCT 201	Principles of Accounting 1	3
BCOR 350	Principles of Marketing	3
BCOR 370	Principles of Management	3
Select one of the following (GEF 8):		3
COMM 102	Fundamentals of Interpersonal Communication	
COMM 104	Fundamentals of Public Communication	
COMM 306	Organizational Communication	3
CS 101	Intro to Computer Applications (GEF 2)	4
ECON 200	Survey of Economics	3
or ECON 201	Principles of Microeconomics	
ENGL 101	Introduction to Composition and Rhetoric (GEF 1)	3
MDIA 101	Media and Society (GEF 4)	3
PR 215	Introduction to Public Relations	3
SEP 271	Sport in American Society (GEF 8)	3
SEP 272	Psychological Perspectives of Sport (GEF 8)	3
SM 167	Introduction to Sport Management (B- or higher)	3
SM 340	Sport Governance	3
SM 345	Technology in Sport Management	2
SM 350	Leadership Theory and Application in Sport	2
SM 355	Orientation in Sport Management	1
SM 375	Sport in the Global Market (GEF 7)	3
SM 387	Contemporary Issues in Sport Management	3
SM 425	Sport Facility Management	3
SM 486	Sport Marketing & Sales	3
SM 491	Professional Field Experience	3

Advisor Approved Electives	6
Total Hours	69

## M.S. SPORT MANAGEMENT DEGREE REQUIREMENTS

Code	Title	Hours
Minimum overall GPA of 3.0 or higher required.		
SM 516	Sport Marketing Research Methods	3
SM 527	Legal Issues in Sport Administration	3
SM 535	Sport Management Processes	3
SM 540	International Sport Governance	3
SM 546	Sport Marketing	3
SM 570	Sport Finance	3
SM 575	Fund-Raising and Development	3
SM 580	Sociocultural and Ethical Dimensions of Sport	3
SM 586	Facility Planning and Management	3
SM 590	Teaching Practicum	3
Total Hours		30

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)		3 CS 101 (GEF 2)	4
Select one of the following:		3 ACCT 201	3
COMM 102		PR 215	3
COMM 104		SEP 271	3
MDIA 101		3 GEF 5	3
SM 167		3	
PASS 191		2	
GEF 6		3	
		17	16

### Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 BCOR 350 or 370	3
Select one of the following (GEF 3):		3 ECON 200 or 201	3
MATH 121		SM 350	3
MATH 124		SM 355	1
COMM 306		3 Industry Approved Elective	3
SEP 272 (GEF 8)		3 Elective or Minor Course	3
GEF 2		3	
		15	16

### Third Year

Fall	Hours	Spring	Hours	Summer	Hours
BCOR 370 or 350		3 SM 375 (GEF 7)		3 SM 516	3
SM 340		3 SM 486		3 SM 586	3
SM 345		2 Industry Approved Elective		3 SM 590	1
SM 425		3 Elective or Minor Course		6 Elective or Minor Course	2
Elective or Minor Course		3			
		14		15	9

**Fourth Year**

Fall	Hours	Spring	Hours	Summer	Hours
SM 387		3 SM 527		3 SM 535	3
SM 491		3 SM 540		3 SM 570	3
SM 546		3 SM 590		1 SM 580	3
SM 575		3 Elective or Minor Courses		8	
SM 590		1			
		13		15	9

Total credit hours: 139

## Program Learning Outcomes

### SPORT MANAGEMENT

The goal of the program is for students to graduate with the essential skills and knowledge necessary to prepare them for immediately entry into a career in the field of sport management.

- **Professional Knowledge** - Understand advanced disciplinary knowledge and the primary modes of inquiry that form the basis for evidence-informed practice in their field.
- **Professional Practice** - Apply evidence-informed strategies in their professional practice to meet the differentiated needs of the client groups and key stakeholders whom they serve.
- **Professional Leadership** - Contribute to the leadership of communities of professional practice as collaborative learners who can facilitate their own continued development and that of others.

## Physical Education Teacher Education, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The Master of Science in Physical Education Teacher Education (delivered online) is designed for success-oriented professional learners who aspire to further their career advancement. The curriculum is aligned with the advanced teaching standards (Professional Knowledge, Practice and Leadership) from the Society of Health and Physical Educators (SHAPE). The program develops advanced teacher candidates in three areas: Professional Knowledge, Practice, and Leadership. The four guiding principles that underlie these standards include (1) Focus on learning rather than teaching; (2) Development of integrated knowledge base; (3) Importance of systematic inquiry; and (4) Role of teachers as leaders in schools.

The Physical Education Teacher Education program offers a unique combination of professional courses and advanced labs. Professional courses are followed by advanced lab experiences allowing for the timely application of the knowledge and skills learned in K-12 school settings. Across the curriculum, students evaluate their own teaching effectiveness using research-informed methods to further extend their understanding of school physical activity and physical education. The ultimate measure of student learning remains its positive impact on youth in the schools and communities in which they serve. Please note that despite its emphasis on practical application, this is not an initial licensure program in physical education. Individual states and districts, however, may provide an endorsement for certified teachers upon completion. We highly encourage students to discuss this option with their employer before enrolling.

### Admissions

#### M.S. PHYSICAL EDUCATION TEACHER EDUCATION

Required criteria for PETE program admission include the following:

1. Resume: highlighting professional background, experience, and qualifications
2. Personal statement: 1-2 written pages on professional goals and reasons for seeking admission

Note: Students who do not meet the 2.75 grade point average requirement may be admitted as a provisional graduate student only if their GPA is between 2.50 and 2.75. Provisional graduate students are required to attain a 3.0 GPA in their first 9 hours of adviser approved course work in order to remain in the program and to be reclassified as a regular graduate student.

No more than twelve graduate hours may be taken toward the master's degree as a non-degree seeking graduate student.



Applications are accepted on a rolling basis until August 1st for a fall term start, December 15th for a spring term start, and May 1st for a summer term start.

## ACCELERATED B.S./M.S. PHYSICAL EDUCATION TEACHER EDUCATION

Students must complete an internal application for admission to the accelerated B.S./M.S. (ABM) program. Students may apply for regular admission to the ABM in PETE in the fall semester following the completion of 60 credits. Only enrolled WVU PEK majors may be considered for regular admission to the program. Transfer students must complete at least 24 credit hours as degree-seeking students at WVU before applying. The minimum GPA requirement for regular admission is a GPA of 3.0, with no provisional admissions allowed. Additional criteria include acceptable performance on the Praxis Core Exam and the program's Professionalism Assessment, used to monitor undergraduate student dispositions each semester in the major by a designated faculty member. Regular admission will not be offered to students with less than 2 semesters to complete the bachelor's degree. The ABM in PETE is not available to students seeking a second (or subsequent) bachelor's degree. The internal application is due by October 1 with program admissions decisions communicated by December 15. Applications will be reviewed by a three-member work group and presented to the program faculty for a final admissions decision.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5531

## Degree Requirements

Code	Title	Hours
PET 515	Research Methodology in Physical Education	3
PET 545	Standards-Based Assessment in Physical Education	3
PET 565	Curriculum in Physical Education	3
PET 573	Instructional Technology in Sport and Physical Education	2
PET 574	Curriculum in Physical Education - Advanced Laboratory	2
PET 575	Effective Teaching in Physical Education - Advanced Laboratory	2
PET 576	Motor Development for Special Populations - Advanced Laboratory	2
PET 577	School Physical Activity and Technology - Advanced Laboratory	2
PET 580	School Physical Activity	3
PET 581	Motor Development in Special Populations	3
PET 583	Principles of Effective Teaching	3
PET 585	Physical Education Supervision and Advocacy	2
Total Hours		30

## SUGGESTED PLAN OF STUDY

First Semester	Hours
PET 565	3
PET 574	2
	5
Second Semester	Hours
PET 515	3
PET 585	2
	5
Third Semester	Hours
PET 580	3
PET 577	2
	5
Fourth Semester	Hours
PET 581	3
PET 576	2
	5
Fifth Semester	Hours
PET 545	3

PET 573	2
	5
<b>Sixth Semester</b>	<b>Hours</b>
PET 583	3
PET 575	2
	5

Total credit hours: 30

## Accelerated Program

- B.S. Physical Activity and Kinesiology and M.S. Physical Education Teacher Education

## Accelerated B.S./M.S. Degree Requirements

### DEGREE REQUIREMENTS

Code	Title	Hours
University Requirements		30
Physical Education and Kinesiology Major Requirements		82
M.S. Physical Education Teacher Education Degree Requirements		26
Total Hours		138

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 6, 7, and 8		28
PASS 191	First-Year Seminar	2
Total Hours		30

## Physical Education and Kinesiology Major Requirements

Code	Title	Hours
<b>Foundations</b>		<b>16</b>
PET 101	Games in American Culture (GEF 5; C- or higher required)	
PET 124	Human Body: Structure and Function (C- or higher required)	
PET 125	Principles of Human Movement (C- or higher required)	
PET 167	Introduction to Physical Education (C- or higher required)	
PET 175	Motor Development (C- or higher required)	
PET 244	Motor Learning and Performance (C- or higher required)	
PET 276	Special Physical Education (C- or higher required)	
<b>PEK CORE Block *</b>		<b>54</b>
<b>All students must earn a minimum grade of C- required in all PET and PASS CORE Block courses.</b>		
<b>And all students must maintain a minimum GPA of 2.5 or higher each semester.</b>		
PET 228	Curriculum in Physical Education (Fulfills Writing and Communication Skills Requirement)	
PET 233	Pedagogy Theory and Application	
PET 346	Teaching Physical Activities 1	
PET 347	Teaching Physical Activities 2	
PET 349	Health-Optimizing Physical Education	
PET 350	Teaching Primary Physical Education	
PET 369	Teaching K-2 Physical Education	
PET 379	Teaching 3-5 Physical Education	
PET 441	Technology in Physical Education	
PET 447	Teaching Physical Activities 3 (Fulfills Writing and Communication Skills)	
PET 449	Teaching Physical Activities 4	
PET 477	Adapted Physical Education Practicum	

EXPH 365	Exercise Physiology 1
RDNG 422	Reading in the Content Areas
SPED 304	Special Education in Contemporary Society (GEF 4)
PET 401	Foundations of Health Education
PET 402	Core Concepts in Health Education
PET 403	Program Design, Implementation, and Evaluation for Health Educators
<b>Capstone Experience</b>	
Students complete one of the following tracks:	
<b>Track 1 Physical Education Teaching **</b>	
PET 587	Student Teaching: K-5 Physical Education
PET 588	Student Teaching: 6-12 Physical Education
PET 589	Student Teaching Seminar
<b>Track 2 Sport Pedagogy ****</b>	
PET 491	Professional Field Experience
Total Hours	

82

## M.S. PHYSICAL EDUCATION TEACHER EDUCATION DEGREE REQUIREMENTS

Code	Title	Hours
Minimum cumulative GPA of 3.0 is required.		
PET 515	Research Methodology in Physical Education	3
PET 545	Standards-Based Assessment in Physical Education	3
PET 565	Curriculum in Physical Education	3
PET 573	Instructional Technology in Sport and Physical Education	2
Select one of the following:		4
PET 574 & PET 577	Curriculum in Physical Education - Advanced Laboratory and School Physical Activity and Technology - Advanced Laboratory	
PET 575 & PET 576	Effective Teaching in Physical Education - Advanced Laboratory and Motor Development for Special Populations - Advanced Laboratory	
PET 581	Motor Development in Special Populations	3
PET 583	Principles of Effective Teaching	3
PET 580	School Physical Activity	3
PET 585	Physical Education Supervision and Advocacy	2
Total Hours		26

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
PET 101		3 PET 125	2
PET 124		2 PET 244	2
PET 167		3 GEF 3	3
ENGL 101 (GEF 1)		3 GEF 7	3
PASS 191		2 GEF 8	3
GEF 6		3 GEF 8	3
		16	16

### Second Year

Fall	Hours	Spring	Hours
PET 175		2 PET 228	3
PET 276		2 PET 233	4
ENGL 102 (GEF 1)		3 PET 349	3
SPED 304		3 EXPH 365	3
GEF 2		4 PET 403	3
		14	16

**Third Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
PET 350		2 PET 346		3 PET 545	3
PET 369		3 PET 347		3 PET 565 or 581	3
PET 379		3 PET 441		3 PET 573	2
RDNG 422		3 PET 402		3	
PET 401		3 PET 576 or 574		2	
		PET 581 or 565		3	
		14		17	8

**Fourth Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
PET 447		3 PET 587 or CI 491		5 PET 515	3
PET 449		3 PET 588 or CI 491		5 PET 580 or 583	3
PET 477		3 PET 589 or CI 491		2 PET 585	2
PET 575 or 577		2			
PET 583 or 580		3			
GEF 8		3			
		17		12	8

Total credit hours: 138

## Major Learning Outcomes

### PHYSICAL EDUCATION TEACHER EDUCATION

Following the completion of this program, graduates will be able to:

- Understand advanced disciplinary knowledge and the primary modes of inquiry that form the basis for evidence-informed practice in their field. (Professional Knowledge)
- Apply evidence-informed strategies in their professional practice to meet the differentiated needs of the client groups and key stakeholders whom they serve. (Professional Practice)
- Contribute to the leadership of communities of professional practice as collaborative learners who can facilitate their own continued development and that of others. (Professional Leadership)

## Sport Coaching, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The Master of Science in Sport Coaching (delivered online) prepares students to be lifelong learner who can adapt professional practices to meet the changing needs of today's athletes. Students in our program learn by applying the latest recommendations for best practice to their own coaching. This program is perfect for professional learners who have a coaching placement at the collegiate, scholastic, club or community level. The Sport Coaching curriculum is aligned with the International Council for Coaching Excellence (ICCE) Sport Coaching Framework. This multi-dimensional framework outlines the fundamental competencies that sport coaches must master to facilitate the peak development of their athletes and teams. Attention is also paid to strategies for protecting and maintaining the personal well-being for the coach both in- and out-of-season.

Our holistic approach to coaching centers on training the whole athlete physically, mentally, and technically while developing their interpersonal and life skills off the field. The program provides students with a variety of classes to enhance current practices and to support aspirational coaching opportunities. The standards-based curriculum addresses the following essential content areas: professional knowledge, applied sport science, pedagogy and content, and leadership development. All courses are designed to build relationships with faculty and peers, grow professional networks, and advance student careers in coaching.

## Admissions

### CRITERIA

- Resume: including coaching background, sport participation, sport-related awards, and employment and/or experience (e.g., athletic administration, officiating, volunteering)
- Personal statement: 1-2 pages on professional goals and reasons for seeking admission

Note: Students who do not meet the 2.75 grade point average requirement may be admitted as a provisional graduate student only if their GPA is between 2.50 and 2.75. Provisionally admitted students are required to attain a 3.0 GPA in their first 9 hours of adviser approved course work in order to remain in the program and to be reclassified as a regular graduate student.

No more than twelve graduate hours may be taken toward the master's degree as a non-degree seeking graduate student.

Applications for admission are accepted on a rolling basis until August 1st for a fall term start, December 15th for a spring term start, and May 1st for a summer term start.

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5529

### Degree Requirements

Code	Title	Hours
Student must complete a total of 30 credits across the three areas in the ICCE Framework.		
<b>Intrapersonal Knowledge</b>		
ACE 508	The Sport Coaching Profession (New Title: The Sport Coaching Profession)	3
<b>Interpersonal Knowledge</b>		
ACE 585	Applied Professional Development (New Title: Applied Professional Development)	3
<b>Professional Knowledge</b>		
Pedagogy and Context		6
ACE 518	Psychology of Coaching	
ACE 522	Motor Behavior for Sport Coaches	
ACE 539	Creating a Healthy Competitive Environment	
ACE 541	Positive Youth Development in Sport	
Applied Sport Science		6
ACE 510	Training Theories for Coaches	
ACE 568	Sport Movement Analysis	
ACE 569	Strength and Conditioning Methods for Coaches	
Leadership Development		6
ACE 530	Coaching Education Administration	
SM 535	Sport Management Processes	
SM 571	Interscholastic Sport Organization and Administration	
SM 578	Leadership in Interscholastic Athletic Administration	
<b>Additional Coursework *</b>		<b>6</b>
ACE 518	Psychology of Coaching	
ACE 522	Motor Behavior for Sport Coaches	
ACE 539	Creating a Healthy Competitive Environment	
ACE 541	Positive Youth Development in Sport	
ACE 510	Training Theories for Coaches	
ACE 568	Sport Movement Analysis	
ACE 569	Strength and Conditioning Methods for Coaches	
ACE 530	Coaching Education Administration	
SM 535	Sport Management Processes	
SM 571	Interscholastic Sport Organization and Administration	

SM 578	Leadership in Interscholastic Athletic Administration	
Total Hours		30

\*

Additional coursework cannot be fulfilled by courses already completed in Pedagogy and Context, Applied Sport Science, or Leadership Development content areas.

## SUGGESTED PLAN OF STUDY

<b>First Semester</b>	<b>Hours</b>	
ACE 508	3	
ACE 541	3	
	6	
<b>Second Semester</b>	<b>Hours</b>	
ACE 568	3	
ACE 510	3	
	6	
<b>Third Semester</b>	<b>Hours</b>	
SM 535	3	
ACE 522	3	
	6	
<b>Fourth Semester</b>	<b>Hours</b>	
SM 571	3	
SM 578	3	
	6	
<b>Fifth Semester</b>	<b>Hours</b>	
ACE 518	3	
ACE 585	3	
	6	

Total credit hours: 30

## Major Learning Outcomes

### SPORT COACHING

The goal of the program is for students to graduate with the essential skills and knowledge to work with athletes in a variety of contexts across their lifetime.

- 1.Content Knowledge** – Students will demonstrate an understanding of and the ability to synthesize and apply Professional Knowledge, Interpersonal Knowledge, and Intrapersonal Knowledge through the use of best practices related to athlete development and sport coaching.
- 2.Reflection and Critical Thinking** – Students will develop and utilize critical thinking skills as they refine their professional practice and promote lifelong athlete development.
- 3.Professionalism and Ethics** – Students will model leadership competencies including ethical practices representative of professional conduct.

## Sport, Exercise and Performance Psychology, M.S., Ph.D.

### Degree Offered

- Master of Science
- Doctor of Philosophy

### Nature of the Program

The Ph.D. program in Sport, Exercise, and Performance Psychology at WVU is recognized as among the premier training programs in the discipline globally. To train highly competent and well-rounded future professionals, this program provides students with a comprehensive experience that combines academic rigor, extensive engagement in research and teaching, and opportunities in applied practice settings. Students work with our nationally- and internationally-recognized faculty to make meaningful contributions to the science and practice of the field.

Importantly, plans of study are uniquely designed in collaboration with each student to meet their unique needs toward a range of career goals, including those in research, teaching, and applied practice. Beyond coursework, students in this program complete several benchmarks in research leading to the dissertation and garner experience in teaching, often as the primary instructor. Students may choose to additionally engage in supervised applied experiences in a range of sport, exercise, and performance settings toward credentialing in mental performance consulting. For students further interested in applied practice, a concurrent completion of a master's degree in Clinical Mental Health Counseling is an option that qualifies them to sit for counseling licensure upon graduation. Alternatively, students may opt to place greater emphasis on research output and teaching experience to prepare for a career in higher education or another setting. Unique to students admitted to the Ph.D. program with a baccalaureate degree, a M.S. in Sport, Exercise, and Performance Psychology is completed concurrently with their doctorate.

## Admissions

Applicants can seek admission to the doctoral program in Sport, Exercise and Performance Psychology with either a baccalaureate degree or master's degree [Note: The M.S. program in Sport, Exercise, and Performance Psychology does not offer direct admission at this time]. To be considered for admission, applicants must upload the following documentation within the graduate application:

- Resume or curriculum vitae
- Transcripts from all previous institutions. This program utilizes the University GPA requirement (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) for entry to the program.
- Official GRE scores
- Personal statement (1-2 written pages on professional background, goals, reasons for pursuing doctoral degree at WVU, and rationale for potential faculty advisor)
- Letters of recommendation (2)

You will not be able to submit your application until the above documents are uploaded. Once the application is submitted and (unofficial/official) transcripts are received, your application will be reviewed for an admission decision. International applicants will not be reviewed with unofficial transcripts.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MS Major Code: 5534

PhD Major Code: 5540

For specific information on the following program please see the link to the right:

- Sport, Exercise and Performance Psychology, M.S.

For specific information on the following program please see the link to the right:

- Sport, Exercise and Performance Psychology, Ph.D.

## Sport, Exercise and Performance Psychology, M.S.

### Degree Requirements

There are no direct admissions into the M.S. in Sport, Exercise, and Performance Psychology. Students who are accepted into the Ph.D. program in Sport, Exercise, and Performance Psychology are eligible to receive the M.S. degree upon completing the course requirements described below. In addition to these course requirements, students will work with their faculty advisor to conduct a thesis project as an initial step in developing an independent line of research at the doctoral level.

Code	Title	Hours
A minimum grade of B- is required unless otherwise noted.		
<b>Disciplinary Core *</b>		<b>12</b>
Select 12 credits from the courses listed below:		
SEP 640	Sport and Performance Psychology	
SEP 719	Social and Psychological Foundations of Performance	
SEP 720	Psychological Sport Performance Enhancement	
SEP 721	Counseling College Student-Athletes	
SEP 722	Exercise and Health Psychology	
SEP 723	Psychological Aspects of Sport Injury	

SEP 727	Ethical/Legal Issues in sport Psychology	
SEP 793	Special Topics (3 to 6 credits)	
<b>Counseling Core *</b>		<b>12</b>
Select 12 credits from the courses listed below:		
COUN 501	Counseling Theory and Techniques 1	
COUN 606	Counseling Theory and Techniques 2	
COUN 609	Group Counseling Theory and Techniques	
COUN 622	Introduction to Clinical Mental Health	
COUN 630	Children/Adolescents/Parents	
COUN 634	Cultural Issues	
COUN 640	Addictions Counseling	
COUN 664	Ethical Issues in Counseling	
COUN 668	Crisis Trauma Grief Counseling	
<b>Research Practice Core</b>		
SEP 615	Research Methodology in Physical Education	3
SEP 697	Research	6
SEP 765	Dissertation and Thesis Seminar	3
Thesis Proposal		
Thesis Defense		
ETD Submission and Approval		
Total Hours		36

\*

Coursework will be selected in consultation with student's graduate coordinator or advisor and according to the Plan of Study.

## PERFORMANCE STANDARDS

Student research will be graded by program faculty each semester. Research grades will be awarded satisfactory or unsatisfactory (S/U). Additionally, graduate student performance will be evaluated annually. Students who do not meet their research requirements by the prescribed deadlines could receive probation notification due to lack of progress. Failure to meet research requirements beyond that point could result in suspension or dismissal from the program.

## Major Learning Outcomes

### SPORT, EXERCISE, AND PERFORMANCE PSYCHOLOGY

Following the completion of this program, graduates will be able to:

- Understand advanced disciplinary knowledge and the primary modes of inquiry that form the basis for evidence-informed practice in their field. (Professional Knowledge)
- Apply evidence-informed strategies in their professional practice to meet the differentiated needs of the client groups and key stakeholders whom they serve. (Professional Practice)
- Contribute to the leadership of communities of professional practice as collaborative learners who can facilitate their own continued development and that of others. (Professional Leadership)

## Sport, Exercise and Performance Psychology, Ph.D.

### Degree Requirements

For the Ph.D. in Sport, Exercise, and Performance Psychology, students will work directly with their plan of study committee to determine the specific courses included. Doctoral plans of study are differentiated based on the student's academic background, work experience, research interests, and career goals. Students must also complete a series of research benchmarks beyond the required coursework: essential readings, qualifying project, dissertation proposal and defense, and multiple peer-reviewed manuscript submissions and/or presentations. It is expected that all students will meet their respective research benchmarks in accordance with the timelines described by their doctoral advisor (chair) and plan of study committee.



## Curriculum Requirements

Code	Title	Hours
A minimum grade of B- is required unless otherwise noted.		
<b>Disciplinary Core</b>		<b>9</b>
Select three of the following:		
SEP 640	Sport and Performance Psychology	
SEP 719	Social and Psychological Foundations of Performance	
SEP 720	Psychological Sport Performance Enhancement	
SEP 721	Counseling College Student-Athletes	
SEP 722	Exercise and Health Psychology	
SEP 723	Psychological Aspects of Sport Injury	
SEP 727	Ethical/Legal Issues in sport Psychology	
SEP 793	Special Topics (3 to 6 credits)	
<b>Professional Practice Core *</b>		<b>12</b>
SEP 647	Supervision Sport Psychology (Repeated; 3-9 credits)	
SEP 690	Teaching Practicum (Repeated; Required 3 to 6 credits)	
<b>Statistics and Research Design Disciplinary Core</b>		
SEP 615	Research Methodology in Physical Education	3
Select three of the following:		9
EDP 613	Statistical Methods 1	
EDP 614	Statistical Methods 2	
EDP 618	Mixing Research Methodologies	
EDP 619	Survey Research Methods	
EDP 711	Multivariate Methods 1	
SCFD 615	Qualitative Research Methods	
SCFD 715	Advanced Qualitative Research	
SEP 726	Advanced Measurement and Research in Physical Education	
<b>Research Practice Core</b>		
SEP 797	Research	9
SEP 765	Dissertation and Thesis Seminar	3
<b>Research Benchmarks</b>		
Complete essential readings as part of the plan of study process		
Submit a first-author, data-based manuscript for publication in a peer-reviewed journal **		
Submit a first-author, data-based or conceptual manuscript for publication in a peer-reviewed journal OR present a first-author data-based study at a national or international conference		
Submit a first-author, data-based manuscript for publication in a peer-reviewed journal as the Qualifying Project AND pass the Qualifying Project defense		
Pass dissertation proposal		
Pass dissertation defense and ETD submission and approval		
Submit a first-author, data-based manuscript for publication in a peer-reviewed journal based on the dissertation findings		
Total Hours		45

\*

SEP 647 repeated for 3 to 9 credits; SEP 690 repeated for 3 to 6 credits.

\*\*

A first-author data-based article submitted prior to the student's first year can count towards this benchmark only if the submission occurred after their official admission into the program and is approved by the doctoral chair as meeting minimum quality standards.

## Program Standards

Student research will be graded by program faculty each semester. Research grades will be awarded satisfactory or unsatisfactory (S/U). Additionally, doctoral student performance will be evaluated annually. Students who do not meet their research benchmarks by the prescribed deadlines could receive

probation notification due to lack of progress. Failure to meet benchmark requirements beyond that point could result in suspension or dismissal from the program.

## Major Learning Outcomes

### SPORT, EXERCISE AND PERFORMANCE PSYCHOLOGY PH.D.

Following the completion of this program, graduates will be able to:

- Adhere to the principles and standards for ethical research in the social sciences.
- Critique and synthesize the literature in their primary field of study for the purpose of identifying gaps in the knowledge base and formulating new research questions.
- Apply theories, methodologies, and data analysis approaches to answer research questions of conceptual significance.
- Demonstrate skills in oral and written communication enough to publish and present peer-reviewed research in their primary field of study.
- Initiate an independent line of research that represents a significant contribution to the literature base in their primary field of study.

## Sport Management, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

Students have two options for completing a master's degree in sport management: 1) On-Campus and 2) Distance-Learning with Areas of Emphasis in either Comprehensive Sport Industry Management or Interscholastic Athletic Administration.

The Master of Science in Sport Management prepares students to compete in the global job sport market as an industry leader. This 36-credit hour program is delivered on-campus and provides real-world training in a range of areas including sport marketing and finance, fund-raising and development, sponsorship and sales, NCAA compliance and more. Students maintain a variety of professional and career goals, so the curriculum is designed to provide them with a broad professional preparation in the sport management field. The plan of study also affords students with the opportunity to further specialize in one of two tracks: (1) Professional Track with a required internship, or (2) Thesis Track with a research component.

This Professional Track is developed for those students who are seeking entry into the sport management workplace immediately following degree completion. The internship requirement represents the signature feature of the Professional Track. Learning across a range of applied settings, the internship provides students with hands-on work experiences targeting knowledge and skill development that is unattainable in the traditional classroom, while also enhancing your job marketability. The Thesis Track is available for students who are considering doctoral level work in the future. Sport Management has continued to emerge as a popular area of study in colleges and universities across the world. The completion of a master's thesis remains an important benchmark for those students who aspire to faculty and/or research positions in higher education. The ability to effectively collect, manage, analyze, and interpret data also has implications for leaders of many non-profit organizations and sport associations.

## Admissions

These programs utilize the University GPA requirement (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) for entry to both programs.

### ON-CAMPUS

- Resume: including any professional experiences in the sport industry
- Personal statement: 1-2 written pages on professional goals and reasons for seeking admission (students interested in thesis track should describe their research interests)
- Letters of recommendation (2)

Apply by December 1 for priority consideration. Applications that are incomplete or are submitted after the deadline may be reviewed if openings remain. Admission is limited to a fall start only.

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

On campus Major Code: 5532

**Degree Requirements: Campus Program**

Code	Title	Hours
Minimum overall GPA of 3.0 or higher required.		
A grade of C or higher must be earned in all major courses		
<b>Core Coursework</b>		
SM 527	Legal Issues in Sport Administration	3
SM 575	Fund-Raising and Development	3
SM 535	Sport Management Processes	3
SM 546	Sport Marketing	3
SM 570	Sport Finance	3
SM 580	Sociocultural and Ethical Dimensions of Sport	3
SM 621	Sport Publicity/Public Relations	3
SM 630	Sport Sponsorship and Sales Management	3
SM 660	NCAA Compliance and Current Issues	3
<b>Select one of the following tracks:</b>		<b>9</b>
Traditional Track		
SM 516	Sport Marketing Research Methods	
SM 685	Internship in Sport Management	
Thesis Track *		
SEP 615	Research Methodology in Physical Education	
or SEP 726	Advanced Measurement and Research in Physical Education	
or EDP 613	Statistical Methods 1	
or SCFD 615	Qualitative Research Methods	
SM 697	Research	
Total Hours		36

\*

Students will substitute SM 516 (Research Methods in Sport Marketing) for SEP 615.

Students will also substitute any of the three-credit hour SM courses for one three-credit statistics (SEP 726 or EDP 613) or qualitative methods course (SCFD 615).

Students will substitute six credit hours of SM 686 of the internship for six credit hours of SM 698 Research (Master thesis).

**SUGGESTED PLAN OF STUDY: TRADITIONAL TRACK****First Year**

Fall	Hours	Spring	Hours	Summer	Hours	
SM 621		3 SM 630		3 SM 685		6
SM 580		3 SM 660		3		
SM 527		3 SM 516		3		
SM 546		3 SM 535		3		
SM 575		3 SM 570		3		
		15		15		6

Total credit hours: 36

**SUGGESTED PLAN OF STUDY: THESIS TRACK****First Year**

Fall	Hours	Spring	Hours	
SM 580		3 SM 630		3
SM 546		3 SM 660		3
SEP 615		3 SEP 726, EDP 613, or SCFD 615		3
		9		9

**Second Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
SM 527		3 SM 535	3
SM 575		3 SM 570	3
SM 697		3 SM 697	3
		9	9

Total credit hours: 36

## Major Learning Outcomes

### SPORT MANAGEMENT

**Professional Knowledge** - Understand advanced disciplinary knowledge and the primary modes of inquiry that form the basis for evidence-informed practice in their field.

**Professional Practice** - Apply evidence-informed strategies in their professional practice to meet the differentiated needs of the client groups and key stakeholders whom they serve.

**Professional Leadership** - Contribute to the leadership of communities of professional practice as collaborative learners who can facilitate their own continued development and that of others.

## Program Learning Outcomes

### SPORT MANAGEMENT

The goal of the program is for students to graduate with the essential skills and knowledge necessary to prepare them for immediately entry into a career in the field of sport management.

- **Professional Knowledge** - Understand advanced disciplinary knowledge and the primary modes of inquiry that form the basis for evidence-informed practice in their field.
- **Professional Practice** - Apply evidence-informed strategies in their professional practice to meet the differentiated needs of the client groups and key stakeholders whom they serve.
- **Professional Leadership** - Contribute to the leadership of communities of professional practice as collaborative learners who can facilitate their own continued development and that of others.

# Arts and Sciences- Eberly College of

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The Eberly College of Arts and Sciences, West Virginia University's largest college, has approximately 460 faculty in academic departments and program areas in the following: literature and the humanities, social and behavioral sciences, and mathematics and natural sciences. These departments occupy twelve buildings on the Downtown campus and include programs that lead to master's degrees in twenty fields and doctoral degrees in twelve fields. Many of the faculty have earned distinguished national and international reputations and have been honored for excellence in teaching, research, and service. Their awards not only acknowledge extreme dedication but also accentuate the relationship between the faculty and students. Graduate students often collaborate with faculty on specialized research projects which lead to publications in national and international journals.

## Degrees Offered

- Master of Science, Doctor of Philosophy in Biology
- Master of Science, Doctor of Philosophy in Chemistry
- Master of Arts, Doctor of Philosophy in Communication Studies
- Master of Arts in English, Professional Writing and Editing; Master of Fine Arts; Doctor of Philosophy in English
- Master of Arts in Linguistics, Teaching English to Speakers of Other Languages
- Master of Science, Doctor of Philosophy in Forensic Science
- Master of Arts, Doctor of Philosophy in Geography
- Master of Science, Doctor of Philosophy in Geology
- Master of Science in GIS and Spatial Analysis
- Master of Arts in History, Public History; Doctor of Philosophy in History
- Master of Legal Studies
- Master of Science, Doctor of Philosophy in Mathematics
- Master of Science, Doctor of Philosophy in Physics
- Master of Arts, Doctor of Philosophy in Political Science
- Master of Science in Psychology, Behavior Analysis; Doctor of Philosophy in Behavior Analysis, Behavioral Neuroscience, Clinical Psychology, Developmental Psychology
- Master of Public Administration
- Master of Social Work, Doctor of Philosophy in Social Work
- Master of Arts, Doctor of Philosophy in Sociology

The Eberly College of Arts and Sciences offers research or teaching concentrations as follows:

- Biology—ecology and evolutionary biology, forensic biology, genetics and genome biology, and neurobiology and endocrinology
- Chemistry—analytical, biological, inorganic, organic, and physical
- Communication studies—instructional, interpersonal, and organizational
- English—literature
- Geography—human geography, environmental geography, geographic information science
- Geology—energy geology, geophysics, hydrogeology, environmental geology
- History—United States (Appalachia), Europe, Africa, science, and technology
- Mathematics—selected areas of pure, applied, and discrete mathematics, and undergraduate mathematics education
- Physics—condensed matter, applied physics, plasma physics, astrophysics, electro-optics, elementary particle physics, and radio astronomy
- Political science—public policy analysis (domestic and international)
- Psychology—behavior analysis, behavioral neuroscience, clinical psychology, clinical child psychology, and developmental psychology
- Social Work—behavioral health, aging, child welfare, generalist practice and advanced integrated practice
- Sociology—crime, community, and culture

## EBERLY COLLEGE GRADUATE NON-DEGREE SEEKING STUDENTS:

Applicants who wish to pursue graduate level work in the Eberly College unrelated to pursuing a degree may apply to be a graduate non-degree student (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#applytext>). In addition to meeting the university requirements ([http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#Non-Degree\\_Graduate\\_Students](http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#Non-Degree_Graduate_Students)) for a graduate non-degree student, applicants should submit brief a statement indicating why they would like to enroll in graduate coursework in the Eberly College. Applicants should also demonstrate that they have approval to enroll in specific courses.

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## ADMINISTRATION

### DEAN

- R. Gregory Dunaway - Ph.D. (University of Cincinnati)

### ASSOCIATE DEANS

- Lupe Davidson - Ph.D. (Duquesne University)  
Associate Dean for Social Justice, Faculty Development and Innovation
- Valérie Lastinger - Ph.D. (University of Georgia)  
Associate Dean for Academic Affairs
- Asuntina S. Levelle - J.D. (West Virginia University)  
Associate Dean for Financial Planning and Management
- Duncan Lorimer - Ph.D. (University of Manchester)  
Associate Dean for Research

### ASSISTANT DEANS

- Andrea Bebell - Ph.D. (West Virginia University)  
Assistant Dean of Undergraduate Student Services & Programs
- Jessica M. Deshler - Ph.D. (University of New Mexico)  
Interim Assistant Dean for Graduate Studies
- John Navaratnam - Ph.D. Biology (West Virginia University)  
Assistant Dean for Curriculum and Assessment

## Accreditation

The Master of Science in Forensic & Investigative Science within the Eberly College of Arts and Sciences has specialized accreditation through the Forensic Science Education Programs Accreditation Commission of the American Academy of Forensic Science.

The Doctor of Philosophy in Clinical/Clinical Child Psychology within the Eberly College of Arts and Sciences has specialized accreditation from the American Psychological Association. The Doctor of Philosophy in Behavior Analysis Psychology within the Eberly College of Arts and Sciences has specialized accreditation from the Association for Behavior Analysis International.

The Master of Public Administration within the Eberly College of Arts and Sciences has specialized accreditation through the Commission on Peer Review & Accreditation, Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

The Master of Social Work within the Eberly College of Arts and Sciences is accredited by the Council on Social Work Education.

## Certificate Programs

- Applied Statistics (p. 198)
- Community Development Policy and Practice (p. 218)
- Cultural Resource Management (p. 221)
- Healthcare Administration (p. 258)
- Leadership (p. 268)
- Linguistics (p. 273)
- Quantitative & Qualitative Social Science Research Methods (p. 314)
- Spanish (p. 335)
- Teaching English to Speakers of Other Languages (p. 344)
- Women's and Gender Studies (p. 345)

## Applied Statistics

### Certificate Offered

- Applied Statistics

### Nature of the Program

The Department of Statistics offers a Certificate in Applied Statistics for professionals or students who want to take applied statistics courses to enhance their quantitative skills and job opportunities. Because many students receive baccalaureate degrees from colleges that do not offer undergraduate

programs in statistics, and because historically statistics has been primarily a field of graduate education, a student does not need a degree in statistics to enter the certificate program. A background in mathematics, science, or engineering is reasonable preparation for graduate work in statistics.

## FACULTY

### ASSOCIATE DIRECTOR

- Kenneth J. Ryan

### PROFESSOR

- Kenneth J. Ryan - Ph.D. (Iowa State University)  
Statistical Machine Learning, Experimental Design

### ASSISTANT PROFESSORS

- Ryan T. Hansen - Ph.D. (West Virginia University)  
Combinatorics, Graph Theory
- Mihyun Kim - Ph.D. (Colorado State University)  
Functional Data Analysis, Functional Time Series, Extreme Value Analysis
- Jason A. Palmer - Ph.D. (University of California San Diego)  
Statistical Signal Processing, Machine Learning, Non-Gaussian Linear Models
- Youngseok Song - Ph.D. (Colorado State University)  
Statistical Network Analysis, Graphical Models, Large-Scale Inference, Robust Learning

### LECTURERS

- Theresa E. Boots - M.S. (West Virginia University)  
Statistics
- Jad Ramadan - M.S. (West Virginia University)  
Statistics
- Samantha K. Service - M.S. (West Virginia University)  
Statistics
- John N. Twist - Ph.D. (Rutgers University)  
Applied Statistics, Pharmaceutical Science

### PROFESSOR EMERITUS

- Erdogan Gunel - Ph.D. (State University of New York, Buffalo)  
Bayesian Inference, Biostatistics, Categorical Data Analysis

### ASSOCIATE PROFESSORS EMERITI

- Daniel M. Chilko - M.S. (Rutgers University)  
Statistical Computing, Computer Graphics
- Gerald R. Hobbs Jr. - Ph.D. (Kansas State University)  
Biostatistics, Nonparametric Statistics, Regression Analysis

## Admissions

### GRADUATE CERTIFICATE IN APPLIED STATISTICS

Students who are currently admitted to or enrolled in a graduate degree program and want to earn the Certificate in Applied Statistics (CAS) should contact the Associate Director for Statistics to enroll in the certificate program. Applicants must meet WVU's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationstext>). The GRE is not required for admission to this program.

All students must have successfully completed College Algebra. Single and Multi-variable Calculus are recommended.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Curriculum Vitae or Resume.
- A one page (250 word) personal statement that describes the applicant's interest in the certificate program.

**International Applicants:**

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

**Application Deadline:**

- The Certificate in Applied Statistics program admits students on a rolling basis.

For additional questions, please contact [stat@mail.wvu.edu](mailto:stat@mail.wvu.edu)

**ADMISSION REQUIREMENTS 2024-2025**

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: CG29

**Certificate in Applied Statistics****CERTIFICATE CODE - CG29**

Graduation requirement: Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the certificate.

Code	Title	Hours
<b>CORE COURSES</b>		<b>6</b>
STAT 512	Statistical Methods 2	
STAT 513	Design of Experiments	
<b>ELECTIVES</b>		<b>9</b>
Select 9 credits from the following options:		
Any STAT courses at the 500 level or above		
STAT 461	Introduction to Probability Theory	
STAT 462	Theoretical Introduction to Statistical Inference	
Total Hours		15

**Certificate Learning Outcomes****APPLIED STATISTICS**

Upon completion of the certificate students will be able to:

- Identify appropriate statistical methods for the analysis of real-world data;
- Analyze data using statistical programming tools;
- Apply the principles of experimental design in a science and engineering context;
- Interpret the results of designed experiments and observational studies.

**Biology****Degrees Offered**

- Master of Science
- Doctor of Philosophy

**Nature of the Program**

The Department of Biology's graduate program is dedicated to scholarship in academics and research. The objectives of the program are to empower students through the following:

1. Recognize important biological problems
2. Design, execute, and analyze experiments aimed at solving important problems



3. Communicate their findings in oral and written form
4. Foster an awareness of the social and political issues of the day related to biology
5. Create a desire to continue independent study after graduation

The Department of Biology offers graduate courses and research that lead to M.S. and Ph.D. degrees in biology. The focal areas of research in the graduate program are: plant sciences, biochemistry and molecular biology, bioinformatics, genetics, genomics and evolutionary biology, cell and developmental biology, ecology, forensic biology, neuroanatomy and neurophysiology and behavioral neurobiology.

## FACULTY

### CHAIRPERSON

- Jennifer Hawkins - Ph.D. (Iowa State University)

### ASSOCIATE CHAIR

- Andrew Dacks - Ph.D. (University of Arizona)  
Associate Chair for Graduate Studies
- Dana Huebert Lima - Ph.D. (University of Wisconsin-Madison)  
Associate Chair for Undergraduate Advising, Recruitment, and Retention
- Stephanie Young - Ph.D. (West Virginia University)  
Associate Chair for Undergraduate Studies

### PROFESSORS

- Ashok Bidwai - Ph.D. (Utah State University)  
Biochemical and molecular genetic analysis of protein kinases
- Kevin C. Daly - Ph.D. (University of Arizona)  
Sensory motor integration and behavior
- William Peterjohn - Ph.D. (Duke University)
- Rita V.M. Rio - Ph.D. (Yale University)  
Evolution of symbiosis
- Richard B. Thomas - Ph.D. (Clemson University)  
Physiological plant ecology, global environmental change

### ASSOCIATE PROFESSOR

- Edward Brzostek - Ph.D. (Boston University)  
Forest ecology, ecosystem modeling
- Andrew M. Dacks - Ph.D. (University of Arizona)  
Neural basis of behavior states, nervous system evolution
- Sarah M. Farris - Ph.D. (University of Illinois)  
Nervous system evolution and development, entomology
- Jennifer Gallagher - Ph.D. (Yale University)  
Yeast genetics, stress response, systems biology
- Jennifer Hawkins - Ph.D. (Iowa State University)  
Plant comparative genomics, Molecular evolution.
- Gary Marsat - Ph.D. (McGill University)  
Sensory processing of communication signals, systems neuroscience, computational neuroscience

### ASSISTANT PROFESSOR

- Loren Albert - Ph.D. (University of Arizona)  
Plant ecophysiology and near-surface remote sensing
- Craig Barrett - PhD The Ohio State University  
Plant evolutionary biology
- Sadie Bergeron - Ph.D. (University of Massachusetts - Amherst)  
Developmental neuroscience
- Timothy Driscoll - Ph.D. (Virginia Tech)  
Bioinformatics, microbial metagenomics
- Eric Horstick - Ph.D. (University of Michigan)  
Developmental genetics, neuroscience, behavioral genetics

## SERVICE PROFESSOR

- Donna Ford-Werntz - Ph.D. (Washington University, St. Louis)  
Plant systematics

## SERVICE ASSOCIATE PROFESSOR

- Zachariah Fowler - Ph.D (West Virginia University)  
Forest ecology

## Admissions

### THE M.S. AND PH.D. IN BIOLOGY

The Biology program admits students directly to either the master's or doctoral degree programs. In addition to WVU's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants for graduate studies in biology must have a bachelor's degree in biology or a related field, and should possess an adequate background in science and mathematics.

### M.S. IN BIOLOGY

The M.S. in Biology is appropriate for students who wish to pursue a career in teaching or conducting directed research.

### PH.D. IN BIOLOGY

The Ph.D. in Biology is appropriate for students who wish to pursue a career in teaching or conducting independent research. Applicants should identify and are encouraged to contact at least one or more member(s) of our faculty who could act as their prospective advisor. If after reviewing all the application materials there is no faculty member willing to serve as the applicant's academic advisor, then the potential student will not be accepted into the program. Therefore, we recommend that applicants identify a member of our faculty who can provide them with the research training they seek and communicate with them directly to determine if they are taking any new students and whether they might be interested in serving as the applicant's advisor.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Applicants must submit transcripts from all institutions attended.
- Three letters of recommendation, written by people (typically faculty) in a position to evaluate your academic strengths and abilities.
- A curriculum vitae or resume (no more than two pages) that lists work experience, research experience, volunteer activities, internships, academic degrees and honors, and other accomplishments the admissions committee should take into account in reviewing an application.
- A statement of purpose (no more than two pages) that demonstrates a strong interest in scientific research, describes what the applicant hopes to gain from the Biology program, explains why WVU offers the best opportunity for achieving the applicant's future professional goals, and addresses the match between the stated research interests and those of specific faculty in our department who may serve as their academic mentors. Information regarding faculty and their research interest can be found [here](#).
- GRE Scores are not required for the application or admission to the WVU Biology graduate programs, but will be considered if they are provided.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadlines:

- The Biology graduate programs admit students to the Fall, Spring, or Summer terms.
- The priority review deadline for all application materials is January 1<sup>st</sup> for Summer or Fall admission.
- The priority review deadline for all application materials is October 1<sup>st</sup> for Spring admission.
- All applications received by the deadlines will be considered for financial support in the form of a graduate teaching assistantship (GTA).
- Application materials submitted after the deadlines may be considered on a space-available basis and may also be considered for financial support in the form of a graduate teaching assistantship (GTA).
- Exceptional Ph.D. applicants may be nominated by the Biology program for competitive University Fellowships. Applicants who wish to be considered should submit a completed application no later than December 1st. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

## Assistantships

All applicants will be considered for financial support in the form of graduate teaching assistantships (GTAs) and Graduate Research Assistantships (GRAs). Graduate research assistantships are sometimes available through funded faculty member research. Students who qualify for available research assistantships will be contacted by the relevant faculty member with details.

Certain application requirements may be waived based on a preliminary review of an application by the program.

For additional questions, please contact [wvu.biology.gradprogram@mail.wvu.edu](mailto:wvu.biology.gradprogram@mail.wvu.edu)

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.S. and Ph.D. Major Code: 1436

**For specific information on the following program, please see the link to the right:**

- Biology, M.S.

**For specific information on the following program, please see the link to the right:**

- Biology, Ph.D.

## Degree Progress

At the beginning of each academic year, students are evaluated by the advisory committee to ensure timely progress in their degree programs.

## MASTER'S BENCHMARKS

- Year 1: Form a committee and present the program of study.
- Year 3+: Submit Written Thesis and present Oral Thesis Defense.

## DOCTORAL BENCHMARKS

- Year 1: Form a committee and present the program of study.
- Year 2: Complete the Comprehensive
- Year 3: Complete the Proposal Examination.
- Year 5+: Submit Written Dissertation and present Oral Dissertation Defense.

## PROBATION

There are several reasons why a student may need to be placed on probation. These may include:

1) A documented violation of the student code of conduct (<https://studentresponsibility.wvu.edu/campus-student-code/>). Depending on the nature of the violation, either probation or dismissal without a probationary period may be appropriate.

2) Receiving an "Unsatisfactory" in Biology 797 ("Independent Research") due to the failure to meet expectations established in the semester student workload plan.

## Biology, M.S.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 33 graduate credit hours in Biology at the 400 level or above. Only 12 credit of coursework at the 400 level may be used.
- **Grade Point Average:** Students must earn a minimum overall GPA of a 2.75, and a minimum GPA of 3.00 in coursework applied to their graduate program.
- **Thesis:** Students must write and defend a Master's Thesis. A final oral defense is administered after an original, written thesis has been submitted to and approved by the Advisory Committee. For complete guidelines, please see the graduate student handbook at <http://biology.wvu.edu/students/graduate-students/forms-and-policies> (<http://biology.wvu.edu/students/graduate-students/forms-and-policies/>).

## Curriculum Requirements

Code	Title	Hours
Biology Coursework at the 400 level or above. *		18
Research		6
BIOL 797	Research (Repeated)	
Graduate Professional Development Seminars		6
BIOL 796	Graduate Seminar (Repeated each Fall)	
BMS 700	Scientific Integrity	
Professional development courses (2 cr. min) selected with the graduate advisor. **		
Departmental Colloquium		3
BIOL 788	Biology Department Colloquium	
Total Hours		33

\*

Excludes BIOL 486, BIOL 490, BIOL 590, BIOL 690, BIOL 790, BIOL 796, BIOL 797

\*\*

Pending list from Department of Biology

## Major Learning Outcomes

### BIOLOGY

The graduate programs in the Department of Biology provide rigorous training in several fields of biology. The central mission of our graduate program is to train the next generation of Biologists for careers in the field, laboratory and several other professional settings that rely on deep expertise in the biological sciences.

Students earning a M.S. in Biology will be able to:

- Explain general biological principles as well as those specific to their research sub-discipline
- Demonstrate familiarity with the literature published within their field
- Independently perform experiments and provide quality data, analysis and interpretation, critical to progress in their research area
- Effectively communicate their research in oral and written formats, including the ability to co-author manuscripts suitable for publication in peer reviewed scientific journals
- Learn and apply the role of ethics in personal and professional behavior
- Learn and apply best laboratory practices (i.e. proper laboratory safety procedures and experimental protocols)

## Biology, Ph.D.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 37 graduate credit hours in Biology at the 400 level or above. Only 12 credit of coursework at the 400 level may be used.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Comprehensive Examination:** Students must complete both an oral and written portion of the Comprehensive (or Preliminary) Examination. For details see the Biology graduate student handbook.
- **Proposal Examination:** The Proposal Examination contains both a written and oral portion, used to develop a coherent, convincing research plan. For details see the Biology graduate student handbook.
- **Graduate Handbook:** For complete guidelines, please see the graduate student handbook at <https://biology.wvu.edu/students/graduate-students/forms-and-policies/> (<https://biology.wvu.edu/students/graduate-students/forms-and-policies/>).

## Curriculum Requirements

Code	Title	Hours
Biology Coursework at the 400 level or above *		18
Research		6
BIOL 797	Research (Repeated) **	
Graduate Professional Development Seminars		6
BIOL 796	Graduate Seminar (Repeated each Fall)	

BMS 700	Scientific Integrity	
Professional development courses (2 cr. min) selected with the graduate advisor		
Departmental Colloquium		5
BIOL 788	Biology Department Colloquium	
Teaching Practicum		2
BIOL 790	Teaching Practicum	
Total Hours		37

\*

Excludes BIOL 486, BIOL 490, BIOL 590, BIOL 690, BIOL 790, BIOL 794, BIOL 796, BIOL 797

\*\*

Students are expected to be involved in research throughout their graduate career, and enrollment in BIOL 797, should reflect this activity. Students must complete at least six hours, however most students complete more than 60 credit hours of research.

## Major Learning Outcomes

### BIOLOGY

The graduate programs in the Department of Biology provide rigorous training in several fields of biology. The central mission of our graduate program is to train the next generation of Biologists for careers in the field, laboratory and several other professional settings that rely on deep expertise in the biological sciences.

Students earning Ph.D. in Biology will be able to:

- Explain general and advanced biological principles as well as those specific to their research sub-discipline
- Critically evaluate and demonstrate fluency with the literature published within their field
- Independently generate testable hypotheses based on preliminary data and literature reviews
- Design and execute experiments and provide quality data, analysis and interpretation, critical to progress in their research area
- Effectively communicate their research in oral and written formats, including the ability to write and revise manuscripts suitable for publication in peer reviewed scientific journals, conference abstracts, and grant proposals
- Learn and apply the role of ethics in personal and professional behavior
- Learn and apply best laboratory practices (i.e. proper laboratory safety procedures and experimental protocols)

## Chemistry

### Degrees Offered

- Master of Science
- Doctor of Philosophy

### Nature of the Program

The Department of Chemistry offers graduate studies leading to the degrees of master of science and doctor of philosophy with research concentration in the areas of analytical, inorganic, organic, and physical chemistry. The master of science and doctor of philosophy degrees require completion of a research project which represents the principal component of the graduate program. The M.S. program is limited in scope and involves advanced coursework and a study of a problem in chemical research culminating in the preparation and oral defense of a M.S. thesis.

The Ph.D. program has a much wider scope than the M.S. program. Ph.D. students are expected to take a broad range of advanced coursework, both within and outside of the major area of interest. The major emphasis of the Ph.D. program is on research. A typical research problem may take several years to complete and involves many advanced techniques and concepts at the frontiers of chemical knowledge. The Ph.D. program culminates in the preparation and defense of the Ph.D. dissertation.

The program for the degree of doctor of philosophy reflects a flexible, research-oriented approach geared to develop the interests, capability, and potential of students. A program of courses is recommended to suit individual needs based on background and ability. These courses are classified as basic graduate courses, which present the essentials of a given discipline on an advanced level, and specialized graduate courses, which take one to the frontiers in a specific area of research. The course offerings are designed to provide guidelines from which students can launch their independent studies in preparation for candidacy examinations. Students are required to enroll in the departmental seminar program and attend special lectures and seminars offered by visiting scientists. Graduate students in the Ph.D. program are required to satisfactorily complete a minimum of three courses (three credits each) at the 500 to 700-level offered by the Department of Chemistry and distributed in at least two areas outside their major area of research. In

addition, each major area in chemistry requires students in that area to enroll in basic graduate courses presenting the essentials of that discipline on an advanced level.

## FACULTY

### CHAIR

- Gregory Dudley - Ph.D. (Massachusetts Institute of Technology)

### ASSOCIATE CHAIR

- Michelle Richards-Babb - Ph.D. (Lehigh University)

### DIRECTOR OF GRADUATE STUDIES

- Brian Popp - Ph.D. (University of Wisconsin-Madison)

### DIRECTOR OF UNDERGRADUATE STUDIES

- Betsy Ratcliff - Ph.D. (University of Binghamton-SUNY)

### PROFESSORS

- Gregory Dudley - Ph.D. (Massachusetts Institute of Technology)  
Regular Graduate Faculty; Eberly Family Distinguished Professor; Chemical Synthesis, Organic Reaction Methodology, Medicinal Chemistry
- Terry Gullion - Ph.D. (William and Mary)  
Regular Graduate Faculty; Physical Chemistry, Solid State NMR, Biological Materials, Polymers
- Lisa Holland - Ph.D. (University of North Carolina-Chapel Hill)  
Regular Graduate Faculty; Micro-separations, High Throughput Drug Screening
- Fred L. King - Ph.D. (University of Virginia)  
Regular Graduate Faculty; Analytical Chemistry, Mass Spectrometry, Trace Elements, Gas-phase Chemistry
- Justin Legleiter - Ph.D. (Carnegie Mellon University)  
Regular Graduate Faculty; Biophysical Chemistry, Scanning Probe Microscopy
- Michelle Richards-Babb - Ph.D. (Lehigh University)  
Regular Graduate Faculty; Chemical Education
- Kenneth Showalter - Ph.D. (University of Colorado)  
Regular Graduate Faculty; Bennett Distinguished Professor; Physical Chemistry, Chemical Kinetics, Multistability and Oscillating Systems
- Bjorn C. Soderberg - Ph.D. (Royal Institute of Technology, Sweden)  
Regular Graduate Faculty; Organic Synthesis Using Transition Metals

### ASSOCIATE PROFESSORS

- Erin Battin - Ph.D. (Clemson University)  
Bioinorganic Chemistry
- Fabien Goulay - Ph.D. (Université of Rennes, France)  
Regular Graduate Faculty; Physical Chemistry, Laser Spectroscopy
- Jessica Hoover - Ph.D. (University of Washington)  
Regular Graduate Faculty; Organometallic Chemistry, Catalysis
- Peng Li - Ph.D. (Texas Tech University)  
Regular Graduate Faculty; Bioanalytical Chemistry
- Carsten Milsman - Ph.D. (Max Planck Institute for Bioinorganic Chemistry)  
Regular Graduate Faculty; Inorganic and Organic Chemistry, Photochemistry, Catalysis
- Brian Popp - Ph.D. (University of Wisconsin-Madison)  
Regular Graduate Faculty; Organic and Organometallic Chemistry, Catalysis
- Joshua Osbourn - Ph.D. (University of Pittsburgh)  
Organic Chemistry
- Betsy Ratcliff - Ph.D. (University of Binghamton-SUNY)  
Chemical Education, Physical Chemistry
- Mark Tinsley - Ph.D. (Leeds University, England)  
Physical Chemistry, Nonlinear Dynamics
- Stephen Valentine - Ph.D. (Indiana University)  
Regular Graduate Faculty; Mass Spectrometric Analysis of Biomolecules

- Mingming Xu - Ph.D. (Ohio University)  
Analytical Chemistry

## ASSISTANT PROFESSORS

- Hacer Karatas Bristow - Ph.D. (University of Michigan)  
Regular Graduate Faculty; Chemical Biology, Bioorganic and Medicinal Chemistry
- Brian Dolinar - Ph.D. (University of Wisconsin-Madison)  
Inorganic Chemistry
- Melissa Ely - Ph.D. (West Virginia University)  
Analytical Chemistry
- Margaret Hilton - Ph.D. (University of Utah)  
Regular Graduate Faculty; Organic and Organometallic Chemistry, Catalysis
- Carolyn Kitchens - Ph.D. (University of Pittsburgh)  
Biochemistry
- David Mersing - Ph.D. (West Virginia University)  
Teaching Faculty; Physical Chemistry
- Brian Nichols - Ph.D. (West Virginia University)  
Organic Chemistry
- Tobi Odeleye - Ph.D. (South Dakota State University)  
Regular Graduate Faculty; Chemical Education
- Trina Perrone - Ph.D. (West Virginia University)  
Organic Chemistry

## TEACHING INSTRUCTOR

- Mark Schraf - M.S. (West Virginia University)  
Analytical Chemistry

## PROFESSORS EMERITI

- Harry Finklea - Ph.D. (California Institute of Technology)
- Charles Jaffe - Ph.D. (University of Colorado)
- Robert Nakon - Ph.D. (Texas A&M University)
- Jeffrey Petersen - Ph.D. (University of Wisconsin-Madison)
- Ronald Smart - Ph.D. (University of Michigan)
- Kung Wang - Ph.D. (Purdue University)

## Admissions

### PH.D. IN CHEMISTRY

The Chemistry program admits students directly to the doctoral degree. Admitted students may transition to the M.S. in Chemistry during their studies. In addition to the university's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the Ph.D. program must hold a bachelor's degree in chemistry or a related field with a concentration in chemistry and an appropriate background in physics and mathematics, with an overall GPA of at least 3.0. The GRE is not required for admission to this program.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- A personal statement discussing specific examples of the applicant's ability to write effectively, analyze complex situations, and complete quantitative analyses. The following topics should also be included in the statement: 1) why a career in chemistry, 2) how will a PhD in Chemistry help the applicant reach their professional goals, 3) why WVU Chemistry offers the best opportunity for achieving those future professional goals, and 4) which faculty member(s) and/or research area(s) the applicant wishes to pursue in the WVU Chemistry PhD program. Information about the Chemistry faculty and their research interests can be found here (<https://www.chemistry.wvu.edu/directory/>).
- A current curriculum vitae or resume that lists work experience, volunteer activities, internships, academic degrees and honors, and other accomplishments the applicant considers relevant.
- Three letters of recommendation from professional or academic references who can comment directly on the applicant's skills and experience.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).



- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadline:

- The priority review deadline for all application materials for fall admission is January 1<sup>st</sup>.
- Applicants are typically notified of the committee's decision on or before February 1<sup>st</sup>.
- Completed applications for admission may be considered after the January 1<sup>st</sup> deadline on a space-available basis.
- The Chemistry program admits students for the Fall semester only.
- Exceptional applicants may be nominated by the Chemistry program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).
- At this time, the Chemistry program is not accepting applications to the MS program.

For further information, please contact: Director of Graduate Studies, Chemistry.DGS@mail.wvu.edu.

#### Assistantships

All applicants will be considered for financial support in the form of graduate teaching assistantships (GTAs) and graduate research assistantships (GRAs). Graduate research assistantships are sometimes available through funded faculty member research. Students who qualify for available research assistantships will be made aware of these opportunities during the Chemistry New Graduate Student Orientation held prior to the beginning of the Fall term.

Certain application requirements may be waived based on a preliminary review of an application by the program.

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1439

For specific information on the following program, please see the link to the right:

- Chemistry, M.S.

For specific information on the following program, please see the link to the right:

- Chemistry, Ph.D.

## Degree Progress

### GENERAL BENCHMARKS

#### Guidance Exams

By the end of the second semester in residence, both M.S. and Ph.D. students are required to pass 3 out of 4 guidance exams. The guidance exams are in the areas of analytical, inorganic, organic, and physical chemistry. Students have 3 total attempts to pass each exam. The initial attempts occur prior to the student's first semester in the form of written exams generally during orientation week. Subsequent attempts can be either re-taking the written exam or earning a grade of B- or better in a designated graduate course. Failure to meet the guidance exam requirement by the end of the second semester in residence will result in termination from the graduate program.

#### Plan of Study

By the end of the first semester in residence, M.S. and Ph.D. students are required to have a Plan of Study, documenting expected coursework that is approved by both the student's faculty M.S. thesis/Ph.D. dissertation Faculty Research Advisor and the Chemistry Director of Graduate Studies. By the end of the second semester in residence, M.S. and Ph.D. students are required to update their Plan of Study, documenting their M.S. thesis/Ph.D. dissertation committee members. M.S. students who choose the coursework track are advised by the Chemistry Graduate Studies committee who will oversee appropriate updates to the Plan of Study. To remain in good standing, it is the responsibility of the graduate student to keep their Plan of Study updated while in residence. Failure to meet Plan of Study submission or update deadlines will place the student out of program compliance, leading to poor standing and probationary status that may impact a student's ability to maintain their assistantship or fellowship.

#### Coursework

Students must maintain a minimum 2.75 cumulative GPA to remain eligible for a graduate assistantship. Failure to do so may result in loss of the graduate assistantship until the minimum cumulative GPA is reestablished.

#### Program Status

A graduate student is expected to remain in good standing throughout the entirety of the program. Standing in the program is based in part on student research progress, which will be evaluated semesterly through the awarding of a satisfactory (S) or unsatisfactory (U) grade in CHEM 797, and yearly through written evaluation by the faculty research advisor. A student may also will be considered in poor standing if satisfactory research progress



is not maintained while in residence. Poor standing will result if a grade of unsatisfactory (U) is earned in research (CHEM 797) and/or conveyed through written evaluation by the Faculty Research Advisor. A student may be considered in poor standing for failure to maintain ethical and safe laboratory practices in their daily academic, research, and/or teaching duties. A student in poor standing will be placed on probationary status and clear expectations will be communicated that, if met, will return the student to good standing. Failure to meet documented expectations will result in termination from the graduate program.

## PH.D. BENCHMARKS

### Research

Research may be initiated as early as the student and Faculty Research Advisor feel appropriate for the individual. Normally, a student will begin laboratory work no later than the beginning of the second semester in residence. Upon successful completion of an original piece of research, the candidate will present results in a Ph.D. dissertation and, at the appropriate time, defend the work in a final oral examination. Failure to maintain satisfactory research progress after two successive semesters will result in the student being transitioned to either the M.S. thesis or coursework track after advisement by the Faculty Research Advisor and the Graduate Studies Committee.

### Seminars

All students pursuing a PhD must register for both graduate seminar (CHEM 796) and research seminar (CHEM 789) every semester in residence. Students who have a justified reason for being unavailable for a seminar, during a specific semester, must petition the Chemistry Graduate Studies Committee in writing before the semester begins to receive a waiver of the requirement. A student may be considered in poor standing for repeated failures to register for appropriate seminars.

### Candidacy

Candidacy examinations contain written and oral portions. Generally, students will attain candidacy before beginning their 3<sup>rd</sup> year (5th semester) in the doctoral program. The Graduate Studies Committee will consider Research Faculty Advisor approved extension requests for justified reasons. Such requests should be made by email to the Director of Graduate Studies at least two-weeks prior to the deadlines outlined below.

- The written portion is a research progress report that will contain a comprehensive review of the pertinent literature and applicable scientific concepts, a discussion of current results, a description of studies needed to finish the project, a discussion of expected results and alternative approaches, and a timeline for completing the work. The report is submitted to the student's Graduate Research Committee by the end of final's week of their third (3rd) semester in residence. The Graduate Research Committee may request revisions to the written document, with final revisions completed no later than mid-term of the fourth (4th) semester in residence. The Graduate Research Committee will grade the final document as pass/fail.
- After notification of successful completion of the written portion, the student will publicly present and defend an oral progress report by the end of final's week of their fourth (4<sup>th</sup>) semester in residence. This oral report must demonstrate fundamental chemical knowledge and independence on the part of the student. The Graduate Research Committee will evaluate the oral portion as pass/fail or conditional reconsideration. A student who receives conditional reconsideration will have documented conditions and timeline for improvement provided by their Graduate Research Committee. The timeline for completion of the conditions will typically be no longer than the end of the subsequent semester. The Graduate Research Committee will reevaluate all aspects of the oral portion as pass/fail only.

Failure to pass either written or oral candidacy examinations will result in the student being transitioned to either the M.S. thesis or coursework track after advisement by the Faculty Research Advisor and the Graduate Studies Committee.

### Research Progress Updates

All doctoral students will complete a survey in every year in residence, assessing their own progress in the program and documenting research products. The survey results will be shared with their Faculty Research Advisor.

Doctoral candidates will meet with their Chemistry Graduate Research Committee members at least once a year after attaining candidacy status. Generally, students will schedule these committee meetings in late spring or summer term at the end of their 3<sup>rd</sup> and 4<sup>th</sup> years (after six and eight semesters in residence) and subsequent years, if necessary. The candidate will prepare a short 10-minute oral presentation to update their committee members on notable successes and research products from the previous year. Included in the presentation is discussion of plans to complete their dissertation requirements. The committee members will evaluate the student's work as satisfactory or unsatisfactory progress toward their degree. A student whose progress is unsatisfactory will be issued a remediation plan, established by the Graduate Research Committee members, and moved to probationary status for the subsequent academic term. Failure to meet remediation plan guidelines will result in the student being transitioned to either the M.S. thesis or coursework track after advisement by the Faculty Research Advisor and the Graduate Studies Committee.

### Original Research Proposal

Doctoral candidates will prepare and present a written and oral independent original research proposal. The written proposal proposes a unique research idea that is outside of the candidate's doctoral research. The written proposal will be distributed to all members of the department including faculty and graduate students. An oral defense of the proposed idea will occur within the divisional seminar programs. After the presentation all members in attendance will have an opportunity to pose questions to the presenter. All faculty in attendance at the seminar will evaluate the proposal, both written and oral, on established criteria. Candidates must pass this requirement before they will be allowed to schedule their oral dissertation

defense. Failure to pass the original research proposal will result in the student being transitioned to either the M.S. thesis or coursework track after advisement by the Faculty Research Advisor and the Graduate Studies Committee.

## M.S. BENCHMARKS

**Coursework:** Students must earn a minimum cumulative GPA of 2.75 in order to graduate and must earn a B- or better in all coursework applied to the M.S. degree requirements.

**Seminars:** All students in the thesis track must register for both graduate seminar (CHEM 796) and research seminar (CHEM 789) every semester. Students in the coursework track may register in a graduate seminar and must register for research seminar every semester. Students who have a justified reason for being unavailable for a seminar, during a specific semester, must petition the Chemistry Graduate Studies Committee in writing before the semester begins to receive a waiver of the requirement. A student may be considered in poor standing for repeated failures to register for appropriate seminars.

### Thesis Track

Research may be initiated as early as the student and Faculty Research Advisor feel appropriate for the individual. Normally, a student will begin laboratory work no later than the beginning of the second semester in residence. Upon successful completion of an original piece of research, the candidate will present results in a M.S. thesis and, at the appropriate time, defend the work in a final oral examination. Failure to maintain satisfactory research progress will result in the student being transitioned to the M.S. coursework track.

Graduate students in the M.S. program in chemistry in the thesis track are required to submit a research thesis. A research project is chosen in the area of the student's interest and in consultation with the faculty thesis advisor. The written thesis and oral defense shows the ability of the student to defend scientific conclusions based on their research project. The final oral examination is administered after completion and submission of the thesis to the graduate student's committee.

- **Credit Hour Requirement:** Students may apply up to 6 hours of research credit and 3 hours of seminars toward the 30-hour requirement. The remaining 21 hours of credit must be earned in basic graduate courses (500-level or higher) that reflect a diversified exposure to chemistry, and no more than 10 hours may be elected outside the department. Students are required to enroll in the departmental seminar program and are required to attend special lectures and seminars offered by visiting scientists.

### Coursework Track

Graduate students in the M.S. program in chemistry in the coursework track are *not* required to submit a research thesis. The student may choose to perform research for research credit.

- **Credit Hour Requirement:** Students may apply up to 3 hours of research credit and 3 hours of seminars toward the 30-hour requirement. The remaining 24 hours of credit must be earned in basic graduate courses (500-level or higher) that reflect a diversified exposure to chemistry, and no more than 10 hours may be elected outside the department. Students are required to enroll in the departmental seminar program and are required to attend special lectures and seminars offered by visiting scientists.

## Chemistry, M.S.

### Degree Requirements

- **Completed Plan of Study indicating either Thesis or Coursework Degree Track**
- **Credit Hours:** Students are required to complete a minimum of 30 graduate credit hours in Chemistry at the 500, 600, and 700 level.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum grade of B- in all courses applied to the degree.
- **Graduation Requirements**
  - Thesis Track:
    - Complete a plan of study.
    - Complete at least 21 formal (graded) course credit-hours; up to 6 hours of research credit; up to 3 hours of seminar credit.
      - Up to 10 formal (graded) course credit-hours may come from outside of CHEM to be approved by the Graduate Advising Committee prior to the beginning of the semester in which they are offered.
    - Complete and defend a Master's thesis.
  - Coursework Track:
    - Complete a plan of study.
    - Complete at least 24 formal (graded) course credit-hours; up to 3 hours of research credit; up to 3 hours of seminar credit.
      - Up to 10 formal (graded) course credit-hours may come from outside of CHEM to be approved by the Graduate Advising Committee prior to the beginning of the semester in which they are offered.
- **Benchmarks:** For details, go to the Chemistry Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/chemistry/#degreeprogress>)

## Curriculum Requirements

Code	Title	Hours
<b>CORE REQUIREMENTS</b>		<b>21</b>
Any CHEM courses at the 500, 600, or 700 level *		
<b>DEGREE TRACK</b>		<b>9</b>
Select one track:		
<b>Thesis Track:</b>		
CHEM 797	Research (repeated; up to 6 credit hours)	
CHEM 796	Graduate Seminar (repeated; up to 3 credit hours)	
CHEM 789	Research Seminar (repeated; up to 3 credit hours)	
<b>Coursework Track:</b>		
Any CHEM course at the 500, 600, 700 level (3 credits) *		
Select a combination of options below:		
Any CHEM course(s) at the 500, 600, 700 level (up to 6 credit hours) *		
CHEM 797	Research (repeated; up to 3 credit hours)	
CHEM 796	Graduate Seminar (repeated; up to 3 credit hours)	
CHEM 789	Research Seminar (repeated; up to 3 credit hours)	
Total Hours		30

\*

Excluded courses include CHEM 789, 790, 795, 796, 797.

## Major Learning Outcomes

### CHEMISTRY

The graduate programs in the C. Eugene Bennett Department of Chemistry provide rigorous training in chemistry. The central mission of the Graduate Program is to train the next generation of Chemists for productive careers in the global economy.

Students earning a M.S. in Chemistry (Thesis Track) will be able to:

- Communicate chemical concepts orally and in writing.
- Explain chemical principles as they pertain to their specific field of research.
- Demonstrate the ability to understand and critically evaluate the existing literature published within their field of research.
- Generate quality data using a variety of experimental and/or computational techniques.
- Effectively communicate their research in oral and written formats.
- Inquire about and prepare for various career opportunities with their advanced degree.
- Learn and adopt best safety practices (chemical hygiene, personal protective wear, proper handling of chemical waste streams, etc.) in chemical research.
- Learn and apply the ethical impact of personal and professional behavior.
- Understand and apply good laboratory practices (chemical hygiene, personal protective wear, etc.) and the proper handling of chemical waste streams.
- Generate quality data using a variety of experimental and/or computational techniques.
- Interpret the meaning and implication of their data.
- Effectively communicate their research in oral and written formats, including the ability to author manuscripts suitable for publication in peer reviewed scientific journals.
- Understand the ethical impact of personal and professional behavior.

Students earning a M.S. in Chemistry (Coursework Track) will be able to:

- Communicate chemical concepts orally and in writing.
- Demonstrate the ability to understand and critically evaluate contemporary chemical literature.
- Inquire about and prepare for various career opportunities with their advanced degree.
- Learn and adopt best safety practices (chemical hygiene, personal protective wear, proper handling of chemical waste streams, etc.) in the chemical enterprise.
- Learn and apply the ethical impact of personal and professional behavior.

# Chemistry, Ph.D.

## Degree Requirements

- **Completed Plan of Study**
- **Credit Hours:** Students are required to complete a minimum of 50 graduate credit hours in Chemistry at the 500, 600, and 700 level.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum grade of B- in all courses applied to the degree.
- **Additional Requirements:** Students are required to enroll in the departmental seminar program and attend special lectures and seminars offered by visiting scientists. In addition, each major area in chemistry requires students in that area to enroll in basic graduate courses presenting the essentials of that discipline on an advanced level.
- **Benchmarks:** For details, go to the Chemistry Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/chemistry/#degreeprogress>)

## MAJOR REQUIREMENTS

Code	Title	Hours
Minimum GPA of 3.0 is required.		
Chemistry Coursework (500, 600, 700-level) *		18
Graduate Research		24
CHEM 797	Research (Repeated)	
Research Seminar		4
CHEM 789	Research Seminar (Repeated)	
Graduate Seminar		4
CHEM 796	Graduate Seminar (Repeated)	
Total Hours		50

\*

Excluded courses include CHEM 789, 790, 795, 796, 797.

## Major Learning Outcomes

### CHEMISTRY

The graduate programs in the C. Eugene Bennett Department of Chemistry provide rigorous training in chemistry. The central mission of the Graduate Program is to train the next generation of Chemists for productive careers in the global economy. Some of the learning outcomes below were adapted from the 2013 American Chemical Society Presidential Commission on Graduate Education in the Chemical Sciences. Students earning a Ph.D. in Chemistry will be able to:

- Communicate chemical concepts orally and in writing.
- Explain advanced chemical principles as they pertain to their specific field of research.
- Analyze and critically evaluate the existing literature published within their field of research.
- Independently design and execute original research that can address important scientific questions.
- Generate quality data using a variety of experimental and/or computational techniques and interpret the meaning and implication of their data.
- Effectively communicate their research in oral and written formats, including the ability to author manuscripts suitable for publication in peer reviewed scientific journals.
- Inquire about and prepare for various career opportunities with their advanced degree.
- Learn and adopt best safety practices (chemical hygiene, personal protective wear, proper handling of chemical waste streams, etc.) in chemical research.
- Learn and apply the ethical impact of personal and professional behavior.

## Communication Studies

### Degrees Offered

- Master of Arts
- Doctor of Philosophy

## Nature of the Program

The Department of Communication Studies offers the M.A. and the Ph.D. degrees in Communication Studies. Communication scholars seek to discover the mechanisms and rules that govern the wide range of communication activities using a battery of social scientific techniques. We try to develop theories that will account for why we act the way we do. The graduate faculty in the Department of Communication Studies is well-known at the regional, national, and international level for accomplishments in research, teaching, and service.

The Department of Communication Studies offers work leading to the degree of master of arts. Persons who possess a bachelor's degree from an accredited college or university may be admitted to the program. Qualified graduate students from a variety of disciplines are admitted to the program. The master of arts degree program is intended to qualify the student to do the following:

- Assume a variety of professional roles in educational, organizational, health, governmental, or media institutions
- Teach the subject matter in high school and/or college
- Undertake advanced training toward a doctorate in the behavioral/social sciences

The M.A. in Communication Studies offers areas of emphasis:

### COMMUNICATION IN INSTRUCTION AREA OF EMPHASIS

All students planning a professional career in the education field or are currently employed as a K-12 teacher are encouraged to enter this program.

### COMMUNICATION THEORY & RESEARCH AREA OF EMPHASIS

All students planning to continue graduate study past the M.A. level are encouraged to enter this program.

### CORPORATE & ORGANIZATIONAL COMMUNICATION AREA OF EMPHASIS

All students planning a professional career in a field other than education are encouraged to enter this program. This is normally a terminal degree program in communication studies. Students may complete this program through off-campus study or on-campus study.

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## FACULTY

### CHAIR

- Lindsay Morris-Neuberger - Ph.D. (Michigan State University)  
Health and Risk Communication, Campaigns

### DIRECTOR OF GRADUATE STUDIES

- Daniel Totzkay - Ph.D. (Michigan State University)  
Health Communication, Mass Communication

### PROFESSORS

- Alan K. Goodboy - Ph.D. (West Virginia University)  
Instructional, Interpersonal, Quantitative Methods
- Christine Kunkle - Ph.D. (University of Nebraska)  
Family, Life-span, Interpersonal
- Matthew M. Martin - Ph.D. (Kent State University)  
Instructional, Interpersonal, Communication Traits
- Lindsay Morris-Neuberger - Ph.D. (Michigan State University)  
Health and Risk Communication, Campaigns
- Scott A. Myers - Ph.D. (Kent State University)  
Instructional, Family, Organizational

### ASSOCIATE PROFESSORS

- Elizabeth Cohen - Ph.D. (Georgia State University)  
Media Psychology, Entertainment Education, New Media, Health and Risk Communication
- Megan R. Dillow - Ph.D. (Pennsylvania State University)  
Interpersonal, Communication Theory, Relational Communication
- Brian R. Patterson - Ph.D. (University of Oklahoma)  
Developmental Communication, Communication Theory

## ASSISTANT PROFESSORS

- Katie Kang - Ph.D. (Rutgers University)  
Organizational, Group
- Daniel Totzkay - Ph.D. (Michigan State University)  
Health Communications, Mass Communication
- Megan Vendemia - Ph.D. (Ohio State University)  
Communication Technology

## TEACHING ASSISTANT PROFESSORS

- John G. Cole - M.A. (West Virginia University)  
Instructional, Organizational, Computer Technology
- Carrie D. Kennedy-Lightsey - Ph.D. (West Virginia University)  
Communication Theory, Student Internships, Interpersonal

## PROFESSORS EMERITI

- Melanie Booth-Butterfield - Ph.D. (University of Missouri)
- Joan Gorham - Ph.D. (Northern Illinois University)
- Virginia P. Richmond - Ph.D. (University of Nebraska)

## Admissions

### M.A. IN COMMUNICATION STUDIES

The Communication Studies department at WVU offers its M.A. program either face-to-face or fully online. Applicants must indicate to which program they wish to apply. Please note that for online students, the only Area of Emphasis available is Corporate and Organizational Communication. Students must meet the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) and must submit the items below and must have an undergraduate degree in Communication Studies or a closely allied field, with an undergraduate GPA of 3.0. The GRE is not required for admission to this program.

Information about admission to the online program and admission requirements can be found here (<https://online.wvu.edu/programs/communication-studies-m-a/>).

### PH.D. IN COMMUNICATION STUDIES

The Ph.D. program in Communication Studies is intended to qualify students to teach and conduct research in instructional communication, interpersonal communication, mediated communication, health communication, and organizational communication, among other topics, in the communication-related industries or in higher education. More information about the program and the application process is available here (<https://communicationstudies.wvu.edu/students/graduate-students/ph-d-in-communication-studies/>). An M.A. in Communication Studies or a closely allied field is required for admission to the Ph.D. program in Communication Studies. Applicants are expected to have attained a minimum undergraduate GPA of 2.75 and a minimum graduate GPA of 3.25. The GRE is not required for admission to this program.

#### List of Admission Requirements for the M.A.:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Two letters of recommendation from individuals who can directly comment on the applicant's undergraduate academic record and potential for pursuing an M.A. degree in Communication Studies (e.g., undergraduate professors, undergraduate academic advisor).
- A curriculum vitae should include all formal education, any professional internship or work experiences, undergraduate activities, and any research projects completed to date.
- A statement of interest/purpose (2-3 pages) must identify the applicant's reasons for pursuing the M.A. in Communication Studies, the reasons for obtaining this degree at West Virginia University and indicate why attaining the M.A. in Communication Studies at WVU is vital to the accomplishment of the applicant's career goals.

#### List of Admission Requirements for the Ph.D.:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- Three letters of recommendation from individuals familiar with the applicant's academic progress and potential, which address the applicant's ability to succeed in the Ph.D. program as both a Ph.D. student and as a graduate teaching assistant.
- A curriculum vitae that addresses all formal education, any teaching or professional work experience, and any research projects conducted to date.
- A personal statement (3-4 pages) that identifies the reasons for pursuing a Ph.D. in communication studies, the reasons for wanting to attain a Ph.D. in communication studies at West Virginia University, research interests and how these interests correspond with the research conducted by the

department faculty, the faculty members whose research interests are most closely aligned with the applicant's educational and career goals, and why attaining the Ph.D. degree in communication studies specifically from West Virginia University is vital to the achievement of the applicant's career goals. Statement of purpose.

- A sole-authored, scholarly writing sample completed in the applicant's M.A. program. This sample can be a course paper, a convention paper, a thesis or major project, or a journal article. Applicants may also include any additional supporting evidence they wish the committee to consider. This evidence can include, but is not limited to, awards received for outstanding research, teaching, or academic endeavors; a convention paper or journal article of which the applicant is a co-author; a newspaper or magazine article; or teaching evaluations.
- Additional supporting evidence (optional).

#### **International Applicants:**

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applications should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### **Application Deadlines:**

- The M.A. in Communication Studies program in Theory and Research Area of Emphasis admits students for the fall semester only. The priority deadline for the M.A. program is March 1<sup>st</sup>.
- The M.A. in Communication Studies program in Corporate and Organizational Communication admits students for the fall and spring semesters, with rolling admission.
- The Ph.D. program admits students for the fall semester only. The priority review deadline for the Ph.D. program is January 15<sup>th</sup>.
- Exceptional Ph.D. applicants may be nominated by the Communication Studies program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

Applications completed by the deadline will receive full consideration.

#### **Assistantships**

All applicants will be considered for financial support in the form of graduate teaching assistantships (GTAs). All applicants who are accepted into the program are provided with an assistantship for the first year of study, with the potential for two additional years of assistantship based on a yearly performance review.

Certain application requirements may be waived based on a preliminary review of an application by the program.

### **ADMISSION REQUIREMENTS 2024-2025**

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1473

**For specific information on the following program, please see the link to the right:**

- Communication Studies, M.A.

**For specific information on the following program, please see the link to the right:**

- Communication Studies, Ph.D.

### **Degree Progress**

All Students will have a plan of study and will receive, at minimum, a yearly letter of evaluation.

### **MASTER OF ARTS**

Students in the online program complete two courses a semester (Spring, Summer, and Fall) for a total of 36 credit hours. Typically, students complete the program in two years.

Students completing the Master of Arts on campus typically complete their requirements in one academic year. Full-time students enroll in 15 hours of coursework during the Fall and Spring semesters and complete the remaining 6 hours of coursework during the summer term.



## DOCTOR OF PHILOSOPHY

Upon admission to the program, students are advised by the Ph.D. Coordinator. Working with the Coordinator, students devise their course schedules for their first year.

By the start of the Fall semester of their second year, students should select their dissertation advisor, who must hold Regular Graduate Faculty status.

In addition to making satisfactory progress toward the completion of the degree, students will submit a teaching and research portfolio (i.e., one document) at the end of Year 1 Spring semester and at the end of Year 2 Spring semester. The portfolios will be evaluated by the Ph.D. Graduate Studies Committee.

Upon completion of coursework (typically at the conclusion of Year 2 Spring or Summer term), students take a comprehensive examination. Before the comprehensive examination can be taken, students must have completed 39 hours of coursework with a grade of B- or higher, have a minimum grade point average of 3.25, and have completed any courses for which they received a grade of "Incomplete."

Once the comprehensive examination has been successfully passed, the student writes a dissertation prospectus and submits a typed copy of the prospectus to each member of the student's dissertation committee.

Additional details can be found in the program's graduate student handbook (<https://communicationstudies.wvu.edu/files/d/a5d0fb25-0144-4b34-8a78-c454f0e0c761/2018-2019-graduate-handbook.pdf>).

## Communication Studies, M.A.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 graduate credit hours in Communication Studies at the 400 level or above. A maximum of 6 credits may be taken at the 500 level or above from outside the department.
- **Grade Point Average:** Students must earn a minimum overall GPA of 2.75, and of 3.00 in coursework applied to their graduate program, with a minimum grade of B- in all courses applied to the degree requirements.
- **Area of Emphasis:** Students must select one of three area of emphasis: Communication in Instruction, Corporate and Organizational Communication, Communication Theory and Research.
- **Graduation Requirement:** Student requirements vary based on the Area of Emphasis (AOE) chosen. Students in the Communication Theory & Research AOE take a comprehensive written or oral examination, or write a Master's Thesis. Students in the Communication in Instruction AOE and Corporate & Organizational Communication AOE are not required to take comprehensive examinations.

### Curriculum Requirements

Code	Title	Hours
<b>COURSEWORK:</b>		<b>18</b>
Select any COMM courses 400 level or above. *		
<b>AREA OF EMPHASIS:</b>		<b>12</b>
Select one:		
Communication in Instruction		
Corporate and Organizational Communication		
Theory and Research		
Total Hours		30

\*

A maximum of 6 credits may be taken at the 500 level or above from outside the department. Excluded courses include those applied to the Area of Emphasis and COMM 697 and COMM 797

Students can earn a maximum of 12 credits at the 400 level for this degree program. The 12 credit limit is cumulative across both COURSEWORK and AREA OF EMPHASIS.

### Areas of Emphasis Offered:

- Communication Theory & Research (p. 217)
- Communication in Instruction (p. 217)
- Corporate & Organizational Communication (p. 217)



## COMMUNICATION THEORY & RESEARCH AREA OF EMPHASIS

Code	Title	Hours
<b>CORE COURSES:</b>		<b>6</b>
COMM 700	Survey of Human Communication Theory	
COMM 701	Graduate Research Methods	
<b>COMPLETION REQUIREMENT:</b>		<b>6</b>
<b>Thesis Option:</b>		
COMM 697	Research	
<b>Non-Thesis Option:</b>		
Any COMM course at the 400 level or above. *		
Total Hours		12

\*

Excluding COMM 697, COMM 797, or any course applied to other parts of the Master's program.

## COMMUNICATION IN INSTRUCTION AREA OF EMPHASIS

Code	Title	Hours
Communication Studies coursework (400, 500, 600, 700-level)		12
Total Hours		12

## CORPORATE & ORGANIZATIONAL COMMUNICATION AREA OF EMPHASIS

Code	Title	Hours
<b>CORE COURSES:</b>		<b>6</b>
COMM 650	Applied Communication Theory	
COMM 660	Communication in the Organization	
<b>ELECTIVES:</b>		<b>6</b>
Any COMM courses at the 400 level or above *		
Total Hours		12

\*

Excluding COMM 697, COMM 797, or any course applied to other parts of the Master's program.

## Major Learning Outcomes

### COMMUNICATION STUDIES

Students earning a M.A. in Communication Studies will be able to:

1. acquire a general understanding of Communication theories, perspectives, principles, and concepts
2. identify, analyze, and critique Communication-related problems using Communication theories, perspectives, principles, and concepts, and prescribe Communication-based solutions to these problems
3. design, conduct, and interpret original Communication-based research
4. propose ways in which Communication theories, perspectives, principles, and concepts can enhance personal, social, and professional relationships
5. develop the ability to encode and decode messages effectively across communication contexts

## Communication Studies, Ph.D.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum number of 59 graduate credit hours in Communication Studies at the 500 level or above. Courses taken outside of the department must be approved by the Graduate Coordinator.
- **Grade Point Average:** Students must earn a minimum overall GPA of 2.75, and 3.25 in coursework applied to their graduate program, with a minimum grade of B- in all courses applied toward degree. Students who receive more than three grades of less than a B- will not be permitted to continue in the program.

- **Comprehensive Examination:** Upon completion of a minimum of thirty-nine hours of coursework approved in a plan of study (excluding COMM 797 and COMM 790), students take a comprehensive examination. The comprehensive examination consists of three sections on which students will be tested on the primary and secondary areas of communication emphasis and research methods. The written examination will be followed by an oral examination approximately two weeks later.
- **Dissertation:** Once the written and oral comprehensive examinations have been successfully defended (as determined by the committee), students write a dissertation prospectus and submit it to their committee. Once the prospectus has been approved, students write and defend their dissertation. The dissertation defense is open to the public.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
<b>CORE COURSES:</b>		<b>8</b>
COMM 700	Survey of Human Communication Theory	
COMM 701	Graduate Research Methods	
COMM 796	Graduate Seminar	
<b>FOUNDATIONAL COURSES: *</b>		<b>6</b>
Select 2 foundational COMM courses.		
COMM 601	Instructional Communication	
COMM 602	Interpersonal Communication: Theory and Research	
COMM 604	Theory and Research in Persuasion	
COMM 605	Theory and Research in Mass Communication	
COMM 606	Theory and Research in Organizational Communication	
<b>AREA COURSES: *</b>		<b>27</b>
Select nine COMM courses at the 600 or 700 level.		
<b>RESEARCH:</b>		<b>18</b>
COMM 797	Research	
Total Hours		59

\*

Of the Foundational and Area Courses: 12 hours are Primary Area courses, nine hours are Secondary Area courses, and nine hours are Research Methods courses.

## Major Learning Outcomes

### COMMUNICATION STUDIES

Students earning a Ph.D. in Communication Studies will be able to:

1. explain, synthesize, and critique the primary Communication theories, perspectives, principles, and concepts associated with the Communication Studies discipline
2. convey expert knowledge of the Communication theories, perspectives, principles, and concepts that comprise their primary and secondary areas of study
3. independently design, conduct, and interpret original Communication-based research using quantitative research methods suitable for conference presentations and professional publication
4. create a programmatic line of research to guide future Communication-based research endeavors and projects
5. select and use effective instructional communicative behaviors across a variety of teaching and training situations
6. develop their writing, analytical, and research skills needed for success as a professional in the field of Communication Studies
7. commit to the profession through activity in professional associations and service to the department, university, and community

## Community Development Policy and Practice

### Certificate Offered

- Community Development Policy and Practice

### Nature of the Program

The Graduate Certificate in Community Development Policy & Practice (CDPP) is offered through the Department of Public Administration. This 18-credit hour program of study is designed to enable both traditional students and in-service practitioners to prepare for, enhance, and advance their

careers in the field of community development, with an emphasis on applied research and service-learning. Community development is a wide-ranging profession that pursues holistic improvements to local social, economic, and environmental quality of life. From community organizing to economic development, these activities take place in diverse public, nonprofit, and private enterprise.

## FACULTY

### CHAIR

- Scott Myers - Ph.D.

### PROFESSORS

- L. Christopher Plein - Ph.D. (University of Missouri)  
Regular Graduate Faculty, Eberly Professor of Outstanding Public Service, Legal and Political Foundations, Public Policy Analysis, Social Policy, Community and Economic Development
- Margaret Stout - Ph.D. (Arizona State University)  
Regular Graduate Faculty, Local Government, Community Development, Public Policy and Public Planning

### ASSOCIATE PROFESSORS

- Paolo D. Farah - Ph.D., LL.M., JD (College of Europe, University of Paris)  
Regular Graduate Faculty, Public Policy & Admin., Legal & Political Foundation, Sustainability, Socio-Economic & Cultural Rights & Justice, Human Rights, Technology & Innovation
- Maja Husar Holmes - Ph.D. (Syracuse University)  
Regular Graduate Faculty, Public Management and Public Leadership
- Karen Kunz - D.P.A. (University of Illinois, Springfield)  
Regular Graduate Faculty, Financial Management, Corporate Use of Public Funds, Political Economy

### PROFESSORS EMERITI

- Nancy L. Adams - Ph.D. (Fielding Institute)
- Gerald M. Pops - Ph.D. (Syracuse University)
- David G. Williams - Ph.D. (State University of New York at Albany)

## Admissions

### CERTIFICATE IN COMMUNITY DEVELOPMENT POLICY AND PRACTICE

This 18-credit hour program of study is designed to enable both traditional students and in-service practitioners to prepare for, enhance, and advance their careers in the field of community development, with an emphasis on applied research and service-learning. The Community Development Policy and Practice (CDPP) credential is available to certificate seeking students, as well as those pursuing another graduate degree. Candidates must meet the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>). The GRE is not required for admission to this program.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- A 1-2-page statement of purpose that describes the applicant's career interests and experience in community building and development work, explains the applicant's ability to conduct applied research in small rural communities, demonstrates the applicant's commitment to social, economic, and environmental justice, and confirms availability for online, synchronous class sessions and occasional fieldwork in host communities (no more than two visits in any semester).

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadline:

- The CDPP Certificate program admits students on a rolling basis, with Fall starts strongly recommended.

**For questions, please contact:** [publicadmin@mail.wvu.edu](mailto:publicadmin@mail.wvu.edu)

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: CG42

## Graduate Certificate in Community Development Policy and Practice

### CERTIFICATE CODE - CG42

Graduation requirements: Students must earn a minimum cumulative GPA of 3.0. Students must also earn a minimum GPA of 3.0 in all courses applied to the certificate and a minimum grade of B- in PUBA 650, PUBA 750 and PUBA 755.

### CERTIFICATE REQUIREMENTS

Code	Title	Hours
<b>CORE COURSES</b>		
PUBA 650	Local Governance	3
PUBA 750	Public Planning	3
PUBA 755	Sustainable Community Development	3
<b>ELECTIVES</b>		<b>9</b>
Select 9 credit hours from the following:		
PUBA 651	Social Equity in Public Service	
PUBA 655	Public Engagement	
PUBA 730	Advanced Public Service Research	
PUBA 791	Advanced Topics	
AGEE 650	Program Development in Community Education	
AGEE 651	Program Evaluation in Comm Ed	
ART 623S	Graduate Graphic Design	
DSM 650	The Creative Economies	
FNRS 523	Advanced Urban Forest Management	
GEOG 550	Geographic Information Science	
HIST 609	Field Methods in Historic Preservation	
HIST 613	Local History Research Methodology	
HIST 620	Practicum in Cultural Resource Management	
LAW 625	Nonprofit Organizations	
LAW 635	Land Use and Resilience Law	
LAW 774	Local Government	
LEGS 760	Administrative Ethics	
RPTR 714	Outdoor Recreation Behavior	
RPTR 738	Tourism Planning	
SOWK 656	Financial Management and Grant Writing	
WGST 530	Feminist Theory	
Total Hours		18

## Certificate Learning Outcomes

### COMMUNITY DEVELOPMENT POLICY AND PRACTICE (CDPP)

- Investigate and determine the components of local quality of life and analyze how they are pursued by local governments, organizational collaborators, and citizens.
- Distinguish, critique, and recommend public planning approaches and apply them to a range of issues in a specific context.
- Investigate and interpret how community development methods contribute to social, economic, and environmental sustainability and apply them to a specific context.
- Develop and apply specialized skills for social, economic, or environmental development at the local level.
- Develop and apply research skills used in community development.

# Cultural Resource Management

## Certificate Offered

- Cultural Resource Management

## Nature of the Program

The Graduate Certificate in Cultural Resource Management provides instruction in the theory and practice of federally-mandated compliance for historic preservation and cultural resource management. This certificate complements many WVU graduate programs including Art History, History, Public History, Public Administration, and Recreation Parks and Tourism Resources. Individuals with an undergraduate degree with an interest in historic preservation, museums, and other cultural resources who want to earn the certificate without enrolling in a graduate degree program are eligible to apply.

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## FACULTY

### CHAIR

- Kate Staples - Ph.D. (University of Minnesota)

### ASSOCIATE CHAIR

- Matthew Vester - Ph.D. (University of California, Los Angeles)

### DIRECTOR OF GRADUATE STUDIES

- Jason Phillips - Ph.D. (Rice University)

### DIRECTOR OF UNDERGRADUATE STUDIES

- William Gorby - Ph.D. (West Virginia University)

## PROFESSORS

- Brian Luskey - Ph.D. (Emory University)  
Regular Graduate Faculty, 19th-century U.S., Social and Cultural History
- Jason Phillips - Ph.D. (Rice University)  
Regular Graduate Faculty, Eberly Family Professor of Civil War Studies, Civil War Era, 19th-century U.S., Southern History, Material Culture
- James Siekmeier - Ph.D. (Cornell University)  
Regular Graduate Faculty, U.S. Diplomatic, Modern Latin America
- Matthew Vester - Ph.D. (University of California, Los Angeles)  
Regular Graduate Faculty, Early Modern Europe, Italy

## ASSOCIATE PROFESSORS

- Melissa Bingmann - Ph.D. (Arizona State University)  
Regular Graduate Faculty, Public history, 20th-century U.S.
- William Gorby - Ph.D. (West Virginia University)  
Associate Graduate Faculty, West Virginia, Appalachia, Immigration
- Sheena Harris - Ph.D. (The University of Memphis)  
Regular Graduate Faculty, Race, Class, Gender, Education, Black Women's Organizations, Hip-Hop Feminism
- Joseph Hodge - Ph.D. (Queen's University at Kingston)  
Regular Graduate Faculty, Modern Britain, British Empire, Decolonization, International Development, Africa
- Tamba E. M'bayo - Ph.D. (Michigan State University)  
Regular Graduate Faculty, West Africa, Colonial and Postcolonial, African Diaspora and Pan-Africanism
- Kate Staples - Ph.D. (University of Minnesota)  
Regular Graduate Faculty, Medieval, Gender, England, Material Culture
- Mark B. Tauger - Ph.D. (University of California, Los Angeles)  
Regular Graduate Faculty, 20th-century Russia/USSR, World/Comparative, Historiography
- Jessica Wilkerson - Ph.D. (University of North Carolina-Chapel Hill)  
Regular Graduate Faculty, Joyce and Stuart Robbins Chair, Appalachia and the South, Women, Gender, and Sexuality, 20th-c U.S., Labor and Working Class History

## ASSISTANT PROFESSORS

- Brooke Durham - Ph.D. (Stanford University)  
Regular Graduate Faculty, Modern Europe, French Empire, North Africa, Decolonization
- Max Flomen - Ph.D. (University of California, Los Angeles)  
Regular Graduate Faculty, Early American History, Native American History
- Sean Lawrence - Ph.D. (University of California, Santa Cruz)  
Regular Graduate Faculty, Germany, Colonialism, Middle East, Environment, Political Economy
- Austin McCoy - Ph.D. (University of Michigan)  
Regular Graduate Faculty, 20th-Century U.S., African-American, Labor, Social Movements
- Devin Smart - Ph.D. (University of Illinois-Urbana Champaign)  
Regular Graduate Faculty, Africa, World/Global, Environmental
- Jennifer Thornton - Ph.D. (University of California, Riverside)  
Associate Graduate Faculty, Public History

## EMERITI FACULTY

- William S. Arnett - Ph.D. (Ohio State University)
- Robert E. Blobaum - Ph.D. (University of Nebraska)
- William I. Brustein - Ph.D. (University of Washington)
- Elizabeth Fones-Wolf - Ph.D. (University of Massachusetts)
- Kenneth Fones-Wolf - Ph.D. (Temple University)
- Jack Hammersmith - Ph.D. (University of Virginia)
- Barbara J. Howe - Ph.D. (Temple University)
- Elizabeth K. Hudson - Ph.D. (Indiana University)
- Ronald L. Lewis - Ph.D. (University of Akron)
- Mary Lou Lustig - Ph.D. (Syracuse University)
- Robert M. Maxon - Ph.D. (Syracuse University)
- Stephen C. McCluskey - Ph.D. (University of Wisconsin)
- A. Michal McMahon - Ph.D. (University of Texas)
- John C. Super - Ph.D. (University of California, Los Angeles)

## Admissions

### GRADUATE CERTIFICATE IN CULTURAL RESOURCE MANAGEMENT

The Graduate Certificate in Cultural Resource Management provides instruction in the theory and practice of federally-mandated compliance for historic preservation and cultural resource management. This certificate complements many WVU graduate programs including Art History, History, Public History, Public Administration, and Recreation Parks and Tourism Resources. Individuals with an undergraduate degree with an interest in historic preservation, museums, and other cultural resources who want to earn the certificate without enrolling in a graduate degree program are eligible to apply. The GRE is not required for admission to this program.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Curriculum Vitae or Resume.
- Students currently enrolled in a graduate degree program should meet with the CRM coordinator before applying.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadline:

- The Cultural Resource Management Certificate program admits students on a rolling basis.

For questions, please contact: [history@mail.wvu.edu](mailto:history@mail.wvu.edu) ([history@mail.wvu.edu](mailto:history@mail.wvu.edu))

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

## Graduate Certificate in Cultural Resource Management

### CERTIFICATE CODE - CG02

Graduation requirement: Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the certificate.

Code	Title	Hours
<b>CORE COURSES</b>		<b>6</b>
HIST 600	Cultural Resource Management	
Select one course from the following list: *		
ARHS 491	Professional Field Experience	
HIST 620	Practicum in Cultural Resource Management	
HIST 614	Internship in Public History	
PUBA 751	Public Service Internship	
RPTR 608	Recreation and Park Management Practicum	
<b>ELECTIVES</b>		<b>9</b>
Select three courses from the following list: *		
ARHS 411	Conservation Practices: Digital Documentation, Treatment, Condition Assessment	
ARHS 412	Collections Care and Preservation of Material Objects	
HIST 609	Field Methods in Historic Preservation	
HIST 610	Historic Site Interpretation	
HIST 613	Local History Research Methodology	
HIST 615	Museum Studies	
GEOG 550	Geographic Information Science	
LARC 465	Regional Design	
LARC 466	Introduction to Urban Design Issues	
PUBA 610	Public and Nonprofit Management	
PUBA 645	Public Policy and Administration	
PUBA 655	Public Engagement	
RPTR 680	Non-Personal Interpretation	
Total Hours		15

\*

Other courses to fulfill this requirement may be submitted to the Cultural Resource Management certificate advisor for approval.

## Certificate Learning Outcomes

### CULTURAL RESOURCE MANAGEMENT

Students earning a Certificate in Cultural Resource Management will be able to:

1. Interpret and apply federal and state laws, statutes, regulations, and policy that impact cultural resources and their management.
2. Employ professional methodologies in researching, recording, and evaluating cultural resources.
3. Synthesize information from a wide variety of sources to create cultural resource management documents, such as National Register evaluations, management plans, mitigation recommendations, interpretive strategies, and other technical reports.
4. Collaborate with cultural resource management specialists, such as archaeologists, engineers, architects, curators, historic preservationists, project managers, and planners, among others, through an understanding of each discipline's unique role in CRM.
5. Explain the significance of CRM to public audiences, and understand the connection of interpretation and public education to cultural resource management.

# English

## Degrees Offered

- Master of Arts
- Master of Arts in Professional Writing and Editing
- Master of Fine Arts
- Doctor of Philosophy

## Nature of the Program

### MASTER OF ARTS

The Master of Arts (M.A.) in English is a two-year program designed for students who have shown an aptitude for sustained literary study and who desire to pursue a more intensive and extensive academic training. The M.A. program has five primary goals: (1) to extend the student's knowledge of the cultural, linguistic, and literary heritage of Great Britain, America, and other English-speaking lands, (2) to introduce students to the critical and professional discourses of academics in literary and linguistic studies, (3) to develop the student's research, writing, and analytical skills, which are necessary for professional success, (4) to provide professional training to prepare students to teach English at the post-secondary level, and (5) to counsel students to craft their program of study to meet their professional and personal needs.

The M.A. program meets these goals by providing a rotation of courses in literature, linguistics, theory, and pedagogy that require extensive reading, writing, research, and oral presentations. With small classes, students receive individual attention from the faculty, which facilitates student progress. M.A. students are eligible for teaching assistantships within the English Department, which provides training in pedagogy.

The knowledge and skills that students acquire in the M.A. program provide the requisite foundation to pursue doctoral work in English, with the ultimate goal of becoming a professional scholar and academic at a post-secondary institution. The academic training provided by the M.A. also is applicable for careers in secondary education, professional writing, and editing.

### MASTER OF ARTS IN PROFESSIONAL WRITING AND EDITING

The M.A. in Professional Writing and Editing is a thirty-hour degree that combines theories of writing with practice in real-world writing situations. Students will study professional writing theory, the history of rhetoric, editing, rhetorical analysis, new modes of digital composition, and writing ethics. This degree prepares students for a variety of career options, including technical writing and editing, project management, writing consulting, writing instruction, and advanced graduate study in rhetoric and composition. The degree is designed for both newly-graduated undergraduates and working adults who want more training in writing and editing.

### MASTER OF FINE ARTS

The Master of Fine Arts in creative writing is a three-year academic/studio program that combines an apprenticeship to the craft with more traditionally academic elements. This approach seeks to train students in ways that reflect the realities of the writer/artist's evolving role in the academy. Because writers, when hired to teach, are often asked to handle a variety of courses beyond the creative writing workshop, the academic/studio format requires students to take literature and pedagogy courses in addition to writing workshops.

Thus, the M.F.A. is both an academic and a professional degree. As part of WVU's comprehensive Center for Writing Excellence, this degree allows students to prepare for careers in teaching or professional writing/editing. Our objective is to nurture and mentor the many writers in the region seeking professional training. We also intend to attract student writers from all over the country to West Virginia for the opportunity to live and write in this culturally-rich state and to work with our faculty. The ultimate goal is to produce writers who will publish literature and contribute to the culture. A secondary goal is to offer practical skills and opportunities to writers interested in pursuing writing-related professions.

### DOCTOR OF PHILOSOPHY

The doctoral program in English offers opportunities for specialization in literary studies, cultural studies, or composition and rhetoric. The program has five goals: (1) to build upon the broad foundations of the M.A. degree's focus on the cultural, linguistic, and literary heritage of Britain, America, and other English-speaking lands, (2) to help students to develop fluency in the critical discourses of the profession, (3) to help students to develop professional competency in three fields of research, as dictated by the Examination for Formal Admission to Candidacy, (4) to help students to develop the research, writing, and analytical skills necessary for professional success, and (5) to provide professional training and counseling to prepare graduates to teach English professionally on the post-secondary level.

These goals are met by the various features of our program, which include coursework, examinations, and both formal and informal instruction and advising regarding professional teaching and research responsibilities. Doctoral study culminates in the writing of the dissertation, which is designed to contribute to the critical and/or theoretical discussion in its field and to prepare the doctoral candidate for further research and publication as a professional scholar and teacher.



## Publications

*Calliope*, a publication of WVU student writing, is sponsored by the Department of English and the English Honorary and Club.

Cheat River Review (<http://cheatriverreview.com/>), is a literary magazine edited by MFA students and the Council of Writers of the West Virginia University MFA program.

*Resilience* is a digital, peer-reviewed journal of the Environmental Humanities. It provides a forum for scholars from across the humanities disciplines to speak to one another about their shared interest in environmental issues, and to plot out an evolving conversation about what the humanities contributes to living and thinking sustainably in a world of dwindling resources.

*Victorian Poetry*, a critical journal of Victorian literature, is edited by the Department of English. The journal was established at WVU in 1963 and has become internationally known, with subscribers in 27 countries.

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## FACULTY

### CHAIR

- Brian Ballentine - Ph.D. (Case Western Reserve University)

### ASSISTANT CHAIR

- Christine Hoffmann - Ph.D. (University of Arkansas)

### M.A. & PH.D. PROGRAM SUPERVISOR

- Adam Komisaruk - Ph.D. (University of California, Los Angeles)

### M.F.A. PROGRAM SUPERVISOR

- Mark Brazaitis - M.F.A. (Bowling Green State University)

### M.A. P.W.E. PROGRAM SUPERVISOR

- Brian Ballentine - Ph.D. (Case Western Reserve University)

## PROFESSORS

- Brian Ballentine - Ph.D. (Case Western Reserve University)  
Technical and professional communication, Rhetoric
- Laura Brady - Ph.D. (University of Minnesota)  
Eberly Family Distinguished Professor of Outstanding Teaching, Composition and Rhetorical Theory, Writing Program Administration, Women's Studies
- Mark Brazaitis - M.F.A. (Bowling Green State University)  
Creative Writing: Fiction
- Cari Carpenter - Ph.D. (University of Michigan)  
19th-century American Literature, Native American Literature
- Lara Farina - Ph.D. (Fordham University)  
Medieval Literature and Culture, Gender Studies
- Stephanie Foote - Ph.D. (University of Buffalo)  
Jackson and Nichols Professor of English, Gender and women's studies, Critical theory
- Marilyn Francus - Ph.D. (Columbia University)  
Restoration and 18th-century Literature and Culture, Women's Studies
- Michael Germana - Ph.D. (University of Iowa)  
American Studies, 19th and 20th-century American Literature, Popular Culture
- Catherine Gouge - Ph.D. (West Virginia University)  
Professional writing, Medical rhetoric
- Rosemary Hathaway - Ph.D. (The Ohio State University)  
Folklore, English Education, 20th-century American Literature
- Kirk Hazen - Ph.D. (University of North Carolina-Chapel Hill)  
Linguistics, Sociolinguistics
- Adam Komisaruk - Ph.D. (University of California, Los Angeles)  
Romanticism and 18th-century British Literature
- Kathleen O'Hearn Ryan - Ph.D. (University of Massachusetts-Amherst)  
Eberly Family Professor of Outstanding Teaching, 20th-century American Literature

- Mary Ann Samyn - M.F.A. (University of Virginia)  
Creative Writing: Poetry
- Timothy Sweet - Ph.D. (University of Minnesota)  
Eberly Family Distinguished Professor of American Literature, American Studies (17th-19th Century), Literature and Environment, Native American Literature

## ASSOCIATE PROFESSORS

- Gwen Bergner - Ph.D. (Princeton University)  
African-American and Multi-ethnic Literatures, Post-colonial Studies
- Anna Shannon Elfenbein - Ph.D. (University of Nebraska)  
American Literature, Women's Studies, Film
- Christine Hoffmann - Ph.D. (University of Arkansas)  
Early Modern British Studies
- Glenn Taylor - M.F.A. (Texas State University)  
Creative Writing: Fiction
- Lisa Weihman - Ph.D. (New York University)  
19th and 20th-century British and Irish Literature and Culture

## ASSISTANT PROFESSORS

- Brian Broome - M.F.A. (University of Pittsburgh)  
Creative Writing: Non-fiction
- Erin Brock Carlson - Ph.D. (Purdue University)  
Professional and Technical Communication, Rhetoric
- Rose Casey - Ph.D. (Cornell University)  
Modern British Literature
- Jenny Johnson - M.F.A. (Warren Wilson College)  
Creative Writing: Poetry
- Sarah Morris - Ph.D. (University of Maryland)  
human science phenomenology, embodiment, writing process, and student-centered teaching
- Christa Parravani - M.F.A. (Rutgers University)  
Creative Writing: Non-fiction
- Johanna Winant - Ph.D. (University of Chicago)  
Modern American poetry and poetics

## SERVICE PROFESSORS

- Nathalie Singh-Corcoran - Ph.D. (University of Arizona)  
Writing Center Theory and Practice, Writing Assessment

## SERVICE ASSOCIATE PROFESSOR

- Ann Pancake - Ph.D. (University of Washington)  
Fiction, Appalachian Studies

## TEACHING ASSOCIATE PROFESSORS

- Nancy Caronia - Ph.D. (University of Rhode Island)  
Contemporary British and American literature
- Douglas Phillips - Ph.D. (Carnegie Mellon University)  
Professional and technical writing

## TEACHING ASSISTANT PROFESSORS

- Amy Alvarez - M.F.A. (University of Southern Maine)  
Poetry
- Amanda Berardi Tennant - Ph.D. (Carnegie Mellon University)  
Composition and rhetoric

## INSTRUCTORS

- Jill Woods - Ph.D. (West Virginia University)  
Business and technical writing

## PROFESSORS EMERITI

- Gail Galloway Adams
- Dennis Allen
- Rudolph Almasy
- Patrick Conner
- Ellesa High
- Elizabeth Juckett
- John Lamb
- Byron Nelson
- Carolyn Nelson
- Kevin Oderman
- Ethel Morgan Smith

## Admissions

The Department of English admits students to the M.A. in English, the M.A. in Professional Writing and Editing, the M.F.A. in Creative Writing, and the Ph.D. in English. Admission requirements for each program are described below.

The GRE is not required for admission to any of the programs.

### M.A. IN ENGLISH

In addition to the university admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), prospective candidates for the degree of Master of Arts are expected to have completed work comparable to that required for the department's undergraduate degree in English (<http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/englishlanguageandliterature/#majortext>). Applicants typically have an undergraduate GPA of 3.5 or above and strong recommendations from instructors.

### M.A. IN PROFESSIONAL WRITING AND EDITING (PWE)

In addition to the university admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), prospective candidates for admission are expected to have completed an undergraduate degree in English or an allied field with a record distinctly above average or to have at least two years' work experience in writing and editing. The program recognizes, however, that not all potentially excellent graduate students fit this profile and welcomes applications from individuals who can make a strong case that they will succeed.

### M.F.A. IN CREATIVE WRITING

In addition to the university admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), prospective candidates for the degree of master of fine arts are normally expected to have completed a bachelor's degree in English. However, the program welcomes applicants from any field of study. Admission to the program is based primarily on the excellence of a substantial writing sample in fiction, nonfiction, or poetry.

### PH.D. IN ENGLISH

In addition to the university admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants for admission to the program are generally expected to have completed an M.A. in English or a related field. Students who have completed only a B.A. in English, however, may apply for direct admission to the Ph.D. program. Direct admission is highly selective and limited to exceptionally qualified students with superior standing in their bachelor's degree. Students of this caliber are generally expected to have a cumulative GPA of 3.75 or higher.

#### List of Admission Requirements for all programs:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- Three letters of recommendation, written by people in a position to evaluate the applicant's academic strengths.
- Statement of purpose (personal statement) appropriate to the program of application, as described below.
  - M.A. in English: The personal statement (2-3 pages) should outline the applicant's academic and professional goals.
  - M.A. in PWE: The statement should outline the applicant's interests and motivations for graduate work in PWE which highlights undergraduate achievements and/or prior experience with writing and editing, speaks to interests in writing and composition instruction as well as any prior teaching-related experience, and showcases the promise for success in graduate studies.

- M.F.A. in Creative Writing: The personal statement (2-5 pages) should outline the applicant's background, literary and other influences, and the reasons for pursuing graduate study.
- Ph.D.: The personal statement should outline the applicant's academic and professional goals.
- Writing sample appropriate to the program of application, see below.
  - M.A. in English: A 10–15-page essay demonstrating strong skills in literary or cultural analysis is required.
  - M.A. in PWE: A writing sample that consists of a portfolio of written work is required.
  - M.F.A. in Creative Writing: A substantial writing sample in fiction, nonfiction, or poetry (10-20 pages of poetry; 20-30 pages of prose) is required.
  - Ph.D.: A 15–20 page analytic essay demonstrating research skills in literary/cultural studies or writing studies, awareness of scholarly subfields, and persuasive argument is required.

### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

### Application Deadlines:

- The graduate programs in English only admit for the Fall semester.
- The priority review deadline for the M.A. and Ph.D. is January 5<sup>th</sup>.
- The priority review deadline for the M.A. in Professional Writing and Editing is January 15<sup>th</sup>.
- The priority review deadline for the M.F.A. is January 15<sup>th</sup>.
- Completed applications for admission submitted after the deadline may be reviewed on a space-available basis.
- Exceptional applicants for the Doctoral Program may be nominated by the department of English for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.A. Major Code: 1442

M.A. in Professional Writing and Editing Major Code: 1481

M.F.A. Major Code: 1486

Ph.D. Major Code: 1442

**For specific information on the following program, please see the link to the right:**

- English, M.A.

**For specific information on the following program, please see the link to the right:**

- Professional Writing and Editing, M.A.

**For specific information on the following program, please see the link to the right:**

- English, M.F.A.

**For specific information on the following program, please see the link to the right:**

- English, Ph.D.

## Degree Progress

### M.A.

**Graduation Requirements:** Students have the option of completing the M.A. through either (1) 30 credits of coursework, or (2) 24 credits of coursework plus M.A. thesis. The optional M.A. thesis is a work of scholarship in the form of an extended research paper (usually 50-75 pages). The thesis is directed by a regular member of the graduate faculty and two additional committee members. It is recommended that one member be from outside of the Department of English. Students must satisfactorily defend their completed projects before their committees and anyone else who wishes to attend. All theses must be filed electronically.

### M.A. IN PWE

**Graduation Requirement:** Students have the option of completing the M.A. in Professional Writing and Editing through either (1) completing a graduate level internship, or (2) researching, writing, and defending a thesis.

**Internship (3 hours):** Students who choose the internship option will work for a local or regional company, program, or organization for 8-10 hours a week for 12-15 weeks. Students will engage in a variety of supervised writing tasks, including research, editing, proofreading, project management, and content development. At the end of the internship period, students will submit a portfolio to the Professional Writing Coordinator that documents and reflects on their internship experience.

**Critical Thesis (3-6 hours):** The M.A. thesis is a work of scholarship in the form of an extended research paper (usually 50-75 pages) on a topic in the field. The thesis is directed by a regular member of the graduate faculty and two additional committee members. Students must satisfactorily defend their completed projects before their committees and anyone else who wishes to attend. All theses must be filed electronically.

### M.F.A.

Students will work with faculty to develop a progress-toward-degree plan. In the third year, students must follow submission timelines for application for graduation and Thesis Defense Declaration form. In addition, they must be aware of ETD guidelines and generally work with their thesis advisor and committee members to insure ample time for reading the manuscript before the defense date.

### PH.D.

**Graduation Requirements:** Students earn the Ph.D. by satisfactorily completing all of the following:

1. required coursework;
2. a portfolio of academic work;
3. the foreign-language requirement;
4. the Examination for Formal Admission to Candidacy; and
5. a prospectus, full text, and defense of the doctoral dissertation.

**Coursework:** For students who enter the program with an M.A. already in hand, up to 30 hours may be waived at the discretion of the M.A./Ph.D. Program Supervisor.

**Portfolio:** By September 1 of the second year past the completion of 30 credit hours, each student will submit a portfolio consisting of:

- a research paper (approximately 20 pages) of his/her choosing, most likely stemming from a first-year course;
- a self-evaluation of his/her coursework, research, writing, teaching, and department participation; and
- a plan of study, including possible dissertation field and list of primary courses.

A three-member committee, constituted in advance from the English graduate faculty, will evaluate all portfolios. A portfolio deemed unsatisfactory must be resubmitted in January of the same academic year.

**Foreign-Language Requirement:** Students must demonstrate proficiency in a foreign language in one of the following ways:

- successfully completing the fourth semester of a foreign language at the university level, with a minimum grade of B, within the past five years; or
- passing a graduate translation examination administered by the WVU Department of World Languages.
- International students who have submitted the results of an English language proficiency exam (e.g. TOEFL or IELTS) as part of their application to the program may request a waiver of the requirement.

**Examination:** At the beginning of preparations for the Examination for Formal Admission to Candidacy ("Booklist Exam"), the student must constitute a Ph.D. committee. The committee consists of a chair (a regular member of the Department of English graduate faculty), two additional members from the English faculty, and one member external to the English faculty. The examination is designed to have the student gain more detailed familiarity with

his/her field and to refine an original topic for the dissertation. The student compiles a list of 75-100 core texts, writes a brief preface, then sits for a two-hour oral examination with the committee.

**Dissertation:** Passage of the Booklist Exam is followed by the writing and committee approval of the dissertation prospectus, then the writing of the dissertation. The dissertation is intended to be an original contribution to the scholarship in its field. A two-hour oral defense of the completed dissertation is required. For the student to pass the dissertation defense, no more than one member of the committee may dissent. All dissertations must be filed electronically.

**Summary:** The portfolio of academic work must be submitted in September of the second year past completion of 30 hours of coursework; and resubmitted, if applicable, in January of the same academic year. Preparations for the Booklist Exam may begin once all but three credits of coursework are complete. All degree requirements, including the dissertation defense, must be completed within five years of the student's passing the Booklist Exam. For more details, please consult the Graduate Handbook on the English Department website.

# English, M.A.

## Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 graduate credit hours in English (ENGL) at the 500 level or above.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75. Students must also earn a minimum GPA of 2.75 and a minimum grade of B- in all courses applied to the degree.
- **Graduation Requirements:** Students have the option of completing the M.A. through either (1) 30 credits of coursework, or (2) 24 credits of coursework with an M.A. thesis. The M.A. thesis must be defended satisfactorily before the student's thesis committee.
- **Benchmarks:** For details, please go to the English Degree Progress tab (p. 229).
- **Progress toward Completion:** Students should complete the M.A. within two academic years, including summer semesters.
- **Additional Requirements:**
  - Breadth Requirement: At least one course must be taken in each of the following areas: American Literature, British Literature, pre-1800 literature, post-1800 literature.
  - Foreign-Language Requirement: Students must demonstrate proficiency in a foreign language in one of the following ways:
    - successfully completing the fourth semester of a foreign language at the university level, with a minimum grade of B-. The course must have been completed within the past five years, or
    - passing a graduate translation examination administered by the WVU Department of World Languages.
    - International students who have submitted the results of an English language proficiency exam (e.g. TOEFL or IELTS) may request a waiver of the requirement.

## Curriculum Requirements

Code	Title	Hours
<b>Core Courses</b>		<b>6</b>
ENGL 609	College Composition Pedagogy *	
and:		
ENGL 680 or ENGL 682	Introduction to Literary Research Recent Literary Criticism	
<b>Graduate Coursework in English *</b>		<b>18</b>
Any elective in ENGL at the 500 level or above		
Select 6 credits of seminar:		
ENGL 701	Seminar in Rhetoric	
ENGL 741	Seminar in American Studies	
ENGL 764	Seminar in Renaissance Studies, 1550-1660	
ENGL 766	Seminar in Restoration and Eighteenth-Century Studies	
ENGL 768	Seminar in British Romanticism	
ENGL 771	Seminar in Twentieth-Century British Studies	
ENGL 782	Current Directions in Literary Study	
<b>BREADTH REQUIREMENT **</b>		
American Literature:		
ENGL 646	American Literature to 1865	

ENGL 647	American Literature, 1865-1915
ENGL 648	American Literature, 1915-Present
ENGL 741	Seminar in American Studies

## British Literature:

ENGL 661	Medieval Literature
ENGL 663	Shakespeare
ENGL 664	Renaissance Literature
ENGL 666	Restoration and Eighteenth-Century Literature
ENGL 668	Romantic Literature
ENGL 669	Victorian Literature
ENGL 671	Twentieth-Century British Literature
ENGL 764	Seminar in Renaissance Studies, 1550-1660
ENGL 766	Seminar in Restoration and Eighteenth-Century Studies
ENGL 768	Seminar in British Romanticism
ENGL 771	Seminar in Twentieth-Century British Studies

## Pre-1800-Literature:

ENGL 663	Shakespeare
ENGL 661	Medieval Literature
ENGL 664	Renaissance Literature
ENGL 666	Restoration and Eighteenth-Century Literature
ENGL 764	Seminar in Renaissance Studies, 1550-1660
ENGL 766	Seminar in Restoration and Eighteenth-Century Studies

## Post-1800 Literature:

ENGL 647	American Literature, 1865-1915
ENGL 648	American Literature, 1915-Present
ENGL 669	Victorian Literature
ENGL 671	Twentieth-Century British Literature
ENGL 771	Seminar in Twentieth-Century British Studies

**Completion Requirement****6**

Select one option

Thesis option:

ENGL 698 Thesis or Dissertation

Coursework option:

2 additional ENGL courses at the 500 level or above \*\*\*

Total Hours

30

\*

Students must take ENGL 609 in their first semester of teaching.

\*\*

Each of the four parts of the Breadth Requirement must be satisfied. Courses used for the Elective and Seminar requirements may also be used for the Breadth Requirement. A single course may be used for more than one part of the Breadth Requirement, but cannot receive credit more than once. With the permission of the program director, certain courses other than those listed may be used for the Breadth Requirement.

\*\*\*

ENGL 690/790, 698/798, 697/797 should be excluded from any graduate program requirements.

## Major Learning Outcomes

### ENGLISH

Upon completion of the M.A. program, students will be able to:

1. Demonstrate advanced knowledge of the literary and linguistic histories of English-speaking communities
2. Apply the critical and professional discourses of literary and cultural study

3. Compose persuasive analytical arguments about cultural and literary topics
4. Teach writing in English at the post-secondary level

## Professional Writing and Editing, M.A.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours in English at the graduate level.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75. Students must also earn a minimum GPA of 2.75 and a minimum grade of B- in all courses applied to the degree.
- **Graduation Requirement:** Students must complete coursework and practical experience.
  - **Professional Writing and Editing Electives:** In consultation with the advisor, students will individualize their plan of study by choosing two 500 or 600-level courses that develop a specific focus within the general field of professional writing and editing. Students must work with an advisor to file an approved plan of study by the end of their first semester.
  - **General Distribution English Coursework:** In addition to specific required English courses, students must complete a minimum of nine credits in general English studies. Courses may include literature, writing, and/or linguistics courses offered by the Department of English and are chosen in consultation with the advisor. General distribution hours may often include requirements dictated by graduate teaching status, prior coursework, and departmental guidelines. Students may not use the same course(s) to fulfill the general distribution and the professional writing electives requirements.
  - **Practical Experience:** Students typically complete a workplace internship while enrolling in ENGL 610 (<http://catalog.wvu.edu/search/?P=ENGL%20610>) (three hours). With approval from the program a thesis option can substitute for the internship.
- **Benchmarks:** PWE students typically complete an internship in their final semester of the program. At a minimum, students must first complete at least 12 credit hours of coursework before pursuing the internship option. Students pursuing the thesis option should work with their advisor to approve a research topic. To complete the thesis option, students typically register for a section of English 698 in their last two semesters in the program.
- **Additional Requirements:** A student should state in the plan of study the means by which he or she plans to satisfy the language requirement. The M.A. in PWE requires that students demonstrate proficiency in foreign language, statistics, or computer programming, in one of following ways:
  - Earning a B or above in the second-year level of foreign language study at an accredited college or university (or its international equivalent) within the last five years
  - Passing the Graduate Student Foreign Language Exam administered by the Department of World Languages, Literatures, and Linguistics
  - Participating in a University-approved study abroad program of four or more weeks in a non-English-speaking host country will also fulfill the language requirement if, as part of the experience, students are required to study the language and culture of the host country. As part of the study abroad program, students must enroll in at least one three-credit-hour course and earn a grade of B or above
  - Completing STAT 111 or STAT 211 with a grade of B or above
  - Completing CS 110 (<http://catalog.wvu.edu/search/?P=CS%20110>) Introduction to Computer Science and its accompanying one credit hour lab with a grade of B or above

### Curriculum Requirements

Code	Title	Hours
<b>Professional Writing and Editing Courses:</b>		
ENGL 601	Studies in Composition and Rhetoric	3
ENGL 602	Editing	3
ENGL 605	Professional Writing Theory	3
ENGL 609	College Composition Pedagogy *	3
<b>Internship: **</b>		<b>3</b>
ENGL 610	Professional Writing Internship	
<b>Professional Writing and Editing 500 or 600-level electives and General Distribution English Coursework</b>		<b>15</b>
Select two PWE 500 or 600 level electives and three graduate level English courses in consultation with advisor ***		
Total Hours		30

\*

Students who do not hold an assistantship will substitute three additional hours of electives.

\*\*

With program approval, a thesis option can be substituted for the internship.



\*\*\*

Additional courses may accepted with Professional Writing Coordinator approval, excluding ENGL 698, 790, and 798.

## Major Learning Outcomes

### PROFESSIONAL WRITING AND EDITING

The learning outcomes for the M.A. in PWE reflect the program's mixture of theory and practice:

1. Recognize and evaluate a variety of ethical, social, legal, and political values intertwined in the production and consumption of technical communications.
2. Analyze the uses and applications of new communication technologies.
3. Acquire historical and critical understanding of rhetorical theories and practices.
4. Master a variety of research and analytical methods, especially as these apply to the study and practical application of oral, written, and visual communication in professional contexts.
5. Acquire a practical and theoretical understanding of workplace dynamics including client relations and project management skills.

## English, M.F.A.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 45 credit hours in English at the 500 level or above.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75. Students must also earn a minimum GPA of 2.75 and a minimum grade of B- in all courses applied to the degree.
- **Graduation Requirement:** Students must complete a thesis.
  - **Master's Thesis:** A book-length manuscript (ideally 48 pages in poetry, 150 pages in fiction or nonfiction) suitable for publication on its own.
- **Benchmarks:** For details, please go to the English Degree Progress tab. (p. 229)

### Curriculum Requirements

Code	Title	Hours
<b>Creative Writing Workshops *</b>		<b>15</b>
ENGL 618	Graduate Writing Workshop: Poetry	
ENGL 618A	Graduate Writing Workshop: Fiction	
ENGL 618B	Graduate Writing Workshop: Non-Fiction	
<b>Pedagogy Requirement</b>		<b>3</b>
ENGL 609	College Composition Pedagogy	
ENGL 688	Creative Writing Mentoring	
<b>Non Creative Writing English Courses **</b>		<b>12</b>
Any course at the 500 level or above		
<b>Thesis</b>		<b>9</b>
ENGL 698	Thesis or Dissertation	
<b>Electives ***</b>		<b>6</b>
Any course at the 500 level or above		
<b>Total Hours</b>		<b>45</b>

\*

Students must complete fifteen hours of creative writing workshops with three hours outside of the student's primary genre.

\*\*

Non Creative Writing English Courses may include any course at the 500 level or above with MFA Coordinator approval except ENGL 611, ENGL 618, or ENGL 618A, or ENGL 618B, or ENGL 688, or ENGL 689, or ENGL 698, or ENGL 790.

\*\*\*

Electives may include any course at the 500 level or above with MFA Coordinator approval, except ENGL 689, or ENGL 698, or ENGL 790.

## Major Learning Outcomes

### CREATIVE WRITING

The Master of Fine Arts in Creative Writing emphasizes the following as goals and outcomes for students graduating from the program:

1. The mastery of a specific literary tradition relevant to the student's genre and craft;
2. The mastery of the revision process;
3. The clear articulation of aesthetic principles;
4. A solid familiarity with genres other than the student's principal genre;
5. A firm understanding of the writing profession.

## English, Ph.D.

### Doctor of Philosophy

- **Credit Hours:** Students are required to complete a minimum of 72 graduate credit hours in English at the 500 level or above. A student entering the Ph.D. program with an M.A. degree already in hand may request that up to 30 hours of coursework be applied toward the doctoral coursework. The final decision is at the discretion of the program director.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75. Students must also earn a minimum GPA of 2.75 and a minimum grade of B- in all courses applied to the degree.
- **Graduation Requirements:** Students earn the Ph.D. by satisfactorily completing all of the following:
  - required coursework;
  - a portfolio of academic work;
  - the foreign-language requirement;
  - the Examination for Formal Admission to Candidacy; and
  - the prospectus, full text, and defense of the doctoral dissertation.
- **Benchmarks:** For details, go to the English Degree Progress tab (p. 229).
- **Foreign-Language Requirement:** Students must demonstrate proficiency in a foreign language in one of the following ways:
  - successfully completing (no more than five years prior to matriculation) the fourth semester of a foreign language at the university level, with a minimum grade of B-; or
  - passing a graduate translation examination administered by the WVU Department of World Languages.
  - International students who have submitted the results of an English language proficiency exam (e.g. TOEFL or IELTS) may request a waiver of the requirement.
- **Examination:** The Examination for Formal Admission to Candidacy ("Booklist Exam") is administered by the student's Ph.D. committee at the conclusion of regular coursework.
- **Dissertation:** Passage of the Booklist Exam is followed by the dissertation phase, all portions of which require approval by the student's Ph.D. committee. It consists of:
  - a prospectus (approx.10 pp.) for the dissertation, with a provisional bibliography;
  - the dissertation itself, designed to be an original contribution to the scholarship in its field; and
  - a two-hour oral defense of the completed dissertation. For the student to pass the dissertation defense, no more than one member of the committee may dissent.

### Curriculum Requirements

Code	Title	Hours
<b>Core Courses</b>		<b>12</b>
ENGL 609	College Composition Pedagogy *	
ENGL 680	Introduction to Literary Research **	
ENGL 682	Recent Literary Criticism **	
ENGL 782	Current Directions in Literary Study ***	
<b>Seminars</b>		<b>12</b>
Select from the following:		
ENGL 701	Seminar in Rhetoric	
ENGL 741	Seminar in American Studies	
ENGL 764	Seminar in Renaissance Studies, 1550-1660	
ENGL 766	Seminar in Restoration and Eighteenth-Century Studies	

ENGL 768	Seminar in British Romanticism	
ENGL 771	Seminar in Twentieth-Century British Studies	
ENGL 782	Current Directions in Literary Study	
<b>Electives:</b>		<b>30</b>
Any ENGL course at the 500 level or above not used for Core or Seminar requirements ****		
<b>Teaching Practicum:</b>		<b>6</b>
ENGL 790	Teaching Practicum	
<b>Thesis:</b>		<b>12</b>
ENGL 798	Thesis or Dissertation	
Total Hours		72

\*

ENGL 609 should be taken in the student's first semester of teaching. At the discretion of the program director, a student who has completed the equivalent of ENGL 609 elsewhere may substitute a different 3-credit ENGL course at the 500 level or above.

\*\*

At the discretion of the program director, a student who has completed the equivalent of ENGL 680 and/or ENGL 682 elsewhere may substitute different 3-credit ENGL courses at the 500 level or above.

\*\*\*

ENGL 782 is a required core course, but it may be repeated in a subsequent semester toward the seminar requirement.

\*\*\*\*

Excluding ENGL 790

## Major Learning Outcomes

### ENGLISH

Upon completion of the PhD program, graduates will be able to:

1. Conceptualize the cultural, linguistic, and literary texts of the English-speaking world as categories of study
2. Converse in the critical and professional discourses of literary and cultural study
3. Conduct research on literature and culture at the level of professional competency
4. Write a substantial (book-length) analysis of a literary or cultural topic
5. Teach courses in the study of language and culture at the post-secondary level

## Forensic and Investigative Science, Forensic Science

### Degrees Offered

- Master of Science
- Doctor of Philosophy

### Nature of the Program

#### M.S. FORENSIC AND INVESTIGATIVE SCIENCE

The objective of the M.S. degree is to prepare students for employment in local, state, and federal forensic science laboratories in several forensic disciplines. The M.S. degree is a rigorous, quantitative, research oriented degree accredited by the Forensic Science Education Programs Accreditation Commission (FEPAC).

The coursework comprises a core of advanced chemistry, biology and pattern evidence courses, including laboratory-based instruction in microscopy, trace evidence, analytical chemistry, DNA, statistics and laboratory management. Further specialization occurs through the student's research. The learning and research environments are supported by state-of-the-art instrumentation and laboratory facilities.

#### PH.D. FORENSIC SCIENCE

The objective of the Ph.D. program is to prepare students to work as professionals in academia, government laboratories, and private industry as laboratory specialists. Students will learn to critically assess the current state of knowledge within the field, and to solve complex problems at the frontier of the discipline. The major component of the program is research. The coursework comprises a core of advanced chemistry, biology and pattern evidence courses, including laboratory-based instruction in microscopy, trace evidence, analytical chemistry, DNA, statistics and laboratory management.

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## FACULTY

### CHAIR

- Casper Venter - Ph.D. (University of South Africa)

### GRADUATE STUDIES COORDINATOR

- Tina Moroosse - M.S. (Marshall University)

### PROFESSORS

- Glen Jackson - Ph.D. (West Virginia University)  
Ming Hsieh Distinguished Professor, Forensic Chemistry and Mass Spectrometry
- Keith Morris - Ph.D. (University of Port Elizabeth)  
Ming Hsieh Distinguished Professor, Impression Evidence, Evidence Interpretation

### ASSOCIATE PROFESSORS

- Jaqueline Speir - Ph.D. (Rochester Institute of Technology)  
Informatics, Pattern Analysis, Image Analysis
- Casper Venter - Ph.D. (University of South Africa)  
Director, Undergraduate Coordinator, Seized Drugs, Latent Fingerprint Development and Comparison
- Tina Moroosse - M.S. (Marshall University)  
DNA Analysis and Quality Assurance

### ASSISTANT PROFESSORS

- Luis Arroyo - Ph.D. (Florida International University)  
Toxicology, Environmental Forensics
- Robin Bowen - Ed.D. (West Virginia University)  
Ethics, Bloodstain Pattern Analysis
- Arati Iyengar - Ph.D. (University of South Hampton)  
Forensic Genetics, Wildlife Forensics
- Roger Jeffreys - M.S. (West Virginia University)
- Lisa Licata - M.S.  
(University of North Texas)
- Rachel Mohr - Ph.D. (Texas A&M University)  
Forensic Entomology
- Tiffany Edwards - M.S. Forensic Science (University of Central Oklahoma)
- Tatiana Trejos - Ph.D. (Florida International University)  
Trace Evidence, Elemental Analysis

## Admissions

The M.S. and the Ph.D. are separate degree programs and students should carefully consider which is the most appropriate for their career goals. The M.S. degree is ideal preparation for work in local, state, and federal forensic laboratory systems. The Ph.D. is geared toward preparing students for research-intensive positions, academic appointments, and laboratory management. Enrollment is limited and competitive. Meeting minimum requirements does not guarantee acceptance.

### M.S. IN FORENSIC AND INVESTIGATIVE SCIENCE

Applicants to the M.S. program should possess a bachelor's degree in natural science, Forensic Science, or equivalent, which includes at least one year of the following courses:

- Fundamentals of Chemistry (inclusive of laboratories)
- Organic Chemistry (inclusive of laboratories)
- Biology (inclusive of laboratories)
- Physics (inclusive of laboratories) and
- Calculus

Applicants should have a minimum cumulative GPA of 3.0 and GRE scores of 300 or better (on combined verbal and quantitative reasoning).

## PH.D. IN FORENSIC SCIENCE

Students with a B.S. degree can be directly admitted to the Ph.D. program but are encouraged to complete the M.S. degree prior to applying to the Ph.D. program. Students applying to the Ph.D. program are strongly encouraged to contact faculty prior to submission of their application to discuss research interests and space availability in their research group. At least two potential research advisors must be identified as part of the admission process.

Applicants to the Ph.D. program should possess a bachelor's or research based master's degree from an accredited college or university which includes at least one year of the following courses:

- Fundamentals of Chemistry (inclusive of laboratories)
- Organic Chemistry (inclusive of laboratories)
- Biology (inclusive of laboratories)
- Physics (inclusive of laboratories) and
- Calculus

Applicants should have a minimum cumulative GPA of 3.0 and GRE scores of 300 or better (on combined verbal and quantitative reasoning).

Current students in the FIS M.S. program who decide to pursue a Ph.D. must submit a completed application by the deadline to be considered for admission. Current enrollment in the FIS M.S. program **does not** guarantee acceptance into the Ph.D. program. Placement in a specific research group or with a specific faculty member is not guaranteed.

### List of Admission Requirements for both programs:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Letters of recommendation from persons who can address potential for success in graduate study and research must be submitted (two for M.S. and three for Ph.D.).
- A personal statement the addresses requirement for the program.
  - For the M.S., the statement should address the applicant's desire to pursue graduate studies in Forensic Science, present concept of Forensic Science, academic goals in the M.S. program, professional goals and employment objectives. Additionally, the personal statement must indicate a first and second choice for which faculty members in the department the applicant would most like to work with and the work they would most like to perform. Information on faculty and their research interests can be found here (<https://forensics.wvu.edu/faculty-and-staff/>).
  - For the Ph.D., the personal statement should address the applicant's desire to pursue graduate studies in Forensic Science, present concept of Forensic Science, academic goals in the Ph.D. program, professional goals and employment objectives. Additionally, the personal statement must indicate a first and second choice for which faculty members in the department the applicant would most like to work with and the work they would most like to do. Information on faculty and their research interests can be found here (<https://forensics.wvu.edu/faculty-and-staff/>).
- A writing sample as follow.
  - For the M.S., students must submit an original writing sample (4-6 pages, 1.5 spaced, 12 pt. font) that consists of one or more of the following must also be submitted: a peer-reviewed publication where the applicant was the lead author, an honors thesis, research report or capstone report in which the applicant is the sole author, or an essay discussing one of the following statements:
    - DNA will eventually replace trace evidence as a technique in forensic science.
    - Forensic science will survive criticism about its reliability.
    - The role of NIST OSAC in strengthening forensic practice.
    - Describe ways in which standards approved by the NIST OSAC organization have helped to strengthen the practice of forensic science.
    - Describe the recent developments in the error rates or uncertainty in any chosen domain of forensic science.
    - Forensic laboratories would benefit from reinforcing the silos of forensic science
  - For the Ph.D., students must submit an original writing sample (approximately 4-6 pages) that consists of one or more of the following:
    - a peer-reviewed publication where the student is the lead author;
    - a thesis research converted to a publication-ready document (note that this document must conform to a pre-print to be submitted to a peer reviewed journal [such as JFS or FSI], and should include appropriate subsections and be of reasonable length);
    - a thesis research proposal converted to a white paper (maximum length of 6 pages, single-spaced).
- Curriculum Vitae.
- Official Transcripts and GRE scores.

### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).

- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### **Application Deadlines:**

- The Department of Forensic and Investigative Science generally admits graduate students for the Fall semester. Admissions for Spring semester may be considered on a case-by-case basis; contact the Coordinator of Graduate Studies before submitting.
- Applications are considered starting in January for admission for the following Fall semester.
- Priority will be given to completed applications received by January 15<sup>th</sup>; application reviews will be continued past the deadline on a space-available basis.
- Upon receipt and evaluation of the complete application package, suitable candidates may be invited for a final interview with the graduate committee.
- Exceptional applicants to the Ph.D. program may be nominated by the Department of Forensic and Investigative Science for competitive University Fellowships. Late applicants cannot be considered for University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

Certain application requirements may be waived based on a preliminary review of an application by the program.

### **ADMISSION REQUIREMENTS 2024-2025**

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MS Major Code: 1479

PhD Major Code: 14C2

**For specific information on the following program, please see the link to the right:**

- Forensic and Investigative Science, M.S.

**For specific information on the following program, please see the link to the right:**

- Forensic Science, Ph.D.

### **Degree Progress**

All students should identify a faculty mentor and research topic as soon as possible. The faculty mentor will work with the student to develop a Plan of Study, constitute an advisory committee, and formulate research plans. Details on the composition and establishment of an advisory committee, timelines, and expectations are provided in the Department's Graduate Student Handbook.

### **MASTER'S BENCHMARKS**

Ideally, the Plan of Study Form should be completed and submitted to the Coordinator of Graduate Studies before the end of the first semester. Failure to complete the Plan of Study by the end of the second semester will result in the student being placed on probation.

The proposal should be successfully defended on or before the last day for defenses as defined by the Eberly college (typically on or before April 15th for fall semester admits). Failure to do so may result in academic probation, and the student may be ineligible for departmental financial support. The student will be required to defend by the end of the summer. If this is not accomplished, steps may be initiated to dismiss the student from the program. For all others, please consult with the Coordinator of Graduate Studies.

Once completed, the proposal defense is valid for a maximum of 4 academic semesters. If the student has not defended the research described by the proposal within 4 academic semesters of the successful proposal defense date, he or she must repeat the proposal defense process, unless given written permission to continue by his or her Primary Investigator (PI) and the Graduate Committee.

### **DOCTORAL BENCHMARKS**

Please refer to Degree Regulations, Time Limits ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree\\_regulations/](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree_regulations/)) in the WVU Graduate Catalog for more information.

The proposal defense should be conducted before the start of the second year of study, assuming completion of the core M.S. coursework. If the research proposal is not successfully defended, the student must reschedule the defense within one semester. Failure to successfully defend or schedule the second defense within one semester may be grounds for dismissal from the program. Once completed, the proposal is valid for a maximum of 6 academic semesters. If the student has not defended the research described by the proposal within 6 academic semesters of the successful proposal defense date, he or she must repeat the proposal defense process, unless given written permission to continue by his or her PI and the Graduate Committee.

Students should schedule their oral qualifying examination by the end of the fall of the second year (3 academic semesters, assuming successful completion of all core M.S. coursework). If unsuccessful in the first attempt of their oral examination, this examination must be repeated within one semester. Failure to successfully qualify or schedule the second oral examination within one semester is grounds for dismissal from the program.

Please refer to the *Forensic and Investigative Science Graduate Handbook* for more information.

## Forensic and Investigative Science, M.S.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 42 graduate credit hours in Forensic and Investigative Science at the 500 and 600 level.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Graduation Requirement:** Students are required to complete a thesis. Details, requirements, and timelines are provided in the department's Graduate Student Handbook.
- **Benchmarks:** Ideally, the Plan of Study Form should be completed and submitted to the Coordinator of Graduate Studies before the end of the first semester. Failure to complete the Plan of Study by the end of the second semester will result in the student being placed on probation.

### Curriculum Requirements

Code	Title	Hours
<b>Core Courses</b>		<b>22</b>
FIS 501 & 501L	Foundations of Criminalistics and Foundations of Criminalistics Laboratory	
FIS 502 & 502L	Forensic Laboratory Management and Forensic Laboratory Management Laboratory	
FIS 602 & 602L	Forensic Informatics and Forensic Informatics Laboratory	
FIS 614 & 614L	Trace Evidence Examination and Laboratory Trace Evidence Examinations	
FIS 620	Forensic Casework Practicum	
FIS 632 & 632L	Advanced Forensic Biology and Advanced Forensic Biology Laboratory	
STAT 512	Statistical Methods 2 *	
<b>Forensic Chemistry Requirement</b>		<b>4</b>
Please select one of the following lecture and lab pairs:		
FIS 451 & 451L	Arson and Explosives Analysis and Arson and Explosives Analysis Laboratory	
FIS 460 & 460L	Analysis of Seized Drugs and Analysis of Seized Drugs Laboratory	
FIS 470 & 470L	Analytical Forensic Toxicology and Analytical Forensic Toxicology Laboratory	
<b>Seminar</b>		<b>4</b>
FIS 696	Graduate Seminar **	
<b>Research</b>		<b>6</b>
FIS 697	Research	
<b>Electives *</b>		<b>6</b>
Any FIS course at the 400 level or above		
Total Hours		42

\*

Or equivalent graduate class as approved by Graduate Studies Committee

\*\*

Each attempt at FIS 696 is worth one credit hour; students must successfully complete one credit per semester over four semesters.

## Major Learning Outcomes

### FORENSIC AND INVESTIGATIVE SCIENCE

As a result of completing the MS in Forensic and Investigative Science, students will be able to:

-Assess the value of evidence in different circumstances, describe best practices for its examination and demonstrate competency in performing a variety of different examinations of evidence

-Identify the limitations in the knowledge and capabilities of forensic science, describe creative solutions and conduct scientifically sound experiments to overcome the identified limitations

-Execute persuasive communications, in written and oral formats, of his/her test results and research discoveries

## Forensic Science, Ph.D.

### Degree Requirements

- **Credit Hours:** Graduate students in the Ph.D. program must successfully complete a minimum of 71 credit hours. Each student may apply a maximum of 31 credit hours of research toward the 71-hour requirement; the remaining 40 credit hours must be earned in graduate-level courses in Forensic Science.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Program of Study:** The program also includes an oral qualifying examination, a dissertation proposal presentation, and an oral defense of the dissertation.
- **Oral Qualifying Examination:** Doctoral students must pass a comprehensive oral examination in the field of criminalistics to demonstrate their competency in the discipline and successfully defend the topic of their dissertation research.
- **Dissertation:** Students are required to complete a dissertation. Additional information, expectations, requirements, and timeline information is found in the Department's Graduate Student Handbook.
- **Benchmarks:** For details, go to the Forensics Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/forensicandinvestigativescience/#degreeprogress>).

### Curriculum Requirements

Code	Title	Hours
<b>CORE COURSES</b>		<b>24</b>
FIS 501	Foundations of Criminalistics	
FIS 502	Forensic Laboratory Management	
FIS 602	Forensic Informatics	
FIS 614	Trace Evidence Examination	
FIS 620	Forensic Casework Practicum	
FIS 632	Advanced Forensic Biology	
FIS 703	Research Design in Forensic Science	
STAT 512	Statistical Methods 2 *	
<b>Forensic Chemistry Requirement</b>		<b>4</b>
Select one of the following lecture and lab pairs:		
FIS 451 & 451L	Arson and Explosives Analysis and Arson and Explosives Analysis Laboratory	
FIS 460 & 460L	Analysis of Seized Drugs and Analysis of Seized Drugs Laboratory	
FIS 470 & 470L	Analytical Forensic Toxicology and Analytical Forensic Toxicology Laboratory	
<b>ELECTIVES</b>		<b>6</b>
Any FIS course at the 400 or above *		
Any BIOL, CHEM, or PHAR course at the 400 level or above *		
<b>FORENSIC SEMINAR</b>		<b>6</b>
FIS 796	Graduate Seminar **	
<b>RESEARCH</b>		<b>31</b>



FIS 797	Research	
Total Hours		71

\*

Or equivalent graduate course approved by Graduate Studies Committee. Excludes Graduate Seminar (796) and Research (797).

\*\*

Each attempt at FIS 796 is worth one credit hour; students must successfully complete one credit per semester over six semesters.

## Major Learning Outcomes

### FORENSIC SCIENCE

As a result of completing the PhD in Forensic Science, students will be able to:

- Assess the value of evidence in different circumstances, propose best practices for its examination and demonstrate mastery in performing a variety of different examinations of evidence
- Identify the limitations in the knowledge and capabilities of forensic science, formulate creative solutions and design and conduct scientifically sound experiments to overcome the identified limitations.
- Execute persuasive communications, in written and oral formats, of his/her test results and research discoveries

## Geography

### Degrees Offered

- Master of Arts
- Doctor of Philosophy

### Nature of the Program

Geography is a diverse and innovative field of study that bridges humanities, social sciences and natural sciences. Geographers engage with the most pressing issues of our time, including global environmental change, social inequality and transformations of our economy, politics, ecology and culture in the shifting terrain of the 21st century. Our geographers are trained in cutting-edge approaches to understand and make a difference in our rapidly changing world.

West Virginia University offers master's and doctoral degrees in geography. Our graduate program has a large faculty with expertise in the sub-disciplines of **human geography**, **environmental geography**, **sustainability**, and **geographic information science**. Using qualitative and quantitative research methods, our faculty research in South American, Central America, Mexico, and the Caribbean ("Latin America), sub-Saharan Africa, North Africa and Southwest Asia ("the Middle East"), and the U.S., including Appalachia.

Our interdisciplinary learning environment featuring state-of-the-art computing and spatial analysis facilities offers students the chance to develop innovative research projects and learn valuable skills to help solve some of the major challenges facing our world today.

The Graduate Program in Geography has been designated a program of excellence by the West Virginia University Board of Governors since 1998. This award is given to superlative degree programs in recognition of their contribution to higher education in West Virginia and national recognition.

### Research

Students who are interested in pursuing research in an area other than these may do so provided the research area matches the interest of a faculty member in the department who agrees to supervise the student's program. The Graduate Program in Geography at WVU has strong links with the University's Regional Research Institute, the State GIS Technical Center, the Geology Program, the Water Research Institute, the International Studies Program, the West Virginia Geological and Economic Survey, the Center for Women's and Gender Studies, and the Center for Resilient Communities.

### Computing Facilities

The Geography program has extensive computing facilities housed in Brooks Hall, a modern 98,000 square foot building dedicated exclusively to geography and geology. Brooks Hall has five computer laboratories dedicated to teaching and research. The department has ESRI ArcGIS, ERDAS Imagine, and ENVI site licenses. In addition, the faculty teach several programming languages for GIS and data science including R, Python, and Bash. Faculty engaged in qualitative data analysis teach using tools including Nvivo and Atlas.ti. The department's geovisualization research group operates an immersive four-wall 3-D display environment or CAVE. The remote sensing program operates an ASD full-range portable spectroradiometer.

## FACULTY

### CHAIR

- Brent McCusker - Ph.D. (Michigan State University)

### ASSOCIATE CHAIR

- Jaime Toro - Ph.D. (Stanford University)

### PROFESSORS

- Kathleen Benison - Ph.D. (The University of Kansas)  
Regular Graduate Faculty, Sedimentary Geology - Planetary Geology
- Dengliang Gao - Ph.D. (Duke University)  
Regular Graduate Faculty, Exploration Geophysics, Petroleum and Structural Geology
- Amy Hessl - Ph.D. (University of Arizona)  
Regular Graduate Faculty, Biogeography, Forest Ecosystems, Climate Variability
- Brent McCusker - Ph.D. (Michigan State University)  
Regular Graduate Faculty, Land Use Change, Africa, Policy Making
- Shikha Sharma - Ph.D. (University of Lucknow)  
Regular Graduate Faculty, Isotope Geochemistry
- Jaime Toro - Ph.D. (Stanford University)  
Regular Graduate Faculty, Structure and Tectonics
- Dorothy Vesper - Ph.D. (Pennsylvania State University)  
Regular Graduate Faculty, Aqueous Geochemistry, Hydrogeology

### ASSOCIATE PROFESSOR

- Jamison Conley - Ph.D. (Pennsylvania State University)  
Regular Graduate Faculty, Spatial Analysis, Geocomputation, Health Geography
- Karen Culcasi - Ph.D. (Syracuse University)  
Regular Graduate Faculty, Geopolitics, Identity, Middle East
- Cynthia Gorman - Ph.D. (Rutgers University)  
Regular Graduate Faculty, Gender, Migration, Human Rights, Refugee Communities
- James Lamsdell - Ph.D. (The University of Kansas)  
Regular Graduate Faculty, Paleobiology, Arthropods, Macroevolution, Heterochrony, Paleoecology, Phylogenetics
- Joseph Lebold - Ph.D. (West Virginia University)  
Regular Graduate Faculty, Paleoecology, Paleontology, Regional Geology
- Brenden McNeil - Ph.D. (Syracuse University)  
Regular Graduate Faculty, GIS, Environmental modeling, Forest Ecosystem Services
- Maria Alejandra Perez - Ph.D. (University of Michigan)  
Regular Graduate Faculty, Cultural Geography, Science & Technology Studies, Speleology, Latin America and the Caribbean
- Amy Weislogel - Ph.D. (Stanford University)  
Regular Graduate Faculty, Sedimentology
- Bradley Wilson - Ph.D. (Rutgers University)  
Regular Graduate Faculty, Social Movements, Local/Global Food Systems, Food Justice

### ASSISTANT PROFESSOR

- Vikas Agrawal - Ph.D. (West Virginia University)  
Associate Graduate Faculty, Chemical Hygiene Officer, Isotopic and Biogeochemical Characterization of Geological Materials, Energy and Environment
- Michael Harman - Ph.D. (West Virginia University)  
3D visualization, modeling complex landforms and processes, GIS
- Aaron Maxwell - Ph.D. (West Virginia University)  
Regular Graduate Faculty, Geospatial Instruction, Remote Sensing, Image Analysis, Spatial Modeling
- Charles Shobe - Ph.D. (University of Colorado - Boulder)  
Regular Graduate Faculty, Geomorphology, Earth Surface Processes, Landscape Evolution, Rivers, Source-to-Sink, Numerical Modeling

## PROFESSOR EMERITI

- Robert Behling - Ph.D. (The Ohio State University)
- Timothy Carr - Ph.D. (University of Wisconsin - Madison)
- Joe Donovan - Ph.D. (Pennsylvania State University)
- Greg Elmes - Ph.D. (Pennsylvania State University)
- Trevor Harris - Ph.D. (University of Hull)
- Thomas Kammer - Ph.D. (Indiana University)
- Steven Kite - Ph.D. (University of Wisconsin)
- Kenneth C. Martis - Ph.D. (Michigan University)
- Henry Rauch - Ph.D. (Pennsylvania State University)
- Robert C. Shumaker - Ph.D. (Cornell University)
- Richard Smosna - Ph.D. (University of Illinois)
- Timothy Warner - Ph.D. (Purdue University)
- Thomas Wilson - Ph.D. (West Virginia University)

## Admissions

The Geography program admits students to either the M.A. or the Ph.D. program. GRE scores are not required for admission to any of these programs.

### M.A. IN GEOGRAPHY

All applicants are strongly encouraged to contact potential faculty advisors prior to submitting their application. Prospective students who establish these connections typically have much stronger applications. All M.A. applicants are all required to name potential advisor(s) in their statement and application.

In addition to the university's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the M.A. program must have a bachelor's degree in geography or a related field with an overall GPA of at least a 3.0.

### PH.D. IN GEOGRAPHY

All applicants are strongly encouraged to contact potential faculty advisors prior to submitting their application. Prospective students who establish these connections typically have much stronger applications. All Ph.D. applicants are all required to name potential advisor(s) in their statement and application.

In addition to the university's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the Ph.D. program must hold an M.A. or M.S. degree in geography or a related field with an overall GPA of at least 3.0 in their previous graduate work. Students with degrees in other non-geography disciplines are encouraged to apply but may be asked to make up deficiencies in geography during their first year in the program.

#### List of Admission Requirements for both programs:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- A two-page statement of purpose describing the applicant's interest in geography, career intentions, and the name of potential advisor(s) in the department.
- Letters of recommendation from people who are familiar with the applicant's preparation for graduate study (two for the M.A., three for the Ph.D.).

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadlines:

- The Geography program admits students for the Fall and Spring semester semesters.
- The priority review deadline for all application materials for fall admission is January 15<sup>th</sup>.
- The priority review deadline for all application materials for Spring admission is August 15<sup>th</sup>.
- Completed applications for admission may be considered after the January 15<sup>th</sup> deadline on a space-available basis.
- Exceptional applicants may be nominated by the Geography Program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

## Assistantships

All applicants will be considered for financial support in the form of graduate teaching assistantships (GTAs) and Graduate Research Assistantships (GRAs). Graduate research assistantships are sometimes available through funded faculty member research. Students who qualify for available research assistantships will be contacted by the relevant faculty member with details. Certain application requirements may be waived based on a preliminary review of an application by the program.

For more information, please contact [GradGeography@mail.wvu.edu](mailto:GradGeography@mail.wvu.edu).

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MA Major Code: 1444

PhD Major Code: 1476

For specific information on the following program, please see the link to the right:

- Geography, M.A.

For specific information on the following program, please see the link to the right:

- Geography, Ph.D.

## Degree Progress

### MASTERS DEGREE:

- **Thesis/Project Proposal Defense:** The thesis/project proposal defense occurs when the advisor and the committee agree that a defensible copy of the proposal is completed, and no later than Oct/Mar 31 of the student's third semester. The defense date must be advertised to the department at least two weeks in advance. Proposal defenses are not normally scheduled between June 15 and August 15. In accordance with College requirements, original signatures are required on the shuttle sheet form specifying the outcome of the defense.
- **Thesis/Project Defense:** The thesis/project defense occurs when the advisor and the committee agree that a defensible copy of the thesis is completed, no later than the end of the student's fourth semester. The defense date must be advertised to the department at least two weeks in advance. Thesis defenses are not normally scheduled between June 15 and August 15. In accordance with College requirements, original signatures are required on the shuttle sheet form specifying the outcome of the defense. Students should work closely with their advisors to establish expectations for length and structure of the thesis.
- **Annual Evaluation:** The academic progress of every graduate student is reviewed each year. Students must submit a self-evaluation signed by their advisor by January 15. The Graduate Committee will conduct its annual review of students in February and communicate with students by March, if needed. Waivers to deadlines, timing requirements, and other rules may be requested from the Graduate Director. Waivers are only given under extraordinary circumstances.
- **Required Deadlines:**

#### Thesis option

##### First year

- First semester: File plan of study
- Second semester: Form committee

##### Second year

- Third semester: Written proposal given to committee by Oct./Mar. 1st and complete oral proposal by Oct./Mar. 31st
- Fourth semester: Defend thesis by the end of semester

#### Professional option

##### First year

- First semester: File plan of study
- Second semester: Form committee

##### Second year

- Third semester: Professional option must be chosen by Oct./Mar. 1st. Get approval of written plan from the thesis committee and request permission from the graduate committee by the end of semester.
- Fourth semester: Defend project by the end of semester

## DOCTORAL DEGREE:

- **Comprehensive Examinations:** The student is required to pass an oral and three written comprehensive examinations no later than the fourth semester. The student will be examined in two specialty areas and a third area closely related to the proposed dissertation research topic.
- **Dissertation Proposal Defense:** Upon successful completion of the comprehensive examination and no later than the end of the fifth semester, the student will be expected to defend a dissertation research proposal. Dissertation Proposal defenses are not normally scheduled between June 15 and August 15. In accordance with College requirements, original signatures are required on the shuttle sheet form specifying the outcome of the proposal defense.
- **Dissertation Defense:** The dissertation defense occurs when the advisor and the committee agree that a defensible copy of the dissertation is completed. The defense date must be advertised to the department at least two weeks in advance. Dissertation defenses are not normally scheduled between June 15 and August 15. In accordance with College requirements, original signatures are required on the shuttle sheet form specifying the outcome of the defense. Students should work closely with their advisors to establish expectations for length and structure of the dissertation.
- **Annual Evaluation:** The academic progress of every graduate student is reviewed each year. Students must submit a self-evaluation signed by their advisor by January 15. The Graduate Committee will conduct its annual review of students in February and communicate with students by March, if needed. Waivers to deadlines, timing requirements, and other rules may be requested from the Graduate Director. Waivers are only given under extraordinary circumstances.
- **Required Deadlines:**

First year: Course work

- First semester: File plan of study
- Second semester: Form committee

Second year: Course work

- Third semester: Form committee, if not yet completed
- Fourth semester: Oral and Written comprehensive exams

Third year: Defend proposal/Field work/Data collection

- Fifth semester: Defend dissertation proposal by the end of semester
- Sixth and Spring semesters: Collect data/conduct fieldwork as necessary

Fourth year: Dissertation writing

## Graduate Certificate in GIS and Spatial Analysis

### CERTIFICATE CODE - CG37

Code	Title	Hours
<b>Required Courses</b>		
Select four of the following courses:		12
ARE 729	Spatial Econometrics	
or ECON 729	Spatial Econometrics	
RESM 540	Geospatial Modeling	
RESM 575	Spatial Analysis for Resource Management	
RESM 545	Spatial Hydrology and Watershed Analysis	
GEOG 550	Geographic Information Science	
GEOG 651	Geographic Information Science: Technical Issues	
GEOG 654	Environmental Geographic Information Systems Modeling	
GEOG 655	Remote Sensing Principles	
GEOG 753	Exploratory Spatial Data Analysis	
GEOG 755	Advanced Remote Sensing	
Independent Study Requirement		3

## Geography, M.A.

### Master of Arts

The Master's Program in Geography at West Virginia University provides students with cutting edge training in the history and theory of geography, experience with advanced geographic research methodologies and specialized mentoring from faculty experts across three sub-disciplinary fields (Human Geography; Environmental Geography; Geographic Information Science). To earn a M.A. in Geography at WVU students must complete 30 credit hours of graduate courses (based upon the curriculum described below), form a committee of graduate faculty to supervise their study, write and defend a thesis or project proposal, and finally, write and defend a thesis or project.

### Degree Requirements

The M.A. thesis option is designed to enable full-time students to satisfy all program requirements and complete an examinable thesis within two years. Students are required to be well grounded in one or more of the program's three areas of specialization (Geographic Information Science; Human Geography; and Environmental Geography).

- **Credit Hours:** Students are required to complete a minimum of 30 graduate credit hours in Geography at the 400 level or above. The program requires that no more than six credits be at the 400-level.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Graduation Requirement:** Students have the option of pursuing a Professional Master's Project or completing a Master's Thesis. The M.A. thesis is an independent research project undertaken by the student. The thesis research should adhere to the following: 1) Demonstrate knowledge of the literature in the student's chosen field, 2) Use data and methods appropriate to the research, 3) Draw conclusions from the research endeavor. The Professional Master's Project is designed for students interested in a more focused project than the traditional research thesis option. It is not recommended for students considering entering a Ph.D. program. The project has strict deadlines and must be completed in one semester and after the completion of GEOG 601 and GEOG 602 Geographic Research-Design.
- **Additional Requirements:** The academic progress of every master's student is reviewed each year. Students must submit a self-evaluation signed by their advisor by January 15. The Graduate Committee will conduct its annual review of students in February and communicate with students in or before March. Waivers to the M.A. deadlines, timing requirements, and other rules may be requested from the Graduate Director. Waivers are only given under extraordinary circumstances.
- **Thesis Defense:** The defense date must be advertised to the department at least two weeks in advance. Thesis/Project defenses are not normally scheduled between June 15 and August 15. In accordance with College requirements, original signatures are required on the shuttle sheet form specifying the outcome of the defense. Students should work closely with their advisors to establish expectations for length and structure of the thesis/project.
- **Benchmarks:** For details, please go to the Geography Degree Progress tab (p. 244).

### Curriculum Requirements

Code	Title	Hours
<b>CORE COURSES:</b>		<b>10</b>
GEOG 600	Geography Research Colloquium (repeated every semester)	
GEOG 601	Geographic Thought	
GEOG 602	Geographic Research-Design	
<b>GEOGRAPHY ELECTIVES: *</b>		<b>9</b>
GEOG Courses at the 400 level or above		
<b>ADDITIONAL COURSEWORK:</b>		<b>5</b>
Any GEOG course at the 400 level or above.		
Any course at the 400 level or above with permission from the project/thesis adviser.		
<b>GRADUATION TRACK:</b>		<b>6</b>
Select one option from below:		
<b>Professional Track:</b>		
GEOG 780	Non-Thesis Project	
Any GEOG course at the 400 level or above		
<b>Thesis Track:</b>		

GEOG 797	Research	
Total Hours		30

\*

Excluding GEOG 697 and GEOG 797.

## Major Learning Outcomes

### GEOGRAPHY

The graduate program in Geography at West Virginia University trains students at the highest level to assume leadership roles in research, teaching, and applied work in Human Geography, Environmental Geography, and Geographic Information Science.

The Geography Graduate Committee regularly reviews the structure and content of the M.A. and Ph.D. programs to provide the best possible education to students in order to meet the needs for highly trained individuals in Human Geography, Environmental Geography, and Geographic Information Science.

### M.A. PROGRAM

Student's obtaining a Master's in Geography with a Research Track will be able to:

- Communicate geographic concepts orally and in writing
- Apply research skills to analyze geographic questions
- Propose, produce and defend original research in their field of study
- Explain geographic principles as they relate to their area of research

Student's obtaining a Master's in Geography with a Professional Studies Track will be able to:

- Communicate geographic concepts orally and in writing
- Demonstrate knowledge in their field of geography
- Apply geographical knowledge and methods to at least one of the following:
  - Human geography
  - Environmental geography
  - Geographic Information Science

## Geography, Ph.D.

### Doctor of Philosophy

The Doctoral Program in Geography at West Virginia University provides students with cutting edge training in the history and theory of geography, experience with advanced geographic research methodologies and specialized mentoring from faculty experts across three sub-disciplinary fields (Human Geography; Environmental Geography; Geographic Information Science). To earn a Ph.D. in Geography at WVU students must complete 28 credit hours of graduate courses (based upon the curriculum described below), form a committee of graduate faculty to supervise their study, pass a comprehensive exam, write and defend a dissertation research proposal, and finally, write and defend a dissertation.

### Degree Requirements

- **Credit Hours:** Coursework will be selected based on the research area of each student, providing an individualized plan of study appropriate to the field of Human Geography, Environmental Geography, or Geographic Information Science. Students are required to complete a minimum number of 28 graduate credit hours in Geography at the 400 level or above. Coursework substitutions may be approved as appropriate by a student's graduate committee. No more than 6 credit hours of 400-level courses may be counted towards the degree. Students may petition their committee to transfer up to 9 credit hours from another program, including other graduate programs at WVU.
- **Grade Point Average:** Students must earn a minimum GPA of 3.0 overall, and 3.0 in coursework applied to their graduate program.
- **Comprehensive Examinations:** The student is required to pass an oral and three written comprehensive examinations no later than the fourth semester. The student will be examined on two specialty areas and a third area closely related to the proposed dissertation research topic.
- **Dissertation Proposal/Defense:** Upon successful completion of the comprehensive examination and no later than the end of the fifth semester, the student will be expected to defend a dissertation research proposal. The award of the Ph.D. is granted upon the successful defense of the dissertation itself.
- **Additional Requirements:** The academic progress of every Ph.D. student is reviewed each year. Students must submit a self-evaluation signed by their advisor by January 15. The Graduate Committee will conduct its annual review of students in February and communicate with students in or before March. Waivers to the Ph.D. deadlines, timing requirements, and other rules may be requested from the Graduate Director. Waivers are only given under extraordinary circumstances.



- **Benchmarks:** For further information, go to the Geography Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/geologyandgeography/#degreeprogressesstext>).

## Curriculum Requirements

Code	Title	Hours
<b>CORE COURSES</b>		<b>10</b>
GEOG 600	Geography Research Colloquium	
GEOG 601	Geographic Thought	
GEOG 602	Geographic Research-Design	
<b>GEOGRAPHY ELECTIVES *</b>		<b>6</b>
Two GEOG courses at the 500 level or above		
<b>METHODS COURSE</b>		<b>3</b>
Select one course from the following list:		
GEOG 550	Geographic Information Science	
GEOG 603	Qualitative Research in Geography	
GEOG 651	Geographic Information Science: Technical Issues	
GEOG 654	Environmental Geographic Information Systems Modeling	
GEOG 655	Remote Sensing Principles	
GEOG 701	Quantitative Spatial Analysis	
<b>SEMINAR COURSE</b>		<b>3</b>
Select one course from the following list:		
GEOG 612	Gender, Society and Space	
GEOG 640	Geopolitical Perspectives	
GEOG 650	Political Ecology Seminar	
GEOG 696	Graduate Seminar	
GEOG 796	Graduate Seminar	
<b>ADDITIONAL COURSEWORK</b>		<b>6</b>
In consultation with graduate committee, select an additional 6 credit hours of graduate level coursework**		
Total Hours		28

\*

Excluding GEOG 780 (<http://catalog.wvu.edu/search/?P=GEOG%20780>) or GEOG 797 (<http://catalog.wvu.edu/search/?P=GEOG%20797>).

\*\*

Additional coursework may include Geography courses at the graduate level or, with approval from the student's graduate committee, may include graduate level coursework from related disciplines. Additional coursework also excludes GEOG 780 or GEOG 797.

**Note:** Students are expected to be involved in research throughout their graduate career and enrollment in GEOG 797 should reflect this activity. Most students complete 50 credit hours of research.

## Major Learning Outcomes

### GEOGRAPHY

The graduate program in Geography at West Virginia University trains students at the highest level to assume leadership roles in research, teaching, and applied work in Human Geography, Environmental Geography, and Geographic Information Science.

The Geography Graduate Committee regularly reviews the structure and content of the M.A. and Ph.D. programs to provide the best possible education to students in order to meet the needs for highly trained individuals in Human Geography, Environmental Geography, and Geographic Information Science.

### PH.D. PROGRAM

Students obtaining a doctorate in geography will be able to:

- Communicate geographical concepts orally and in writing
- Apply research skills to analyze geographical questions
- Propose, produce and defend original research of publishable quality



- Explain geographic principles as they relate to their area of research
- Effectively communicate the state of knowledge in their research area
- Identify research questions in geography
- Critique and assess peer-reviewed literature

## Geology

### Degrees Offered

- Master of Science
- Doctor of Philosophy

### Nature of the Program

The graduate program in geology provides study opportunities in the following areas:

- Hydrogeology and environmental geology with strengths in ground water flow and modeling; aqueous, contaminant and isotope geochemistry; mine reclamation; and floods and debris flows
- Basin analysis and sedimentary geology with strengths in seismic modeling, basin structures, deposition analysis, sequence stratigraphy, biostratigraphy, diagenesis, and plate tectonics
- Energy geology and geophysics with strengths in the exploration and development of oil, gas, and coal; and environmental impacts of fossil fuel usages
- Paleobiology and paleontology with strengths in macroevolution, paleoecology, and phylogenetics, particularly in relation to arthropods and mass extinctions
- Igneous petrology and volcanology with strengths in arc magmatism and the emplacement of lava flows and pyroclastic deposits
- Geochemistry. In particular aqueous geochemistry, stable isotope geochemistry and organic geochemistry
- Surficial processes and landscape evolution
- Tectonic evolution of the Appalachian, Cordilleran and Himalayan orogens

### Tracks within the Masters Degree

- The Research Track requires students to complete independent scholarly research culminating in a thesis. This track is intended for students interested in a research-based graduate degree.
- The Professional Studies Track requires students to complete Professional Development credits/tasks in place of thesis-based research. This track is intended for students looking to obtain additional knowledge and skills for their professional careers in Energy, Geology, or Environmental Geology.

## FACULTY

### CHAIR

- Brent McCusker - Ph.D. (Michigan State University)

### ASSOCIATE CHAIR

- Jaime Toro - Ph.D. (Stanford University)

### PROFESSORS

- Kathleen Benison - Ph.D. (The University of Kansas)  
Regular Graduate Faculty, Sedimentary Geology - Planetary Geology
- Dengliang Gao - Ph.D. (Duke University)  
Regular Graduate Faculty, Exploration Geophysics, Petroleum and Structural Geology
- Amy Hessel - Ph.D. (University of Arizona)  
Regular Graduate Faculty, Biogeography, Forest Ecosystems, Climate Variability
- Brent McCusker - Ph.D. (Michigan State University)  
Regular Graduate Faculty, Land Use Change, Africa, Policy Making
- Shikha Sharma - Ph.D. (University of Lucknow)  
Regular Graduate Faculty, Isotope Geochemistry
- Jaime Toro - Ph.D. (Stanford University)  
Regular Graduate Faculty, Structure and Tectonics

- Dorothy Vesper - Ph.D. (Pennsylvania State University)  
Regular Graduate Faculty, Aqueous Geochemistry, Hydrogeology

## ASSOCIATE PROFESSOR

- Jamison Conley - Ph.D. (Pennsylvania State University)  
Regular Graduate Faculty, Spatial Analysis, Geocomputation, Health Geography
- Karen Culcasi - Ph.D. (Syracuse University)  
Regular Graduate Faculty, Geopolitics, Identity, Middle East
- Cynthia Gorman - Ph.D. (Rutgers University)  
Regular Graduate Faculty, Gender, Migration, Human Rights, Refugee Communities
- James Lamsdell - Ph.D. (The University of Kansas)  
Regular Graduate Faculty, Paleobiology, Arthropods, Macroevolution, Heterochrony, Paleoecology, Phylogenetics
- Joseph Lebold - Ph.D. (West Virginia University)  
Regular Graduate Faculty, Paleoecology, Paleontology, Regional Geology
- Brenden McNeil - Ph.D. (Syracuse University)  
Regular Graduate Faculty, GIS, Environmental modeling, Forest Ecosystem Services
- Maria Alejandra Perez - Ph.D. (University of Michigan)  
Regular Graduate Faculty, Cultural Geography, Science & Technology Studies, Speleology, Latin America and the Caribbean
- Amy Weislogel - Ph.D. (Stanford University)  
Regular Graduate Faculty, Sedimentology
- Bradley Wilson - Ph.D. (Rutgers University)  
Regular Graduate Faculty, Social Movements, Local/Global Food Systems, Food Justice

## ASSISTANT PROFESSOR

- Vikas Agrawal - Ph.D. (West Virginia University)  
Associate Graduate Faculty, Chemical Hygiene Officer, Isotopic and Biogeochemical Characterization of Geological Materials, Energy and Environment
- Michael Harman - Ph.D. (West Virginia University)  
3D visualization, modeling complex landforms and processes, GIS
- Aaron Maxwell - Ph.D. (West Virginia University)  
Regular Graduate Faculty, Geospatial Instruction, Remote Sensing, Image Analysis, Spatial Modeling
- Charles Shobe - Ph.D. (University of Colorado - Boulder)  
Regular Graduate Faculty, Geomorphology, Earth Surface Processes, Landscape Evolution, Rivers, Source-to-Sink, Numerical Modeling

## PROFESSOR EMERITI

- Robert Behling - Ph.D. (The Ohio State University)
- Timothy Carr - Ph.D. (University of Wisconsin - Madison)
- Joe Donovan - Ph.D. (Pennsylvania State University)
- Greg Elmes - Ph.D. (Pennsylvania State University)
- Trevor Harris - Ph.D. (University of Hull)
- Thomas Kammer - Ph.D. (Indiana University)
- Steven Kite - Ph.D. (University of Wisconsin)
- Kenneth C. Martis - Ph.D. (Michigan University)
- Henry Rauch - Ph.D. (Pennsylvania State University)
- Robert C. Shumaker - Ph.D. (Cornell University)
- Richard Smosna - Ph.D. (University of Illinois)
- Timothy Warner - Ph.D. (Purdue University)
- Thomas Wilson - Ph.D. (West Virginia University)

## Admissions

The Geology program admits students to both the M.S. and the Ph.D. program. Applicants should apply to the program that best aligns with their professional goals. Applicants are required to contact potential advisers among the faculty prior to application and name potential advisors in their personal statement as acceptance into the graduate program is contingent on placement with a graduate faculty advisor willing and able to advise the prospective student. Information on faculty and their research areas can be found here (<https://www.geo.wvu.edu/faculty-and-staff/faculty/>). GRE scores are not required for admission to any of these programs.

## M.S. IN GEOLOGY

The Geology program gives students the opportunity to earn the master's degree by completing either a professional-studies track or a research track. In addition to the University general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), all applicants should possess an undergraduate GPA of 3.0 or higher and a GPA of 3.0 or higher in any graduate coursework.

Applicants must hold a B.A. or B.S. degree in a STEM or relevant field that includes coursework in the equivalents of Geology and allied sciences and mathematics. Completed coursework in Geology is preferred.

## PH.D. IN GEOLOGY

Applicants may apply to the Ph.D. program with an M.S. or seek direct admission with a B.S. or B.A. degree. In addition to WVU's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), all applicants should possess a GPA of 3.0 or higher in their highest degree.

### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended (note: official transcripts are required to finalize an offer of admission to the graduate program).
- Three Letters of recommendation.
- Curriculum Vitae or Resume.
- A personal statement that identifies the applicant's preferred faculty advisor, details of any contact applicant has had with them and why the applicant wants to work with them, subject areas that interest applicant, any prior research experience applicant has had; career goals and how a graduate degree will help fulfill these goals, and any achievements or pertinent issues that might influence applicant's academic record that may not reflect applicant's full potential.

### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

### Application Deadlines:

- The Geology program admits students for the Fall and Spring semesters.
- The deadline for Fall semester admission is January 15<sup>th</sup>.
- The deadline for Spring semester admissions is October 1<sup>st</sup>.
- We will review applicants received after the January 15<sup>th</sup> and October 1<sup>st</sup> deadlines on a space-available basis.
- Exceptional PhD applicants may be nominated by the Geology program for competitive University Fellowships. Eligible applicants that wish to be considered for University Fellowships must have completed applications submitted by December 31<sup>st</sup>. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

### Assistantships

All applicants will be considered for financial support in the form of graduate teaching assistantships (GTAs) and Graduate Research Assistantships (GRAs).

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.S. and Ph.D. Major Code: 1445

**For specific information on the following program, please see the link to the right:**

- Geology, M.S.

**For specific information on the following program, please see the link to the right:**

- Geology, Ph.D.

## Degree Progress - Masters

- Students whose GPA falls below 3.0 will be put on probation for one semester. If they remain below 3.0 for a second semester, they are dismissed from the program.
- Students are discouraged with withdrawing from courses, and should only do so after a discussion with their advisor or the Graduate Program Committee.
- Students must complete annual progress reports (see graduate handbook for details)
- For students completing the Research track, milestone deadlines are below:
  - Target Date - Indicates excellent progress.
  - Deadline - Indicates reasonable progress. Students who do not meet this deadline will be placed on probation.
  - Funding termination date - Students not meeting this deadline will no longer receive department funding and support.

### Progress Schedule and Deadlines for MS Research Students

Milestone	Start Semester	Target	Deadline	Funding termination date
Proposal Defense	Fall	May 1, Year 1	Aug 1, Year 1	Dec 1, Year 2
Spring	Aug 1, Year 1	Dec 1, Year 1	May 1, Year 2	
Thesis defense and submission	Fall	May, Year 2	Support typically not available after 2 years	
Spring	Aug, Year 2			

## Degree Progress - Ph.D.

- Students whose GPA falls below 3.0 will be put on probation for one semester. If they remain below 3.0 for a second semester, they are dismissed from the program.
- Withdrawing from classes is only permitted with the permission of the student's advisor or the Geology Graduate Program Committee.
- Students must complete annual progress reports (see graduate handbook for details).
- Milestone deadlines are below:
  - Target Date - Indicates excellent progress.
  - Deadline - Indicates reasonable progress. Students who do not meet this deadline will be placed on probation.
  - Funding termination date - Students not meeting this deadline will no longer receive department funding and support.

### Ph.D. Milestone Targets and Deadlines

Milestone	Start Semester	Target date	Deadline	Funding termination date
Preliminary Exam	Fall	May 1, Year 1		Aug 1, Year 1 (for retakes only)
Spring	Dec 1, Year 1		May 1, Year 2 (for retakes only)	
Proposal/ Comprehensive (Candidacy) Exam	Fall	May 1, Year 2	Dec 1, Year 2	May 1, Year 3
Spring	Dec 1, Year 2	May 1, Year 3	Dec 1, Year 3	
Dissertation defense	Fall	May, Year 4	Support typically not available after 4 years	

## Geology, M.S.

### Degree Requirements

- Completed Plan of Study**
- Credit Hours:** All students are required to complete a minimum of 32 graduate credit hours at the 400, 500 or 600 level. Students who elect to complete a thesis will typically earn additional credit hours.
- Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- Degree Requirements:**
  - Complete a plan of study
- Completion Requirements:** students must select a completion track for a total of 8 credits. Available tracks are the
  - Research track: students must complete a Master's thesis including:
    - Thesis Proposal Defense
    - Thesis Defense

- Professional studies track: students have the option of completing an internship, completing a project with a faculty member, taking the ASBOG Fundamental exam (first step in professional licensure), additional coursework, or a combination of these options.

## Curriculum Requirements

Code	Title	Hours
<b>Core Requirements</b>		<b>15</b>
Any GEOL courses at the 400, 500 or 600 level*		
<b>Electives</b>		<b>9</b>
Select three courses from the list below:		
Any additional GEOG or GEOL courses at the 400, 500 or 600 level**		
AEM 401	Environmental Microbiology	
ESWS 417 & 417L	Soil Genesis and Classification and Soil Genesis and Classification Laboratory	
ESWS 455	Reclamation of Disturbed Soils	
ESWS 460 & 460L	Environmental Impact Assessment and Environmental Impact Assessment Laboratory	
ESWS 515 & 515L	Hazardous Waste Training and Hazardous Waste Training Laboratory	
ESWS 552	Pedology	
ESWS 555	Environmental Sampling and Analysis	
FNRS 444	Watershed Management	
FNRS 655	Watershed Hydrology	
PNGE 632	Reservoir Simulation and Modeling	
PNGE 735	Advanced Formation Evaluation	
RESM 444	Advanced GIS for Natural Resource Management	
RESM 480	Environmental Regulation	
RESM 540	Geospatial Modeling	
RESM 545	Spatial Hydrology and Watershed Analysis	
STAT 511	Statistical Methods 1	
STAT 512	Statistical Methods 2	
WMAN 446	Freshwater Ecology	
WMAN 547	Applied Wetlands Ecology and Management	
<b>GRADUATION TRACK</b>		<b>8</b>
Select one track:		
<b>Research Track:</b>		
GEOL 697	Research (students must complete 6 credit hours)	
GEOL 696	Graduate Seminar (students must complete 2 credit hours)	
<b>Professional Studies Track: ***</b>		
Core Courses:		
GEOL 682	Masters: Professional Studies Track Cohort Seminar (taken first semester in program)	
GEOL 696	Graduate Seminar	
Select one option or a combination of the options below:		
Project:		
GEOL 680	Masters Project Research	
Internship:		
GEOL 681	Grad Internship in Geology	
Professional Licensure:		
Any GEOL course(s) at the 400, 500 or 600 level		
GEOL 696	Graduate Seminar	
Total Hours		32

\*  
No more than 40% of courses may be at the 400 level (WVU requirement) and excludes GEOL 790.

\*\*

Except GEOL 680, 681, 697, 790.

\*\*\*

The professional studies track is completed in part by 1 hour of GEOL 682 and 1 hour of GEOL 696. The remaining 6 credits may be satisfied one or a combination of the following options: additional GEOL 696 credits, Internship, Research Project, Licensure, or additional GEOL coursework at the 500 or 600 level.

## Major Learning Outcomes

### GEOLOGY

Students obtaining a masters in Geology with a Research Track will be able to:

- Communicate geologic concepts orally and in writing
- Apply research skills to analyze geologic questions
- Propose, produce and defend original research in their field of study
- Explain geologic principles as they relate to their area of research

Students obtaining a masters in Geology with a Professional Studies Track will be able to:

- Communicate geologic concepts orally and in writing
- Demonstrate knowledge in either energy geology or environmental geology
- Apply geological knowledge and methods to (1) find, develop and produce energy resources particularly natural gas, natural gas liquids and oil; OR, (2) to assess environmental issues

## Geology, Ph.D.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum number of nine credit hours of coursework at the 400-level or above. Additionally, students will complete a minimum of eight additional credits in research and seminar. A maximum of three credit hours at the 400-level may be applied.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Benchmarks:** For details, please go to the Geology Degree Progress tab.
- **Preliminary Exam:** The student is required to pass a preliminary exam at the end of their second semester. The preliminary exam comprises a written research plan encompassing the first chapter of their dissertation and an oral presentation and defense of the plan to their preliminary exam committee. The preliminary exam is used to determine whether students can formulate a coherent, convincing research plan.
- **Proposal/Proposal Defense:** Upon successful completion of the preliminary examination and no later than the end of the fourth semester, the student will be expected to defend a dissertation research proposal. The research proposal comprises a written proposal and an oral presentation and defense of the proposal to their dissertation committee. Following from the oral proposal defense, the student will commence their oral comprehensive exam.
- **Oral Comprehensive (Candidacy) Exam:** The student is required to pass an oral comprehensive exam no later than the fourth semester. The examination covers general topics that the student may be expected to have familiarity with given their field of research and academic background. Passing the oral comprehensive exam marks the admission of the student to Ph.D. candidacy.
- **Dissertation/Dissertation Defense:** The dissertation must demonstrate an ability to carry out independent research. Chapters of the dissertation should meet the standards required for publication in a reputable peer-reviewed science journal. Once the written dissertation has been deemed defensible by their dissertation committee, Ph.D. candidates present an open oral defense of their dissertation to the department.

### Curriculum Requirements

Code	Title	Hours
<b>Core Courses:</b>		
GEOL 696	Graduate Seminar	2
GEOL 697	Research (at least 6 credits) **	6
<b>Coursework</b>		
Graduate coursework at the 400-level or above*		9
Total Hours		17

\*

Excludes GEOL 600, 697, 700, and 797. Courses will be selected in consultation with an advisor.

\*\*

Students must complete at least six hours, however most students complete more than 50 credit hours of research.

## Major Learning Outcomes

### GEOLOGY

Students obtaining a doctorate in geology degree will be able to:

- Communicate geologic concepts orally and in writing
- Apply research skills to analyze geologic questions
- Propose, produce and defend original research of publishable quality
- Explain geologic principles as they relate to their area of research
- Effectively communicate the state of knowledge in their research area
- Identify research questions in geology
- Critique and assess peer-reviewed literature

## GIS and Spatial Analysis, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The Master's in Geographic Information Science and Spatial Analysis is a fully online program that offers training in a variety of spatial analysis, quantitative analysis, remote sensing, computational, and spatial programming techniques to investigate problems with a spatial component. Ideal for new students seeking a master's level degree or working professionals hoping to expand their credentials, the major offers a strong focus on the applications of geospatial science in the environmental sciences and resource management as well as applications for spatial analytics, geocomputation and coding, and digital cartography. The program is completed with a combination of required coursework electives, and a professional level project. Students who remain in good standing and continue to make degree progress may be able to complete the degree in four semesters.

## FACULTY

### CHAIR

- Brent McCusker - Ph.D. (Michigan State University)

### ASSOCIATE CHAIR

- Jaime Toro - Ph.D. (Stanford University)

### PROFESSORS

- Kathleen Benison - Ph.D. (The University of Kansas)  
Regular Graduate Faculty, Sedimentary Geology - Planetary Geology
- Dengliang Gao - Ph.D. (Duke University)  
Regular Graduate Faculty, Exploration Geophysics, Petroleum and Structural Geology
- Amy Hessel - Ph.D. (University of Arizona)  
Regular Graduate Faculty, Biogeography, Forest Ecosystems, Climate Variability
- Brent McCusker - Ph.D. (Michigan State University)  
Regular Graduate Faculty, Land Use Change, Africa, Policy Making
- Shikha Sharma - Ph.D. (University of Lucknow)  
Regular Graduate Faculty, Isotope Geochemistry
- Jaime Toro - Ph.D. (Stanford University)  
Regular Graduate Faculty, Structure and Tectonics
- Dorothy Vesper - Ph.D. (Pennsylvania State University)  
Regular Graduate Faculty, Aqueous Geochemistry, Hydrogeology

## ASSOCIATE PROFESSOR

- Jamison Conley - Ph.D. (Pennsylvania State University)  
Regular Graduate Faculty, Spatial Analysis, Geocomputation, Health Geography
- Karen Culcasi - Ph.D. (Syracuse University)  
Regular Graduate Faculty, Geopolitics, Identity, Middle East
- Cynthia Gorman - Ph.D. (Rutgers University)  
Regular Graduate Faculty, Gender, Migration, Human Rights, Refugee Communities
- James Lamsdell - Ph.D. (The University of Kansas)  
Regular Graduate Faculty, Paleobiology, Arthropods, Macroevolution, Heterochrony, Paleoecology, Phylogenetics
- Joseph Lebold - Ph.D. (West Virginia University)  
Regular Graduate Faculty, Paleoecology, Paleontology, Regional Geology
- Brenden McNeil - Ph.D. (Syracuse University)  
Regular Graduate Faculty, GIS, Environmental modeling, Forest Ecosystem Services
- Maria Alejandra Perez - Ph.D. (University of Michigan)  
Regular Graduate Faculty, Cultural Geography, Science & Technology Studies, Speleology, Latin America and the Caribbean
- Amy Weislogel - Ph.D. (Stanford University)  
Regular Graduate Faculty, Sedimentology
- Bradley Wilson - Ph.D. (Rutgers University)  
Regular Graduate Faculty, Social Movements, Local/Global Food Systems, Food Justice

## ASSISTANT PROFESSOR

- Vikas Agrawal - Ph.D. (West Virginia University)  
Associate Graduate Faculty, Chemical Hygiene Officer, Isotopic and Biogeochemical Characterization of Geological Materials, Energy and Environment
- Michael Harman - Ph.D. (West Virginia University)  
3D visualization, modeling complex landforms and processes, GIS
- Aaron Maxwell - Ph.D. (West Virginia University)  
Regular Graduate Faculty, Geospatial Instruction, Remote Sensing, Image Analysis, Spatial Modeling
- Charles Shobe - Ph.D. (University of Colorado - Boulder)  
Regular Graduate Faculty, Geomorphology, Earth Surface Processes, Landscape Evolution, Rivers, Source-to-Sink, Numerical Modeling

## PROFESSOR EMERITI

- Robert Behling - Ph.D. (The Ohio State University)
- Timothy Carr - Ph.D. (University of Wisconsin - Madison)
- Joe Donovan - Ph.D. (Pennsylvania State University)
- Greg Elmes - Ph.D. (Pennsylvania State University)
- Trevor Harris - Ph.D. (University of Hull)
- Thomas Kammer - Ph.D. (Indiana University)
- Steven Kite - Ph.D. (University of Wisconsin)
- Kenneth C. Martis - Ph.D. (Michigan University)
- Henry Rauch - Ph.D. (Pennsylvania State University)
- Robert C. Shumaker - Ph.D. (Cornell University)
- Richard Smosna - Ph.D. (University of Illinois)
- Timothy Warner - Ph.D. (Purdue University)
- Thomas Wilson - Ph.D. (West Virginia University)

## Admissions

### MS IN GEOGRAPHIC INFORMATION SCIENCE (GIS) AND SPATIAL ANALYSIS

The M.S. in Geographic Information Science and Spatial Analysis is a fully online program that offers training in a variety of spatial analysis, quantitative analysis, remote sensing, computational, and spatial programming techniques to investigate problems with a spatial component. All applicants must meet West Virginia University's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) and should have a bachelor's degree in a geospatial, natural, or applied science with some prior exposure to geographic information systems.

The GRE is not required for admission.



**List of Admission Requirements:**

- See the steps to apply for admission and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- Three letters of recommendation written by persons acquainted with the applicant's professional work, experience, or academic background.
- Resume or curriculum vitae.
- A statement of purpose/personal statement (at least 500 words) that describes the applicant's reasons for pursuing graduate study, reasons for specifically pursuing the MS in GIS and Spatial Analysis at WVU, and career goals.

**Application Deadlines:**

- The MS admits students for all semesters.
- The deadline for Fall semester admission is January 15<sup>th</sup>.
- The deadline for the Summer term is March 15<sup>th</sup>.
- The deadline for Spring semester admissions is November 15<sup>th</sup>.
- All application materials, including completed recommendation letters, must be submitted by the deadline in order to ensure full consideration.
- In exceptional circumstances, we will review applicants received after the January 15<sup>th</sup> and October 1<sup>st</sup> deadlines on space-available basis.

Certain application requirements may be waived based on a preliminary review of an application by the program.

**ADMISSION REQUIREMENTS 2024-2025**

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14E9

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**Degree Requirements**

- **Credit Hours:** Students must complete 31 hours of coursework, including a minimum of 3 credits in Resource Management.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Graduation Requirement:** In addition to completing the required coursework, students must complete a graduation project. This may include a written report or deliverables/products, such as data, software, maps, web maps, code, and/or web apps. An oral defense of the work is not required.
- **Note:** Certificate students who have completed RESM 585: GIS and Spatial Analysis Project, must complete a new project and register for Geography 797: Research.

Code	Title	Hours
<b>CORE COURSES:</b>		<b>16</b>
GEOG 550	Geographic Information Science	
GEOG 797	Research	
Select two of the following:		
GEOG 651	Geographic Information Science: Technical Issues	
GEOG 655	Remote Sensing Principles	
RESM 540	Geospatial Modeling	
<b>ELECTIVES:</b>		<b>15</b>
GEOG 462	Digital Cartography	
GEOG 651	Geographic Information Science: Technical Issues	
GEOG 654	Environmental Geographic Information Systems Modeling	
GEOG 655	Remote Sensing Principles	
GEOG 657	Open-Source Spatial Analytics	
RESM 540	Geospatial Modeling	
RESM 545	Spatial Hydrology and Watershed Analysis	

## Degree Progress

All students will receive at least one annual evaluation. Students experiencing difficulty meeting benchmarks or facing academic consequences may receive more frequent communication.

In order to stay in good academic standing, students should maintain cumulative GPA of 2.75, and a GPA of 3.00 in all courses applied to the graduate programs.

By the end of the first semester, students should have completed at least 9 hours of coursework towards degree completion.

By the end of the second semester, students should have completed at least 18 hours of coursework towards degree completion.

By the end of the third semester students should have completed at least 24 hours of coursework towards degree completion, formed a project advisory committee, and have submitted a project proposal and gained approval from his or her committee to undertake the project in the last term of attendance.

In addition to coursework, students must complete a graduate project. The graduation project must be completed before the end of the last semester of attendance.

## Major Learning Goals

### GIS AND SPATIAL ANALYSIS

The educational goals and objectives:

1. Design, execute, and defend a professional project that effectively addresses a need, problem, or research question with a spatial component.
2. Collect, create, use, and manage data to address a spatial problem.
3. Apply a variety of spatial analysis, quantitative analysis, remote sensing, computational, and spatial programming techniques to investigate a problem that has a spatial component.
4. Critique and compare a variety of spatial analysis and quantitative analysis techniques to solve a problem.
5. Make recommendations as to the best data and methods for investigating a question with a spatial component.
6. Construct multi-part and complex analyses to address a question or problem.
7. Produce written reports that effectively communicate the methods and results of an analysis.
8. Design and create maps and graphics that effectively communicate findings and data.

## Healthcare Administration

### Certificate Offered

- Healthcare Administration

### Nature of the Program

The Public Administration Department offers a healthcare administration graduate certificate for students who are interested in a career in a variety of healthcare settings, including hospitals, health departments, nursing homes, mental health services, home health services, nonprofit voluntary agencies, health research foundations, public and private insurance, and a variety of governmental agencies. The certificate program is available to students pursuing a degree other than the MPA degree or it can be pursued alone.

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## FACULTY

### PROFESSORS

- L. Christopher Plein - Ph.D. (University of Missouri)  
Ph.D. (University of Missouri)
- Margaret Stout - Ph.D. (Arizona State University)  
Regular Graduate Faculty, Local Government, Community Development, Public Policy and Public Planning

## ASSOCIATE PROFESSORS

- Paolo D. Farah - Ph.D., LL.M., JD (College of Europe, University of Paris)  
Regular Graduate Faculty, Public Policy & Admin., Legal & Political Foundation, Sustainability, Socio-Economic & Cultural Rights & Justice, Human Rights, Technology & Innovation
- Maja Husar Holmes - Ph.D. (Syracuse University)  
Regular Graduate Faculty, Public Management and Public Leadership
- Karen Kunz - D.P.A. (University of Illinois, Springfield)  
Regular Graduate Faculty, Financial Management, Corporate Use of Public Funds, Political Economy

## PROFESSORS EMERITI

- Nancy L. Adams - Ph.D. (Fielding Institute)
- Gerald M. Pops - Ph.D. (Syracuse University)
- David G. Williams - Ph.D. (State University of New York at Albany)

## ADMISSIONS

### GRADUATE CERTIFICATE IN HEALTHCARE ADMINISTRATION

The Public Administration Department offers a healthcare administration certificate for students who are interested in a career in a variety of healthcare settings. Candidates must meet the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>). The GRE is not required for admission to this program.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Curriculum Vitae or Resume.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadline:

- The Healthcare Administration Certificate program admits students on a rolling basis.

For questions, please contact: [publicadmin@mail.wvu.edu](mailto:publicadmin@mail.wvu.edu)

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: CG01

## Graduate Certificate in Healthcare Administration

### CERTIFICATE CODE - CG01

The Public Administration Department offers a healthcare administration certificate for students who are interested in a career in a variety of healthcare settings, including hospitals, health departments, nursing homes, mental health services, home health services, nonprofit voluntary agencies, health research foundations, public and private insurance, and a variety of governmental agencies. The certificate program is available to students pursuing a degree other than the MPA degree or it can be pursued alone. For more information, please consult: <http://publicadmin.wvu.edu/>.

Graduation requirements: Students must earn a minimum cumulative GPA of 3.0. Students must also earn a minimum GPA of 3.0 and a minimum grade of B- in all courses applied to the certificate.

### CERTIFICATE REQUIREMENTS

Each student must successfully complete 15 credit hours, including four required courses and one elective.

Code	Title	Hours
<b>CORE COURSES</b>		<b>9</b>
PUBA 670	Health Systems	
PUBA 671	Healthcare Organization and Operation	

PUBA 672	Healthcare Finance	
<b>ELECTIVES</b>		<b>3</b>
Select 3 credit hours from electives or courses approved by Graduate Certificate Coordinator		
PUBA 651	Social Equity in Public Service	
PUBA 655	Public Engagement	
PUBA 712	Administrative Ethics	
LEGS 730	Employment Law	
LEGS 770	Healthcare Law	
LEGS 771	Legal Issues for Adults in Care	
<b>CAPSTONE EXPERIENCE:</b>		<b>3</b>
PUBA 780	Healthcare Administration Practicum	
Total Hours		15

## Certificate Learning Outcomes

### HEALTHCARE ADMINISTRATION

Upon completion of the certificate, students should be able to:

- Understand, identify, and explain key social, political, and economic issues that shape the delivery of healthcare in the United States.
- Examine and identify the variety of organizations and entities in the healthcare delivery environment.
- Assess current workforce, funding, organizational delivery, quality and equity trends in healthcare administration.
- Understand, interpret, and utilize financial information, reports, policies and tools to implement decision-making in healthcare administration.

## History

### Degrees Offered

- Master of Arts
- Doctor of Philosophy

### Nature of the Program

The Department of History offers graduate work in the history of Africa, Asia, Europe, Latin America, public history, the United States including Appalachia/regional, and world history. In addition to our core areas of strength, the department encourages research that is comparative and transnational in perspective and scope. Faculty research and teaching interests are clustered thematically around four areas: Gender and Kinship, Imperial and Postcolonial Societies, Labor and Political Economy, and War and Society. Our program is designed to give students flexibility to create a plan of study that matches their interests, while at the same time provide a breadth of training in different fields that will prepare students in historiography, research methods, and teaching approaches. Students can select concentrations leading to preparation for careers in teaching and scholarship and as specialists for various branches of government, business, and public service. Students in the program are normally expected to pursue the degrees of master of arts or doctor of philosophy.

### TRANSATLANTIC OPTION FOR THE MASTER OF ARTS

The Department of History has launched a new transatlantic program in international history and security studies in partnership with Collegium Civitas, located in Warsaw, Poland, beginning fall 2018. The program is designed as a two-year plan of study consisting of 60 U.S. credit hours, or 120 European Credit Transfer and Accumulation System credits. Students completing the program earn half of these credits at WVU and the other half at Collegium Civitas. Following a successful completion of all requirements, including the thesis defense, two master's degrees will be conferred—one in history from WVU, and the other in international relations from Collegium Civitas.

WVU students will normally spend their first year of studies at WVU and their second year at CC. Students from Collegium Civitas will spend their first year in Warsaw and their second year in Morgantown. Defense of the joint MA thesis will be held on the premises of both institutions, physically and virtually, with participation by both WVU and CC faculty.

All requirements of the program must be met and credits transferred between the institutions before either the U.S. degree from WVU, or the European degree from Collegium Civitas can be issued. As a result, the two degrees, though coming from separate institutions, are awarded simultaneously.

## FACULTY

### CHAIR

- Kate Staples - Ph.D. (University of Minnesota)

### ASSOCIATE CHAIR

- Matthew Vester - Ph.D. (University of California, Los Angeles)

### PROFESSORS

- Brian Luskey - Ph.D. (Emory University)  
Regular Graduate Faculty, 19th-century U.S., Social and Cultural History
- Jason Phillips - Ph.D. (Rice University)  
Regular Graduate Faculty, Eberly Family Professor of Civil War Studies, Civil War Era, 19th-century U.S., Southern History, Material Culture
- James Siekmeier - Ph.D. (Cornell University)  
Regular Graduate Faculty, U.S. Diplomatic, Modern Latin America
- Matthew Vester - Ph.D. (University of California, Los Angeles)  
Regular Graduate Faculty, Early Modern Europe, Italy

### DIRECTOR OF GRADUATE STUDIES

- Jason Phillips - Ph.D. (Rice University)

### DIRECTOR OF UNDERGRADUATE STUDIES

- William Gorby - Ph.D. (West Virginia University)

### ASSOCIATE PROFESSOR

- Melissa Bingmann - Ph.D. (Arizona State University)  
Regular Graduate Faculty, Public history, 20th-century U.S.
- William Gorby - Ph.D. (West Virginia University)  
Associate Graduate Faculty, West Virginia, Appalachia, Immigration
- Sheena Harris - Ph.D. (The University of Memphis)  
Regular Graduate Faculty, Race, Class, Gender, Education, Black Women's Organizations, Hip-Hop Feminism
- Joseph Hodge - Ph.D. (Queen's University at Kingston)  
Regular Graduate Faculty, Modern Britain, British Empire, Decolonization, International Development, Africa
- Tamba E. M'bayo - Ph.D. (Michigan State University)  
Regular Graduate Faculty, West Africa, Colonial and Postcolonial, African Diaspora and Pan-Africanism
- Kate Staples - Ph.D. (University of Minnesota)  
Regular Graduate Faculty, Medieval, Gender, England, Material Culture
- Mark B. Tauger - Ph.D. (University of California, Los Angeles)  
Regular Graduate Faculty, 20th-century Russia/USSR, World/Comparative, Historiography
- Jessica Wilkerson - Ph.D. (University of North Carolina-Chapel Hill)  
Regular Graduate Faculty, Joyce and Stuart Robbins Chair, Appalachia and the South, Women, Gender, and Sexuality, 20th-c U.S., Labor and Working Class History

### ASSISTANT PROFESSOR

- Brooke Durham - Ph.D. (Stanford University)  
Regular Graduate Faculty, Modern Europe, French Empire, North Africa, Decolonization
- Max Flomen - Ph.D. (University of California, Los Angeles)  
Regular Graduate Faculty, Early American History, Native American History
- Sean Lawrence - Ph.D. (University of California, Santa Cruz)  
Regular Graduate Faculty, Germany, Colonialism, Middle East, Environment, Political Economy
- Austin McCoy - Ph.D. (University of Michigan)  
Regular Graduate Faculty, 20th-Century U.S., African-American, Labor, Social Movements
- Devin Smart - Ph.D. (University of Illinois-Urbana Champaign)  
Regular Graduate Faculty, Africa, World/Global, Environmental
- Jennifer Thornton - Ph.D. (University of California, Riverside)  
Associate Graduate Faculty, Public History

## EMERITI FACULTY

- William S. Arnett - Ph.D. (Ohio State University)
- Robert E. Blobaum - Ph.D. (University of Nebraska)
- William I. Brustein - Ph.D. (University of Washington)
- Elizabeth Fones-Wolf - Ph.D. (University of Massachusetts)
- Kenneth Fones-Wolf - Ph.D. (Temple University)
- Jack Hammersmith - Ph.D. (University of Virginia)
- Barbara J. Howe - Ph.D. (Temple University)
- Elizabeth K. Hudson - Ph.D. (Indiana University)
- Ronald L. Lewis - Ph.D. (University of Akron)
- Mary Lou Lustig - Ph.D. (Syracuse University)
- Robert M. Maxon - Ph.D. (Syracuse University)
- Stephen C. McCluskey - Ph.D. (University of Wisconsin)
- A. Michal McMahon - Ph.D. (University of Texas)
- John C. Super - Ph.D. (University of California, Los Angeles)

## Admissions

The History program admits students to either the M.A. in History, the M.A. in Public History, or the Ph.D. in History. GRE scores are not required but will be considered if they are provided.

### M.A. IN HISTORY

In addition to the university's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the M.A. program must have a bachelor's degree in history or a related field with a GPA of at least 3.0 in history courses. Applicants with an undergraduate degree in a different subject area may be required to make up deficiencies by enrolling in additional history courses as determined by the graduate program committee. Students who wish to pursue the transatlantic program in international history and security studies should apply to the M.A. in History.

### M.A. IN PUBLIC HISTORY

In addition to the university's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the M.A. in Public History program must have a bachelor's degree in history or a related field with a GPA of at least 3.0 in history courses. Applicants with a degree in a different subject area may be required to make up deficiencies by enrolling in additional history courses as determined by the graduate program committee.

### PH.D. IN HISTORY

In addition to the university's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the Ph.D. program should have the equivalent of an M.A. in history or a related field with a GPA of at least a 3.0 in history courses. Applicants with a degree in a different subject area may be required to make up deficiencies by enrolling in additional history courses as determined by the graduate program committee.

#### Direct Admission Track to Ph.D. Program

Students who have compiled an outstanding record in an undergraduate history major may apply for direct admission to the doctor of philosophy program. They are not required to obtain a master's degree. Direct admission to the Ph.D. program is highly selective and limited to exceptionally qualified students with superior standing in their bachelor's degree. Students of this caliber are generally expected to have a cumulative grade point average (GPA) of 3.9 or higher. In addition, students must provide evidence that they have experience conducting a substantial piece of original historical research, such as a senior honors thesis or major capstone paper.

#### List of Admission Requirements for all programs:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- Three letters of recommendation written by people in a position to evaluate the applicant's academic strengths.
- Resume that indicates past education, professional, and voluntary experiences.
- Statement of purpose that indicates clearly to which program the applicant is seeking admission (e.g., Ph.D. in History, M.A. in History transatlantic program, etc.) and addresses the applicant's goals as a history graduate student in the expected program/concentration area.
  - Students interested in the transatlantic program in international history and security and those interested in the public history program must specifically address their goals and background in those areas/concentrations.
- Writing sample

- For the M.A., the required writing sample may be a senior honors thesis, major capstone or research seminar paper, or a term paper written for an advanced history course.
- For the Ph.D., the required writing sample may be a master's thesis, senior honors thesis, major capstone or research seminar paper, or a term paper written for an advanced history course.
- GRE scores are not required but will be considered if they are provided.

### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

### Application Deadlines:

- The graduate programs in History admit for the fall semester only.
- The priority review deadline for the Ph.D. program is January 15<sup>th</sup> and for the M.A. program is February 1<sup>st</sup>.
- Completed applications for the M.A. program may be submitted until April 1<sup>st</sup> for admissions purposes but will not be considered for funding.
- Exceptional Ph.D. applicants may be nominated by the History program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

### Assistantships

All applicants will be considered for financial support in the form of graduate teaching assistantships (GTAs) and Graduate Research Assistantships (GRAs). Graduate research assistantships are sometimes available through funded faculty member research. Students who qualify for available research assistantships will be contacted by the relevant faculty member with details.

For questions, please contact: [history@mail.wvu.edu](mailto:history@mail.wvu.edu) ([history@mail.wvu.edu](mailto:history@mail.wvu.edu))

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.A. and Ph.D. in History Major Code: 1449

M.A. in Public History Major Code: 14C7

For specific information on the following program, please see the link to the right:

- History, Ph.D.

## Degree Progress

### M.A. IN HISTORY

Students will be evaluated annually. If adequate progress is not made, students may be placed on probation or suspended from the program. All students should complete a plan of study by the end of their second semester. Students who choose the thesis option should defend their thesis proposal prior to the beginning of the semester in which they intend to graduate, and submit and defend their thesis during the semester in which they intend to graduate. Students who choose the examination option should take HIST 795 and complete written and oral examinations during the semester in which they intend to graduate.

### M.A. IN PUBLIC HISTORY

Student will be evaluated annually by the program coordinator. HIST 614 should be completed by the end of the student's third semester in the program.

### PH.D.

Students will be evaluated on a yearly basis. If adequate progress is not made, students may be placed on probation or dismissed from the program. Students should complete a plan of study by the end of their second semester. Students typically complete comprehensive exams at the end of their fourth semester or beginning of their fifth semester, defend their dissertation prospectus during their fifth or sixth semester, and defend and submit their dissertation within five years of completing their comprehensive exams.



# History, M.A.

## Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours in History at the graduate level. Up to 12 credits can be at the 400 or 500 level.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the degree.
- **Graduation Requirement:** Students have the option of either taking a comprehensive examination or completing a thesis.
  - **Master's Thesis:** The thesis must be based on original research that demonstrates a critical engagement with primary sources and the secondary literature and is developed in multiple chapters. Students must first prepare a thesis prospectus, which must be approved by their thesis committee, before writing and successfully defending the thesis in an oral examination. A maximum of six hours of credit for HIST 697 can be taken for writing the thesis.
  - **Comprehensive Examination:** Students who choose this option must register for HIST 795 while preparing for their exam. In their final semester, they complete comprehensive exams in their major and minor fields, based on their coursework and in consultation with a faculty adviser for each field. The comprehensive exams include a written component and an oral defense.
- **Benchmarks:** For details, go to the History Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/history/#degreeprogressesstext>)

## Curriculum Requirements

Code	Title	Hours
<b>CORE COURSE:</b>		<b>3</b>
HIST 700	Historiography	
<b>PRIMARY FIELD</b>		<b>12</b>
Select one of the following sequences:		
HIST 701 & HIST 702	Readings in Medieval History and Seminar in Medieval History	
HIST 705 & HIST 706	Readings in Early Modern History 3 Hr and Seminar in Early Modern History	
HIST 717 & HIST 718	Readings In Modern European History and Seminar in Modern European History	
HIST 725 & HIST 726	Readings in African History and Seminar in African History	
HIST 731 & HIST 732	Readings In American History: 1585-1763 and Seminar in American History: 1585-1763	
HIST 757 & HIST 758	Readings in United States History: 1787-1850 and Seminar in United States History: 1787-1850	
HIST 759 & HIST 760	Readings in United States History: 1840-1898 and Seminar in United States History: 1850-1898	
HIST 763 & HIST 764	Readings in United States History: 1898-Present and Seminar in United States History: 1898-Present	
HIST 765 & HIST 766	Readings in United States Diplomatic History and Seminar in United States Diplomatic History	
HIST 773 & HIST 774	Readings in Appalachian Regional History and Seminar in Appalachian Regional History	
Any 2 HIST courses related to the field at the 400 level or above. *		
<b>SECONDARY FIELD AND ELECTIVE:</b>		<b>9</b>
Select any 3 HIST courses 400 level or above *		
<b>COMPLETION OPTION:</b>		<b>6</b>
Select one option:		
<b>Thesis</b>		
HIST 697	Research	
<b>Examination:</b>		
HIST 795	Independent Study	
Total Hours		30



\*

Except HIST 697, HIST 700, HIST 790, HIST 789, HIST 797.

## Major Learning Outcomes

### HISTORY

Students earning a M.A. in History will be able to:

- Examine and evaluate primary and secondary sources, historiographical methods, and debates among historians.
- Compose a research question and agenda that identifies the state of their field, potential weaknesses of our current historiographical understanding, or the limits of current debates.
- Use their understanding of the historical and historiographical literature to conduct research and produce and defend an original argument that makes a contribution to their field of study.

## Public History, M.A.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 36 graduate credit hours in History. Up to 12 credits can be at the 400 or 500 level. Six of the 36 credits can be from outside history, with permission from adviser.
- **Grade Point Average:** Students must earn a minimum overall GPA of 2.75, and a GPA of 3.00 in coursework applied to their graduate program.
- **Benchmarks:** For details, go to the History Degree Progress tab (<http://catalog.wvu.edu/graduate/everlycollegeofartsandsciences/history/#degreeprogress>)

Code	Title	Hours
<b>Core Courses</b>		<b>12</b>
HIST 613	Local History Research Methodology	
HIST 750	Public History Methods	
Select one set of courses:		
HIST 701 & HIST 702	Readings in Medieval History and Seminar in Medieval History	
HIST 705 & HIST 706	Readings in Early Modern History 3 Hr and Seminar in Early Modern History	
HIST 717 & HIST 718	Readings In Modern European History and Seminar in Modern European History	
HIST 725 & HIST 726	Readings in African History and Seminar in African History	
HIST 731 & HIST 732	Readings In American History: 1585-1763 and Seminar in American History: 1585-1763	
HIST 757 & HIST 758	Readings in United States History: 1787-1850 and Seminar in United States History: 1787-1850	
HIST 759 & HIST 760	Readings in United States History: 1840-1898 and Seminar in United States History: 1850-1898	
HIST 763 & HIST 764	Readings in United States History: 1898-Present and Seminar in United States History: 1898-Present	
HIST 765 & HIST 766	Readings in United States Diplomatic History and Seminar in United States Diplomatic History	
HIST 773 & HIST 774	Readings in Appalachian Regional History and Seminar in Appalachian Regional History	
HIST 785 & HIST 786	Readings in Environmental History and Seminar in Environmental History	
<b>Professional Experience</b>		<b>6</b>
HIST 614	Internship in Public History	
<b>Reading Electives *</b>		<b>3</b>
A minimum of one HIST Reading course at the 700 level or above is required		
<b>Electives **</b>		<b>12</b>

Any HIST course at the 400 level or above	
Total Hours	33

\*  
Excluding HIST 750, 797

\*\*  
Courses at the 400 level or above in another subject, as approved by advisor

## Major Learning Outcomes

### PUBLIC HISTORY

Students earning a M.A. in Public History will be able to:

- Demonstrate skills as expert researchers, writers, and interpreters of history.
- Evaluate and apply methodological approaches to researching and interpreting the past that considers audience, stakeholders, ethical best practice, and project resources.
- Interpret the unique nature of working as a professional historian in the public sector and explain how shared authority, community building, and collaboration are essential to successful public history practice.
- Develop professional skills in museums, historic preservation, archives, administrative leadership, cultural resources management, grant writing, oral history, digital history, or contract work.

## History, Ph.D.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum number of 34 credit hours in History at the 400 level and above.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the degree.
- **Program of Study:** A candidate must complete a program of study in four fields (a major field and three minor fields) developed in consultation with faculty field examiners.
  - Students may be required to take additional coursework depending upon their preparation in exam fields. Decisions about required coursework will be made in consultation with field examiners and the director of graduate studies.
  - At least three fields must be in History while the fourth may be in a related field with the approval of the director of graduate studies.
  - At least one of the four fields must be in a geographic area outside the student’s main area of concentration for dissertation research.
- **Comprehensive Examination:** For each of the four fields of study, students take a comprehensive examination (written and oral) based on knowledge derived from coursework and readings from a book-list prepared in consultation with the faculty field adviser.
- **Dissertation:** Dissertation work should normally be in the history of the United States, Europe, or modern Africa.
- **Benchmarks:** For details, go to the History Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/history/#degreeprogress>)

### Curriculum Requirements

Code	Title	Hours
Historiography Requirement		3
HIST 700	Historiography	
Primary Field: *		9
Select at least one Reading/Seminar sequence		
HIST 701 & HIST 702	Readings in Medieval History and Seminar in Medieval History	
HIST 705 & HIST 706	Readings in Early Modern History 3 Hr and Seminar in Early Modern History	
HIST 717 & HIST 718	Readings In Modern European History and Seminar in Modern European History	
HIST 725 & HIST 726	Readings in African History and Seminar in African History	
HIST 731 & HIST 732	Readings In American History: 1585-1763 and Seminar in American History: 1585-1763	

HIST 757 & HIST 758	Readings in United States History: 1787-1850 and Seminar in United States History: 1787-1850
HIST 759 & HIST 760	Readings in United States History: 1840-1898 and Seminar in United States History: 1850-1898
HIST 763 & HIST 764	Readings in United States History: 1898-Present and Seminar in United States History: 1898-Present
HIST 765 & HIST 766	Readings in United States Diplomatic History and Seminar in United States Diplomatic History
HIST 773 & HIST 774	Readings in Appalachian Regional History and Seminar in Appalachian Regional History
Select at least one additional related course: **	
HIST at the 400, 500, 600, or 700 level	

**Minor Field 1: \*****6**

Select an additional Reading/Seminar pair

HIST 701 & HIST 702	Readings in Medieval History and Seminar in Medieval History
HIST 705 & HIST 706	Readings in Early Modern History 3 Hr and Seminar in Early Modern History
HIST 717 & HIST 718	Readings In Modern European History and Seminar in Modern European History
HIST 725 & HIST 726	Readings in African History and Seminar in African History
HIST 731 & HIST 732	Readings In American History: 1585-1763 and Seminar in American History: 1585-1763
HIST 757 & HIST 758	Readings in United States History: 1787-1850 and Seminar in United States History: 1787-1850
HIST 759 & HIST 760	Readings in United States History: 1840-1898 and Seminar in United States History: 1850-1898
HIST 763 & HIST 764	Readings in United States History: 1898-Present and Seminar in United States History: 1898-Present
HIST 765 & HIST 766	Readings in United States Diplomatic History and Seminar in United States Diplomatic History
HIST 773 & HIST 774	Readings in Appalachian Regional History and Seminar in Appalachian Regional History

**Minor Fields 2 & 3: \*****12**

Select at least four courses: \*\*

Any HIST at the 400 level or above

**Research Requirement \*\*\*****4**

HIST 797	Research
Total Hours	34

\*

Courses selected for this section should not be used for another field.

\*\*

Excluding HIST 490, HIST 590, HIST 690, HIST 697 HIST 700, HIST 789, HIST 790, and HIST 797

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Students are expected to be involved in research throughout their graduate career, and enrollment in HIST 797, should reflect this activity. Students must complete at least four hours, however most students complete more than 60 credit hours of research.

## Major Learning Outcomes

### HISTORY

Students earning a Ph.D. in History will be able to:

- Examine and evaluate primary and secondary sources, historiographical methods, and debates among historians.
- Communicate their understanding of the content and context of the past by teaching about history to a variety of audiences.
- Assess the contours of historiographical debates over time and suggest future developments in the historiographical literature.
- Compose a research question and agenda that identifies the state of their field, potential weaknesses of our current historiographical understanding, or the limits of current debates.
- Use their understanding of the historical and historiographical literature to conduct historical research and produce and defend an original doctoral dissertation that makes a contribution to their field of study.

## Leadership

### Certificate Offered

- Leadership

### Nature of the Program

Effective leadership may be the most critical component of a fruitful and sustained human society or organization. Though related to effective management and administration, effective leadership requires a different and more strategically applied skill set and a larger, longer term perspective and sense of context.

WVU's Graduate Certificate in Leadership is the first of its kind in the state of West Virginia. It offers working professionals innovative, research-driven courses with practical applications that will prepare you for the next stage of your career. If you entered the workforce before having the opportunity to take courses in leadership, our graduate certificate will meet your needs. Offered entirely online, our program provides a flexible curriculum that can be completed in as little as one year.

Students in the WVU Leadership Program are part of a community that is committed to helping them develop through hands-on experiences and academic opportunities. The faculty, staff, and partners extend beyond the traditional boundaries of the classroom and academic departments. The faculty who teach reflect this mix of scholarship in the field and real-world experience as leaders. In addition to passion and discipline, our program cultivates competent, confident and conscientious citizens.

Our courses will equip you to enhance leadership capacity at work and in your daily life, manage conflict and change, analyze organizational ethics and leadership practices, assess a variety of leadership types and approaches, and critique the role of leadership in shaping organizational culture and climate.

Students will study, practice, and understand leadership in a global context. Graduates will demonstrate knowledge of leadership theories and approaches, apply leadership approaches to analyze and evaluate ethical leadership practices, and exercise the skills essential to effective leadership in the classroom and through real-world cases. They will also explore how identity and culture impact leadership in the United States and abroad.

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## FACULTY

### PROGRAM DIRECTOR

- Lisa DeFrank-Cole - Ed.D. (University of Pittsburgh)  
Associate Graduate Faculty

### ASSISTANT PROFESSOR

- Cheyenne Luzynski - Ph.D. (Eastern Michigan University)  
Associate Graduate Faculty

## Admissions

The Graduate Certificate in Leadership offers working professionals innovative, research-driven courses with practical applications that will prepare them for their next career stage. Individuals with an undergraduate degree in any field who are eager to learn about leadership, in theory and practice, are encouraged to apply. The GRE is not required for admission to this program.

### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Curriculum Vitae or Resume.
- A one page (250 word) personal statement that describes the applicant's interest in the certificate program.

**International Applicants:**

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

**Application Deadline:**

- The Leadership Certificate program admits students on a rolling basis

**For questions, please contact:** LeadershipStudies@mail.wvu.edu

**ADMISSION REQUIREMENTS 2024-2025**

The Admission Requirements above will be the same for the 2023-2024 Academic Year.

Major Code: CG43

**Graduate Certificate in Leadership****CERTIFICATE CODE - CG43**

Graduation requirement: Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in courses applied to the certificate.

Code	Title	Hours
<b>CORE COURSES</b>		
LDR 501	Advanced Leadership Theory and Practice	3
LDR 551	Advanced Problems in Leadership	3
LDR 601	Applied Leadership in the Workplace	3
<b>ELECTIVES</b>		<b>3</b>
Select one of the following:		
LDR 435	Women and Leadership	
LDR 445	Intersections in Leadership	
LDR 610	Operationalizing Leadership	
LDR 615	Leadership in Contemporary Organizations	
Total Hours		12

**Certificate Learning Outcomes****LEADERSHIP**

Students completing this graduate certificate will have proven competencies in the following:

1. Examining a variety of leadership theories and approaches.
2. Analyzing ethical considerations in leadership practices.
3. Critiquing environments (based on race, class, gender, etc.) and how leaders and followers interact.
4. Synthesizing applicable leadership skills that can be used in professional, political and civic settings.
5. Applying outcomes/simulations where leaders, followers and context are all incorporated to manage conflict and change.

**Legal Studies, M.L.S.****Degree Offered**

- Master of Legal Studies

**Nature of the Program**

West Virginia University's Master of Legal Studies (MLS) program is housed in the Department of Public Administration.

The MLS is a degree program designed to build greater public understanding of the law and the United States legal system, provide graduates with the ability to apply knowledge and skills gained to performing their jobs more effectively, and provide private and public organizations the benefit of enhanced experience. It is designed for professionals practicing in human relations, criminal and juvenile justice, the court system, journalism, social

work, regulatory agencies, county and municipal government, military, business, and other professionals who work with, though not necessarily in, the legal system. It is neither a “pre-law” program nor a paralegal program. It does not prepare graduates to practice law.

The MLS is a 30-credit hour program offered entirely online. Courses are offered each semester, including summer terms. Students following the prescribed course of study should be able to finish the degree in 18 months.

The MLS degree offers Areas of Emphasis in Healthcare Systems and Justice Systems.

Prospective and current students should frequently check the program's website (<https://publicadmin.wvu.edu/students/master-of-legal-studies/>) for up-to-date program information, forms, and other guidelines.

## **FACULTY**

### **ASSOCIATE PROFESSORS**

- Valarie Blake - JD (University of Pittsburgh)
- John C. Kilwein - Ph.D. (Ohio State University)

### **SERVICE ASSISTANT PROFESSOR**

- Samantha Godbey - Ph.D. (West Virginia University)

### **LECTURERS**

- Carrie Caviani - JD (West Virginia University College of Law)
- Irving Condon - JD (University of South Carolina School of Law)
- Michelle Mensore Condon - JD (Washington & Lee University)
- Cara Davis - JD (Duquesne University School of Law)
- Cheryl Dennis - JD (West Virginia University College of Law)
- Frederick Dimichele - JD (Indiana University School of Law)
- Kevin Gillen - JD (West Virginia University College of Law)
- Julie Hawkinberry - JD (West Virginia University College of Law)
- Ulysses N. Jaen - JD (West Virginia University College of Law)
- Jeri Kirby - Ph.D. (West Virginia University)
- Gregory Noone - JD, Ph.D. (Suffolk University Law School, West Virginia University)
- Thomas O. Patrick - JD (West Virginia University College of Law)

### **PROFESSOR EMERITUS**

- Nancy L. Adams - Ph.D. (Fielding Institute)

## **Admissions**

The Master of Legal Studies is a degree program designed to build greater public understanding of the law and the United States legal system. Graduates will be able to apply the knowledge and skills gained to performing their jobs more effectively and to provide private and public organizations the benefit of enhanced experience. Applicants must have a bachelor's degree with an overall undergraduate GPA of 2.75 or higher. Preference is given to those with work experience broadly related to legal studies.

Standardized graduate-level test scores (GRE, GMAT or LSAT) are required unless the following circumstances apply, in which case the requirement can be waived:

- Applicants who earned a bachelor's degree from a U.S. accredited college or university and achieved a cumulative GPA of 3.4 or higher may request a waiver of the graduate exam score requirement.
- Applicants who already hold a graduate degree or have successfully completed at least 18 credit hours and achieved a cumulative GPA of 3.0 or higher from another accredited graduate program.
- Applicants with at least five years of broadly related experience after completing their undergraduate degree. If applicant are active military or a veteran, they should include this information in their request as well as a description of all relevant professional experience and how it relates to legal studies and the applicant's career goals.

### **List of Admission Requirements:**

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.

- Standardized graduate-level test scores (GRE, GMAT, LSAT) unless exceptions described above apply. In that case, this should be addressed in the statement of purpose.
- A statement of purpose that describes the applicant's career goals and how the M.L.S. program will support those goals. The statement should also address any exceptions to the graduate test scores as described above.
- Resume or CV.
- Two letters of recommendation.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadlines:

- The MLS program admits students for the Summer, Fall, and Spring semesters on a rolling basis.
- The priority review deadlines for all application materials are April 15<sup>th</sup> (Summer), May 15<sup>th</sup> (Fall) and November 15<sup>th</sup> (Spring).
- Applications will be considered after these deadlines on a space-available basis.

For questions, please contact: [publicadmin@mail.wvu.edu](mailto:publicadmin@mail.wvu.edu)

Certain application requirements may be waived based on a preliminary review of an application by the program.

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1408

## Master of Legal Studies

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours in graduate coursework.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0. Students must also earn a minimum GPA of 3.0 and a minimum grade of B- in all courses applied to the degree.
- **Area of Emphasis:** The MLS program offers three areas of emphasis 1) Healthcare, 2) Justice Systems, and 3) Homeland Security. Students may either complete an Area of Emphasis or 9 credits of electives.
- **Benchmarks:** For details, go to the Legal Studies Degree Progress tab (<http://catalog.wvu.edu/graduate/everlycollegeofartsandsciences/legalstudies/#degreeprogresstext>)

### Curriculum Requirements

Code	Title	Hours
<b>Required Courses</b>		
LEGS 610	Law and the Legal System	3
LEGS 620	Researching the Law	3
Select two of the following:		6
LEGS 640	Administrative Legal Process	
LEGS 645	Judicial Legal Process	
LEGS 650	The Legislative Process	
LEGS 660	Dispute Resolution	3
LEGS 700	Research Capstone	3
LEGS 760	Administrative Ethics	3
<b>AOE or Elective Courses</b>		
Select three of the following (others approved by Master of Legal Studies Advisor):		9
LEGS 691	Advanced Topics	
LEGS 720	Media and the Law	

LEGS 730	Employment Law	
LEGS 750	Criminal Law and Procedure	
LEGS 751	Punishment and Corrections	
LEGS 752	Homeland Security	
LEGS 753	Immigration and Border Security	
LEGS 754	Military Justice	
LEGS 770	Healthcare Law	
LEGS 771	Legal Issues for Adults in Care	
LEGS 780	Constitutional Law	
Total Hours		30

## Areas of Emphasis Offered:

- Health Systems (p. 272)
- Justice System (p. 272)

## Health Systems Area of Emphasis

Code	Title	Hours
<b>CORE COURSE:</b>		<b>3</b>
LEGS 770	Healthcare Law	
<b>ELECTIVE COURSES:</b>		<b>6</b>
LEGS 720	Media and the Law	
LEGS 730	Employment Law	
LEGS 731	State, Corporate, and Organizational Fraud	
LEGS 771	Legal Issues for Adults in Care	
LEGS 780	Constitutional Law	
Total Hours		9

## Justice System Area of Emphasis

Code	Title	Hours
<b>CORE COURSE:</b>		<b>3</b>
LEGS 750	Criminal Law and Procedure	
<b>ELECTIVES:</b>		<b>6</b>
LEGS 720	Media and the Law	
LEGS 731	State, Corporate, and Organizational Fraud	
LEGS 730	Employment Law	
LEGS 751	Punishment and Corrections	
LEGS 752	Homeland Security	
LEGS 753	Immigration and Border Security	
LEGS 754	Military Justice	
LEGS 780	Constitutional Law	
Total Hours		9

## Degree Progress

**Benchmarks:** Students are expected to consult with their faculty advisor at least once a semester to review their progress in the program of study. More information is provided in the MLS Student Handbook.

**Plan of Study:** The Plan of Study should be discussed with the faculty advisor to ensure appropriate sequencing of courses to meet graduation requirements.

**Evaluation Procedures:** The Legal Studies faculty are committed to supporting all admitted students in their timely completion of the program. Students will receive a "good standing" letter from the Department Chair annually. They will also be provided feedback through academic assignments and



individual meetings as needed. The academic advisor is available to discuss areas in which students may be experiencing challenges and/or need additional support. If the academic advisor is not available, students should feel free to contact the Chair of the Department of Public Administration.

**Timeline:** Master's degree students are permitted to continue in a program for a maximum of eight years following their term of admission to the program. Students who have been inactive for two or more years or who exceed eight years following their term of admission are required to apply for readmission to the University and their graduate program.

**Professional Behavior:** The MLS program is a professional program preparing people for careers in public service. Adherence to professional standards and ethics is expected of students.

**Degree Completion:** Full-time students usually complete the MLS degree in five semesters.

More information is provided in the MLS Student Handbook.

## Major Learning Outcomes

### MASTER OF LEGAL STUDIES

Students will be able to:

- Effectively communicate the current state of knowledge, research, and bodies of legal doctrines in the field of jurisprudence and regulatory law.
- Identify and evaluate policy and procedure of the distinct governing bodies of legal mandates including the courts, legislatures, judiciary and other legal institutions.
- Apply professional practice, including mediation and ethics, as they relate to various legal professions, areas of regulation and broader social connections.
- Critically analyze the recognized literature and apply knowledge to conduct independent and original research in the field of jurisprudence and/or regulatory law.

## Linguistics

### Degree Offered

- Master of Arts
- Graduate Certificate

### Nature of the Program

The M.A. program in Linguistics includes 30 hours of core and elective courses and is designed to provide students with a well rounded perspective on the field. Students also have the opportunity to engage in research projects that reflect their interests within a given subject and that serve to complement and augment the information imparted through in-class activities. The program may be completed either by taking comprehensive exams, or by writing and defending a Master's thesis. The program is intended both for students seeking preparation for doctoral studies in linguistics or a related field, as well as for those seeking a professional degree with a goal of pursuing careers in language related fields.

### Available Financial Aid

Graduate teaching assistantships are available to students admitted to any of our three M.A. programs for teaching different languages, including Arabic, Chinese, French, German, English as a Second Language, Italian, Japanese, Russian, and Spanish. The assistantships carry full university tuition remission and a nine-month stipend (August–May); there are also limited opportunities to teach during the university's summer session.

In addition to the graduate teaching assistantships, a limited number of meritorious tuition waiver awards are sometimes available from the Eberly College of Arts and Sciences through the department. These awards are based on academic performance and financial need.

### Graduate Teaching Assistants

The department values the contributions made by our graduate assistants and strives to help them become effective teachers. Graduate assistants normally teach two courses (six class-hours per week). They work under the direct supervision of the course coordinator in the language area, but they are fully responsible for their courses (including evaluating their students' work). The coordinator will conduct orientations and organizational meetings with graduate assistants and provide course materials (such as syllabi). In addition, the coordinator will periodically observe individual classes in order to assess the graduate assistants' performance and to provide encouragement and assistance.

All graduate teaching assistants must register for one of our language teaching methods classes (LANG 421, LANG 521, or LANG 621, depending on the language they are teaching). In addition, graduate assistants must register for LANG 690 each semester of employment. Students who have already received an M.A. in World Languages, Literatures, and Linguistics from West Virginia University may be ineligible for an assistantship in this department.

## Additional Points of Information

### ADVISING

All graduate students will have a primary advisor (to be assigned by the chairperson). Students should consult with their advisor when they register for courses or add and/or drop courses. In addition, the Associate Chair of Graduate Studies is available to answer questions regarding the degree program, requirements, comprehensive examinations, graduation, etc. Students may consult with the chairperson regarding departmental matters.

### STUDY ABROAD OPPORTUNITIES FOR GRADUATE STUDENTS

Qualified teaching assistants in French may compete for the Marguerite Eynard McBride Award, which funds an academic year in France. Year-long exchange programs for graduate students are also in place for France and Spain. The department also sponsors study abroad during the summers in Canada, China, France, Germany, Italy, Japan, Jordan, Mexico, Spain, and Taiwan that graduate students may participate in if they meet the program's requirements. Grants are available on a competitive basis through the department and through the Office of International Programs to assist students who wish to study abroad.

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## FACULTY

### CHAIR

- Amy S. Thompson - Ph.D. (Michigan State University)

### ASSOCIATE CHAIR

- Sandra Stjepanovi# - Ph.D. (University of Connecticut)

### PROFESSORS

- Lisa DiBartolomeo - Ph.D. (University of Pittsburgh)  
Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema, Science Fiction, the Holocaust
- Daniel Ferreras - Ph.D. (Michigan State University)  
Regular Graduate Faculty; French and Spanish, Comparative Romance Literature, French/Spanish 19th and 20th Century Novel, Theory of the Fantastic
- Valérie Lastinger - Ph.D. (University of Georgia)  
French, 18th-century French Literature, French Women Writers
- Amy S. Thompson - Ph.D. (Michigan State University)  
Regular Graduate Faculty; Applied Linguistics

### ASSOCIATE PROFESSORS

- Manal AlNatour - Ph.D. (University of Arkansas)  
Regular Graduate Faculty; Arabic Studies, Comparative Literature and Cultural Studies
- Susan Braid - Ph.D. (University of Delaware)  
Regular Graduate Faculty; ESL/Linguistics, Applied Linguistics, Second Language Acquisition, Syntax
- Heiko ter Haseborg - Ph.D. (West Virginia University)  
Education, Applied Linguistics
- Yilin Liao-Carlson - Ph.D. (Purdue University)  
Chinese Studies
- Cynthia Chalupa - Ph.D. (Ohio State University)  
Regular Graduate Faculty; Fin de Siècle German and Austrian Literature, Poetry, Foreign Language Pedagogy
- Deborah Janson - Ph.D. (University of California Los Angeles)
- Jonah Katz - Ph.D. (Massachusetts Institute of Technology)  
Regular Graduate Faculty; Phonetics, Phonology, Theoretical and Experimental Linguistics, Music Cognition
- Tania de Miguel Magro - Ph.D. (The State University of New York, Stony Brook)  
Regular Graduate Faculty; Spanish Literature and Culture, Spanish Language, Spanish Golden Age Literature
- Sergio Robles Puente - Ph.D. (University of Southern California)  
Regular Graduate Faculty; Spanish Phonetics, Phonology, and Sociolinguistics
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)  
Regular Graduate Faculty; Linguistics, Syntax, Psycholinguistics, Semantics
- Nicole Tracy-Ventura - Ph.D. (University of Alabama)  
Regular Graduate Faculty; Spanish, Applied Linguistics
- Annastella Vester - Ph.D. (University of California, Los Angeles)  
Italian, Contemporary Italian Literature, 18th and 19th-century Italian

- Ching-Hsuan Wu - Ph.D. (The Ohio State University)  
Regular Graduate Faculty; Chinese, Applied Linguistics

## ASSISTANT PROFESSORS

- William Justin Morgan - Ph.D. (University of Alabama)  
Spanish, Applied Linguistics
- Rafael Osuna Montanez - Ph.D. (University of Connecticut)  
XXth–XXIst century Spanish essay, novel, graphic novel, short story, play, film and poetry with an emphasis on the Spanish Civil War, the Dictatorship, and Post-Franco Spain 1975-2017.
- Marie Paillard - Ph.D. (Pennsylvania State University)  
20th and 21st century Francophone literatures from the Caribbean and the Indian Ocean
- Adrienne Washington - Ph.D. (University of Pittsburgh)  
Regular Graduate Faculty; Linguistics
- Sonia Zarco-Real - Ph.D. (University of Connecticut)  
Peninsular literature and Hispanic transatlantic studies

## TEACHING INSTRUCTORS

- Yumiko Adachi - M.A. (University of Wisconsin-Madison)
- Livia Cascao - M.A. (West Virginia University)
- Lindsey DeBolt - M.A. (West Virginia University)
- Tracy Dingess - M.A. (West Virginia University)
- Arleana Mago - M.A. (Mississippi State University)
- Beatrice Malvisi - M.A. (University of Pittsburgh)
- Lindsei Pereira da Silva - M.A. (West Virginia University)
- Jennifer Simpson - M.A. (West Virginia University)
- Kristen Williams - M.A. (West Virginia University)

## PROFESSORS EMERITI

- María Amores - Ph.D. (Pennsylvania State University)
- Sandra Dixon - Ph.D. (Brown University)
- Ahmed Fakhri - Ph.D. (University of Michigan)
- Pablo González - Ph.D. (University Complutense de Madrid)
- Michael Lastinger - Ph.D. (University of Georgia)
- Kathleen McNerney - Ph.D. (Universidad Nacional Autonoma de Mexico)

## Admissions

The Department of World Languages, Literatures, and Linguistics offers both an M.A. program and a graduate certificate in Linguistics. The GRE is not required for admission to this program.

- The M.A. program in Linguistics includes 30 hours of core and elective courses and is designed to provide students with a well-rounded perspective on the field in preparation for Ph.D. programs or jobs.
- The Graduate Certificate in Linguistics is a 12-hour program that provides students with foundational knowledge in the science of human language. While the Certificate integrates well with our M.A. program in TESOL, it also opens the door for students in other fields that intersect with the study of Linguistics (e.g., English, Speech Pathology, Education, Computer Science, and others) to enhance their graduate studies.

## M.A. IN LINGUISTICS

In addition to the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the master's program must have a minimum undergraduate GPA of 3.0 (cumulative as well as within the major) and should possess an undergraduate degree in Linguistics (or an acceptable related area). Admission to our M.A. program is competitive.

## GRADUATE CERTIFICATE IN LINGUISTICS

To be considered for admission to the Certificate, applicants must have a minimum cumulative GPA of 3.00 in their most recent degree program, as well as evidence of an introductory Linguistics course on their transcript.

## GRADUATE TEACHING ASSISTANTSHIPS

Students applying for fall admission to the M.A. program may be considered for a teaching assistantship. Interested applicants should fill out the WLLL TA Application (<https://worldlanguages.wvu.edu/files/d/fff42445-0e06-43d1-9c73-b479347025ad/wlll-ta-application-with-personal-statement.pdf>) and

upload it, along with supporting documents, as part of the personal statement in the graduate application. Applicants will first be considered for admission to the program. If admitted, they will be considered for an assistantship. Applicants who wish to be considered for an assistantship should submit a completed application by February 1<sup>st</sup>.

We normally do not award assistantships to start in a Spring semester. Students who are admitted in the spring semester and would like to be considered for an assistantship to start the following Fall, can fill out the WLLL TA application and email it to the Associate Chair of Graduate Studies by February 1<sup>st</sup>.

#### List of Admission Requirements for both programs:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- All prior transcripts.
- Three letters of recommendation from academic references for the M.A., one letter for the certificate. Letters of recommendation should be from a professor who knows and can comment on the applicant's academic potential.
- Resume.
- A personal statement of 300-word discussing the applicant's academic background, past accomplishments, reasons for selecting this program and how it relates to future goals.
- An academic writing sample in English. The sample may be a paper previously submitted for an academic course. In general, it should be 10-15 pages, although longer submissions are also welcome.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadlines:

- For admission to the fall semester, completed applications must be received by February 1<sup>st</sup>.
- For admission to the spring semester, completed applications must be received by October 1<sup>st</sup>.

For questions, please contact: [WorldLangInfo@mail.wvu.edu](mailto:WorldLangInfo@mail.wvu.edu)

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.A. Major Code: 14D6

Certificate Code: CG60

For specific information on the following program, please see the link to the right:

- Linguistics, M.A.

## Curriculum Requirements

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. French majors complete FRCH 496.
- **Writing and Communication Skills Requirement:** The French Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of GPA in the Major:** French majors must achieve a minimum grade point average of 2.25 for graduation and in French Major Requirements.
- **Residency Requirements:** Students completing a major in world languages/world language studies at WVU must fulfill a residency requirement by completing at least fifteen credit hours on campus in their language/area of study, excluding courses numbered 100, 101, 102, 200, 203, 204, 493, and courses obtained through credit by examination.
- **Benchmark Expectations:** For details, go to the French Degree Progress tab (<http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/french/#degreeprogresstext>).

Code	Title	Hours
University Requirements		63
ECAS B.A. Requirements		12
French Major Requirements		33
Linguistics Degree Requirements		30
Total Hours		138

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		33
LANG 191	First-Year Seminar	1
General Electives		29
Total Hours		63

## ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

## French Major Requirements

Code	Title	Hours
<b>Core Courses</b>		<b>6</b>
Select two of the following courses:		
FRCH 301	Language Through Civilization	
FRCH 302	Language Through Culture	
FRCH 303	Structure and Communication	
FRCH 304	Advanced Readings	
<b>Electives</b>		<b>24</b>
Select 8 classes from the list below:		
1-Additional upper-division French classes (may include alternate courses from above).		
2-Up to 6 credits in FLIT 230-239, 330-339, FCLT 230-239, 330-339, LING 311, or a course in a directly related area approved by the department.		
<b>Capstone Requirement</b>		<b>3</b>
FRCH 496	Senior Thesis	
Total Hours		33

## Linguistics Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours at the graduate level. No more than 12 hours of coursework done at the 400 level will be counted toward the degree.
- **Grade Point Average:** Students must earn a minimum overall GPA of 2.75, and a GPA of 3.00 in coursework applied to their graduate program.
- **Graduation Requirement:** In addition to completing 30 hours of coursework, students must pass comprehensive examinations or successfully defend a thesis.
  - **Comprehensive Examinations:** The comprehensive examinations are intended to evaluate students' knowledge, including the ability to synthesize and evaluate ideas in their area of emphasis. The examinations are based on standardized reading lists and coursework.
  - **Thesis:** A student may request to write a thesis and prepare an oral defense. For more information about this option, see the document "Thesis Guidelines ([https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis\\_guidelines-rev10-17.pdf](https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis_guidelines-rev10-17.pdf))."
- **Benchmarks:** For details, go to the Linguistics Degree Progress tab (p. 278)
- **Additional Requirements:**

- Students must satisfy the foreign language requirement by the time they graduate:
  - Students in the major in Linguistics who are native speakers of English must demonstrate proficiency in a second language prior to graduation by completing one language course of level 204 or above, with a grade of B or better, or by taking the departmental placement examination in one language and placing above the 204-level.
  - International students whose native language is not English are considered to have satisfied this requirement by virtue of their TOEFL or IELTS score.

Code	Title	Hours
<b>CORE COURSES:</b>		<b>24</b>
LING 411	Phonology	
LING 412	Syntax	
LING 514	Sociolinguistics	
LING 517	Cognitive Foundations of Language	
LING 610	Methods of Research	
LING 611	Advanced Phonology	
LING 612	Advanced Syntax	
Select one of the following:		
LING 402	Structure of Modern French	
LING 501	Structure of Spanish	
LING 513	History of Linguistics	
LING 516	Discourse Analysis	
LING 616	Language Typology	
LING 614	Psycholinguistics	
LING 620	Spanish Prosody	
<b>ELECTIVES:</b>		<b>6</b>
Select 2 courses from the following list:		
ESL 630	American Culture	
LANG 421	The Teaching of Foreign Languages	
LANG 422	Second Language Reading	
LANG 521	English as a Second Language Methods	
LANG 621	Teaching Foreign Language in College	
LANG 622	English as a Second Language Theory	
LANG 624	Second Language Writing	
LANG 625	Language Assessment	
LANG 626	Literacy in a Second Language	
LING 511	English as a Second Language Linguistics	
LING 512	Applied Linguistics	
LING 613	English as a Second Language Phonetics	
LING 697	Research (up to 6 credits) *	
Total Hours		30

For specific information on the following program, please see the link to the right:

- Linguistics, Graduate Certificate

## Degree Progress

### M.A. IN LINGUISTICS

- All students should complete a plan of study by the end of their first semester.
- Students will be evaluated in writing at the end of the Spring term on a yearly basis. If adequate progress is not made, students may be placed on probation or dismissed from the program.
- Students who choose the thesis option should typically defend their thesis topic by the midterm of their second semester, have their thesis proposal approved by the end of the second semester, and submit and defend their thesis during the semester in which they intend to graduate. The student's thesis committee may revise these deadlines.
- Students who choose the examination option should complete the examinations during the semester in which they intend to graduate.

# Linguistics, M.A.

## Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours at the graduate level. No more than 12 hours of coursework done at the 400 level will be counted toward the degree.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the degree.
- **Graduation Requirement:** In addition to completing 30 hours of coursework, students must pass comprehensive examinations or successfully defend a thesis.
  - **Comprehensive Examinations:** The comprehensive examinations are intended to evaluate students' knowledge, including the ability to synthesize and evaluate ideas in their area of emphasis. The examinations are based on standardized reading lists and coursework.
  - **Thesis:** A student may request to write a thesis and prepare an oral defense. For more information about this option, see the document "Thesis Guidelines ([https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis\\_guidelines-rev10-17.pdf](https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis_guidelines-rev10-17.pdf))."
- **Benchmarks:** For details, go to the Linguistics Degree Progress tab (p. 278)
- **Additional Requirements:**
  - Students must satisfy the foreign language requirement by the time they graduate:
    - Students in the major in Linguistics who are native speakers of English must demonstrate proficiency in a second language prior to graduation by completing one language course of level 204 or above, with a grade of B or better, or by taking the departmental placement examination in one language and placing above the 204-level.
    - International students whose native language is not English are considered to have satisfied this requirement by virtue of their TOEFL or IELTS score.

## M.A. Major in Linguistics Curriculum

Code	Title	Hours
<b>CORE COURSES:</b>		<b>24</b>
LING 411	Phonology	
LING 412	Syntax	
LING 610	Methods of Research	
LING 611	Advanced Phonology	
LING 612	Advanced Syntax	
Select 3 courses from the following list:		
LING 402	Structure of Modern French	
LING 501	Structure of Spanish	
LING 513	History of Linguistics	
LING 514	Sociolinguistics	
LING 516	Discourse Analysis	
LING 517	Cognitive Foundations of Language	
LING 616	Language Typology	
LING 614	Psycholinguistics	
LING 620	Spanish Prosody	
<b>ELECTIVES:</b>		<b>6</b>
Select 2 courses from the following list:		
ESL 630	American Culture	
LANG 421	The Teaching of Foreign Languages	
LANG 422	Second Language Reading	
LANG 521	English as a Second Language Methods	
LANG 621	Teaching Foreign Language in College	
LANG 622	English as a Second Language Theory	
LANG 624	Second Language Writing	
LANG 625	Language Assessment	
LANG 626	Literacy in a Second Language	
LING 511	English as a Second Language Linguistics	
LING 512	Applied Linguistics	
LING 613	English as a Second Language Phonetics	

LING 697	Research (up to 6 credits) *	
Total Hours		30

\*

No more than six hours of thesis credits (697) can be applied to the degree.

## Major Learning Outcomes

### LINGUISTICS

Upon completion of the M.A. in Linguistics, students will be able to:

- Demonstrate an understanding of cognitive foundations of language.
- Explain the concepts of syntactic and phonological theory.
- Analyze relevant linguistic data by using the tools of syntactic theory and argue for the appropriateness of the analyses.
- Provide informed descriptions of phonetic and phonological data.
- Apply phonetic, phonological, and syntactic knowledge to the study of language in use.
- Describe languages in terms of their structural characteristics.
- Communicate the results of research in the field in oral and written formats.

## Linguistics, Certificate

### Graduate Certificate in Linguistics

#### CERTIFICATE CODE: CG60

Graduation Requirement: Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the certificate.

Code	Title	Hours
<b>CORE COURSE</b>		<b>3</b>
Choose one of the following:		
LING 411	Phonology	
or LING 412	Syntax	
<b>ELECTIVES</b>		<b>9</b>
Choose three of the following:		
LANG 621	Teaching Foreign Language in College	
LING 501	Structure of Spanish	
LING 514	Sociolinguistics	
LING 516	Discourse Analysis	
LING 517	Cognitive Foundations of Language	
LING 611	Advanced Phonology	
LING 612	Advanced Syntax	
LING 616	Language Typology	
LING 620	Spanish Prosody	
SPAN 521	Dialectology and Sociolinguistics	
Total Hours		12

## Certificate Learning Outcomes

### LINGUISTICS

Students completing this graduate certificate will be able to:

1. Explain the concepts of syntactic or phonological theory, and analyze relevant linguistic data by using the basic tools of phonological or syntactic theory.
2. Apply their knowledge of phonological or syntactic theory to the study of language in use or in the description of the world's languages.



# Mathematics

## Degrees Offered

- Master of Science
- Doctor of Philosophy

## Nature of the Program

The Department of Mathematics offers graduate programs leading to the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees. The master's degree program offers specializations in pure and applied mathematics. The Ph.D. program provides for a common core of fundamental mathematics followed by specialized studies culminating in an original research dissertation directed by a faculty advisor. Depending on the student's program and interests, there are diverse career opportunities available in education, government, and industry.

## Financial Support

Many graduate students receive financial support in the form of a graduate teaching assistantship, which provides a stipend and a full waiver of university tuition. These are awarded taking into account primarily the student's academic record along with the letters of recommendation and any supplementary information reflecting on the student's potential for success in the program. In some cases, teaching experience and/or the potential for outstanding teaching can be a consideration. Teaching assistants have the opportunity to work with the faculty in the Department's Institute for Mathematics Learning (IML). A small number of research assistantships are also available, usually through external funding.

Applications to the graduate program received by the January 15 deadline will receive full consideration for financial support for the subsequent fall semester. Late applications are accepted, but students are advised to check with the graduate director as to the availability of assistantships. Other financial aid includes partial university tuition waivers and part-time positions such as grading assisting in the instructional computer labs. TOEFL/IELTS scores are required for international students whose native language is not English, and passing the university SPEAK test is required for international students to be awarded teaching assistantships.

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## FACULTY

### DIRECTOR OF THE SCHOOL OF MATHEMATICAL AND DATA SCIENCES

- Earl Scime - Ph.D. (University of Wisconsin-Madison)  
Plasma Physics

### ASSOCIATE DIRECTOR FOR MATHEMATICS

- Adrian Tudorascu - Ph.D. (Carnegie Mellon University)  
Partial Differential Equations

### ASSISTANT DIRECTOR FOR GRADUATE STUDIES

- Adam Halasz - Ph.D. (State University of New York at Stony Brook)  
Mathematical Biology, Swarm Robotics

## PROFESSORS

- Krzysztof Ciesielski - Ph.D. (Warsaw University)  
Analysis, Topology, Set Theory
- Marjorie Darrah - Ph.D. (West Virginia University)  
Educational technology, algorithms
- Jessica Deshler - Ph.D. (University of New Mexico)  
Undergraduate Mathematics Education
- Harvey Diamond - Ph.D. (MIT)  
Approximation Theory, Applied Mathematics
- Harry Gingold - D.Sc. (Israel Institute of Technology)  
Differential Equations, Asymptotic Methods
- John Goldwasser - Ph.D. (University of Wisconsin-Madison)  
Combinatorics, Graph Theory
- Harumi Hattori - Ph.D. (Rensselaer Polytechnic Institute)  
Differential Equations, Continuum Mechanics
- Snehalata Huzurbazar - Ph.D. (Colorado State University)  
Statistics, Data Science
- Hong-Jian Lai - Ph.D. (Wayne State University)

Associate Chair, Graph Theory, Matroid Theory

- Dening Li - Ph.D. (Fudan University)  
Partial Differential Equations
- Rong Luo - Ph.D. (West Virginia University)  
Discrete Mathematics
- David Miller - Ph.D. (Oklahoma State University)  
Undergraduate mathematics education
- Robert Mnatsakanov - Ph.D. (Moscow Inst. of Electronics and Mathematics)  
Statistics
- Laura Pyzdrowski - Ed.D. (West Virginia University)  
Mathematics Education, Instructional Technology
- Adrian Tudorascu - Ph.D. (Carnegie Mellon University)  
Partial Differential Equations
- Jerzy Wojciechowski - Ph.D. (University of Cambridge)  
Combinatorics, Graph Theory
- Cun-Quan Zhang - Ph.D. (Simon Fraser University)  
Graph Theory, Combinatorics

## ASSOCIATE PROFESSORS

- Olgur Celikbas - Ph.D. (University of Nebraska)  
Commutative Algebra
- Adam Halasz - Ph.D. (State University of New York at Stony Brook)  
Mathematical Biology; Swarm Robotics
- Kevin Milans - Ph.D. (University of Illinois)  
Combinatorics, Graph Theory
- Casian Pantea - Ph.D. (University of Wisconsin-Madison)  
Mathematical Biology; Dynamical Systems
- Vicki Sealey - Ph.D. (Arizona State University)  
Mathematics Education
- Charis Tsikkou - Ph.D. (Brown University)  
Nonlinear PDE

## ASSISTANT PROFESSORS

- Ela Celikbas - Ph.D. (University of Nebraska)  
Commutative Algebra, Representation Theory
- Qingtian Zhang - Ph.D. (Pennsylvania State University)  
Analysis of PDEs

## PROFESSORS EMERITI

- Gary H. Ganser  
Applied Mathematics, Fluid Mechanics, Numerical Analysis
- Henry W. Gould - M.A. (University of Virginia)  
Combinatorics, Number Theory, Special Functions
- Michael E. Mays - Ph.D. (Penn State University)  
Number Theory
- Sherman D. Riemenschneider - Ph.D. (Syracuse University)  
Approximation Theory, Wavelet Theory

## Admissions

The Mathematics program admits students into both the M.S. and the Ph.D. program. The GRE is not required for admission to this program.

## M.S. IN MATHEMATICS

Programs are available for students to study pure and applied mathematics. In addition to the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the master's program must have a bachelor's degree ([http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/mathematics/mathematics\\_bs/](http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/mathematics/mathematics_bs/)) in mathematics (or a strongly allied field). It is generally expected that incoming students have passed at least one semester each of real analysis, linear algebra, and modern algebra.

## PH.D. IN MATHEMATICS

In addition to the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the Ph.D. program are expected to have earned an M.S. in Mathematics (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/mathematics/ms/>) or a closely related field. Well-qualified students without an M.S. but with at least 12-18 hours of advanced mathematics coursework beyond the level of a B.S. in Mathematics at WVU ([http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/mathematics/mathematics\\_bs/](http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/mathematics/mathematics_bs/)) will be considered for direct admission to the Ph.D. program.

### List of Admission Requirements for both programs:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- Three letters of recommendation from individuals having experience with the applicant's mathematical ability.
- A personal statement that indicates the applicant's mathematical interests and how those align with research interests of faculty within the department, as well as any experience relevant to potential teaching opportunities. The personal statement should indicate if a student has an interest in pursuing a Ph.D. after completion of the master's degree.

### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

### Application Deadlines:

- The Mathematics programs admit students for the Fall and Spring semesters.
- For Fall admission, completed applications should be submitted no later than January 15<sup>th</sup>.
- For Spring admission, completed applications should be submitted no later than October 15<sup>th</sup>.
- Applications submitted after the deadline may be considered on a space-available basis.
- Exceptional Ph.D. applicants may be nominated by the Mathematics program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

### Assistantships

All interested applicants will be considered for financial support in the form of Graduate Teaching Assistantships (GTAs) and Graduate Research Assistantships (GRAs). *Priority will be given to applicants committed to pursuing a PhD (irrespective of their current program level)*.

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.S. and Ph.D. Major Code: 1457

### For specific information on the following program, please see the link to the right:

- Mathematics, M.S.

### For specific information on the following program, please see the link to the right:

- Mathematics, Ph.D.

## Degree Progress

All Students will have a plan of study and will receive, at minimum, a yearly letter of evaluation.

## MASTER OF SCIENCE

The M.S. program usually requires two years of full-time study. In their first year, students will normally complete the Linear Algebra and the Real Analysis requirements. Ideally, students in the Pure Mathematics Area of Emphasis take at least one of the subject areas of the M.S. Advanced Exam by no later than August at the beginning of their second year. To be in good standing, a student is expected to maintain at least a 3.0 average (B) in mathematics courses and to present at least a 3.0 average in all work offered in fulfillment of the degree program.

## ADVISING

Each student will be assigned to be advised by the Graduate Program Director upon entry to the program who will assist the student in designing a written plan of study that takes into account the student's interests and needs as well as the aims of the department's graduate programs. Later changes in the plan are possible only through mutual agreement of the student and the Director.

## PROGRAMS

The student's plan of study is developed in one of these areas of emphasis: pure mathematics or applied mathematics. The programs are designed either for students who intend to pursue a doctor of philosophy in mathematics or the mathematical sciences or for those planning to seek employment in education, government, or industry. At least thirty-one semester hours of approved coursework are required.

Note: MATH 590/690/696/697/790/797 may not be counted for credit to satisfy graduate course requirements.

## EXAMINATIONS/THESES/PROJECTS

Upon beginning graduate study, all M.S. students are given a basic exam in advanced calculus and linear algebra for purposes of course placement. Depending on the program chosen, students must complete examinations, a thesis, or a project as a graduation requirement.

## DOCTOR OF PHILOSOPHY

The doctor of philosophy is a research program in which the final product is an original, publishable research thesis. For students entering with regular admission status, the program requires a minimum of twenty-four hours of approved coursework along with research and graduate seminar requirements. As reflected in the interests and expertise of the faculty, students may specialize in a variety of areas of pure, applied, and discrete mathematics as well as research in undergraduate mathematics education. Beyond any coursework taken to remove deficiencies while a provisional student, a minimum of twenty-four hours of approved coursework (not including research or one-credit seminar courses) is required of all doctoral students, which must include a major area of four courses and two minor areas of two courses each. Certain level and distribution requirements apply to a student's program. Six credits of seminar (Five credits of Math 696 and one credit of Math 694) are required.

## DISSERTATION COMMITTEE

Students normally select a dissertation advisor at the end of their first year in the program, though this can also be done in the second year. Upon selecting a dissertation advisor, a student must request that the Director of Graduate Studies select a dissertation committee of at least five members (with a dissertation advisor as chairperson and one member from outside the department) for them.

## EXAMINATIONS AND DISSERTATION

All doctoral students must demonstrate that they are prepared to undertake doctoral work and research by passing an entrance examination, given each year in April and August, within two years after enrolling. Specifically, students entering the program in a given calendar year must pass the entrance examinations by the end of the spring semester in the calendar year two years after. Students must pass examinations in two areas from among the four areas of algebra, real analysis, topology, and differential equations. During the fourth year after enrolling, the student is expected to pass a qualifying oral and written examination and present an approved dissertation prospectus. Any minor area in which the student has not achieved a GPA of at least 3.5 also requires a written examination. If the qualifying examination results are unsatisfactory, the dissertation committee may reexamine the student once. After the Qualifying Examination is successfully completed the student is considered a Candidate for the Ph.D. The dissertation typically requires from one to two years of research and writing, with the defense completed by the end of the fifth year.

# Mathematics, M.S.

## Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 31 credit hours in Mathematics at the 400, 500 or 600 levels. While some courses may fulfill several degree requirements, the same course cannot be used to fulfill more than one requirement.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the degree.
- **Area of Emphasis:** Students must select between a Pure Mathematics or an Applied Mathematics area of emphasis by the end of their first year of study.
- **Master's Thesis:** all students who have earned an overall GPA of 3.25 or higher may decide to write a thesis.
- **Completion Requirements:**
  - Pure Mathematics AoE: In addition to completion of required coursework, students must pass the M.S. Advanced Exam by passing two subject areas from among Real Analysis, Algebra, Topology, and Differential Equations. Any exam can only be attempted three times.
  - Applied Mathematics AoE: In addition to completion of required coursework, students must present a project under the supervision of a faculty member, complete an internship and present an internship report, or complete a thesis.

## Curriculum Requirements

Code	Title	Hours
<b>Foundation Courses</b>		<b>7</b>
MATH 543	Linear Algebra	
MATH 551 or MATH 452	Real Variables 1 Introduction to Real Analysis 2	
MATH 696	Graduate Seminar	
<b>Area of Emphasis</b>		<b>12</b>
Select one option:		
Pure Mathematics		
Applied Mathematics		
<b>Electives</b>		<b>12</b>
Select four courses in consultation with advisor:		
MATH 521	Numerical Analysis	
MATH 522	Numerical Solution of PDE	
MATH 535	Foundations of Geometry	
MATH 541	Modern Algebra 1	
MATH 545	Number Theory 1	
MATH 551	Real Variables 1	
MATH 555	Complex Variables 1	
MATH 563	Mathematical Modeling	
MATH 564	Intermediate Differential Equations	
MATH 567	Advanced Calculus 1	
MATH 568	Advanced Calculus	
MATH 571	Combinatorial Analysis 1	
MATH 573	Graph Theory	
MATH 578	Applied Discrete Mathematics	
MATH 631	RUME 1: Introduction to Undergraduate Mathematics Education Research	
MATH 641	Modern Algebra 2	
MATH 645	Number Theory 2	
MATH 651	Real Variables 2	
MATH 681	Topology 2	
MATH 683	Set Theory and Applications 1	
MATH 697	Research	
STAT 512	Statistical Methods 2	
STAT 513	Design of Experiments	
STAT 516	Forensic Statistics	
STAT 521	Statistical Analysis System Programming	
STAT 522	Advanced Statistical Analysis System Programming	
STAT 531	Sampling Theory and Methods	
STAT 545	Applied Regression Analysis	
STAT 555	Categorical Data Analysis	
STAT 561	Theory of Probability and Statistics 1	
STAT 562	Theory of Statistics 2	
CS 510	Formal Specification of Language	
CS 520	Advanced Analysis of Algorithms	
CS 525	Computational Complexity	
CS 572	Advanced Artificial Intelligence Techniques	
CS 573	Advanced Data Mining	
Total Hours		31

\*

3 credits maximum of MATH 697 may be used for students writing a thesis

## Areas of Emphasis Offered:

- Applied Mathematics (p. 286)
- Pure Mathematics (p. 286)

### APPLIED MATHEMATICS AREA OF EMPHASIS

Code	Title	Hours
<b>CORE COURSES:</b>		<b>9</b>
MATH 521	Numerical Analysis	
MATH 563	Mathematical Modeling	
MATH 564	Intermediate Differential Equations	
<b>COMPLEX VARIABLES ELECTIVE:</b>		<b>3</b>
Select one course:		
MATH 456	Complex Variables	
MATH 555	Complex Variables 1	
MATH 568	Advanced Calculus	
Total Hours		12

### PURE MATHEMATICS AREA OF EMPHASIS

Code	Title	Hours
<b>CORE COURSES:</b>		<b>9</b>
Select one sequence: *		
MATH 541 & MATH 641	Modern Algebra 1 and Modern Algebra 2	
MATH 551 & MATH 651	Real Variables 1 and Real Variables 2	
MATH 581 & MATH 681	Topology 1 and Topology 2	
Select one course from the following: *		
MATH 541	Modern Algebra 1	
MATH 551	Real Variables 1	
MATH 581	Topology 1	
<b>ELECTIVES: *</b>		<b>3</b>
MATH 541	Modern Algebra 1	
MATH 545	Number Theory 1	
MATH 551	Real Variables 1	
MATH 555	Complex Variables 1	
MATH 564	Intermediate Differential Equations	
MATH 571	Combinatorial Analysis 1	
MATH 573	Graph Theory	
MATH 581	Topology 1	
Total Hours		12

\*

May not use a course used for another requirement.

## Major Learning Outcomes

### MATHEMATICS

M.S. students are expected to:

- Solve problems showing a conceptual and operational understanding of real analysis and linear algebra as evidenced by success in required coursework in these fields.
- Read, analyze, and write logical arguments to prove mathematical concepts in advanced mathematics courses.
- Communicate mathematical ideas with precision and clarity on written advanced exams or a research thesis.
- Illustrate an understanding of professional tools used in the mathematical sciences by participation in the professional tools seminar.

## Mathematics, Ph.D.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum number of 54 graduate credit hours in Mathematics at the 500 level or above, with a minimum of 18 credits at the 700 level (excluding seminar and MATH 797), with at least 12 from discrete mathematics, algebra, foundations, applied mathematics, and topology.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the degree.
- **Program of Study:** The Ph.D. program assumes an M.S.-level background in graduate mathematics for admission. The program provides for a common core of fundamental mathematics followed by specialized studies culminating in an original research dissertation directed by a faculty advisor.
- **Qualifying Examination:** The qualifying examination consists of two parts. For students with research areas in discrete mathematics, algebra, foundations, analysis, applied mathematics, or topology, a written exam is given in the students research area, based on the corresponding course work and other specialized knowledge needed for the dissertation. Paired with the written exam is an oral exam, to be given within one week of the written exam and covering similar material. These exams are led by the dissertation supervisor in consultation with the student's committee. Students whose research area is in research in undergraduate mathematics education are assigned a written research project, whose results are examined at an oral presentation. The second part of the qualifying examination is the public presentation of the dissertation prospectus, followed by questioning by the student's committee. The purpose of this is to demonstrate that the student has mastered the relevant literature in his or her field, and has developed a clear, realizable and program-suitable research topic, along with a research plan to achieve the desired results. The qualifying exam is considered to have been passed when both parts have been successfully completed. In case a student fails to achieve a 3.5 GPA overall in one or both of their elective sequences, a written examination will be prepared in the corresponding elective courses, which the student must pass in the judgement of the committee.
- **Dissertation:** The research upon which the dissertation is based must conform to scholastic standards and constitute an original and publishable contribution to mathematics.
- **Benchmarks:** Students must demonstrate that they have mastered basic graduate mathematics by passing the Department's Ph.D. Entrance Examination by no later than the spring of their second full academic year in the program. The examination is over two subjects selected by the student from the four areas of algebra, real analysis, differential equations, and topology. The exams are given twice a year, in August and April. The student's dissertation committee is appointed after the Ph.D. Entrance Examination has been passed, and upon selection of an advisor, typically by the end of the second year. The Qualifying Examination is normally taken at the end of the third year of study, or in the first semester of the fourth year. The dissertation defense should occur by the end of the fifth year in the program.

### Curriculum Requirements

Code	Title	Hours
<b>RESEARCH AREA CONCENTRATION</b>		<b>12</b>
<b>Discrete Mathematics, Algebra and Foundations *</b>		
MATH 573 & MATH 773	Graph Theory and Advanced Topics in Graph Theory	
MATH 683 & MATH 783	Set Theory and Applications 1 and Set Theory and Applications	
MATH 745 & MATH 746	Analytic Number Theory 1 and Analytic Number Theory 2	
MATH 747 & 747	Advanced Topics in Modern Algebra and Advanced Topics in Modern Algebra	
MATH 771 & MATH 772	Matroid Theory 1 and Matroid Theory 2	
<b>Analysis, Applied Mathematics, and Topology *</b>		

MATH 751 & MATH 752	Functional Analysis 1 and Functional Analysis 2	
MATH 757 & MATH 758	Theory of Partial Differential Equations 1 and Theory of Partial Differential Equations 2	
MATH 780 & 780	Seminar in Topology and Seminar in Topology	
<b>Research in Undergraduate Mathematic Education</b>		
MATH 631	RUME 1: Introduction to Undergraduate Mathematics Education Research	
MATH 732	RUME 2: Learning Theories	
MATH 733	RUME 3: Advanced Learning Theories	
MATH 734	RUME 4: Advanced Research in Undergraduate Mathematics Education	
<b>SEMINARS AND RESEARCH:</b>		
<b>Professional Seminar</b>		<b>1</b>
MATH 696	Graduate Seminar	
<b>Graduate Seminar</b>		<b>5</b>
MATH 796	Graduate Seminar **	
<b>Research</b>		<b>24</b>
MATH 797	Research	
<b>ELECTIVE COURSES ***</b>		<b>12</b>
<b>Discrete Mathematics, Algebra and Foundations</b>		
MATH 573 & MATH 773	Graph Theory and Advanced Topics in Graph Theory	
MATH 683 & MATH 783	Set Theory and Applications 1 and Set Theory and Applications	
MATH 745 & MATH 746	Analytic Number Theory 1 and Analytic Number Theory 2	
MATH 747 & 747	Advanced Topics in Modern Algebra and Advanced Topics in Modern Algebra	
MATH 771 & MATH 772	Matroid Theory 1 and Matroid Theory 2	
<b>Analysis, Applied Mathematics, and Topology</b>		
MATH 751 & MATH 752	Functional Analysis 1 and Functional Analysis 2	
MATH 757 & MATH 758	Theory of Partial Differential Equations 1 and Theory of Partial Differential Equations 2	
Total Hours		54

\*

Select two pairs rather than four individual courses to satisfy the requirement.

\*\*

MATH 796 must be taken at 1 credit hours for 5 semesters.

\*\*\*

Choose at least one pair outside of Research Area Concentration. May not select courses already chosen to satisfy a Research Area Concentration requirement. Students who choose RUME as their research area must select at least two courses from the Discrete Mathematics, Algebra, and Foundation group, and two courses from the Analysis, Applied Mathematics, and Topology group.

## Major Learning Outcomes

### MATHEMATICS

Ph.D. students are expected to:

- Conduct independent, original research in mathematics under the supervision of a faculty advisor.
- Produce and defend an original contribution to knowledge, as evidenced by the writing and defense of a dissertation involving significant original research leading to a significant contribution in their field of study.
- Demonstrate mastery of subject material, as evidenced by quality of performance in coursework, and on written and oral examinations in mathematics



- Become familiar with a breadth of modern mathematics, by successful completion of a range of advanced courses in various fields as required by the degree program
- Communicate mathematics clearly and coherently through multiple research presentations at department colloquium and at research conferences.

## Physics

### Degrees Offered

- Master of Science (M.S.)
- Doctor of Philosophy (Ph.D.)

### Nature of the Program

The graduate programs in Physics provide a solid foundation in the fundamentals as well as a diverse range of specializations for research (<https://physics.wvu.edu/research/>). The programs' strengths include Astronomy and Astrophysics, Biophysics, Experimental Condensed Matter and Materials Physics, Theoretical and Computational Condensed Matter and Materials Physics, Optical and Laser Physics, Physics Education Research, and Plasma and Space Physics. In addition to working with physics faculty in these research areas, graduate students have worked with faculty in a range of other departments at WVU. The Department is supported by several in-house facilities including a machine shop and electronics shop, high-performance computational facilities for condensed matter and astrophysics and a physics cleanroom. The Department has strong collaboration with other facilities at WVU, such as the engineering fabrication and characterization facility (<http://sharedresearchfacilities.wvu.edu/>) and the bio- and health sciences facilities (<http://www.hsc.wvu.edu/>). Many of the research groups are affiliated with the WVNano Initiative (<https://undergraduateresearch.wvu.edu/research-opportunities/wvu-opportunities/summer-undergraduate-research-experience-sure/>), the Green Bank Observatory (<https://science.nrao.edu/facilities/gbt/>) in Green Bank WV, and the DIII-D Research Program (<https://fusion.gat.com/global/DIII-D/>).

### Financial Aid

With rare exceptions, all doctoral students receive financial support; the department makes every effort to secure funding for eligible master's students as well. Beginning students usually receive teaching assistantships; more advanced students receive research assistantships. Several fellowships are available for outstanding students, allowing full-time concentration on coursework and research and a more rapid progress toward the degree. Students on visas must comply with the conditions of their visa for financial support.

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## FACULTY

### CHAIR

- Duncan Lorimer - Ph.D. (University of Manchester)  
Astrophysics/Astronomy

### ASSOCIATE CHAIR

- Paul Miller - Ph.D. (West Virginia University)

### PROFESSORS

- Wathiq Abdul-Razzaq - Ph.D. (University of Illinois - Chicago)  
Physics Education
- Alan Bristow - Ph.D. (University of Sheffield)  
Condensed Matter Physics
- Paul Cassak - Ph.D. (University of Maryland)  
Plasma Physics
- Matthew B. Johnson - Ph.D. (California Institute of Technology)  
Condensed Matter Physics
- Mark E. Koepke - Ph.D. (University of Maryland)  
Plasma Physics
- Lian Li - PhD (University of Arizona)  
Carroll Professor, Condensed Matter Physics
- Duncan Lorimer - Ph.D. (University of Manchester)  
Astrophysics/Astronomy
- Maura McLaughlin - Ph.D. (Cornell University)  
Eberly Family Professor, Astrophysics/Astronomy
- D.J. Pisano - Ph.D. (University of Wisconsin - Madison)  
Astrophysics/Astronomy

- Paul Miller - Ph.D. (West Virginia University)  
Physics Education Research
- Aldo Humberto Romero - Ph.D. (University of California - San Diego)  
Condensed Matter Physics
- Earl E. Scime - Ph.D. (University of Wisconsin - Madison)  
Oleg D. Jefimenko Professor, Plasma Physics
- Tudor Stanescu - Ph.D. (University of Illinois)  
Theoretical Condensed Matter Physics
- Gay Stewart - Ph.D. (University of Illinois-Urbana Champaign)  
Eberly Professor of STEM Education
- John Stewart - Ph.D. (University of Illinois-Urbana Champaign)  
Physics Education Research

## ASSOCIATE PROFESSORS

- Loren Anderson - Ph.D. (Boston University)  
Astrophysics/Astronomy
- Edward Flagg - Ph.D. (University of Texas - Austin)  
Condensed Matter Physics
- Mikel Holcomb - Ph.D. (University of California - Berkeley)  
Condensed Matter Physics
- Sean McWilliams - Ph.D. (University of Maryland)  
Astrophysics/Astronomy
- Weichao Tu - Ph.D. (University of Colorado-Boulder)  
Space Plasma Physics

## ASSISTANT PROFESSORS

- Emmanuel Fonseca - Ph.D. (University of British Columbia)  
Astrophysics/Astronomy
- Katherine Goodrich - Ph.D. (University of Colorado - Boulder)  
Space Plasma Physics
- Joonhee Lee - Ph.D. (Seoul National University)  
Biophysics
- Subhasish Mandal - Ph.D. (Michigan Technological University)  
Condensed Matter Physics
- Jason May - Ph.D. (University of Utah)  
Physics Education Research
- Sarah Burke Spolaor - Ph.D. (Swinburne Institute of Technology)  
Astrophysics/Astronomy
- Jason Ybarra - Ph.D. (University of Florida)  
Astronomy/Astrophysics

## RESEARCH ASSISTANT PROFESSOR

- Christopher Fowler - Ph.D. (University of Colorado - Boulder)  
Space Plasma Physics
- Thomas Steinberger - Ph.D. (West Virginia University)  
Plasma Physics

## PROFESSORS EMERITI

- Larry Halliburton - Ph.D. (University of Missouri - Columbia)  
Condensed Matter Physics
- Arthur S. Pavlovic - Ph.D. (Columbia University)  
Condensed Matter Physics
- Mohindar S. Seehra - Ph.D. (University of Rochester)  
Condensed Matter Physics
- Richard Treat - Ph.D. (University of California - Riverside)  
General Relativity

- H. Arthur Weldon - Ph.D. (Massachusetts Institute of Technology)  
Particle Physics

## Admissions

The M.S. (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/physics/#masterstext>) and the Ph.D. (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/physics/#doctoralstext>) in Physics are separate degree programs, and students should consider which is the most appropriate for their career goals. Students who are admitted to the Ph.D. may earn the M.S. as part of their plan of study. Students will need to indicate their intended degree program in the application portal.

## M.S. AND PH.D. IN PHYSICS

In addition to WVU's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationstext>), applicants are expected to have a bachelor's degree in Physics, Astronomy, or a related field, with upper-division courses in electricity and magnetism, mechanics, quantum mechanics, thermodynamics, and mathematical methods. Applicants lacking some of these courses may be asked to remedy the deficiencies by enrolling in additional courses. Typically, competitive applicants have a cumulative GPA of at least 3.0. Students who hold an undergraduate degree in a field other than Physics or Astronomy, or who believe that their undergraduate GPA does not reflect their Physics knowledge, are strongly encouraged to submit the subject GRE. Prospective students should expect a brief phone interview prior to being offered admission to the program.

### List of Admission Requirements for M.S. and Ph.D. Applications:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- Three letters of recommendation from professional or academic references.
- A statement of purpose that explains the applicant's previous academic experience and highlights their interest in pursuing graduate school in Physics and Astronomy at WVU. While there is no specific length requirement, the essay should demonstrate clear and concise scientific writing.
- The applicant's ranked areas of research interest and the faculty with whom the applicant would want to work.
- Curriculum Vitae or Resume.

### International Applications:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationalstext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

### Application Deadlines:

- The Physics program admits students for the Fall semester only.
- The priority application deadline is January 15<sup>th</sup>.
- Completed applications for admission may be considered after the January 15<sup>th</sup> deadline on a space-available basis.
- Exceptional applicants may be nominated by the Physics program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

More information can be found on the department's website (<https://physics.wvu.edu/students/graduate-students/>). Applicants needing additional information may contact the department: [physics@mail.wvu.edu](mailto:physics@mail.wvu.edu).

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.S. and Ph.D. Major Code: 1463

**For specific information on the following program, please see the link to the right:**

- Physics, M.S.

**For specific information on the following program, please see the link to the right:**

- Physics, Ph.D.

## Degree Progress

Typical plans of study for M.S. and Ph.D. students are available in the graduate student handbook. Ph.D. students must complete their oral candidacy exam by the end of their sixth academic semester in the program.

Students are evaluated each year by either the graduate advisor or their Ph.D. committee (after passing their oral exam). To remain in good standing in the program, students must meet minimum GPA requirements as described in the degree program. Each year, Ph.D. students must submit a report to the Ph.D. advisory committee for the evaluation of progress towards completion of the degree. The report must be signed by the committee chair, along with any comments and recommendations, before being submitted to the chair of the graduate studies and advising committee.

Students who are not in good standing at the end of any semester will be placed on academic probation and must submit a plan to return to good standing to the chair of the graduate studies and advising committee. Students on academic probation may not take the oral candidacy exam. The progress of students who are not in good standing for one full year will be reviewed by the graduate studies and advising committee. Students who are not in good standing for two full years will not be allowed to continue in the program.

More information is available in the physics and astronomy graduate student handbook.

## Physics, M.S.

### Master of Science

- **Credit Hours:** Students are required to complete a minimum number of 30 graduate-level credit hours in Physics or Astronomy.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in courses applied to the degree.
- **Benchmarks:** For details, go to the Physics Degree Progress tab (p. 292).

### Major Requirements

Code	Title	Hours
<b>CORE COURSES</b>		<b>19</b>
PHYS 611	Introduction to Mathematical Physics	
PHYS 631	Advanced Classical Mechanics 1	
PHYS 633	Electromagnetism 1	
PHYS 651	Quantum Mechanics 1	
PHYS 761	Statistical Mechanics	
PHYS 796	Graduate Seminar	
1 course in PHYS or ASTR at the 600 or 700 level *		
<b>COMPLETION OPTION:</b>		<b>12</b>
Select one completion option		
<b>Non-Thesis Option:</b>		
Select courses in PHYS or ASTR at the 600 level or above or courses from the Additional Coursework list **		
Additional Coursework:		
CS 676	Machine Learning	
EE 528	Biomedical Microdevices	
EE 564	Digital Signal Processing for Radio Astronomy	
EE 650	Optoelectronics	
EDP 613	Statistical Methods 1	
EDP 614	Statistical Methods 2	
EDP 619	Survey Research Methods	
EDP 711	Multivariate Methods 1	
EDP 712 Multivariate Methods 2		
<b>Thesis Option:</b>		
PHYS 797	Research	
Total Hours		31

\*

At least 1 course in PHYS or ASTR must be taken at the 600 or 700 level. Courses excluded: ASTR 697, ASTR 796 Graduate Seminar, ASTR 797, PHYS 697, PHYS 796 Graduate Seminar, and PHYS 797

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Graduate courses from other departments may be substituted with approvals from the graduate studies committee. Courses excluded: ASTR 697, ASTR 796 Graduate Seminar, ASTR 797, PHYS 697, PHYS 796 Graduate Seminar, and PHYS 797

## Major Learning Outcomes

### PHYSICS AND ASTRONOMY

The central missions of the Graduate Program in Physics are to train the next generation of Physicists and Astronomers for productive careers in the global economy, to teach them how to apply methods and physics principles to understand and explain the world around us and to expand the scientific boundaries of physics and astronomy.

Students earning a M.S. in Physics will be able to:

- Explain physics and astronomy principles as they pertain to their specific field of research.
- Demonstrate the ability to understand and critically evaluate the existing literature published within their field.
- Understand the ethical impact of personal and professional behavior.

## Physics, Ph.D.

### Degree Requirements

- **Course Requirements:** Students must complete a minimum of 38 credit hours in physics or astronomy at the 600 or 700 level (or approved courses from other departments relevant to the program of study).
- **Calculation of the GPA:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Research Requirement:** Research is the central focus of the degree and is directed by a faculty adviser over a period of several years. When the research is completed, the student must write a dissertation and defend it before the doctoral committee of four faculty. The average completion time for the Ph.D. is five years beyond the B.S. Research specialties within the department include astrophysics/astronomy, biophysics, condensed matter physics, physics education research, and plasma physics.
- **Candidacy Examinations:** To be admitted to candidacy for the Ph.D., a student must pass both a written and an oral candidacy examination. The written examination consists of three parts: quantum mechanics, electromagnetism, and classical mechanics.
- **Oral Exam:** The student needs to pass an oral exam by the end of their sixth academic semester in the program. This Oral presentation is typically 45 minutes in length and it is a presentation of a research paper selected by the advisor and the student. The exam is open to the public. Following the presentation and questions from the general public, the advisor and the Ph.D. committee ask questions to the student related to his/her paper understanding and the background required. Next, the student is excused and the Committee makes an overall decision on the Exam.
- **Progress Toward Completion:** Students must pass all three graduate qualifying exams by the end of their fourth academic semester in the program. All students are evaluated annually before the end of March by their Ph.D. committee or the Graduate Studies committee.
- **Benchmarks:** For details, go to the Physics Degree Progress tab (p. 292).

### Curriculum Requirements

Code	Title	Hours
<b>CORE COURSES:</b>		<b>17</b>
ASTR 796	Graduate Seminar	
PHYS 611	Introduction to Mathematical Physics	
PHYS 631	Advanced Classical Mechanics 1	
PHYS 633	Electromagnetism 1	
PHYS 651	Quantum Mechanics 1	
PHYS 761	Statistical Mechanics	
PHYS 796	Graduate Seminar	
<b>ADVANCED COURSE:</b>		<b>3</b>
Select one of the following:		
PHYS 634	Electromagnetism 2	
PHYS 652	Quantum Mechanics 2	
<b>ELECTIVES:</b>		<b>15</b>
Select five courses in PHYS or ASTR at the 600 level or above or courses from the Additional Coursework list: *		
Any ASTR or PHYS courses at the 600 or 700 level **		
Additional Coursework:		

CS 676	Machine Learning	
EDP 613	Statistical Methods 1	
EDP 614	Statistical Methods 2	
EDP 619	Survey Research Methods	
EDP 711	Multivariate Methods 1	
EE 528	Biomedical Microdevices	
EE 564	Digital Signal Processing for Radio Astronomy	
EE 650	Optoelectronics	
<b>RESEARCH: ***</b>		<b>3</b>
PHYS 797	Research	
Total Hours		38

\*

Up to three graduate courses from other departments may be substituted with approval from the Graduate Studies committee.

\*\*

Except ASTR 796 Graduate Seminar, ASTR 797 Research, PHYS 796 Graduate Seminar, and PHYS 797 Research.

\*\*\*

Students are expected to be involved in research throughout their graduate career, and enrollment in ASTR 797 or PHYS 797, should reflect this activity.

Students must complete at least three hours, however most students complete more than 80 hours. These requirements can be fulfilled through alternate means through discussion with an advisor.

## Major Learning Outcomes

### PHYSICS

The central missions of the Graduate Program in Physics are to train the next generation of Physicists and Astronomers for productive careers in the global economy, to provide the ability to students that will allow them to master the fundamental knowledge of physics, to provide the experience to conduct independent research, and to expand the scientific boundaries of physics and astronomy.

Students earning a Ph.D. in Physics will be able to:

- Explain physics and astronomy principles as they pertain to their specific field of research.
- Demonstrate the ability to understand and critically evaluate the existing literature published within their field.
- Understand the ethical impact of personal and professional behavior.
- Independently design and execute new experimental, theoretical, or computational studies that can address important scientific questions in physics and astronomy.
- Effectively communicate their research in oral and written formats, including the ability to author manuscripts suitable for publication in peer reviewed scientific journals.

## Political Science

### Degrees Offered

- Master of Arts
- Doctor of Philosophy

### Nature of the Program

The graduate program is designed to provide advanced training to students who desire to enter research or teaching fields relating to American politics, public policy (either U.S. domestic or international), comparative politics, and/or international politics, and to those seeking careers as policy analysts in government or the private sector.

The Master of Arts program is designed to provide students with a broad knowledge of political science and the policy-making process. This includes the study of many over-arching factors shaping political thought, analysis, decision-making, and an examination of specific influences that shape public policies at the international, national, state, and local levels of government. Students choose from classes offered in the fields of American politics, comparative politics, international relations, and public policy in addition to taking three classes in political methodology designed to ensure students possess expertise in how to conduct systematic quantitative research. Most graduates will take jobs in government or with private firms needing specialists in policy analysis; however, this degree also leaves students well-placed for further study of these issues in Ph.D. programs.

The Doctor of Philosophy program is designed for people planning careers as researchers and teachers in institutions of higher education or as policy analysts in government or the private sector. All students are expected to complete coursework that leads to mastery of two of the four available areas of emphasis -- American politics, comparative politics, international politics, and public policy -- and to pass general exams in two of them. The student's coursework will provide them with a firm grounding in relevant literatures and prepare them to make their own contributions to the fields in which they specialize. Coursework is also available to train students as expert analysts who will leave the program with a comprehensive knowledge of policy formulation, implementation, and evaluation, as well as a thorough understanding of the dynamics of political institutions. The design of the program will ensure that our graduates are trained in research methodology and statistical techniques.

## FACULTY

### CHAIR

- John Kilwein - Ph.D. (Ohio State University)  
Associate Professor, Public Law, Judicial Politics, Public Policy, Public Administration

### PROFESSORS

- Joe D. Hagan - Ph.D. (University of Kentucky)  
Barnette Professor, International Relations and World Politics, Comparative Foreign Policy Analysis
- Erik Herron - Ph.D. (Michigan State University)  
Eberly Family Professor, Political Institutions, Elections, Post-Communist Europe and Eurasia
- Sam Workman - Ph.D. (University of Washington)  
Director - Institute for Policy Research and Public Affairs, John D. "Jay" Rockefeller School of Policy and Politics

### ASSOCIATE PROFESSORS

- R. Scott Crichlow - Ph.D. (Louisiana State University)  
International Relations, Foreign Policy Decision-making, Middle East Politics
- Christina Fattore - Ph.D. (Florida State University)  
International Political Economy, International Organization, European Union Politics
- William Franko - Ph.D. (University of Iowa)  
American Politics, State and Local Politics, Public Policy
- Matthew Jacobsmeier - Ph.D. (University of Rochester)  
American Politics, Political Behavior, Public Opinion, Research Methods
- Jason MacDonald - Ph.D. (The George Washington University)  
American Politics, Congress, Research Methods
- Philip Michelbach - Ph.D. (University of California)  
Political Theory, American Political Thought, German Political Thought, Comparative Democratic Theory
- Mason Moseley - Ph.D. (Vanderbilt University)  
Comparative Politics, Latin American Politics, Comparative Political Institutions
- Trisha Phillips - Ph.D. (Rice University)  
Social and Political Philosophy, Moral Philosophy, Research Ethics

### ASSISTANT PROFESSORS

- Jay Krehbiel - Ph.D. (Washington University)  
Comparative Politics, Judicial Politics, Comparative Political Institutions
- Herschel Thomas - Ph.D. (University of Texas)  
Public Policy, Interest Groups

### TEACHING ASSOCIATE PROFESSORS

- Boris Barkanov - Ph.D. (University of California, Berkeley)  
Comparative Politics, International Relations
- Clarissa Estep - Ph.D. (West Virginia University)  
International Relations
- David Hauser - Ph.D. (University of Pittsburgh)  
International Conflict, National Security Analysis

### SERVICE ASSISTANT PROFESSORS

- Samantha Godbey - Ph.D. (West Virginia University)  
Director of Debate, Comparative Politics, International Relations, Public Policy



## Admissions

### M.A. IN POLITICAL SCIENCE

In addition to the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the master's program must have an overall undergraduate and/or graduate grade point average of 3.0 or better to be considered for admission as a regular graduate student. Applicants typically have completed a B.A. in Political Science, but students from other fields and disciplines are also encouraged to apply.

### PH.D. IN POLITICAL SCIENCE

Admission to the doctoral program in Political Science is open to applicants with either a bachelor's or master's degree. In addition to the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the Ph.D. program must have an overall undergraduate and/or graduate grade point average of 3.0 or better to be considered for admission as a regular graduate student. Admission to the Ph.D. is competitive; on average, successful applicants typically have earned a 3.5 or better GPA. Applicants to the Ph.D. program typically have completed a degree in Political Science, but students from other fields and disciplines are also encouraged to apply. Some training in statistics and a strong background in written communication is desired.

#### Admission Requirements for both programs:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- Three letters of recommendation from professors well#positioned to assess the applicant's potential for success in graduate school. A recommendation from a supervisor from the applicant's employment history who is well#positioned to discuss intellectual potential may be appropriate as well.
- A statement of purpose (200-500 words in length) that describes the applicant's intellectual and career goals and how the program (M.A. or Ph.D.) will help achieve those goals.
- GRE General Test Scores (Ph.D. applicants only).

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadlines:

- The Political Science graduate programs admit for the Fall semester and consider applicants for that term on a rolling basis. Applicants for the spring semester are only considered in exceptional circumstances.
- Applicants who wish to be considered for graduate assistantships and/or tuition support should submit a complete application by January 15<sup>th</sup>.
- The department may review applications after the January 15<sup>th</sup> deadline, but applicants applying after this date may not receive full consideration for support.
- Exceptional Ph.D. applicants who apply by January 15<sup>th</sup> may be nominated by the Political Science program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

For more information please contact: [politicalscience@mail.wvu.edu](mailto:politicalscience@mail.wvu.edu) ([politicalscience@mail.wvu.edu](mailto:politicalscience@mail.wvu.edu))

Certain application requirements may be waived based on a preliminary review of an application by the program.

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.A. and Ph.D. Major Code: 1464

#### For specific information on the following program, please see the link to the right:

- Political Science, M.A.

#### For specific information on the following program, please see the link to the right:

- Political Science, Ph.D.



## Degree Progress

The Director of Graduate studies serves as the initial advisor for all incoming graduate students. Each student will have a plan of study by the conclusion of the first semester of residence. At least once each academic year, all students will receive an evaluation reviewed by the graduate faculty.

### M.A. PROGRAM

Regular graduate students should be able to complete the MA in four semesters, provided they enter the program in the fall semester and have sufficient background in statistics and political science. See the section of the catalog on time limits ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree\\_regulations/#timelimitstext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree_regulations/#timelimitstext)) for additional information.

### PH.D. PROGRAM

After the first year in residence, each PhD student should select a permanent faculty advisor.

In addition to the required coursework, Ph.D. students must successfully complete the following tasks prior to graduation:

- Comprehensive Exam in Field 1
- Comprehensive Exam in Field 2
- Dissertation Prospectus Defense
- Dissertation Defense
- Submission of Approved Dissertation to ETD

More information can be found in the Political Science Department Graduate Student Handbook (<https://politicalscience.wvu.edu/graduate/current-graduate-students/graduate-handbook/>).

## Political Science, M.A.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 38 credit hours in POLS at the graduate level. Up to 12 credits can be at the 400 level. The number of credit hours may vary depending on number of semesters in residence.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the degree.
- **Benchmarks:** For details, go to the Political Science Degree Progress tab (p. 297).

Code	Title	Hours
<b>CORE COURSES:</b>		<b>11</b>
POLS 600	Introduction to Political Research	
POLS 601	Quantitative Political Analysis	
POLS 602	Advanced Quantitative Methods	
POLS 796	Graduate Seminar	
<b>POLITICAL SCIENCE ELECTIVES: *</b>		<b>27</b>
Any POLS courses at the 400 level or above		
Total Hours		38

\*

Excluding POLS 790, POLS 796 and POLS 797 .

## Major Learning Outcomes

### M.A. IN POLITICAL SCIENCE

Students earning an M.A. in Political Science will be able to:

1. Demonstrate basic substantive knowledge of the institutions, political actors, and relevant processes in state, national, and international political systems.
2. Effectively communicate knowledge of major policy issues in state, national, and international affairs and convey the importance of the uncertainties, trade-offs, and institutional/bureaucratic contexts of problems confronting governments.
3. Evaluate potential explanations of political phenomena in a way that considers alternative explanatory perspectives across the major theoretical schools of thought in the political science literature.

4. Carry out systematic empirical research in political science, including articulating a theoretical question, constructing a rigorous research design, and analyzing data or cases using appropriate methodological approaches.
5. Clearly articulate the potential policy implications of research findings in political science and how those findings relate to larger practical, political, and ethical questions faced by West Virginia, the nation, and communities worldwide.

## Political Science, Ph.D.

### Major Requirements

- **Credit Hours:** Students are required to complete a minimum of 68 credit hours in POLS at the graduate level. Up to 12 credits of 400 level coursework can be taken with permission from the Director of Graduate Studies. The number of credit hours may vary depending on number of semesters in residence and number of research hours.
- **Grade Point Average:** Students must earn a minimum overall GPA of 2.75 and a minimum GPA of 3.00 in coursework applied to their graduate program, with a minimum grade of B- in POLS 600, 601, 602, and 603. Students will have a maximum of two attempts to earn the required B- minimum grade in these four courses.
- **Areas of Emphasis:** The PhD Program offers four areas of emphasis: American Politics, Comparative Politics, International Politics, and Public Policy. Students must complete two areas of emphasis. Students may not choose both Comparative Politics and International Politics as areas of emphasis.

Code	Title	Hours
<b>CORE COURSES:</b>		<b>14</b>
POLS 600	Introduction to Political Research	
POLS 601	Quantitative Political Analysis	
POLS 602	Advanced Quantitative Methods	
POLS 603	Advanced Quantitative Analysis	
POLS 796	Graduate Seminar *	
<b>AREAS OF EMPHASIS: **</b>		<b>24</b>
Complete two areas of emphasis. Students may not choose both Comparative Politics and International Politics as areas of emphasis. ***		
<b>POLITICAL SCIENCE ELECTIVES:</b>		<b>6</b>
Any POLS courses at the 400 level or above. ****		
<b>RESEARCH: *****</b>		<b>24</b>
POLS 797	Research	
Total Hours		68

\*

Students must register for one credit of POLS 796 for each semester they are in residence. Total number of POLS 796 hours may vary.

\*\*

Total number of credit hours required to fulfill the areas of emphasis requirement may vary.

\*\*\*

Credit hours from a single course may not be counted toward the credit hour requirements for more than one area of emphasis.

\*\*\*\*

POLS courses excluding coursework used to satisfy another requirement, POLS 703 Internship, POLS 790, POLS 796 and POLS 797.

\*\*\*\*\*

Students are expected to be involved in research throughout their graduate career, and enrollment in POLS 797, should reflect this activity. Students must complete at least 24 hours, however most students complete more than 70 credit hours of research.

### Areas of Emphasis Offered:

- American Politics (p. 299)
- Comparative Politics (p. 299)
- International Politics (p. 299)
- Public Policy (p. 299)

## AMERICAN POLITICS AREA OF EMPHASIS

Code	Title	Hours
<b>American Politics Electives</b>		<b>12</b>
Select four of the following courses (others approved by Director of Graduate Studies):		
POLS 522	Racial & Ethnic Politics	
POLS 630	Seminar: American Politics and Policy	
POLS 710	Judicial Politics, Policy and Law	
POLS 712	American Construction and Political Development	
POLS 715	The American Presidency	
POLS 728	Congress	
Total Hours		12

## COMPARATIVE POLITICS AREA OF EMPHASIS

Code	Title	Hours
<b>Comparative Politics Electives</b>		<b>12</b>
Select four of the following courses (others approved by Director of Graduate Studies):		
POLS 550	Comparative Politics	
POLS 551	Comparative Political Institutions	
POLS 555	Comparative Public Policy	
POLS 559	Contentious Politics	
Total Hours		12

## INTERNATIONAL POLITICS AREA OF EMPHASIS

Code	Title	Hours
<b>Required Course</b>		
POLS 560	International Theory and Policy	3
<b>International Relations Electives</b>		<b>3</b>
Select one of the following courses (others approved by Director of Graduate Studies):		
POLS 660	International Political Economy	
POLS 665	Comparative Foreign Policy	
POLS 666	National Security Policy	
POLS 667	Foreign Policy Decision Making	
<b>Comparative Politics Electives</b>		<b>9</b>
Select three of the following courses (others approved by Director of Graduate Studies):		
POLS 550	Comparative Politics	
POLS 551	Comparative Political Institutions	
POLS 555	Comparative Public Policy	
POLS 559	Contentious Politics	
Total Hours		15

## PUBLIC POLICY AREA OF EMPHASIS

Code	Title	Hours
<b>Public Policy Electives</b>		<b>12</b>
Select four of the following courses (others approved by Director of Graduate Studies):		
POLS 530	Policy Analysis	
POLS 536	Politics of Agenda Setting	
POLS 555	Comparative Public Policy	

POLS 638	Seminar: Policy Implementation
POLS 710	Judicial Politics, Policy and Law
Total Hours	

## Major Learning Outcomes

### PH.D. IN POLITICAL SCIENCE

Students earning a Ph.D. in Political Science will be able to:

1. Demonstrate basic substantive knowledge of the institutions, political actors, and relevant processes in state, national, and international political systems, particularly as they apply to students' areas of emphasis.
2. Effectively communicate knowledge of major policy issues in state, national, and international affairs and convey the importance of the uncertainties, trade-offs, and institutional/bureaucratic contexts of problems confronting governments.
3. Evaluate potential explanations of political phenomena in a way that considers alternative explanatory perspectives across the major theoretical schools of thought in the political science literature.
4. Carry out systematic empirical research in political science, including articulating a theoretical question, constructing a rigorous research design, and analyzing data or cases using appropriate methodological approaches.
5. Clearly articulate the potential policy implications of research findings in political science and how those findings relate to larger practical, political, and ethical questions faced by West Virginia, the nation, and communities worldwide.
6. Demonstrate fluency with professional norms and processes in the academic discipline of political science that enhance doctoral students' ability to effectively present work at professional conferences, publish original research, navigate the academic job market or advance in their careers.
7. Engage with and respond to scholarly criticism of their original research in appropriate ways, as demonstrated through successful prospectus and dissertation defenses and/or revision of manuscripts prepared for potential publication in scholarly outlets.
8. Effectively teach political science courses at the post-secondary level while demonstrating the ability to design high-quality syllabi, lectures, classroom activities, assignments, and instruments of evaluation.

## Psychology

### Degrees Offered

- Master of Science
- Doctor of Philosophy

### Doctoral Program Majors

The doctoral degrees in Behavior Analysis, Behavioral Neuroscience, Clinical Psychology, and Life-Span Developmental Psychology prepare students for careers in research, teaching, and/or practice.

### Program Accreditation

The Clinical Program at West Virginia University is comprised of two major areas of study: Clinical Psychology and Clinical Child Psychology. The Clinical Program has been accredited continuously by the American Psychological Association since 1966. In 2020, the Program was re-accredited until 2030. For any questions regarding accreditation of this or any other APA-accredited program, contact the Office of Program Consultation and Accreditation of the American Psychological Association, 750 First Street, NE, Washington, DC 20002. Phone number: (202) 336-5979. Website: <http://www.accreditation.apa.org> (<http://www.accreditation.apa.org/>).

The Behavior Analysis Program at West Virginia University has been accredited by the Association for Behavior Analysis International since 2003. In 2019, the Program was re-accredited until 2025. For any questions regarding accreditation of this or any other ABAI-accredited program, contact the ABAI Accreditation Board, 550 West Centre Avenue, Portage, MI 49024. Phone number: (269) 492-9310. Website: <https://accreditation.abainternational.org> (<https://accreditation.abainternational.org/accredited-programs.aspx>).

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## FACULTY

### CHAIR

- Kevin Larkin - Ph.D. (University of Pittsburgh)  
Clinical Health Psychology, Applied Psychophysiology, Cardiovascular Behavioral Medicine

## ASSOCIATE CHAIR

- Karen Anderson - Ph.D. (University of Florida)  
Behavioral pharmacology; self-control and impulsivity

## DIRECTOR OF GRADUATE STUDIES

- Claire St. Peter - Ph.D. (University of Florida)  
Procedural Fidelity, School-Based Behavior Supports, Observational Measurement

## PROFESSORS

- Christina Duncan - Ph.D. (Louisiana State University)  
Behavioral Pediatrics, Pediatric Chronic Illness, Adherence
- Barry A. Edelstein - Ph.D. (University of Memphis)  
Eberly Family Distinguished Professor of Clinical Psychology. Burnout in Intergenerational Caregiving, Older Adult Decision-Making
- Amy Gentzler - Ph.D. (Kent State University)  
Emotion Regulation and Adjustment in Children and Adolescents, Positive Psychology
- Kennon A. Lattal - Ph.D. (University of Alabama)  
Centennial Professor. Experimental Analysis of Behavior, History and Philosophy of Psychology, Human-Pet Interactions
- Tracy L. Morris - Ph.D. (University of Mississippi)  
Eberly Distinguished Professor of Outstanding Teaching
- Melanie C. Page - Ph.D. (Arizona State University)  
Quantitative/Developmental Psychology
- Julie Hicks Patrick - Ph.D. (University of Akron)  
Health Disparities, Cognitive Aging, Mid- and Late-Life, Methodology
- Michael Perone - Ph.D. (University of Wisconsin-Milwaukee)  
Positive and Negative Reinforcement, Animal and Human Operant Behavior, Research Methodology
- Claire St. Peter - Ph.D. (University of Florida)  
Procedural Fidelity, School-Based Behavior Supports, Observational Measurement
- JoNell Strough - Ph.D. (University of Utah)  
Life-Span Development, Decision Making, Everyday Problem Solving, Gender Development

## ASSOCIATE PROFESSORS

- Karen G. Anderson - Ph.D. (University of Florida)  
Behavioral Pharmacology, Self-Control and Impulsivity
- Melissa Blank - Ph.D. (Virginia Commonwealth University)  
Behavioral Pharmacology, Nicotine/Tobacco Addiction, Tobacco Use Disparities
- Amy Fiske - Ph.D. (University of Southern California)  
Late Life Depression and Suicide
- Elisa Krackow - Ph.D. (Binghamton University-SUNY)  
Adult and Child Testimony, Developmental Psychopathology
- Shari Steinman - Ph.D. (University of Virginia)  
Cognitive Bias in Anxiety Disorders, Treatment of Anxiety and Obsessive Compulsive Disorders
- Nicholas Turiano - Ph.D. (Purdue University)  
Personality, Health, and Aging

## ASSISTANT PROFESSORS

- Ryan Best - Ph.D. (Florida State University)  
Adult Development, Value-based Decision-making, Cognitive Aging
- Mariya Cherkasova - Ph.D. (McGill University)  
Addiction; Psychopharmacology; Reward-related Behavior
- Kathryn Kestner - Ph.D. (Western Michigan University)  
Applied Behavior Analysis, Assessment and Treatment of Challenging Behaviors
- Kathleen Morrison - Ph.D. (University of Tennessee)  
Stress and Neuropsychiatric Disease; Women's Health

## TEACHING ASSOCIATE PROFESSORS

- Elizabeth Levelle - Ph.D. (West Virginia University)  
Teaching of Psychology, Academic Advising

- Sharon Tenenholz - Ph.D. (University of California, Los Angeles)  
Teaching of Psychology, Curriculum Design, Academic Advising
- Connie Toffle - Ph.D. (West Virginia University)  
Teaching of Psychology

## TEACHING ASSISTANT PROFESSORS

- Kristina Penikis - Ph.D. (New York University)  
Teaching of Neuroscience, Systems Neuroscience, Advising and Mentorship

## SERVICE ASSISTANT PROFESSOR

- Brennan Armshaw - Ph.D. (University of North Texas)  
Behavior Analysis, Behavioral Medicine and Neuromuscular Behavior, Behavior Analysis and Education, Advising and Mentorship
- Stephanie McWilliams - Ph.D. (West Virginia University)  
Youth Mentorship; Sport and Exercise Psychology, Health Psychology, Behavior Change and Weight Management

## PROFESSORS EMERITI

- Edward Caldwell - Ph.D.
- Stanley Cohen - Ph.D.
- Philip Comer - Ph.D.
- William J. Fremouw - Ph.D.
- Robert Hawkins - Ph.D.
- Katherine Karraker - Ph.D.
- Daniel W. McNeil - Ph.D.
- Cheryl B McNeil - Ph.D.
- Kent Parker - Ph.D.

## Admissions

### PH.D. IN PSYCHOLOGY

The Psychology program admits students directly to the doctoral degree. The requirements for the master's of science are completed as part of the doctoral degree requirements. The department currently offers doctoral degrees in four subdisciplines of Psychology: Behavior Analysis, Behavioral Neuroscience, Clinical, and Life-Span Development.

In addition to WVU's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants for graduate studies in Psychology should have adequate preparation in psychology and related fields and a minimum grade point average of 3.0 in undergraduate or graduate coursework. The personal statement should describe the fit between the applicant's interests and the graduate program major area of study, outline the applicant's academic and professional goals, and demonstrate the personal qualities that predict success in graduate study.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>)
- Applicants must submit transcripts from all institutions attended
- Three letters of recommendation, written by people (typically faculty) in a position to evaluate the applicant's academic strengths and abilities
- Resume/Curriculum Vitae
- Statement of purpose

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>)
- International applications should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>)
- Language proficiency is required to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadlines:

- Psychology only admits students in the fall semester; all application materials, including letters of recommendation, must be received by the preceding December 1<sup>st</sup>

- All applicants received by the deadlines will be considered for financial support, typically in the form of a graduate teaching assistantship (GTA). Language proficiency is required to hold such an assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).
- Exceptional Ph.D. applicants may be nominated by the Psychology program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

Applications received after the deadline may be reviewed at the discretion of the admissions committee. Certain application requirements may be waived based on a preliminary review of an application by the program.

## NON-DEGREE STUDENTS

Graduate courses in psychology are designed for regularly admitted degree-seeking psychology students as part of an extensive program of preparing those students for professional careers. Thus, students not admitted into one of the psychology graduate program areas are discouraged from taking graduate courses in psychology. Non-psychology graduate students must obtain the instructor's permission to enroll in any psychology graduate course.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes:

Ph.D. Psychology: Behavior Analysis 14D1

Ph.D. Psychology: Behavioral Neuroscience 14D2

Ph.D. Psychology: Clinical 14D4

Ph.D. Psychology: Life-Span Development 14D5

**For specific information on the following program, please see the link to the right:**

- Psychology, M.S.
- Psychology: Behavior Analysis, M.S.

**For specific information on the following program, please see the link to the right:**

- Psychology, Ph.D.

## Degree Progress: M.S.

Thesis proposals should be approved no later than May 15, Year 2. Thesis defense and ETD submission should not occur later than May 15, Year 3. Students receive at least a yearly letter of evaluation. Students may be placed on probation or dismissed for any of the following grounds: (1) failing to make timely progress through the program, (2) inability to form a thesis committee, (3) taking unauthorized leaves of absence, (4) engaging in academic misconduct or unethical behavior, (5) receiving two grades below B- (C, D, F, or U), (6) failing to remove two or more grades of incomplete as specified in incomplete contract, (7) failing to meet academic or professional standards outlined in department handbook or program-area supplements to the handbook, (8) violating of any of the institutional, academic, or behavioral standards described in the the WVU Graduate/Professional Handbook (<http://catalog.wvu.edu/>), the American Psychological Association code of ethics (<https://www.apa.org/ethics/code/>), or codes of ethics specified for the student's Program Area.

## Degree Progress: Ph.D.

Dissertation proposals should be approved not later than May 15, Year 4. For students who entered with an approved master's thesis, this date is May 15, Year 3. Each program area also has specific milestones associated with other training activities (found on the program area catalog pages). These additional activities include, at a minimum, completion of preliminary examinations. Students receive at least a yearly letter of evaluation. Students may be placed on probation or dismissed for any of the following grounds: (1) failing to make timely progress through the program, (2) failing the preliminary examination, (3) failing to be recommended for doctoral candidacy by training area or full faculty, (4) inability to form a dissertation committee, (5) taking unauthorized leaves of absence, (6) engaging in academic misconduct or unethical behavior, (6) receiving two grades below B- (C, D, F, or U), (7) failing to remove two or more grades of incomplete as specified in incomplete contract, (8) failing to meet academic or professional standards outlined in department handbook or program-area supplements to the handbook, (9) violating of any of the institutional, academic, or behavioral standards described in the the WVU Graduate/Professional Handbook (<http://catalog.wvu.edu/>), the American Psychological Association code of ethics (<https://www.apa.org/ethics/code/>), or codes of ethics specified for the student's Program Area.

# Psychology, M.S.

## Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 36 graduate-level credit hours in Psychology or other related disciplines approved by the student's advising committee.
- **Grade Point Average:** After admission to a doctoral program major, students must earn a minimum cumulative and major GPA of 2.75.
- **Graduation Requirement:** Students must complete required coursework and a master's thesis.
  - **Master's Thesis:** An empirical research project in an area of psychology approved by the student's master's thesis committee.
- **Benchmarks:** Thesis proposal approval not later than May 15, Year 2. Thesis defense and ETD submission not later than May 15, Year 3.
- **Additional Requirements:** None.

## Curriculum Requirements

Code	Title	Hours
<b>Research Methods</b>		<b>6</b>
PSYC 511	Research Design and Data Analysis 1	
Select one course from the list below:		
PSYC 512	Research Design and Data Analysis 2	
PSYC 611	Single-Subject Research Methods	
PSYC 612	Multivariate Analysis	
PSYC 614	Program Evaluation and Intervention	
PSYC 711	Seminar in Methodology	
<b>Didactic Electives:</b>		<b>18</b>
Select any PSYC courses at the 500 level or above EXCEPT those listed as Experiential Electives or Professional Issues		
<b>Research</b>		<b>6</b>
PSYC 797	Research	
<b>Experiential Electives *</b>		<b>5</b>
Any combination of:		
PSYC 606	Seminar on Teaching Psychology	
PSYC 630	Behavior Analysis Practicum	
PSYC 660	Clinical Psychology Practicum	
PSYC 670	Clinical Child Psychology Practicum	
PSYC 730	Advanced Behavior Analysis Practicum	
PSYC 740	Practicum in Developmental Psychology	
PSYC 790	Teaching Practicum	
PSYC 795	Independent Study	
Or additional PSYC 797 above the 6 required hours		
<b>Professional Issues</b>		<b>1</b>
Select one course from the list below:		
PSYC 601	Professional Issues in Behavior Analysis	
PSYC 602	Professional Issues in Developmental Psychology	
PSYC 603	Professional Issues in Clinical Psychology	
PSYC 608	Professional Issues - Behavioral Neuroscience	
PSYC 701	Advanced Professional Issues in Psychology	
Total Hours		36

\*

Most experiential electives can be repeated for credit.



## Major Learning Outcomes

### PSYCHOLOGY

Students graduating with an MS in psychology will:

- Conduct a high-quality research project in close collaboration with a faculty member.
- Describe research projects in the context of a larger body of literature.
- Maintain certification in ethical standards of conducting research.
- Analyze data using a variety of statistical methods.

## Psychology: Behavior Analysis, M.S.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 36 graduate-level credit hours in Psychology or other related disciplines approved by the student's advising committee.
- **Grade Point Average:** After admission to a doctoral program major, students must earn a minimum cumulative and major GPA of 2.75.
- **Graduation Requirement:** Students must complete required coursework and a master's thesis.
  - **Master's Thesis:** An empirical research project in behavior analysis, as approved by the student's master's thesis committee.
- **Benchmarks:** Thesis proposal approval not later than May 15, Year 2. Thesis defense and ETD submission not later than May 15, Year 3.
- **Additional Requirements:** None.

### Curriculum Requirements

Code	Title	Hours
<b>Research Methods</b>		<b>6</b>
PSYC 511	Research Design and Data Analysis 1	
PSYC 611	Single-Subject Research Methods	
<b>Principles of Behavior</b>		<b>3</b>
PSYC 531	Experimental Analysis of Behavior	
<b>Conceptual Analysis</b>		<b>3</b>
PSYC 732	Behavior Theory and Philosophy	
<b>Applied Behavioral Analysis</b>		<b>6</b>
PSYC 533	Applied Behavior Analysis	
Select one of the following:		
PSYC 729	Performance Management	
PSYC 735	Assessment and Intervention for Severe Behavior	
PSYC 737	Advanced Applied Behavior Analysis	
PSYC 738	Behavior Analysis in Education	
<b>Basic Behavior Analysis</b>		<b>3</b>
Select one of the following:		
PSYC 532	Human Behavior	
PSYC 733	Stimulus Control and Memory	
PSYC 734	Reinforcement and Punishment	
PSYC 736	Advanced Experimental Analysis of Behavior	
<b>Ethics</b>		<b>3</b>
PSYC 609	Ethics in Behavior Analysis	
<b>Supervised Experiential Learning</b>		<b>11</b>
PSYC 797	Research	
Plus five (5) credits of the following in any combination:		
PSYC 606	Seminar on Teaching Psychology	
PSYC 630	Behavior Analysis Practicum	
PSYC 730	Advanced Behavior Analysis Practicum	
PSYC 790	Teaching Practicum	
PSYC 795	Independent Study	

**Professional Development****1**

PSYC 601	Professional Issues in Behavior Analysis
Total Hours	36

**Major Learning Outcomes****PSYCHOLOGY: BEHAVIOR ANALYSIS**

Students graduating with an MS in Psychology: Behavior Analysis will:

- Conduct a high-quality experiment examining impacts of environment on behavior, in close collaboration with a faculty member.
- Describe behavior-analytic research in the context of a larger body of literature.
- Maintain certification in ethical standards of conducting research.
- Analyze data using a variety of quantitative and data-visualization methods.

**Psychology, Ph.D.****Doctor of Philosophy Programs**

- Psychology: Behavior Analysis
- Psychology: Behavioral Neuroscience
- Psychology: Clinical
- Psychology: Life-Span Development

**Psychology: Behavior Analysis****DEGREE REQUIREMENTS**

- **Credit Hours:** Students are required to complete a minimum number of 42 graduate-level credit hours in Psychology or other related disciplines approved by the student's advising committee.
- **Grade Point Average:** After admission to a doctoral program major, students must earn a minimum cumulative and major GPA of 2.75.
- **Comprehensive Examination:** Students must successfully complete a preliminary examination prior to advancement to doctoral candidacy.
- **Dissertation:** Students must complete an empirical research project in an area of psychology approved by the student's dissertation committee.
- **Benchmarks:** Dissertation proposal approved not later than May 15, Year 4. For students who entered with an approved master's thesis, May 15, Year 3.

**Curriculum Requirements**

Code	Title	Hours
<b>Principles of Behavior</b>		<b>3</b>
PSYC 531	Experimental Analysis of Behavior	
<b>Research Methods</b>		<b>9</b>
PSYC 511	Research Design and Data Analysis 1 (fulfills dept methods requirement)	
PSYC 512	Research Design and Data Analysis 2 (fulfills dept methods requirement)	
PSYC 611	Single-Subject Research Methods	
<b>Conceptual Analysis</b>		<b>6</b>
PSYC 732	Behavior Theory and Philosophy	
PSYC 721	History and Systems	
or PSYC 739	Verbal Behavior	
<b>Basic Behavior Analysis</b>		<b>6</b>
Select two from the following:		
PSYC 532	Human Behavior	
PSYC 733	Stimulus Control and Memory	
PSYC 734	Reinforcement and Punishment	
PSYC 736	Advanced Experimental Analysis of Behavior	
<b>Applied Behavior Analysis</b>		<b>6</b>

PSYC 533	Applied Behavior Analysis	
Select one from the following:		
PSYC 630	Behavior Analysis Practicum	
PSYC 729	Performance Management	
PSYC 730	Advanced Behavior Analysis Practicum	
PSYC 735	Assessment and Intervention for Severe Behavior	
PSYC 737	Advanced Applied Behavior Analysis	
PSYC 738	Behavior Analysis in Education	
<b>Ethics</b>		<b>3</b>
PSYC 609	Ethics in Behavior Analysis	
<b>Specialized Elective *</b>		<b>3</b>
PSYC 615	Software Design in Psychology	
PSYC 722	Biological Aspects of Behavior	
PSYC 754	Clinical Psychopharmacology	
<b>Research **</b>		<b>6</b>
PSYC 797	Research	
Total Hours		42

\*

Or another course approved by the Behavior Analysis Training Committee.

\*\*

Students are expected to be involved in research throughout their graduate career, and enrollment in PSYC 797, should reflect this activity. Students must complete at least six hours, however most students complete more than 60 credit hours of research.

## Psychology: Behavioral Neuroscience

### DEGREE REQUIREMENTS

- **Credit Hours:** Students are required to complete a minimum number of 38 graduate-level credit hours in Psychology or other-related disciplines approved by the student's advising committee.
- **Grade Point Average:** After admission to a doctoral program major, students must earn a minimum cumulative and major GPA of 2.75.
- **Comprehensive Examination:** Students must successfully complete a preliminary examination prior to advancement to doctoral candidacy.
- **Dissertation:** Students must complete an empirical research project in an area of psychology approved by the student's dissertation committee.
- **Benchmarks:** Dissertation proposal approved not later than May 15, Year 4. For students who entered with an approved master's thesis, May 15, Year 3.

### Curriculum Requirements

Code	Title	Hours
<b>CORE COURSES:</b>		<b>14</b>
PSYC 608	Professional Issues - Behavioral Neuroscience	
PSYC 650	Behavioral Neuroscience Methods	
PSYC 696	Graduate Seminar *	
PSYC 722	Biological Aspects of Behavior	
PSYC 724	Advanced Neuroscience	
<b>METHODOLOGY:</b>		<b>9</b>
PSYC 511	Research Design and Data Analysis 1	
PSYC 512	Research Design and Data Analysis 2	
Select one advanced methodology course:		
BIOL 576	Computational Neuroscience	
PSYC 611	Single-Subject Research Methods	
PSYC 612	Multivariate Analysis	
PSYC 614	Program Evaluation and Intervention	

PSYC 711	Seminar in Methodology	
<b>RESEARCH: **</b>		<b>6</b>
PSYC 797	Research	
<b>ELECTIVES: ***</b>		<b>9</b>
Any PSYC course at the 500-level or above.		
Total Hours		38

\*

Must be taken every semester the course is offered.

\*\*

Students are expected to be involved in research throughout their graduate career, and enrollment in PSYC 797, should reflect this activity. Students must complete at least six hours, however most students complete more than 60 credit hours of research.

\*\*\*

Excluding PSYC 606, PSYC 608, PSYC 698, PSYC 701, PSYC 790, and PSYC 797.

## Psychology: Clinical

### DEGREE REQUIREMENTS

- **Credit Hours:** Students are required to complete a minimum number of 79 graduate-level credit hours in Psychology or other related disciplines approved by the student's advising committee.
- **Grade Point Average:** After admission to a doctoral program major, students must earn a minimum cumulative and major GPA of 2.75.
- **Comprehensive Examination:** Students must successfully complete a preliminary examination prior to advancement to doctoral candidacy.
- **Dissertation:** Students must complete an empirical research project in an area of psychology approved by the student's dissertation committee.
- **Additional requirements:** At least two academic years of practica must be through a Quin Curtis Center Clinical Team, and you must have at least two different supervisor/team experiences, each lasting one academic year or twelve month period.
- **Benchmarks:** Dissertation proposal approved not later than May 15, Year 4. For students who entered with an approved master's thesis, May 15, Year 3.

### Curriculum Requirements

Code	Title	Hours
<b>METHODOLOGY:</b>		<b>9</b>
PSYC 511	Research Design and Data Analysis 1	
PSYC 512	Research Design and Data Analysis 2	
PSYC 655	Research Methods in Clinical Psychology	
<b>CORE COURSES:</b>		<b>32</b>
PSYC 603	Professional Issues in Clinical Psychology	
PSYC 607	Ethical and Legal Issues in Psychology	
PSYC 651	Behavior Pathology	
PSYC 652	Clinical Interviewing	
PSYC 653	Behavioral and Psychological Assessment 1	
PSYC 654	Behavioral and Psychological Assessment 2	
PSYC 661	Behavior Therapy	
PSYC 671	Child Behavior Therapy	
PSYC 722	Biological Aspects of Behavior	
PSYC 725	Social Psychology	
PSYC 745	Seminar in Life-Span Development	
<b>ADVANCED INTEGRATIVE SEMINAR:</b>		<b>3</b>
Select one of the following:		
PSYC 726	Social Cognition	
PSYC 780	Advanced Integrative Seminar	
<b>CLINICAL SUPERVISION:</b>		<b>2</b>
PSYC 755	Seminar in Clinical Supervision	
<b>PRACTICA AND INTERNSHIP: *</b>		<b>21</b>

PSYC 660	Clinical Psychology Practicum	
PSYC 670	Clinical Child Psychology Practicum	
PSYC 750	Clinical Internship	
<b>RESEARCH: **</b>		<b>6</b>
PSYC 797	Research	
<b>ELECTIVES: ***</b>		<b>6</b>
Any approved PSYC course at the 500 level or above		
Total Hours		79

\*

Students must complete at least 18 hours of practica, PSYC 660 or PSYC 670, and three hours of internship, PSYC 750.

\*\*

Students are expected to be involved in research throughout their graduate career, and enrollment in PSYC 797, should reflect this activity. Students must complete at least six hours, however most students complete more than 60 credit hours of research.

\*\*\*

Excluding PSYC 603, PSYC 606, PSYC 660, PSYC 670, PSYC 698, PSYC 701, PSYC 750, PSYC 790, and PSYC 797

## Psychology: Life-Span Development

### DEGREE REQUIREMENTS

- **Credit Hours:** Students are required to complete a minimum number of 46 graduate-level credit hours in Psychology or other related disciplines approved by the student's advising committee.
- **Grade Point Average:** After admission to a doctoral program major, students must earn a minimum cumulative and major GPA of 2.75.
- **Comprehensive Examination:** Students must successfully complete a preliminary examination prior to advancement to doctoral candidacy.
- **Dissertation:** Students must complete an empirical research project in an area of psychology approved by the student's dissertation committee.
- **Benchmarks:** Dissertation proposal approved not later than May 15, Year 4. For students entering with an approved master's thesis, May 15, Year 3.

### Curriculum Requirements

Code	Title	Hours
<b>CORE COURSES:</b>		<b>28</b>
PSYC 511	Research Design and Data Analysis 1	
PSYC 512	Research Design and Data Analysis 2	
PSYC 541	Infant Development	
PSYC 542	Child Development	
PSYC 543	Adolescent and Young Adult Development	
PSYC 544	Adult Development and Aging	
PSYC 545	Conceptual Issues in Developmental Psychology	
PSYC 546	Methodological Issues in Developmental Psychology	
PSYC 602	Professional Issues in Developmental Psychology	
PSYC 745	Seminar in Life-Span Development	
<b>METHODOLOGY:</b>		<b>6</b>
PSYC 612	Multivariate Analysis	
PSYC 711	Seminar in Methodology	
<b>RESEARCH *</b>		<b>6</b>
PSYC 797	Research	
<b>ELECTIVES: **</b>		<b>6</b>
Any PSYC course approved by the Life-Span Developmental Training Committee		
Total Hours		46

\*

Students are expected to be involved in research throughout their graduate career, and enrollment in PSYC 797, should reflect this activity. Students must complete at least six hours, however most students complete more than 60 credit hours of research.

\*\*

Excluding PSYC 602, PSYC 606, PSYC 701, PSYC 790, and PSYC 797.

## Major Learning Outcomes

### PSYCHOLOGY

Students graduating with a doctorate in psychology will acquire the following research and communication skills:

- Students will design and execute empirical research to investigate psychological topics.
- Students will conduct and interpret statistical analyses.
- Students will clearly communicate results of empirical research, both orally and in writing.
- Students will create and deliver professional oral presentations.
- Students will demonstrate expert knowledge of their area of emphasis.
- Students will be conversant with historical, philosophical, and theoretical issues in psychology.
- Students will abide by the ethical principles of the discipline of psychology.

## Public Administration, M.P.A.

### Degree Offered

- Master of Public Administration

### Nature of the Program

The mission of the West Virginia University Master of Public Administration (MPA) program is to prepare recent college graduates and new professionals to make a difference through careers in public service in a wide array of settings. WVU's Department of Public Administration offers the only internationally accredited MPA program in West Virginia. The MPA degree prepares individuals to work in government and nonprofit agencies to develop and implement public policies and programs. The MPA program offers flexible class times, full- and part-time enrollment, small class settings, and opportunities to work directly with community and government organizations through team-based class projects, the internship experience, professional development activities, and community service.

### Dual Degrees

The department has established two dual degree programs within West Virginia University. A dual JD/MPA degree program established with the College of Law provides preparation in both law and public administration. A dual MSW/MPA degree in cooperation with the School of Social Work provides preparation for administrators in the social services. Dual degree programs also may be arranged with other academic programs and professional schools. Graduate studies regulations permit limited credit hours from one graduate degree to be applied to a second degree. Students may pursue two degrees and use approved coursework for both degrees.

### Graduate Certificates Offered

The department offers a graduate certificate program in Community Development Policy & Practice.

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## FACULTY

### PROFESSORS

- L. Christopher Plein - Ph.D. (University of Missouri)  
Regular Graduate Faculty, Eberly Professor of Outstanding Public Service, Legal and Political Foundations, Public Policy Analysis, Social Policy, Community and Economic Development
- Margaret Stout - Ph.D. (Arizona State University)  
Regular Graduate Faculty, Local Government, Community Development, Public Policy and Public Planning

### ASSOCIATE PROFESSORS

- Paolo D. Farah - Ph.D., LL.M., JD (College of Europe, University of Paris)  
Regular Graduate Faculty, Public Policy & Admin., Legal & Political Foundation, Sustainability, Socio-Economic & Cultural Rights & Justice, Human Rights, Technology & Innovation
- Maja Husar Holmes - Ph.D. (Syracuse University)  
Regular Graduate Faculty, Public Management and Public Leadership

- Karen Kunz - D.P.A. (University of Illinois, Springfield)  
Regular Graduate Faculty, Financial Management, Corporate Use of Public Funds, Political Economy

## PROFESSORS EMERITI

- Nancy L. Adams - Ph.D. (Fielding Institute)
- Gerald M. Pops - Ph.D. (Syracuse University)
- David G. Williams - Ph.D. (State University of New York at Albany)

## Admissions

### MASTER OF PUBLIC ADMINISTRATION

The Master of Public Administration (M.P.A.) program is a degree program designed to prepare recent college graduates and new professionals to make a difference through careers in public service in a wide array of settings. Graduates will be able to apply the knowledge and skills gained to work in government and nonprofit agencies to develop and implement public policies and programs. In addition to the university requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>) for admission, applicants must hold a bachelor's degree in any field from an accredited college. The GRE is not required for admission to this program.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Two letters of recommendations from professional or academic references.
- Resume or CV that lists work experience, volunteer activities, internships, academic degrees and honors, and other accomplishments you feel the admissions committee should take into account in reviewing your application.
- A 500-word statement of purpose that indicates why the applicant wishes to pursue a career in public service, specific target for employment (e.g., nonprofit, profit, and public; local, state, and federal government, or other), and how the M.P.A. program can help meet those professional goals.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applications should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadlines:

- The M.P.A. program accepts students for Fall admission only.
- The deadline for all application materials for Fall admission is April 1<sup>st</sup>.
- Applicants will be notified of the committee's decision by April 15<sup>th</sup>.
- Applications for admission may be considered after this deadline on a space-available basis.

For further information, please visit [publicadmin.wvu.edu](https://publicadmin.wvu.edu) (<https://publicadmin.wvu.edu/>)

**For questions, please contact:** [publicadmin@mail.wvu.edu](mailto:publicadmin@mail.wvu.edu)

Certain application requirements may be waived based on a preliminary review of an application by the program.

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1484

## Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 39 credit hours in graduate coursework. Students may take PUBA courses or courses at the 400 level or above in another department as approved by faculty advisor as electives. Students with substantial experience in public administration may request to waive the MPA internship requirement.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Area of Emphasis:** The Public Administration Department offers two areas of emphasis - Healthcare Administration and Local Governance and Community Development. Students may either complete an Area of Emphasis or 12 credits of electives.

- **Healthcare Administration:** For students who are interested in a career in a variety of healthcare settings, including hospitals, health departments, nursing homes, mental health services, home health services, nonprofit voluntary agencies, health research foundations, public and private insurance, and a variety of governmental agencies.
- **Local Governance and Community Development:** For students who are interested in a career in community and economic development with non-profit agencies and local governments, including counties and municipalities, school districts, and public utilities.
- **Graduation Requirement:** Students are required to complete 3 credit hours of internship which reflects 360 contact hours in the internship placement. The internship requirement may be waived for students who have substantial public service experience.
- **Benchmarks:** For details, go to the Public Administration Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/publicadministration/#degreeprogress>)

## Curriculum Requirements

Code	Title	Hours
<b>Required Courses</b>		<b>24</b>
PUBA 600	Democratic Context of Public Administration	
PUBA 610	Public and Nonprofit Management	
PUBA 620	Public and Nonprofit Financial Management	
PUBA 630	Public Service Research	
PUBA 645	Public Policy and Administration	
PUBA 710	Public Service Leadership	
PUBA 720	Public and Nonprofit Budgeting	
PUBA 700	Capstone Seminar	
<b>AOE or Elective Courses</b>		<b>12</b>
Select one of the following options:		
Any PUBA courses at the 600 or 700 level		
Courses at the 400 level or above in another department as approved by faculty advisor		
Healthcare Administration Area of Emphasis		
Local Governance and Community Development Area of Emphasis		
<b>Internship</b>		<b>3</b>
PUBA 751	Public Service Internship	
Total Hours		39

## Areas of Emphasis Offered:

- Local Governance and Community Development (p. 312)

## Local Governance and Community Development Area of Emphasis

Counties and municipalities are the levels of government most directly involved in community and economic development. Localities are where we live, learn, work, and recreate. These and other local governments, like school districts and public utilities, comprise the largest sector of public employment in the United States. In fact, employment in local government has even been growing while it declines at other levels of government. Adding to this sub-sector the many nonprofit organizations that engage in community and economic development, the opportunities for employment in this field of public service abound.

Code	Title	Hours
PUBA 650	Local Governance	3
PUBA 750	Public Planning	3
PUBA 755	Sustainable Community Development	3
Select 3 credit hours from the list below or an approved course by LGCD Advisor		3
PUBA 651	Social Equity in Public Service	
PUBA 655	Public Engagement	
Total Hours		12

## Dual Degree

- Doctor of Jurisprudence/Master of Public Administration (p. 313)



## DOCTOR OF JURISPRUDENCE/MASTER OF PUBLIC ADMINISTRATION

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the College of Law's JD and Eberly's MPA programs in accordance with each college's standard admission procedure.
- For additional details and requirements for each program, please visit the Law page (<http://catalog.wvu.edu/graduate/law/>) or the Public Administration page (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/publicadministration/>).
- Students will develop a combined plan of study with their graduate advisers in Public Administration and in the Law School. Only courses included in an approved plan of study will satisfy graduation requirements.
- Students must meet the academic standards of both degrees earned.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees earned.

## MASTER OF PUBLIC ADMINISTRATION

Code	Title	Hours
<b>Required Courses</b>		<b>24</b>
PUBA 600	Democratic Context of Public Administration	
PUBA 610	Public and Nonprofit Management	
PUBA 620	Public and Nonprofit Financial Management	
PUBA 630	Public Service Research	
PUBA 645	Public Policy and Administration	
PUBA 710	Public Service Leadership	
PUBA 720	Public and Nonprofit Budgeting	
PUBA 700	Capstone Seminar	
<b>Elective Courses</b>		<b>6</b>
Any PUBA courses at the 600 or 700 level		
Courses at the 400 level or above in another department as approved by faculty advisor		
<b>Internship</b>		<b>3</b>
PUBA 751	Public Service Internship	
Total Hours		33

## DOCTOR OF JURISPRUDENCE

Code	Title	Hours
Minimum GPA of 2.50		
<b>First-Year Required Courses</b>		
LAW 641	Introduction to Legal Research	1
LAW 700	Legal Analysis, Research and Writing 1	2
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 725	Constitutional Law 1	4
LAW 793	Civil Procedure	4
LAW 793	Introduction to the Profession	1
LAW 793	Legal Writing Intensive	1
<b>Upper-Level Requirements</b>		
LAW 715	Appellate Advocacy	2
LAW 742	Professional Responsibility	3
Seminar (any 688, 689, or 796 course)		2
Administrative Law Requirement		3
Perspective		2
Capstone		4

Electives (credit may vary - used to reach the minimum of 91 hours for the degree)

39

Total Hours

85

## Degree Progress

**Academic Advising:** Each student is assigned a faculty advisor to guide students with their program of study, internship placement, and career development. All course selections must be approved by the student's MPA faculty advisor. Students are expected to meet at least once a semester with their faculty advisor to review their progress in the program of study.

**Plan of Study:** The Plan of Study should be discussed with the MPA faculty advisor to ensure appropriate sequencing of courses to meet graduation requirements.

**Evaluation Procedures:** The Public Administration faculty are committed to supporting all admitted students in their timely completion of the program. Students will annually receive a "good standing" letter from the Department Chair. MPA faculty advisors are available to discuss student progress in the MPA program and strategies to meet the MPA program requirements.

**Grade Point Average (GPA) and Course Grades:** Students must earn a minimum cumulative GPA of 3.00 in coursework applied to their graduate program. Students must also earn a minimum grade of B- in all required MPA courses. Students must earn a B- or better in non-PUBA courses that contribute to the MPA degree program of study.

**Timeline:** Master's degree students are permitted to continue in a program for a maximum of eight years following their term of admission to the program. Students who have been inactive for two or more years or who exceed eight years following their term of admission are required to apply for readmission to the University and their graduate program.

**Professional Behavior:** The MPA program is a professional program preparing people for careers in public service. Adherence to professional standards and ethics is expected of students.

**Benchmarks:** Students are expected to meet at least once a semester with their faculty advisor to review their progress in the program of study. More information is provided in the MPA Student Handbook.

**Degree Completion:** Full-time students usually complete the MPA degree in five semesters (Fall semester, Spring semester, Summer term, Fall semester, Spring semester).

More information is provided in the MPA Student Handbook (<https://publicadmin.wvu.edu/students/master-of-public-administration/student-resources/>).

## Major Program Learning Outcomes

### MASTER OF PUBLIC ADMINISTRATION

- Differentiate, synthesize, and apply leadership and management knowledge relevant to public administration theory, research, and practice
- Differentiate and evaluate the various roles, practices, and power dynamics in the public policy process
- Apply research methods and analytical approaches appropriate to public service that generate reasoned conclusions and effective recommendations
- Formulate appropriate and ethical administrative approaches to public service purposes
- Generate and apply culturally responsive interpersonal and communications skills

## Quantitative & Qualitative Social Science Research Methods

### Certificate Offered

- Quantitative & Qualitative Social Science Research Methods

### Nature of the Program

The Graduate Certificate in Quantitative & Qualitative Social Science Research Methods, offered from the Department of Sociology and Anthropology, trains students to conduct rigorous, sound quantitative and qualitative research in real-world settings and to critically evaluate these methods used by others. This certificate responds to increased demand for researchers trained in quantitative and qualitative methods locally, nationally, and globally. Quantitative and qualitative research skills are valuable across industries including healthcare, education, business, non-profit sector, and others. Since the certificate is administered entirely online and asynchronously, it is ideal for working professionals or graduate students who need a flexible schedule. Students must have introductory knowledge of statistics. Applicants lacking the necessary background in statistics may be considered for provisional admission.

## FACULTY

### PROFESSOR AND CHAIR

- Daniel Renfrew - Ph.D. (Binghamton University)

### PROFESSORS

- Sharon R. Bird - Ph.D. (Washington State University)  
Regular Graduate Faculty; Social Inequality (race/ethnicity/class/gender/LGBTQ+), Workplace equity, Research methods
- Henry H. Brownstein - Ph.D. (Temple University)  
Regular Graduate Faculty; Distinguished Research Professor. Drugs and society, Drug policy, Violence, Qualitative research methods
- Walter S. DeKeseredy - Ph.D. (York University)  
Anna Deane Carlson Endowed Chair of Social Sciences; Regular Graduate Faculty; Violence against women, Critical criminology, Masculinities and crime, Criminology theory
- R. Gregory Dunaway - Ph.D. (University of Cincinnati)  
Regular Graduate Faculty; Criminology
- James J. Nolan, III - Ph.D. (Temple University)  
Regular Graduate Faculty; Criminal justice, Group and social processes
- S. Melissa Latimer - Ph.D. (University of Kentucky)  
Regular Graduate Faculty; Gender/race/ethnicity, Inequality/labor markets/welfare systems
- Karen Weiss - Ph.D. (State University of New York-Stony Brook)  
Regular Graduate Faculty; Criminology, Victimization, Gender/sexuality/culture
- Rachael A. Woldoff - Ph.D. (Ohio State University)  
Regular Graduate Faculty; Community, Crime, Inequality/race/class
- Joshua Woods - Ph.D. (Michigan State University)  
Regular Graduate Faculty; Social psychology, Media, Complex organizations, Sociology of risk

### ASSOCIATE PROFESSORS

- Corey Colyer - Ph.D. (Syracuse University)  
Regular Graduate Faculty; People processing systems, Agencies of social control
- Katie E. Corcoran - Ph.D. (University of Washington)  
Regular Graduate Faculty; Theory, Organizations, Culture, Criminology, Religion, Social networks
- Lisa M. Dilks - Ph.D. (University of South Carolina)  
Regular Graduate Faculty; Social psychology, Group processes, Law and society, Quantitative methods
- Amy Hirshman - Ph.D. (Michigan State University)  
Regular Graduate Faculty; Mesoamerican archaeology, Social complexity, Ceramics
- Jason Manning - Ph.D. (University of Virginia)  
Regular Graduate Faculty; Conflict and social control, Violence, Sociology of knowledge
- Christopher P. Scheitle - Ph.D. (Pennsylvania State University)  
Religion, Science in society, Crime, Organizations
- Jennifer Steele - Ph.D. (Pennsylvania State University)  
Associate Graduate Faculty; Rural Sociology Natural resource sociology, Rural and community development
- Rachel Stein - Ph.D. (University of Akron)  
Regular Graduate Faculty; Criminology, Victimization, Media and crime
- Jesse Wozniak - Ph.D. (University of Minnesota)  
Regular Graduate Faculty; Policing, Criminology, Deviance, State power

### ASSISTANT PROFESSORS

- Enkeshi El-Amin - Ph.D. (University of Tennessee, Knoxville)  
Regular Graduate Faculty; Critical race and racism, Urban Sociology, Community, Black Appalachia
- Aaron C. Foote - Ph.D. (University of Massachusetts, Amherst)  
Regular Graduate Faculty; Urban and environmental sociology, Social movements, Inequality
- Lindsay Kahle Semprevivo - Ph.D. (Virginia Tech)  
Associate Graduate Faculty; Youth inequality, School violence, Sexual orientation and criminology
- Kirsten Younghee Song - Ph.D. (Rutgers University)  
Culture, Transnationalism, Young adulthood, Inequality

## TEACHING INSTRUCTORS

- Daniel Brewster - M.A. (West Virginia University)
- Douglas Sahady - M.A. (California University of Pennsylvania)
- Genesis Snyder - M.A. (Western Michigan University)

## PROFESSORS EMERITI

- Ronald C. Althouse - Ph.D. (University of Minnesota)
- Ann L. Paterson - Ph.D. (Michigan State University)
- Patricia C. Rice - M.A. (Ohio State University)
- Joseph J. Simoni - Ph.D. (University of Notre Dame) Sociology
- William I. Torry - Ph.D. (Columbia University)

## Admissions

### GRADUATE CERTIFICATE IN QUANTITATIVE & QUALITATIVE SOCIAL SCIENCE RESEARCH METHODS

The Graduate Certificate in Quantitative & Qualitative Social Science Research Methods (QQSSRM) offers working professionals rigorous, research-driven courses with real-world applications that will prepare them for their next career stage. Individuals with an undergraduate degree in any field who are interested in learning quantitative and qualitative social science research methods and their application in real-world settings are encouraged to apply. Students must have an introductory knowledge of statistics. Applicants lacking the necessary background in statistics may be considered for provisional admission. The GRE is not required for admission to this program.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Curriculum Vitae or Resume.
- Official transcripts from all colleges and universities previously attended.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadline:

- The Certificate in Quantitative & Qualitative Social Science Research Methods program admits students on a rolling basis.
- At this time, the QQSSRM certificate program is not accepting applications to the program.

For questions, please contact: [soca@mail.wvu.edu](mailto:soca@mail.wvu.edu)

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: CG64

## Graduate Certificate in Quantitative & Qualitative Social Science Research Methods

### CERTIFICATE CODE - CG64

This certificate will train students in quantitative and qualitative research methods in order to conduct rigorous, sound quantitative and qualitative research in real-world settings and to critically evaluate the quantitative and qualitative methods used by others in research.

Course Requirements: Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the certificate.

Code	Title	Hours
<b>CORE COURSES</b>		<b>9</b>
SOC 632	Introduction to Qualitative Data Analysis Software	
SOC 640	Quantitative Analysis Using Stata	
SOC 722	Mixed Methodology for the Social Sciences	

**QUANTITATIVE COURSES****3**

Select one course from the following list:

SOC 720	Sociological Survey Methods
SOC 722	Mixed Methodology for the Social Sciences
SOC 724	Structural Equation Modeling for the Social Sciences

**QUALITATIVE COURSES****3**

Select one course from the following list:

SOC 721	Qualitative Methods
SOC 726	Ethnographic Investigation
SOC 728	Content Analysis

Total Hours

15

## Certificate Learning Outcomes

### QUANTITATIVE & QUALITATIVE SOCIAL SCIENCE RESEARCH METHODS

Students completing this graduate certificate will be able to:

- Identify appropriate quantitative and qualitative research methods for given research questions
- Manage and use quantitative and qualitative data using appropriate software
- Analyze a variety of types of quantitative and qualitative data using the appropriate methodological strategy
- Critically evaluate studies that use a variety of quantitative and qualitative research methods
- Apply quantitative and qualitative research methods to substantive problems

## Social Work

### Degrees Offered

- Master of Social Work
- Doctor of Philosophy
- Dual MSW/MPA
- Dual JD/MSW

### Nature of the Program

#### MISSION STATEMENT AND OVERVIEW

The mission of the WVU MSW program is to educate students to become advanced integrated practice social workers. The specialization in advanced integrated practice builds on generalist practice and prepares students to integrate micro, mezzo, and macro practice skills across service sectors and within interdisciplinary teams to effectively address social and human problems pertinent to a wide range of professional practice areas, with a particular emphasis on effective models of rural service delivery. The advanced integrated practice curriculum provides an integrative approach to social work where students are prepared for both direct practice and administrative roles. This curriculum prepares WVU MSW graduates to be well-rounded advanced practitioners who can respond to the complex realities of practice in a variety of roles and settings.

The program offers two degree plan options (Regular Standing and Advanced Standing) and two course delivery modalities (on campus and online). The Advanced Standing degree plan is available to students who have either earned a baccalaureate degree in Social Work (BSW) within the previous 8 years from a program accredited by the Council of Social Work Education, that is recognized through its International Social Work Degree Recognition and Evaluation Service, or that is covered under a memorandum of understanding with international social work accreditors. Each degree plan can be completed through a full-time or a part-time option. The full-time program is offered through the on-campus delivery modality only. The WVU MSW program is nationally accredited by the Council for Social Work Education (CSWE).

A dual degree option resulting in the Master of Social Work (MSW) and Master of Public Administration (MPA) degrees is also available through the School of Social Work and the Department of Public Administration for on campus students. The MSW/MPA dual degree program can be completed in 3 years for Regular Standing students or 2 years for Advanced Standing students, including summer coursework. Students can learn more about the MPA degree here: <https://publicadmin.wvu.edu/students/master-of-public-administration> (<https://publicadmin.wvu.edu/students/master-of-public-administration/>)

A dual degree option resulting in the Doctor of Jurisprudence (JD) and the Master of Social Work (MSW) is also available through the School of Law and the School of Social Work. The JD/MSW degree can be completed in 4 years for Regular Standing students and in 3 years for Advanced Standing

students. Students can learn more about the JD degree here: <https://graduateadmissions.wvu.edu/academics/graduate-programs/law-d> (<https://graduateadmissions.wvu.edu/academics/graduate-programs/law-d/>)

**Students interested in the dual-degree programs must apply to and be accepted by each program (MSW and MPA or JD and MSW) separately.**

Students interested in applying for the MSW program should consult the School of Social Work website: <http://socialwork.wvu.edu> (<http://socialwork.wvu.edu/>) or contact:

MSW Admissions  
School of Social Work  
West Virginia University  
P.O. Box 6830  
Morgantown, WV 26506-6830

Phone: (304) 293-3280

Email: [socialwork@mail.wvu.edu](mailto:socialwork@mail.wvu.edu)

## CAREER OPPORTUNITIES

Graduates of the MSW program are employed throughout the United States and internationally. They work as individual, family, and group treatment specialists, planners, community organizers, and social researchers. They also work as social work educators and as administrators in a variety of programs such as mental health clinics, hospitals, correctional institutions, courts, delinquency programs, aging programs, family counseling agencies, child protective agencies, public welfare departments, child development programs, drug and alcohol abuse programs, public schools, community action agencies, settlement houses, city governments, state government planning agencies, federal administrative agencies, and private research and development organizations concerned with human problems. Social workers are the largest group of mental health service providers in the country.

There has been a constant growth in the need for professional social workers. It is anticipated by the Bureau of Labor Statistics and other research bodies that the employment demand for social workers will continue to increase in numbers and in varieties of programs. The WVU MSW social work curriculum is designed to help students prepare for these careers.

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## FACULTY

### DIRECTOR

- Deana Morrow - Ph.D. (North Carolina State University)

### PH.D. PROGRAM DIRECTOR

- Carrie Rishel - Ph.D. (University of Pittsburgh)

### M.S.W. PROGRAM DIRECTOR

- Mary Christensen - Ph.D. (Simmons University)

### B.S.W. PROGRAM DIRECTOR

- Megan Gandy - Ph.D. (Virginia Commonwealth University)

## PROFESSORS

- Kristina Hash - Ph.D. (Virginia Commonwealth University)  
Regular Graduate Faculty; Aging and Healthcare, Family Caregiving, Geriatric Education, Technology, Conflict Coaching and Meditation
- Deana Morrow - Ph.D. (North Carolina State University)  
Regular Graduate Faculty; Social Work Education, Social Work Practice Regulations, Sexual Minority Populations, Older Adults, Mental Health
- Carrie Rishel - Ph.D. (University of Pittsburgh)  
Regular Graduate Faculty; Rural Integrated Health Training Director; Children's Mental/Behavioral Health, Prevention of Mental Health Problems, Risk and Protective Factors Related to Child Outcomes, Prevention-Focused Social Work Practice, Integrated Models of Service Delivery
- Leslie Tower - Ph.D. (Barry University)  
Regular Graduate Faculty; Women's Issues, Health Care Administration, Domestic Violence

## ASSOCIATE PROFESSORS

- Mary Christensen - Ph.D. (Simmons University)  
Regular Graduate Faculty; Master's Program Director; Suicide Prevention, Substance Abuse, Health Service Disparities, Evidence-Based Social Work Practice
- Megan Gandy - Ph.D. (Virginia Commonwealth University)

Regular Graduate Faculty; LGBTQ Populations, Mental Health Services, Social Justice, Technology in Social Work Education

- Jiyoung Tabone - Ph.D. (University of Chicago)

Regular Graduate Faculty; Child Maltreatment and Later Outcomes, Prevention and Intervention Research, Mental Health Services, Risk and Resilience, Program Evaluation

## ASSISTANT PROFESSORS

- Bridget Bailey - Ph.D. (Ohio State University)

Regular Graduate Faculty; Adolescent and Adult Behavioral Health, Suicide, Bipolar and Mood Disorders, Co-occurring Trauma, Substance Use Disorders, Evidence-Based Treatments, Trauma-Informed Care, Community Engaged Research

- Megan Fabbri - Ph.D. (Ohio State University)

Regular Graduate Faculty; Human Rights, Global Perspectives, Migration, Sex Work, Worker Rights, Health Disparities, Community Organizing, International Social Work Education

- Andrew Irish - Ph.D. (University of Buffalo)

Regular Graduate Faculty; Socioeconomic Status Inequality and Behavioral Health, Recovery Capital and Substance Misuse, Policy Mapping and Multilevel Modeling Methodologies

## TEACHING INSTRUCTORS

- Rebekah Dunaway - M.S.W., M.P.A. (West Virginia University)

Youth and Families, Communities, Program Development, Grant Writing, Training Development

- Jacqueline Englehardt - M.S.W. (West Virginia University)

Nonprofit Management, Continuing Education Certificate Programs, Professional Development

- Rhonda Hayes - M.S.W. (West Virginia University)

Substance Abuse & Recovery, Family Victimology, Grant Writing, Social Agency and Program Administration

- Jamie Mesar - M.S.W. (University of Pittsburgh)

Child Welfare, Forensic Interviewing, Child Neglect and Maltreatment

- Fanica Payne - M.S.W. (West Virginia University)

Behavioral Health, Substance Use Disorders, Diverse Populations, Civil Rights

- Lindsey Rinehart - M.S.W. (New York University)

Field Education, Service Learning, Community Engagement, Homelessness

- Mandy Weirich - M.S.W. (West Virginia University)

Policy and Advocacy, Geriatric Education, Use of Technology in Teaching and Research

## EMERITUS FACULTY

- Carol Amendola - M.S.W. (West Virginia University)

- Marjorie H. Buckholz-Cleveland - Ph.D. (West Virginia University)

- Patricia Chase - Ed.D. (West Virginia University)

- Roger A. Lohmann - Ph.D. (Brandeis University)

- Nancy Lohmann - Ph.D. (Brandeis University)

- Caroline T. Mudd - M.S.W. (University of Pennsylvania)

- Neal Newfield - Ph.D. (Texas Tech University)

- Michael Zakour - Ph.D. (Washington University)

## Admissions

The School of Social Work accepts applicants to both the Masters and the Ph.D. programs. Applicants to the Master of Social Work (M.S.W.) programs (online or on campus) are classified as either Regular Standing or Advanced Standing. The online M.S.W. program is offered on a *part time* basis only. All other programs have full time or part time options. (*\*Note: International applicants living outside the United States are not eligible to apply to the **online** program.*)

The GRE is not required for admission to any of these programs.

## MASTER OF SOCIAL WORK

### REGULAR STANDING

For Regular Standing, domestic applicants must have a bachelor's degree from a regionally accredited college or university. International applicants (on campus program only) must have a bachelor's degree from an accredited institution.



- At least a 2.75 overall GPA is required from the institution granting the applicant's undergraduate degree, though a 3.0 GPA is preferred.
- Applicants who have already completed a graduate degree may use their overall GPA for purposes of admission. A 2.75 GPA is required, with a 3.0 GPA preferred.

## ADVANCED STANDING

Domestic applicants who have received a B.S.W. from a Council on Social Work Education-accredited program within the last eight years may apply for Advanced Standing. International applicants (on-campus program only) who have received a B.S.W. from a Council on Social Work Education-accredited program, recognized through its International Social Work Degree Recognition and Evaluation Services, or covered under a memorandum of understanding with international social work accreditors within the last eight years may apply for advanced-standing.

- At least a 3.25 or higher GPA in applicant's undergraduate social work courses if preferred.
- Applicants who have already completed a graduate degree may use their graduate overall GPA for purposes of admission. A 2.75 GPA is required, with a 3.0 GPA preferred.

## PH.D. IN SOCIAL WORK

Applicants for the Ph.D. program must have an M.S.W. degree plus two years post-M.S.W. practice experience. A GPA of at least 2.75 overall is required, though a 3.0 GPA on a prior degree is preferred.

### List of Admission Requirements for the M.S.W.:

- Steps (<https://graduateadmissions.wvu.edu/how-to-apply/>) to apply for admissions and access the application (\*Note: There are separate applications for the online M.S.W. and on campus M.S.W. programs).
- Transcripts for all institutions attended.
- Resume or Curriculum Vitae (CV).
- Three letters of recommendation (specific requirements on program website (<https://socialwork.wvu.edu/students/msw/admissions-requirements/>)).
- Admissions essay (specific requirements on program website (<https://socialwork.wvu.edu/students/msw/admissions-requirements/>)).

### List of Admission Requirements for the Ph.D.:

- Steps (<https://graduateadmissions.wvu.edu/how-to-apply/>) to apply for admissions and access the application.
- Transcripts from all institutions attended.
- Resume or Curriculum Vitae (CV).
- Three letters of recommendation with at least one from a faculty member and one from a post-M.S.W. practice supervisor (applicants can submit an addendum section in their application essay to explain if this is not feasible).
- Admissions Essay (specific requirements on program website (<https://socialwork.wvu.edu/students/phd/admissions-requirements/>)).
- Academic or professional writing sample (specific requirements on program website (<https://socialwork.wvu.edu/students/phd/admissions-requirements/>)).

### International Applicants

- Steps (<https://graduateadmissions.wvu.edu/information-for/international-students/>) to apply for the admissions and access the application.
- International applications should view additional requirements (<https://admissions.wvu.edu/how-to-apply/international-students/#anchor-intlreqs>).
- Language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>) is required for admission and to hold a graduate teaching assistantship.

### Application Deadlines:

- The M.S.W. program (both on campus and online) and the Ph.D. program admit once per year. The M.S.W. Advanced Standing full time on campus program begins in the summer term (May). All other M.S.W. programs and the Ph.D. program begin in the fall (August).
- The priority review deadline for the M.S.W. Advanced and Regular Standing full time on campus programs is January 15th. The final deadline is March 1.
- The priority review deadline for the M.S.W. Advanced and Regular standing part time online programs is February 1st. The final deadline is April 15th.
- The priority review deadline for the Ph.D. program is January 15th. The final deadline is March 1st.
- For provisionally licensed social workers in West Virginia who are accepted as non-degree students, admissions deadlines may differ. Please contact the M.S.W. program director for details.
- Exceptional Ph.D. applicants may be nominated by the School of Social Work for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).



## Assistantships

All full time applicants who apply by the priority deadlines will be considered for financial support in the form of graduate service assistantships (GSAs), graduate teaching assistantships (GTAs), and graduate research assistantships (GRAs) in the School of Social Work if available.

For questions, please contact: [socialwork@mail.wvu.edu](mailto:socialwork@mail.wvu.edu)

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code M.S.W. on campus: 1407

Major Code M.S.W. online: 14C5

Major Code Ph.D.: 14F1

**For specific information on the following program, please see the link to the right:**

- Social Work, M.S.W.

**For specific information on the following program, please see the link to the right:**

- Social Work, Ph.D.

## Degree Progress- MSW

The School of Social Work outlines specific timelines for degree completion and policies for evaluation of student progress. Students have a total of 8 years from the date of acceptance to complete their MSW degree. If students have not been registered for courses for a period of 24 months or more and do not have a signed degree plan indicating their plan for continuance, they must re-apply to the program in order to continue towards completion of the degree. At that time, the MSW committee will decide whether previously completed coursework can be applied towards the current degree plan and curriculum requirements. Students who are applying for advanced standing status after a period of inactivity must have a BSW degree within 8 years of their most recent acceptance date. Similarly, if a student was previously accepted as an advanced standing student, but has become inactive, his or her advanced standing status is considered based on the most recent acceptance date.

## TIMELINES FOR DEGREE COMPLETION

Typical timelines for degree plans are as follows:

- Advanced Standing, full-time: 1 year (3 semesters)
- Advanced Standing, part-time: 2 years (6 semesters)
- Regular Standing, full-time: 2 years (5 semesters)
- Regular Standing, part-time: 3 years (9 semesters)
- Dual Degree (MSW/MPA), Advanced Standing: 2 years (6 semesters)
- Dual Degree (MSW/MPA), Regular Standing: 3 years (8 semesters)
- Dual Degree (LAW/MSW), Advanced Standing: 3 years (8-9 semesters)
- Dual Degree (LAW/MSW), Regular Standing: 4 years (11-12 semesters)

Timelines for degree completion are uniform for face-to-face and online delivery options. However, the online MSW program is offered on a part-time basis only.

Students are asked to sign a copy of their designated degree plan upon admission to the program. If they wish to deviate from the outlined degree plan, they must have an alternate degree plan that outlines their plan of completion that is approved and signed by the MSW director in order to continue in the program.

## DEGREE PROGRESS- PHD

The School of Social Work outlines specific timelines for degree completion and policies for evaluation of student progress. The PhD program is offered only as a full time program. Students complete coursework by the end of fall of Year 3 and then complete the comprehensive exam/dissertation proposal and dissertation research process. Once a student has successfully defended their dissertation proposal and is admitted to candidacy, the student has no more than five years to complete the doctoral program. Most students are advised to complete their dissertation by the end of Year 4.

## TIMELINES FOR DEGREE COMPLETION

Typical timelines for PhD program completion are as follows:

- Year 1- 10 credit hours of course work fall and spring semesters; 20 hours per week GTA/GRA for funded students
- Year 2- 9 credit hours of course work fall and spring semesters; 20 hours per week GTA/GRA for funded students
- Year 3- 3 credit online course in fall semester; Comprehensive exam/dissertation proposal defense late fall/early spring; 20 hours per week GTA/GRA for funded students
- Year 4- Dissertation- complete and defend when ready

## EVALUATION OF STUDENTS

Students receive a written evaluation of their progress in the program yearly from their academic advisor. These evaluations summarize the student's academic performance, progress in field education, professionalism and interpersonal skills, and progress towards completion of the degree plan. These evaluations are reviewed with students and kept on file at the School of Social Work.

For times when a student's academic performance falls below the threshold, or when there are concerns regarding academic dishonesty or unprofessionalism/policy violations at the school or field placement site, the MSW program has a detailed review and remediation procedure that is clearly outlined in the MSW Student Handbook.

For additional information, please see the MSW and PhD Student Handbooks, which can be downloaded at the SSW Webpage (<https://socialwork.wvu.edu/students/msw/>).

### MSW Requirements

- **Benchmarks:** In addition to maintaining GPA requirements, students must pass all field courses, adhere to academic standards, and demonstrate professional ethics consistent with social work practice (see MSW Handbook for details).
- **Additional Requirements:**
  - Regular Standing students are required to complete two community-based field internships (generalist, 6 credits; advanced; 9 credits)
  - Advanced Standing students are required to complete one advanced community-based field internship (9 credits).

### PhD Requirements

- **Benchmarks:** In addition to maintaining GPA requirements, students must adhere to academic standards and demonstrate professional ethics consistent with social work practice (see PhD Handbook for details). See above timeline of progress toward degree. The majority of coursework is completed by the end of the spring of Year 2 (with exception of the integrated research seminar completed in fall of Year 3). The comprehensive exam in the format of a dissertation proposal (written and oral components) is expected to occur near the end of fall semesters or beginning of spring semester of Year 3. Once the dissertation committee has approved the written proposal and oral defense, the committee will recommend that the student should be advanced to candidacy. Most students are expected to complete the dissertation process and defend by the end of Year 4.
- **Additional Requirements:** The WVU guidelines state that once a student is admitted to candidacy, the student has no more than five years to complete the doctoral program. If a student needs more than five years to complete the doctoral program following candidacy, the PhD Program Committee must approve an extension and follow relevant university guidelines.

## DOCTOR OF JURISPRUDENCE/MASTER OF SOCIAL WORK

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the College of Law's JD and Eberly's MSW program in accordance with each college's standard admission procedure.
- For additional details and requirements for each program, please visit the Law page (<http://catalog.wvu.edu/graduate/law/>) or the Social Work page (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/socialwork/>).
- Students will develop a combined plan of study with their graduate advisers in Social Work and in the College of Law.
- Only courses included in an approved plan of study will satisfy graduation requirements.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Students must meet the academic standards of both degree programs.

Code	Title	Hours
<b>Master of Social Work Regular Standing</b>		
SOWK Coursework		54
SOWK 513	Research Methods	
SOWK 520	Human Behavior in the Social Environment	
SOWK 530	Professional Identity and Social Justice	
SOWK 531	Social Welfare Policy and Programs	
SOWK 540	Generalist Practice 1: Individuals, Families, and Groups	
SOWK 541	Generalist Practice 2: Rural Community Macro Practice	
SOWK 581	Generalist Field Experience	
SOWK 616	Evaluation Research in Social Work	

SOWK 633	Social Policy Analysis, Advocacy, and Deliberation	
SOWK 643	Assessment and Diagnosis	
SOWK 649	Practice with Individuals	
SOWK 650	Practice with Families and Groups	
SOWK 654	Organizational Administration and Leadership	
SOWK 656	Financial Management and Grant Writing	
SOWK 682	Advanced Field Experience	
LAW Electives (share 6 credits)		
<b>Jurisprudence Doctorate</b>		
LAW Coursework		38
LAW 641	Introduction to Legal Research	
LAW 700	Legal Analysis, Research and Writing 1	
LAW 703	Contracts 1	
LAW 705	Criminal Law	
LAW 707	Property	
LAW 709	Torts 1	
LAW 711	Legal Analysis, Research and Writing 2	
LAW 725	Constitutional Law 1	
LAW 793 Civil Procedure		
LAW 793 Introduction to the Profession		
LAW 793 Legal Writing Intensive		
LAW 715	Appellate Advocacy	
LAW 742	Professional Responsibility	
Seminar		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives		39
SOWK Electives (share 6 credits)		
SOWK 626	Child Mental Health: Promotion, Prevention, and Treatment	
SOWK 627	Clinical Practice in Integrated Healthcare	
SOWK 675	Addiction and Social Work Practice	
SOWK 680	Child Welfare Continuum	
GERO 645	Fundamentals of Gerontology	
GERO 681	Rural Gerontology	
Total Hours		142

Code	Title	Hours
<b>Master of Social Work Advanced Standing</b>		
SOWK Coursework		30
SOWK 616	Evaluation Research in Social Work	
SOWK 633	Social Policy Analysis, Advocacy, and Deliberation	
SOWK 643	Assessment and Diagnosis	
SOWK 649	Practice with Individuals	
SOWK 650	Practice with Families and Groups	
SOWK 654	Organizational Administration and Leadership	
SOWK 656	Financial Management and Grant Writing	
SOWK 682	Advanced Field Experience	
LAW Electives (share 6 credits)		
<b>Jurisprudence Doctorate</b>		
LAW Coursework		38
LAW 641	Introduction to Legal Research	

LAW 700	Legal Analysis, Research and Writing 1	
LAW 703	Contracts 1	
LAW 705	Criminal Law	
LAW 707	Property	
LAW 709	Torts 1	
LAW 711	Legal Analysis, Research and Writing 2	
LAW 725	Constitutional Law 1	
LAW 793 Civil Procedure		
LAW 793 Introduction to the Profession		
LAW 793 Legal Writing Intensive		
LAW 715	Appellate Advocacy	
LAW 742	Professional Responsibility	
Seminar (any LAW 688, 689, or 796 course)		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives		39
SOWK Electives (share 6 credits)		
SOWK 626	Child Mental Health: Promotion, Prevention, and Treatment	
SOWK 627	Clinical Practice in Integrated Healthcare	
SOWK 675	Addiction and Social Work Practice	
SOWK 680	Child Welfare Continuum	
GERO 645	Fundamentals of Gerontology	
GERO 681	Rural Gerontology	
Total Hours		118

## Social Work, M.S.W.

### Degree Requirements

- **Standing:**
  - Regular Standing: includes students who have completed a baccalaureate degree from a regionally accredited university in a discipline other than Social Work. Regular Standing students can complete their degree on a full-time or part-time basis. Part-time students have the option of completing their degree on campus or online.
  - Advanced Standing: reserved for students who have earned a Council on Social Work Education accredited baccalaureate degree in Social Work within the past 8 years. Advanced standing students can complete their degree on a full-time or part-time basis. Part-time students have the option of completing their degree on campus or online.
- **Credit Hours:**
  - Regular Standing students are required to complete a minimum of 60 graduate credit hours in Social Work and Gerontology at the 500 and 600 level.
  - Advanced Standing students are required to complete a minimum of 36 graduate credit hours in Social Work and Gerontology at the 600 level.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75, and a GPA of 3.00 in all courses required for the Social Work degree plan.
- **Graduation Requirement:** Students must complete required coursework and maintain the minimum GPA.
- **Benchmarks:** For details, go to the Social Work Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/socialwork/#degreeprogress>)
- **Dual M.S.W/M.P.A.:** A dual degree option resulting in the master of social work (M.S.W.) and master of public administration (M.P.A.) is available through the School of Social Work and the Department of Public Administration.

### Curriculum Requirements: Regular Standing

Code	Title	Hours
<b>Generalist Courses</b>		<b>24</b>
SOWK 513	Research Methods	
SOWK 520	Human Behavior in the Social Environment	

SOWK 540	Generalist Practice 1: Individuals, Families, and Groups
SOWK 531	Social Welfare Policy and Programs
SOWK 530	Professional Identity and Social Justice
SOWK 541	Generalist Practice 2: Rural Community Macro Practice
SOWK 581	Generalist Field Experience
<b>Advanced Courses</b>	
SOWK 616	Evaluation Research in Social Work
SOWK 633	Social Policy Analysis, Advocacy, and Deliberation
SOWK 643	Assessment and Diagnosis
SOWK 649	Practice with Individuals
SOWK 650	Practice with Families and Groups
SOWK 654	Organizational Administration and Leadership
SOWK 656	Financial Management and Grant Writing
SOWK 682	Advanced Field Experience
<b>Electives</b>	
Select two of the following:	
SOWK 626	Child Mental Health: Promotion, Prevention, and Treatment
SOWK 627	Clinical Practice in Integrated Healthcare
SOWK 675	Addiction and Social Work Practice
SOWK 680	Child Welfare Continuum
GERO 645	Fundamentals of Gerontology
GERO 681	Rural Gerontology
Total Hours	

30

6

60

## Curriculum Requirements: Advanced Standing

Code	Title	Hours
<b>Advanced Courses</b>		<b>30</b>
SOWK 616	Evaluation Research in Social Work	
SOWK 633	Social Policy Analysis, Advocacy, and Deliberation	
SOWK 643	Assessment and Diagnosis	
SOWK 649	Practice with Individuals	
SOWK 650	Practice with Families and Groups	
SOWK 654	Organizational Administration and Leadership	
SOWK 656	Financial Management and Grant Writing	
SOWK 682	Advanced Field Experience	
<b>Electives</b>		<b>6</b>
Select two of the following:		
SOWK 626	Child Mental Health: Promotion, Prevention, and Treatment	
SOWK 627	Clinical Practice in Integrated Healthcare	
SOWK 675	Addiction and Social Work Practice	
SOWK 680	Child Welfare Continuum	
GERO 645	Fundamentals of Gerontology	
GERO 681	Rural Gerontology	
Total Hours		36

## SUGGESTED PLAN OF STUDY: REGULAR STANDING

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
SOWK 520		3 SOWK 513		3 SOWK 643	3
SOWK 530		3 SOWK 531		3 SOWK 656	3
SOWK 540		3 SOWK 541		3 SOWK Elective 1	3

SOWK 581		3 SOWK 581		3	
		12		12	9
<b>Second Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
SOWK 650		3 SOWK 616		3	
SOWK 633		3 SOWK 654		3	
SOWK 682		5 SOWK 682		4	
SOWK 649		3 SOWK Elective 2		3	
		14		13	

Total credit hours: 60

**SUGGESTED PLAN OF STUDY: PART-TIME REGULAR STANDING**

<b>First Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
SOWK 530		3 SOWK 513		3 SOWK 581	3
SOWK 540		3 SOWK 531		3 SOWK Elective 1	3
		6		6	6
<b>Second Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
SOWK 520		3 SOWK 541		3 SOWK 643	3
SOWK 581		3 SOWK 654		3 SOWK Elective 2	3
SOWK 633		3			
		9		6	6
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
SOWK 650		3 SOWK 616		3 SOWK 682	3
SOWK 682		3 SOWK 682		3 SOWK 656	3
SOWK 649		3			
		9		6	6

Total credit hours: 60

**SUGGESTED PLAN OF STUDY: ADVANCED STANDING**

<b>First Year</b>					
				<b>Summer</b>	<b>Hours</b>
				SOWK 643	3
				SOWK Elective 1	3
				SOWK 656	3
				9	
<b>Second Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
SOWK 633		3 SOWK 616		3	
SOWK 650		3 SOWK 682		4	
SOWK 682		5 SOWK 654		3	
SOWK 649		3 SOWK Elective 2		3	
		14		13	

Total credit hours: 36

**SUGGESTED PLAN OF STUDY: PART-TIME ADVANCED STANDING****First Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
SOWK 633		3 SOWK 654		3 SOWK 643	3
SOWK 649		3 SOWK Elective 1		3 SOWK Elective 2	3
		6		6	6

**Second Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
SOWK 650		3 SOWK 616		3 SOWK 682	3
SOWK 682		3 SOWK 682		3 SOWK 656	3
		6		6	6

Total credit hours: 36

**DOCTOR OF JURISPRUDENCE/MASTER OF SOCIAL WORK**

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the College of Law's JD and Eberly's MSW program in accordance with each college's standard admission procedure.
- For additional details and requirements for each program, please visit the Law page (<http://catalog.wvu.edu/graduate/law/>) or the Social Work page (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/socialwork/>).
- Students will develop a combined plan of study with their graduate advisers in Social Work and in the College of Law.
- Only courses included in an approved plan of study will satisfy graduation requirements.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Students must meet the academic standards of both degree programs.

<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Master of Social Work Regular Standing</b>		
SOWK Coursework		54
SOWK 513	Research Methods	
SOWK 520	Human Behavior in the Social Environment	
SOWK 530	Professional Identity and Social Justice	
SOWK 531	Social Welfare Policy and Programs	
SOWK 540	Generalist Practice 1: Individuals, Families, and Groups	
SOWK 541	Generalist Practice 2: Rural Community Macro Practice	
SOWK 581	Generalist Field Experience	
SOWK 616	Evaluation Research in Social Work	
SOWK 633	Social Policy Analysis, Advocacy, and Deliberation	
SOWK 643	Assessment and Diagnosis	
SOWK 649	Practice with Individuals	
SOWK 650	Practice with Families and Groups	
SOWK 654	Organizational Administration and Leadership	
SOWK 656	Financial Management and Grant Writing	
SOWK 682	Advanced Field Experience	
LAW Electives (share 6 credits)		
<b>Jurisprudence Doctorate</b>		
LAW Coursework		38
LAW 641	Introduction to Legal Research	
LAW 700	Legal Analysis, Research and Writing 1	
LAW 703	Contracts 1	
LAW 705	Criminal Law	
LAW 707	Property	
LAW 709	Torts 1	
LAW 711	Legal Analysis, Research and Writing 2	
LAW 725	Constitutional Law 1	

LAW 793 Civil Procedure		
LAW 793 Introduction to the Profession		
LAW 793 Legal Writing Intensive		
LAW 715	Appellate Advocacy	
LAW 742	Professional Responsibility	
Seminar		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives		39
SOWK Electives (share 6 credits)		
SOWK 626	Child Mental Health: Promotion, Prevention, and Treatment	
SOWK 627	Clinical Practice in Integrated Healthcare	
SOWK 675	Addiction and Social Work Practice	
SOWK 680	Child Welfare Continuum	
GERO 645	Fundamentals of Gerontology	
GERO 681	Rural Gerontology	
Total Hours		142

Code	Title	Hours
<b>Master of Social Work Advanced Standing</b>		
SOWK Coursework		30
SOWK 616	Evaluation Research in Social Work	
SOWK 633	Social Policy Analysis, Advocacy, and Deliberation	
SOWK 643	Assessment and Diagnosis	
SOWK 649	Practice with Individuals	
SOWK 650	Practice with Families and Groups	
SOWK 654	Organizational Administration and Leadership	
SOWK 656	Financial Management and Grant Writing	
SOWK 682	Advanced Field Experience	
LAW Electives (share 6 credits)		
<b>Jurisprudence Doctorate</b>		
LAW Coursework		38
LAW 641	Introduction to Legal Research	
LAW 700	Legal Analysis, Research and Writing 1	
LAW 703	Contracts 1	
LAW 705	Criminal Law	
LAW 707	Property	
LAW 709	Torts 1	
LAW 711	Legal Analysis, Research and Writing 2	
LAW 725	Constitutional Law 1	
LAW 793 Civil Procedure		
LAW 793 Introduction to the Profession		
LAW 793 Legal Writing Intensive		
LAW 715	Appellate Advocacy	
LAW 742	Professional Responsibility	
Seminar (any LAW 688, 689, or 796 course)		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives		39
SOWK Electives (share 6 credits)		



SOWK 626	Child Mental Health: Promotion, Prevention, and Treatment
SOWK 627	Clinical Practice in Integrated Healthcare
SOWK 675	Addiction and Social Work Practice
SOWK 680	Child Welfare Continuum
GERO 645	Fundamentals of Gerontology
GERO 681	Rural Gerontology

Total Hours

118

## Major Learning Outcomes

### SOCIAL WORK

The mission of the MSW program is to provide students with skills in direct practice with individuals, families, and groups, as well as program and agency administration, community development, and macro-level practice. In addition, students are trained in how to utilize these skills to foster successful interprofessional practice in a wide variety of settings. Specifically, graduates of the MSW program will be prepared to:

1. Formulate and implement integrated service delivery models appropriate to advanced practice with diverse client populations at multi-system levels.
2. Design and conduct brief and/or on-going assessment and intervention methods consistent with integrated systems and context of practice.
3. Construct an integrated evidence-informed theoretical framework appropriate to the level and context of practice situations.
4. Organize collaboration with other professions to coordinate intervention efforts suitable to the practice situation.
5. Design and conduct collaborative, practice-based evaluation methods and apply findings to improve practice, policy, and/or service delivery effectiveness.

## Social Work, Ph.D.

### Degree Requirements

- **Credit Hours:** The minimum total credits required are 53, with 41 total course credits and a minimum of 12 dissertation research credits.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Graduation Requirements:** In addition to coursework requirements, students must successfully defend their comprehensive exam and dissertation in order to graduate.
- **Comprehensive Examination:** The Comprehensive Exam, in the form of a dissertation proposal (written and oral components), is approved by the student's dissertation committee. The exam (proposal) accesses students' knowledge of their area of study and demonstrates their ability to develop and engage in independent research in this area.
- **Dissertation:** The WVU School of Social Work PhD program will use a three-article dissertation format. the dissertation is a coherent body of work. It will consist of three articles suitable for publication in peer-reviewed journals, an introduction chapter, and a conclusion chapter.
- **Benchmarks:** Please see the degree progress tab.

### Curriculum Requirements

Code	Title	Hours
<b>Core Courses</b>		<b>14</b>
SOWK 731	Philosophy and Theories of Social Sciences	
SOWK 732	Advanced Social Work Practice Theories	
SOWK 750	Advanced Social Policy and Programs	
SOWK 770	Issues in Social Work Education	
SOWK 690	Teaching Practicum	
<b>Research Methods</b>		<b>12</b>
SOWK 735	Advanced Social Work Research Methods	
SOWK 736	Community Focused Research	
SOWK 761	Research Practicum 1	
SOWK 762	Research Practicum 2	
<b>Data Analysis</b>		<b>6</b>
SOWK 741	Statistics & Data Analysis 1	

SOWK 742	Statistics & Data Analysis 2	
<b>Electives</b>		<b>6</b>
With graduate advisor, select a course in a related discipline at the 600 level or above *		
<b>Integrative Research Seminar</b>		<b>3</b>
SOWK 780	Integrative Research Seminar	
<b>Research</b>		<b>12</b>
SOWK 797	Research	
Total Hours		53

\*

Excludes the following: 695, 697, 698, 699, 795, 797, 798, 799

## Major Learning Outcomes

### SOCIAL WORK

- 1.Students will demonstrate expert knowledge in their chosen content area and explain how their work fits within the intellectual landscape of social work, including its relevance to social policy and social justice.
- 2.Students will design and implement independent research that is guided by theory and addresses significant, meaningful, and relevant social work research questions.
- 3.Students will conduct a broad range of methodological and statistical techniques appropriate to the research question(s) posed.
- 4.Students will clearly communicate and disseminate results of their research, both through professional oral presentations and written manuscripts.
- 5.Students will abide by social work values and ethics in the implementation of research and knowledge development.
- 6.Students will demonstrate effective teaching skills, including the implementation of theories of adult learning and instructional strategies that are appropriate for diverse populations and learning styles.

## Sociology

### Degrees Offered

- Master of Arts
- Doctor of Philosophy

### Nature of the Program

The Department of Sociology and Anthropology offers an M.A. and Ph.D. in Sociology. All students entering the program will be enrolled as doctoral students. Students entering the program with a BA/BS will be dually enrolled in the M.A. and Ph.D. programs until they complete the M.A. requirements.

The Ph.D. program is designed for students who are interested in working as professional sociologists in teaching and research. The curriculum emphasizes foundational coursework in sociology, including theory, methods and statistics, as well as courses and independent research in an area related to the department's specializations in:

- crime, law, and deviance;
- inequality, diversity, and equity;
- social psychology and group processes;
- sociology of religion.

The department is strongly committed to teaching, mentoring, and collaborative research with students. Members of the faculty have received major research grants, won national teaching and research awards, published several books and numerous academic articles, and served as the editor or editorial board members of prestigious journals. In many cases, students have worked as research collaborators with faculty and co-authored publications.

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## FACULTY

### PROFESSOR AND CHAIR

- Daniel Renfrew - Ph.D. (Binghamton University)

## PROFESSORS

- Sharon R. Bird - Ph.D. (Washington State University)  
Regular Graduate Faculty; Social Inequality (race/ethnicity/class/gender/LGBTQ+), Workplace equity, Research methods
- Henry H. Brownstein - Ph.D. (Temple University)  
Regular Graduate Faculty; Distinguished Research Professor. Drugs and society, Drug policy, Violence, Qualitative research methods
- Walter S. DeKeseredy - Ph.D. (York University)  
Anna Deane Carlson Endowed Chair of Social Sciences; Regular Graduate Faculty; Violence against women, Critical criminology, Masculinities and crime, Criminology theory
- R. Gregory Dunaway - Ph.D. (University of Cincinnati)  
Regular Graduate Faculty; Criminology
- S. Melissa Latimer - Ph.D. (University of Kentucky)  
Regular Graduate Faculty; Gender/race/ethnicity, Inequality/labor markets/welfare systems
- James J. Nolan, III - Ph.D. (Temple University)  
Regular Graduate Faculty; Criminal justice, Group and social processes
- Karen Weiss - Ph.D. (State University of New York-Stony Brook)  
Regular Graduate Faculty; Criminology, Victimization, Gender/sexuality/culture
- Rachael A. Woldoff - Ph.D. (Ohio State University)  
Regular Graduate Faculty; Community, Crime, Inequality/race/class
- Joshua Woods - Ph.D. (Michigan State University)  
Regular Graduate Faculty; Social psychology, Media, Complex organizations, Sociology of risk

## ASSOCIATE PROFESSORS

- Corey Colyer - Ph.D. (Syracuse University)  
Regular Graduate Faculty; People processing systems, Agencies of social control
- Katie E. Corcoran - Ph.D. (University of Washington)  
Regular Graduate Faculty; Theory, Organizations, Culture, Criminology, Religion, Social networks
- Lisa M. Dilks - Ph.D. (University of South Carolina)  
Regular Graduate Faculty; Social psychology, Group processes, Law and society, Quantitative methods
- Amy Hirshman - Ph.D. (Michigan State University)  
Regular Graduate Faculty; Mesoamerican archaeology, Social complexity, Ceramics
- Jason Manning - Ph.D. (University of Virginia)  
Regular Graduate Faculty; Conflict and social control, Violence, Sociology of knowledge
- Christopher P. Scheitle - Ph.D. (Pennsylvania State University)  
Religion, Science in society, Crime, Organizations
- Jennifer Steele - Ph.D. (Pennsylvania State University)  
Associate Graduate Faculty; Rural Sociology Natural resource sociology, Rural and community development
- Rachel Stein - Ph.D. (University of Akron)  
Regular Graduate Faculty; Criminology, Victimization, Media and crime
- Jesse Wozniak - Ph.D. (University of Minnesota)  
Regular Graduate Faculty; Policing, Criminology, Deviance, State power

## ASSISTANT PROFESSORS

- Enkeshi El-Amin - Ph.D. (University of Tennessee, Knoxville)  
Regular Graduate Faculty; Critical race and racism, Urban Sociology, Community, Black Appalachia
- Aaron C. Foote - Ph.D. (University of Massachusetts, Amherst)  
Regular Graduate Faculty; Urban and environmental sociology, Social movements, Inequality
- Lindsay Kahle Semprevivo - Ph.D. (Virginia Tech)  
Associate Graduate Faculty; Youth inequality, School violence, Sexual orientation and criminology
- Kirsten Younghee Song - Ph.D. (Rutgers University)  
Culture, Transnationalism, Young adulthood, Inequality

## TEACHING INSTRUCTORS

- Daniel Brewster - M.A. (West Virginia University)
- Douglas Sahady - M.A. (California University of Pennsylvania)
- Genesis Snyder - M.A. (Western Michigan University)

## PROFESSORS EMERITI

- Ann L. Paterson - Ph.D. (Michigan State University)
- Ronald C. Althouse - Ph.D. (University of Minnesota)
- Patricia C. Rice - M.A. (Ohio State University)
- Joseph J. Simoni - Ph.D. (University of Notre Dame) Sociology
- William I. Torry - Ph.D. (Columbia University)

## Admissions

### PH.D. IN SOCIOLOGY

The program in Sociology only admits directly to the Ph.D. In addition to WVU's general admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the Doctoral program must have minimum of a 3.0 overall GPA in the prior degree. Students who enter the program with a Bachelor's degree or a non-thesis Master's degree are required to complete the M.A. degree (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/sociologyandanthropology/ma/>) as part of their progress toward the Ph.D. The GRE is not required for admission to this program.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Transcripts from all institutions attended.
- Three letters of recommendation from academic references.
- Curriculum Vitae.
- A statement of purpose (personal statement, approximately one page in length) that addresses the applicant's research interests and how they might add to the graduate program. The statement should also identify faculty members they might work with if they were admitted to the program.
- A writing sample that provides evidence the applicant can synthesize ideas and demonstrate critical thought. The sample might include a senior research paper or sections of a thesis project.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadlines:

- The Sociology program admits students for the Fall semester only.
- Completed applications should be received by January 15<sup>th</sup>.
- Students who apply by the deadline will receive priority consideration for funding.
- Applications may be reviewed past the deadline pending the availability of space.
- Exceptional applicants may be nominated by the Sociology program for competitive University Fellowships. Qualified applicants will be notified if they are nominated. More information on WVU fellowships can be found here (<https://graduateeducation.wvu.edu/finances/fellowships/>).

**For questions, please contact:** [soca@mail.wvu.edu](mailto:soca@mail.wvu.edu)

Certain application requirements may be waived based on a preliminary review of an application by the program.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MA Major Code: 1470

PhD Major Code: 14B8

**For specific information on the following program, please see the link to the right:**

- Sociology, M.A.

**For specific information on the following program, please see the link to the right:**

- Sociology, Ph.D.

## Degree Progress

All students will have a plan of study and will receive, at a minimum, a yearly letter of evaluation.

### MASTERS

In addition to maintaining GPA requirements, full-time students must receive acceptance of their thesis proposal no later than November 20 of the third semester of the M.A. program (see the Sociology Graduate Handbook for details (<https://soca.wvu.edu/students/graduate-students/graduate-handbook/>)).

### DOCTORAL

Comprehensive exams should take place in the last semester of coursework or the first semester following the completion of coursework. Students might complete comprehensive exams and a dissertation proposal defense in the same semester, provided they complete the comprehensive exam process by mid-semester (see the Sociology Graduate Handbook for details (<https://soca.wvu.edu/students/graduate-students/graduate-handbook/>)).

## Sociology, M.A.

### Degree Requirements

- **Credit Hours:** Students must complete 32-35 hours of coursework. This includes 17 hours of required coursework in SOC, 6 hours of thesis, and 9 hours of electives in SOC. Further, all students on funded graduate teaching assistantships must complete SOC 710, Teaching Sociology.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Graduation Requirement:** In addition to completing required coursework, students must complete a thesis following the journal article model. This is a research report intended for publication in a peer-reviewed academic journal and presentation at a professional sociology conference.
- **Benchmarks:** For details, go to the Sociology Degree Progress tab (p. 333).

### Curriculum Requirements

Code	Title	Hours
<b>Required Core Coursework</b>		
SOC 600	Becoming a Sociologist	1
SOC 601	Professional Research/Writing	1
SOC 610	Advanced General Sociology	3
SOC 615	Sociological Data Analysis and Interpretation 1	3
SOC 616	Sociological Data Analysis and Interpretation 2	3
SOC 620	Sociological Research Methods	3
SOC 697	Research	6
SOC 710	Teaching Sociology *	3
SOC 730	Sociological Explanation	3
<b>Electives **</b>		<b>9</b>
Total Hours		35

\*

See graduate advisor for details.

\*\*

Includes SOC courses at the 600 or 700 level. Excludes the following: 690, 695, 697, 790, 795, 797.

## Major Learning Outcomes

### SOCIOLOGY

- Proficiently communicate concepts within the field of sociology orally and in writing
- Apply research skills to analyze and/or explore the student's subject area
- Explain the role of research in addressing questions, issues, and problems pertaining to social issues
- Produce original research to evaluate social issues using sociological theories and methodological skills
- Explain professional practice and ethics as they relate to sociology
- Critically analyze and evaluate the literature in the student's subject area

# Sociology, Ph.D.

## Degree Requirements

- **Credit Hours:** Students must complete 47-59 credit hours in the doctoral program. In addition to the requirements shown below, students who enter the PhD program with a BA or non-thesis MA must complete 6 thesis hours. Further, all students on funded graduate teaching assistantships must complete SOC 710, Teaching Sociology.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the degree.
- **Graduation Requirements:** In addition to completing required coursework, students must pass written and oral comprehensive examinations and successfully defend a dissertation. Students can choose from two dissertation models. They can follow the traditional model, which takes the form and substance of a scholarly monograph, or the manuscript model, which consists of three interrelated papers on a single topic.
- **Comprehensive Examination:** The Comprehensive Exam has two parts, the written and an oral. The Written Examination is intended to assess students' broad competencies in a specialized area of sociology with specific focus on understanding sociological theory and methods as they relate to the student's chosen specialization. The exams also test students' writing skills and their ability to think creatively and carry out independent research. In most cases, the student will be asked to give a brief summary of their written comprehensive exam work for the Oral Exam, but the primary emphasis is on a question and answer session.
- **Dissertation:** The dissertation requirement ensures that students have the ability to carry out a major independent research project. Students can choose from two dissertation models. They can follow the traditional model, which takes the form and substance of a scholarly monograph, or the manuscript model, which consists of three interrelated papers on a single topic. The quality and contribution of each paper should reach the level of articles published in peer-reviewed scholarly journals. The manuscript model must also include an introductory chapter that clarifies the dissertation theme and situates the work as a whole in the sociological literature, as well as a concluding chapter that synthesizes and integrates the three papers.
- **Benchmarks:** For details, go to the Sociology Degree Progress tab (p. 333).

## Curriculum Requirements

Code	Title	Hours
<b>Required Core Coursework</b>		
SOC 600	Becoming a Sociologist	1
SOC 601	Professional Research/Writing	1
SOC 610	Advanced General Sociology	3
SOC 615	Sociological Data Analysis and Interpretation 1	3
SOC 616	Sociological Data Analysis and Interpretation 2	3
SOC 620	Sociological Research Methods	3
SOC 710	Teaching Sociology *	3
SOC 730	Sociological Explanation	3
<b>Doctoral Required Coursework</b>		
SOC 721	Qualitative Methods	3
Specialized Elective Course		3
Select One of the Following:		
SOC 740	Theories of Crime and Deviance	
SOC 750	Systemic Inequalities	
SOC 770	Sociology of Religion	
SOC 780	Individual and Society	
<b>Dissertation</b>		<b>9</b>
SOC 797	Research	
<b>Electives **</b>		<b>15</b>
Total Hours		50

\*

See graduate advisor for details.

\*\*

Includes SOC courses at the 600 or 700 level. Excludes the following: 695, 697, 795, 797.

## Major Learning Outcomes

### SOCIOLOGY

Students graduating with a Ph.D. in Sociology will be able to:

1. Effectively communicate, orally and in writing, the current state of knowledge, research, and needs in the field of sociology
2. Conduct independent and original research of publishable quality
3. Develop a research program to evaluate social issues using sociological theories and methodological skills
4. Critically analyze the canonical literature in one of the four research specializations
5. Explain professional practice and ethics as they relate to sociology

## Spanish

### Certificate Offered

- Spanish

### Nature of the Program

The Graduate Certificate in Spanish is a 12-hour program that builds the knowledge of the Spanish language and Hispanic literature and culture. The students who complete the certificate will be able to apply the knowledge in a variety of educational and professional contexts. Individuals with an undergraduate degree in Spanish or a related degree with extensive curriculum in Spanish are encouraged to apply.

### Admissions

The Graduate Certificate in Spanish is a 12-hour program that builds the knowledge of the Spanish language and Hispanic literature and culture. The students who complete the certificate will be able to apply the knowledge in a variety of educational and professional contexts. Individuals with an undergraduate degree in Spanish or a related degree with extensive curriculum in Spanish are encouraged to apply. Applicants to the certificate program must have a minimum GPA of 3.0 (cumulative, as well as in Spanish courses), as well as evidence of a Linguistics course on their transcript. The GRE is not required for admission to this program.

#### List of Admission Requirements:

- Curriculum Vitae or Resume.
- A one page (300 word) personal statement that describes the applicant's interest in the certificate program.
- An academic writing sample in Spanish, which may be a 10-15 page paper previously submitted for an academic course.
- A 3-minute self-introduction speech recording in Spanish.
- One letter of recommendation from an academic reference.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).
- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

#### Application Deadline:

- For admission to the fall semester, completed applications must be received by February 1st.
- For admission to the spring semester, completed applications must be received by October 1st.

For questions, please contact: [WorldLangInfo@mail.wvu.edu](mailto:WorldLangInfo@mail.wvu.edu)

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Certificate Code: CG61

## Graduate Certificate in Spanish

### CERTIFICATE CODE - CG61

Graduation Requirement: Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the certificate.

Code	Title	Hours
<b>CORE COURSES</b>		<b>6</b>
Choose two of the following courses:		
LANG 621	Teaching Foreign Language in College	
LING 501	Structure of Spanish	
LING 620	Spanish Prosody	
SPAN 521	Dialectology and Sociolinguistics	
<b>ELECTIVES</b>		<b>6</b>
Choose two of the following courses:		
SPAN 611	Literary Criticism	
SPAN 631	Latin American Short Story	
SPAN 637	Early Spanish-American Literature	
SPAN 638	Mexican Literature	
SPAN 640	19th Century Latin American Literature	
SPAN 641	20th- and 21st-Century Latin American Literature	
SPAN 643	Contemporary Spanish Literature	
SPAN 651	Medieval and Golden Age	
SPAN 653	Eighteenth and Nineteenth Century Literature	
Total Hours		12

## Certificate Learning Outcomes

### SPANISH

Students completing this graduate certificate will be able to:

1. Explain basic concepts in phonology, morphology, syntax and dialectal variation of the Spanish language, and analyze the relevant data from Spanish using these tools.
2. Identify, describe, and evaluate major historical, literary, cultural and social contexts related to the Hispanic world.

## Teaching English to Speakers of Other Languages

### Degree Offered

- Master of Arts
- Graduate Certificate

### Nature of the Program

The M.A. program in TESOL prepares teachers to teach English as a second language in an English-speaking setting as well as English as a foreign language in countries around the world. The program includes 30 hours of coursework focusing on language, linguistics, literature and culture in conjunction with different aspects of teaching English, while balancing both the theoretical and practical aspects of TESOL. The program may be completed either by taking comprehensive exams, or by writing and defending a Master's thesis. The program is intended for students who seek specialized knowledge in order to pursue an English as a second language teaching career, as well as for students who plan to prepare for doctoral studies in applied linguistics.

### Available Financial Aid

Graduate teaching assistantships are available to students admitted to any of our three M.A. programs for teaching different languages, including Arabic, Chinese, French, German, English as a Second Language, Italian, Japanese, Russian, and Spanish. The assistantships carry full university tuition remission and a nine-month stipend (August–May); there are also limited opportunities to teach during the university's summer session.

In addition to the graduate teaching assistantships, a limited number of meritorious tuition waiver awards are sometimes available from the Eberly College of Arts and Sciences through the department. These awards are based on academic performance and financial need.



## Graduate Teaching Assistants

The department values the contributions made by our graduate assistants and strives to help them become effective teachers. Graduate assistants normally teach two courses (six class-hours per week). They work under the direct supervision of the course coordinator in the language area, but they are fully responsible for their courses (including evaluating their students' work). The coordinator will conduct orientations and organizational meetings with graduate assistants and provide course materials (such as syllabi). In addition, the coordinator will periodically observe individual classes in order to assess the graduate assistants' performance and to provide encouragement and assistance.

All graduate teaching assistants must register for one of our language teaching methods classes (LANG 421, LANG 521, or LANG 621, depending on the language they are teaching). In addition, graduate assistants must register for LANG 690 each semester of employment. Students who have already received an M.A. in World Languages, Literatures, and Linguistics from West Virginia University may be ineligible for an assistantship in this department.

## Additional Points of Information

### ADVISING

All graduate students will have a primary advisor (to be assigned by the chairperson). Students should consult with their advisor when they register for courses or add and/or drop courses. In addition, the Associate Chair of Graduate Studies is available to answer questions regarding the degree program, requirements, comprehensive examinations, graduation, etc. Students may consult with the chairperson regarding departmental matters.

### STUDY ABROAD OPPORTUNITIES FOR GRADUATE STUDENTS

Qualified teaching assistants in French may compete for the Marguerite Eynard McBride Award, which funds an academic year in France. Year-long exchange programs for graduate students are also in place for France and Spain. The department also sponsors study abroad during the summers in Canada, China, France, Germany, Italy, Japan, Jordan, Mexico, Spain, and Taiwan that graduate students may participate in if they meet the program's requirements. Grants are available on a competitive basis through the department and through the Office of International Programs to assist students who wish to study abroad.

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## FACULTY

### CHAIR

- Amy S. Thompson - Ph.D. (Michigan State University)  
Applied Linguistics

### ASSOCIATE CHAIRS

- Sandra Stjepanovi# - Ph.D. (University of Connecticut)  
Graduate Studies, Linguistics, Syntax, Psycholinguistics, Semantics
- Pablo Garcia Loaeza - Ph.D. (Indiana University Bloomington)  
Undergraduate Studies, Spanish Language, Latin American Colonial Literature

### PROFESSORS

- Daniel Ferreras - Ph.D. (Michigan State University)  
French and Spanish, Comparative Romance Literature, French/Spanish 19th and 20th Century Novel, Theory of the Fantastic
- Pablo Garcia Loaeza - Ph.D. (Indiana University Bloomington)  
Spanish Language, Latin American Colonial Literature
- Valérie Lastinger - Ph.D. (University of Georgia)  
French, 18th-century French Literature, French Women Writers
- Amy S. Thompson - Ph.D. (Michigan State University)  
Applied Linguistics

### ASSOCIATE PROFESSORS

- Manal AlNatour - Ph.D. (University of Arkansas)  
Arabic Studies, Comparative Literature and Cultural Studies
- Susan Braidi - Ph.D. (University of Delaware)  
ESL/Linguistics, Applied Linguistics, Second Language Acquisition, Syntax
- Cynthia Chalupa - Ph.D. (Ohio State University)  
Fin de Siècle German and Austrian Literature, Poetry, Foreign Language Pedagogy
- Deborah Janson - Ph.D. (University of California)  
German, 18th-21st-century German Literature, Enlightenment, Romanticism, GDR and Post-Wende Literature, Ecofeminism
- Jonah Katz - Ph.D. (Massachusetts Institute of Technology)  
Phonetics, Phonology, Theoretical and Experimental Linguistics, Music Cognition

- Tania de Miguel Magro - Ph.D. (The State University of New York, Stony Brook)  
Spanish Literature and Culture, Spanish Language, Spanish Golden Age Literature
- Sergio Robles Puente - Ph.D. (University of Southern California)  
Spanish Phonetics, Phonology, and Sociolinguistics
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)  
Linguistics, Syntax, Psycholinguistics, Semantics
- Ching-Hsuan Wu - Ph.D. (The Ohio State University)  
Chinese, Applied Linguistics

## **ASSISTANT PROFESSORS**

- William Justin Morgan - Ph.D. (University of Alabama)  
Spanish, Applied Linguistics
- Nicole Tracy-Ventura - Ph.D. (Northern Arizona University)  
Applied Linguistics
- Sonia Zarco-Real - Ph.D. (University of Connecticut)  
Peninsular literature and Hispanic transatlantic studies

## **TEACHING PROFESSORS**

- Lisa Di Bartolomeo - Ph.D. (University of North Carolina, Chapel Hill)  
Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema, Science Fiction, the Holocaust

## **TEACHING ASSOCIATE PROFESSORS**

- Annastella Vester - Ph.D. (University of California, Los Angeles)  
Italian, Contemporary Italian Literature, 18th and 19th-century Italian

## **TEACHING ASSISTANT PROFESSORS**

- Heiko ter Haseborg - Ph.D. (West Virginia University)  
Education, Applied Linguistics
- Yilin Liao-Carlson - Ph.D. (Purdue University)  
Chinese
- Rafael Osuna Montanez - Ph.D. (University of Connecticut)  
Spanish

## **TEACHING INSTRUCTORS**

- Yumiko Adachi - M.A. (University of Wisconsin-Madison)  
Japanese Linguistics
- Karen Allen - M.A. (West Virginia University)  
ESL
- Livia Cascao - M.A. (West Virginia University)  
ESL
- Lindsey DeBolt - M.A. (West Virginia University)  
ESL
- Tracy Dingess - M.A. (West Virginia University)  
ESL
- Arelana Mago - M.A. (University of Pittsburgh)  
Spanish
- Beatrice Malvisi - M.A. (University of Pittsburgh)  
Italian
- Lindsei Pereira da Silva - M.A. (West Virginia University)  
ESL
- Jennifer Simpson - M.A. (West Virginia University)  
ESL
- Kristen Williams - M.A. (West Virginia University)  
ESL

## **PROFESSORS EMERITI**

- María Amores - Ph.D. (Penn State University)  
Spanish, Foreign Language Acquisition

- Sandra Dixon - Ph.D. (Brown University)  
Spanish, Spanish American Literature, Brazilian Literature)
- Ahmed Fakhri - Ph.D. (University of Michigan)  
ESL/Linguistics, Second Language Acquisition, Applied Linguistics, Discourse Analysis
- Pablo González - Ph.D. (University Complutense de Madrid)  
Spanish American Literature and Culture
- Michael Lastinger - Ph.D. (University of Georgia)  
French, 19th Century French Literature, Critical Theory
- Kathleen McNerney - Ph.D. (Universidad Nacional Autonoma de Mexico)  
Spanish, Catalan Language and Literature, Spanish Literature and Culture, Women Writers

## Admissions

The Department of World Languages, Literatures, and Linguistics offers both an M.A. program and a graduate certificate in Teaching English to Speakers of Other Languages (TESOL). The GRE is not required for admission to this program.

- The M.A. program in TESOL is a 30-hour program that prepares teachers to teach English as a second language in an English-speaking setting, as well as English as a foreign language in countries around the world.
- The Graduate Certificate in TESOL is a 12-hour program designed for students interested in gaining foundational knowledge in second language acquisition theory and its relationship to language teaching and pedagogy. While the Certificate integrates well with our M.A. program in Linguistics, it also opens the door for students in other graduate fields that intersect with the study of TESOL (e.g., English, Education, Speech Pathology, and others) to enhance their graduate education. Additionally, it may be of interest to members of the community, such as K-12 teachers, who need continuing education credits or who are interested in earning additional qualifications, or to students who would like to teach English overseas.

## M.A. IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL)

In addition to the university requirements for admission (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>), applicants to the master's program must have a minimum undergraduate GPA of 3.0 (cumulative as well as within the major) and should possess an undergraduate degree in Linguistics (or an acceptable related area). Admission to our M.A. program is competitive.

## GRADUATE CERTIFICATE TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL)

To be considered for admission to the Certificate, applicants must have a minimum cumulative GPA of 3.00 in their most recent degree program, as well as evidence of an introductory Linguistics course on their transcript.

### List of Admission Requirements for both programs:

- See the steps to apply for admissions and access the application here. (<https://graduateadmissions.wvu.edu/how-to-apply/>)
- All prior transcripts.
- Three letters of recommendation from academic references for the M.A., one for the certificate. Letters of recommendation should be from a professor who knows and can comment on the applicant's academic potential.
- Resume.
- A personal statement of 300-word discussing the applicant's academic background, past accomplishments, reasons for selecting this program and how it relates to future goals.
- An academic writing sample in English. The sample may be a paper previously submitted for an academic course. In general, it should be 10-15 pages, although longer submissions are also welcome.

### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>)
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>); **please note** that admission the TESOL program requires at least a 92 on the TOEFL, 6.5 on IELTS, or 115 on Duolingo, which is higher than the other stated requirements
- Language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

### Application Deadlines:

- For admission to the fall semester, completed applications must be received by February 1<sup>st</sup>
- For admission to the spring semester, completed applications must be received by October 1<sup>st</sup>

Certain application requirements may be waived based on a preliminary review of an application by the program.

### Graduate Teaching Assistantships

Students applying for fall admission to the M.A. program may be considered for a teaching assistantship. Interested applicants should fill out the WLLL TA Application (<https://worldlanguages.wvu.edu/files/d/fff42445-0e06-43d1-9c73-b479347025ad/wlll-ta-application-with-personal-statement.pdf>) and upload it, along with supporting documents, as part of the personal statement in the graduate application. Applicants will first be considered for admission to the program. If admitted, they will be considered for an assistantship. Applicants who wish to be considered for an assistantship should submit a completed application by February 1<sup>st</sup>. The department does not normally award assistantships to start in a Spring semester. Students who are admitted in the spring semester and would like to be considered for an assistantship to start the following Fall, can fill out the WLLL TA application and email it to the Associate Chair of Graduate Studies by February 1<sup>st</sup>.

For questions, please contact: [WorldLangInfo@mail.wvu.edu](mailto:WorldLangInfo@mail.wvu.edu)

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

M.A. Major Code: 14D8

Certificate Code: CG62

For specific information on the following program, please see the link to the right:

- Teaching English to Speakers of Other Languages, M.A.

### Departmental Requirements for the B.A. in Chinese Studies

- Capstone Requirement:** The university requires the successful completion of a Capstone course. Chinese Studies majors complete CHIN 496.
- Writing and Communication Skills Requirement:** The Chinese Studies Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- Calculation of GPA in the Major:** Chinese Studies majors must achieve a minimum grade point average of 2.25 for graduation and in Chinese Studies Major Requirements.
- Residency Requirements:** Students completing a major in Chinese Studies at WVU must fulfill a residency requirement by completing at least fifteen credit hours above 204 on campus in their language/area of study, excluding courses numbered 490 and 491, and courses obtained through credit by examination.
- Benchmark Expectations:** For details, go to the Chinese Studies Degree Progress tab ([http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/chinese\\_studies/#degreeprogresstext](http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/chinese_studies/#degreeprogresstext)).

### Curriculum Requirements

Code	Title	Hours
	University Requirements	66
	ECAS B.A. Requirements	9
	Chinese Studies Major Requirements	33
	TESOL Degree Requirements	30
	Total Hours	138

### University Requirements

Code	Title	Hours
	General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
	Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8	36
LANG 191	First-Year Seminar	1
	General Electives	29
	Total Hours	66

### ECAS Bachelor of Arts Requirements

Code	Title	Hours
	Fine Arts Requirement	
	Foreign Language	9

## Global Studies and Diversity Requirement

Total Hours

9

## Chinese Studies Major Requirements

Code	Title	Hours
<b>Language Courses</b>		<b>15</b>
CHIN 204	Second Year Chinese 2	
Select four of the following courses:		
CHIN 301	Third Year Chinese 1	
CHIN 302	Third Year Chinese 2	
CHIN 303	Readings in Modern Chinese 1	
CHIN 304	Readings in Modern Chinese 2	
CHIN 461	Business Chinese	
CHIN 465	Chinese Media	
CHIN 471	Intensive Mandarin Chinese 2	
CHIN 495	Independent Study	
<b>Literature and Culture Requirement</b>		<b>6</b>
Select two of the following courses:		
FCLT 210	Chinese Civilization and Culture	
FLIT 216	Chinese Literature Translation 1	
FLIT 217	Chinese Literature in Translation 2	
<b>Chinese Studies Electives</b>		<b>9</b>
Select three courses in any of the following categories:		
1. Alternate upper-division courses in Chinese language		
2. Alternate FLIT or FCLT courses in Chinese literature or culture		
3. Any courses from the following list:		
HIST 325	Modern China	
LING 311	Introduction to Structural Linguistics	
POLS 354	Government of China	
RELG 231	Religions of China and Japan	
HIST 435	History of Chinese Thought	
<b>Capstone</b>		<b>3</b>
CHIN 496	Senior Thesis	
Total Hours		33

## TESOL Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours at the graduate level. No more than 12 hours of coursework done at the 400 level will be counted toward the degree.
- **Grade Point Average:** Students must earn a minimum overall GPA of 2.75, and a GPA of 3.00 in coursework applied to their graduate program.
- **Graduation Requirement:** In addition to completing 30 hours of coursework, students must pass comprehensive examinations or successfully defend a thesis.
  - **Comprehensive Examinations:** The comprehensive examinations are intended to evaluate students' knowledge, including the ability to synthesize and evaluate ideas in their area of emphasis. The examinations are based on standardized reading lists and coursework.
  - **Thesis:** A student may request to write a thesis and prepare an oral defense. For more information about this option, see the document "Thesis Guidelines ([https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis\\_guidelines-rev10-17.pdf](https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis_guidelines-rev10-17.pdf))."
- **Benchmarks:** For details, go to the TESOL Degree Progress tab (p. 342).
- **Additional Requirements:**
  - Students must satisfy the foreign language requirement by the time they graduate:
    - Students in the major in TESOL who are native speakers of English must demonstrate proficiency in a second language prior to graduation by completing one language course of level 204 or above, with a grade of B or better, or by taking the departmental placement examination in one language and placing above the 204-level.
    - International students whose native language is not English are considered to have satisfied this requirement by virtue of their TOEFL or IELTS score.

Code	Title	Hours
<b>CORE COURSES:</b>		<b>27</b>
LANG 422	Second Language Reading	
LANG 423	Teaching English Overseas	
LANG 521	English as a Second Language Methods	
LANG 610	Methods of Research	
LANG 622	English as a Second Language Theory	
LANG 625	Language Assessment	
LING 511	English as a Second Language Linguistics	
LING 613	English as a Second Language Phonetics	
Select one of the following:		
ESL 630	American Culture	
LANG 522	Computer Assisted Language Learning	
LANG 624	Second Language Writing	
LANG 626	Literacy in a Second Language	
LING 512	Applied Linguistics	
<b>ELECTIVES</b>		<b>3</b>
LANG 421	The Teaching of Foreign Languages	
LANG 621	Teaching Foreign Language in College	
LANG 697	Research (up to 6 credits) *	
LING 402	Structure of Modern French	
LING 411	Phonology	
LING 412	Syntax	
LING 501	Structure of Spanish	
LING 514	Sociolinguistics	
LING 516	Discourse Analysis	
LING 611	Advanced Phonology	
LING 612	Advanced Syntax	
LING 614	Psycholinguistics	
LING 616	Language Typology	
LING 620	Spanish Prosody	
Total Hours		30

For specific information on the following program, please see the link to the right:

- Teaching English to Speakers of Other Languages, Graduate Certificate

## Degree Progress

### M.A. IN TEACHING ENGLISH AS A SECOND LANGUAGE (TESOL)

- All students should complete a plan of study by the end of their first semester.
- Students will be evaluated in writing at the end of the Spring term on a yearly basis. If adequate progress is not made, students may be placed on probation or dismissed from the program.
- Students who choose the thesis option should typically defend their thesis topic by the midterm of their second semester, have their thesis proposal approved by the end of the second semester, and submit and defend their thesis during the semester in which they intend to graduate. The student's thesis committee may revise these deadlines.
- Students who choose the examination option should complete the examinations during the semester in which they intend to graduate.

## Teaching English to Speakers of Other Languages, M.A.

### Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours at the graduate level. No more than 12 hours of coursework done at the 400 level will be counted toward the degree.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the degree.

- **Graduation Requirement:** In addition to completing 30 hours of coursework, students must pass comprehensive examinations or successfully defend a thesis.
  - **Comprehensive Examinations:** The comprehensive examinations are intended to evaluate students' knowledge, including the ability to synthesize and evaluate ideas in their area of emphasis. The examinations are based on standardized reading lists and coursework.
  - **Thesis:** A student may request to write a thesis and prepare an oral defense. For more information about this option, see the document "Thesis Guidelines ([https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis\\_guidelines-rev10-17.pdf](https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis_guidelines-rev10-17.pdf))."
- **Benchmarks:** For details, go to the TESOL Degree Progress tab (p. 342).
- **Additional Requirements:**
  - Students must satisfy the foreign language requirement by the time they graduate:
    - Students in the major in TESOL who are native speakers of English must demonstrate proficiency in a second language prior to graduation by completing one language course of level 204 or above, with a grade of B or better, or by taking the departmental placement examination in one language and placing above the 204-level.
    - International students whose native language is not English are considered to have satisfied this requirement by virtue of their TOEFL or IELTS score.

## M.A. Major in Teaching English to Speakers of Other Languages (TESOL) Curriculum

Code	Title	Hours
<b>CORE COURSES:</b>		<b>24</b>
LANG 521	English as a Second Language Methods	
LANG 610	Methods of Research	
LANG 622	English as a Second Language Theory	
LANG 625	Language Assessment	
LING 511	English as a Second Language Linguistics	
LING 613	English as a Second Language Phonetics	
Select 2 courses from the following list:		
ESL 630	American Culture	
LANG 422	Second Language Reading	
LANG 522	Computer Assisted Language Learning	
LANG 624	Second Language Writing	
LANG 626	Literacy in a Second Language	
LING 512	Applied Linguistics	
<b>ELECTIVES</b>		<b>6</b>
LANG 421	The Teaching of Foreign Languages	
LANG 423	Teaching English Overseas	
LANG 621	Teaching Foreign Language in College	
LANG 697	Research (up to 6 credits) *	
LING 402	Structure of Modern French	
LING 411	Phonology	
LING 412	Syntax	
LING 501	Structure of Spanish	
LING 514	Sociolinguistics	
LING 516	Discourse Analysis	
LING 611	Advanced Phonology	
LING 612	Advanced Syntax	
LING 614	Psycholinguistics	
LING 616	Language Typology	
LING 620	Spanish Prosody	
Total Hours		30

\*

No more than 6 research credits (697) can be applied to the degree.

## Major Learning Outcomes

### TEACHING ENGLISH AS A SECOND LANGUAGE (TESOL)

Upon completion of M.A. in TESOL, students will be able to:

- Demonstrate knowledge of the major theories of second language acquisition and ability to apply them in pedagogical practices and evaluate their usefulness.
- Demonstrate understanding of assessment concepts and ability to design and develop assessments, analyze and interpret assessment results.
- Demonstrate knowledge of quantitative and qualitative research methods and ability to read and synthesize research publications and propose research projects.
- Design and implement English language classes for a variety of contexts.
- Demonstrate knowledge of English grammar and ability to explain, use, and evaluate for pedagogical purposes.
- Demonstrate knowledge of the sound system of English and ability to explain, use, and evaluate for pedagogical purposes.

## TESOL Certificate

### Graduate Certificate in Teaching English to Speakers of Other Languages

#### CERTIFICATE CODE - CG62

Graduation Requirement: Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 3.0 in courses applied to the certificate.

Code	Title	Hours
<b>CORE COURSES</b>		<b>6</b>
LANG 521	English as a Second Language Methods	
LANG 622	English as a Second Language Theory	
<b>ELECTIVES</b>		<b>6</b>
Choose two of the following:		
ESL 630	American Culture	
LANG 421	The Teaching of Foreign Languages	
LANG 422	Second Language Reading	
LANG 423	Teaching English Overseas	
LANG 621	Teaching Foreign Language in College	
LANG 625	Language Assessment	
LANG 626	Literacy in a Second Language	
LING 511	English as a Second Language Linguistics	
LING 514	Sociolinguistics	
LING 516	Discourse Analysis	
LING 517	Cognitive Foundations of Language	
LING 613	English as a Second Language Phonetics	
LING 620	Spanish Prosody	
SPAN 521	Dialectology and Sociolinguistics	
Total Hours		12

## Certificate Learning Outcomes

### TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES

Students completing this graduate certificate will be able to:

1. Identify, explain, and evaluate major theories of second language acquisition and apply them in pedagogical practices.
2. Identify and explain the relevance of topics in applied linguistics to English language teaching.



# Women's and Gender Studies

## Certificate Offered

- Women's and Gender Studies

## Nature of the Program

The Graduate Certificate in Women's and Gender Studies is available to any student admitted to a graduate degree program at West Virginia University. The graduate certificate consists of fifteen hours of graduate-level work in women's and gender studies, using courses approved as primary or component courses by the Women's and Gender Studies Curriculum Committee. The certificate offers students interdisciplinary perspectives on gender and its intersection with race, class, ethnicity, and sexuality. The breadth of the curriculum provides dynamic courses in theory and methods that help students understand the complex social, cultural, economic, political, and historical dimensions of men's and women's lives.

In pursuing a Graduate Certificate in Women's and Gender Studies, students make connections between their primary field of study and issues surrounding gender, race, class, culture, and sexuality. By applying multifaceted problem solving and critical thinking skills learned in women's and gender studies courses to their primary field of study, students bring a broader base of experience and perspectives to their future careers.

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## FACULTY

### DIRECTOR

- Sharon Bird - Ph.D. (Washington State University)  
Regular Graduate Faculty

### ASSISTANT DIRECTOR

- Kelly Watson - Ph.D. (Bowling Green State University)

### PROFESSORS

- Lupe Davidson - Ph.D. (Duquesne University)  
Regular Graduate Faculty; Woodburn Professor of Women's and Gender Studies
- J. Kasi Jackson - Ph.D. (University of Kentucky)  
Regular Graduate Faculty

### ASSOCIATE PROFESSOR

- Cynthia Gorman - Ph.D. (Rutgers University)  
Regular Graduate Faculty

### ASSISTANT PROFESSORS

- Gloria Negrete-Lopez - Ph.D. (University of Arizona)  
Regular Graduate Faculty
- Kelly Watson - Ph.D. (Bowling Green State University)

## Admissions

### GRADUATE CERTIFICATE IN WOMEN'S AND GENDER STUDIES

The Graduate Certificate in Women's and Gender Studies (WGST) is available to any student admitted to a graduate degree program at West Virginia University. The certificate offers students interdisciplinary perspectives on gender and its intersection with race, class, ethnicity, and sexuality. The GRE is not required for admission to this program.

#### List of Admission Requirements:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- Curriculum Vitae or Resume.
- A one page (250 word) personal statement that describes the applicant's interest in the certificate program.

#### International Applicants:

- See the steps to apply for admissions and access the application here (<https://graduateadmissions.wvu.edu/how-to-apply/>).
- International applicants should view additional requirements here (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext>) and here (<https://graduateadmissions.wvu.edu/information-for/international-students/>).

- English language proficiency is required in order to hold a graduate teaching assistantship. See here (<https://elli.wvu.edu/testing-resources/english-proficiency-gtas/>).

**Application Deadline:**

- The WGST Certificate program admits students on a rolling basis.

For questions, please contact the Center for Women's and Gender Studies ([wgst@mail.wvu.edu](mailto:wgst@mail.wvu.edu)).

Certain application requirements may be waived based on a preliminary review of an application by the program.

**ADMISSION REQUIREMENTS 2024-2025**

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: CG30

**Graduate Certificate in Women's and Gender Studies****CERTIFICATE CODE - CG30**

Graduation Requirements: Students must earn a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in courses applied to the certificate.

Code	Title	Hours
<b>CORE COURSES</b>		<b>6</b>
WGST 530	Feminist Theory	
WGST 696	Graduate Seminar *	
<b>ELECTIVES **</b>		<b>9</b>
Select from the following:		
WGST 595	Independent Study	
WGST 790	Teaching Practicum	
WGST 795	Independent Study	
Additional WGST courses at the 400 level or above		
COMM 611	Intergroup Communication	
C&I 689	Cultural Diversity in the Classroom	
DISB 580	Disability and the Family	
DISB 585	Disability and Society	
DISB 682	Disability and the Community	
ENGL 682	Recent Literary Criticism	
GEOG 603	Qualitative Research in Geography	
GEOG 612	Gender, Society and Space	
GEOG 640	Geopolitical Perspectives	
GERO 512	Public Policy of Aging	
GERO 628	Aging Women & Cultural Issues	
HIED 750	Diversity Issues in Higher Education	
HIED 754	Women and Gender Issues in HIED	
JRL 604	Mass Media and Society	
PUBA 646	Public Policy Advocacy	
PUBA 651	Social Equity in Public Service	
PUBA 670	Health Systems	
PUBA 712	Administrative Ethics	
SOC 750	Systemic Inequalities	
Total Hours		15

\*

Students may repeat WGST 696. Additional attempts may count toward the electives.

\*\*

Electives may use a maximum of 3 hours total and a maximum of one attempt each of 590/690/790; 495/595/695/795; 697/797; or internship courses.

## **Certificate Learning Outcomes**

### **WOMEN'S AND GENDER STUDIES**

In completing a graduate certificate in Women's and Gender Studies, students will be able to:

- Use the lens of feminist and gender theory to analyze manifestations of human endeavor
- Integrate key terms and concepts related to women's and gender studies in an interdisciplinary approach to their primary discipline
- Engage in discourse addressing how gender, class, race, ethnicity, age, sexualities and sexual identities shape experience and reflect societal constructs
- Analyze, dissect, and criticize arguments to demonstrate an understanding of the scholarship and theoretical underpinning of the field of women's and gender studies

# Business and Economics-John Chambers College of

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## Degrees Offered

- Master of Arts in Economics
- Master of Science in Economics
- Master of Business Administration
- Healthcare Master of Business Administration
- Master of Accountancy
- Master of Science in Business Data Analytics
- Master of Science in Business Cybersecurity Management
- Master of Science in Finance
- Master of Science in Forensic and Fraud Examination
- Master of Science in Human Leadership Management
- Master of Science in Human Resource Management
- Doctor of Business Administration
- Doctor of Philosophy in Business Administration
- Doctor of Philosophy in Economics

## Certificates Offered

- Business Data Analysis
- Business Data Science
- Business Data Technology Management
- Business Operations Research
- Business Cybersecurity Data Analytics
- Business Cybersecurity Foundations
- Business Cybersecurity Management
- Forensic Accounting and Fraud Examination

The WVU College of Commerce was born by order of the state higher education board on November 10, 1951 and was known as the College of Business and Economics from 1971 until November 9, 2018, when it was renamed the John Chambers College of Business and Economics. In 1954, the College became fully accredited by the AACSB International (<http://www.aacsb.edu>), the highest level of business accreditation, and has since become one of the largest colleges at West Virginia University.

## Nature of the Programs

All graduate programs in the John Chambers College of Business and Economics require that enrolled students maintain a minimum cumulative GPA of 3.0 in coursework applied toward their degree program, as outlined in the specific academic program of study. Students must also have a minimum cumulative GPA of 3.0 to earn a graduate degree from their respective program.

The Doctor of Philosophy and Master of Arts in Economics degrees prepare students for careers in business, government, and/or higher education. Students receive in-depth education in the concepts and methods of economic analysis and econometrics, and specialize in two fields of study from financial, international, monetary, public, regional, urban economics, and resource economics. These programs are well-suited to students with undergraduate degrees in economics, finance, mathematics, statistics, public policy, history, and other humanities majors.

The online Master of Science in Economics (MS Econ) program prepares students to be high-level quantitative economists with the ability to analyze complex policy issues using modern data analysis and econometric methods. This program also prepares students to work with a large and diverse set of policy issues, including taxation, public expenditure, transportation, and health care. Upon the completion of the MS Econ program, students will be able to apply their knowledge to improve the quality of information surrounding policies and proposed policies in local, state, and federal contexts.

The Doctor of Philosophy degree in Business Administration has four areas of specialization: Accounting, Finance, Management, and Marketing. Students develop deep content knowledge in their area of specialization along with a strong foundation in research methodology. The programs are focused on preparing students for research and academic careers.

The Master of Business Administration (MBA) program exposes students to graduate-level coursework in all the functional areas of business and provides students with a broad general management orientation. The MBA program is offered during the day for full-time students on the WVU-

Morgantown campus. An online MBA (OMBA) program is also offered for working professionals that includes some mandatory residencies as part of the degree requirements (see program website for details).

The online Healthcare Master of Business Administration (HMBA) program prepares students to successfully navigate the business of healthcare, lead through market transitions, and to provide innovative solutions that improve the healthcare system in order to support positive health outcomes. The HMBA curriculum was designed to advance students' knowledge about business theory and business management by applying a healthcare lens. The program allows students to pursue careers in the healthcare profession or allows healthcare professionals a path to formalize their business skill sets so that they can advance their leadership trajectory.

The Master of Science in Human Resource Management (MSHRM) program provides an interdisciplinary education for students desiring a career in Human Resource Management. All undergraduate majors are acceptable. Elective areas of study may include the functional areas of business, counseling, law, safety, and others.

The Master of Accountancy (MAcc) program is available to students with undergraduate degrees in Accounting. Students without Accounting undergraduate degrees can fulfill specific accounting prerequisites and be admitted to the program. The program follows the American Institute of Certified Public Accountants' recommendations for a five-year accounting education and meets the requirements of most states with 150-hour requirements for C.P.A. certification.

The Master of Finance (MSF) program is available to students with a strong background in Finance, Accounting, or other quantitative backgrounds (either through an undergraduate degree in Finance or Accounting or with five years of experience in a Finance-related field). The program offers a series of courses which provides graduates with a thorough understanding of material in the Chartered Financial Analyst (CFA) Candidate Body of Knowledge.

The online Master of Science in Business Data Analytics (MS BUDA) can be completed in a one-year or two-year plan of study. This program offers students flexibility while encouraging them to simultaneously learn valuable business analysis skills, apply concepts in a real-world setting, and experience improved results in an accelerated learning cycle. The MS BUDA program is taught by faculty across various disciplines with both industry and academic experience from around the globe.

The online Master of Science in Business Cybersecurity (MS CYBR) is a 12-month program. The program encourages students to 1) demonstrate managerial expertise in understanding and investigating complex cybersecurity ideas, 2) evaluate data security of businesses from a data and systems security perspective, 3) use appropriate tools to mitigate cybersecurity threats, and 4) communicate the analysis and findings of a comprehensive security audit initiative to enhance the protection and security of an organization.

The online Master of Science in Forensic and Fraud Examination (MS FFE) is a 12-month program geared toward early career professionals in accounting or investigative sciences looking to enhance their career opportunities through a specialized educational experience incorporating case studies and experiential learning in the field of Forensic and Fraud Examination. Students in this program will receive the required preparation for the Certified Fraud Examiners test.

Specific information about graduate programs in the John Chambers College of Business and Economics may be obtained from the Graduate Programs Office: Telephone (304) 293-5505.

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## ADMINISTRATION

### DEAN

- Joshua Hall - Ph.D. (West Virginia University)  
Milan Puskar Dean

### ASSOCIATE DEANS

- Brad Humphreys - Ph.D. Economics (Johns Hopkins University)  
Associate Dean for Academic Affairs and Research
- Rebel Smith - Ed.D. (University of Arkansas)  
Associate Dean for Undergraduate and Graduate Programs
- Michael Walsh - Ph.D. (University of Pittsburgh)  
Associate Dean for Accreditation and Assurance of Learning

### ASSISTANT DEANS

- Susan Catanzarite - J.D. (West Virginia University)  
Assistant Dean for Undergraduate Programs
- John Deskins - Ph.D. (University of Tennessee)  
Assistant Dean for Outreach and Engagement
- Abigail Esguerra - M.A. (West Virginia University)  
Assistant Dean of Development

- John Lympany - Ed.D. (Spalding University)  
Assistant Dean for Administration and Planning
- Heather Richardson - M.B.A. (West Virginia University)  
Assistant Dean of Communications, Engagement, and Impact
- Julie Turner-Maramba - M.Ed. (Frostburg State University)  
Assistant Dean for Graduate Programs
- Elizabeth Vitullo - Ph.D. (West Virginia University)  
Assistant Dean of Strategic Initiatives

## Specialized Accreditation

All academic programs within the John Chambers College of Business and Economics have specialized accreditation through the Association to Advance Collegiate Schools of Business International (AACSB). The Department of Accounting is also separately accredited by the AACSB.

AACSB provides internationally recognized, specialized accreditation for business and accounting programs at the bachelor's, master's, and doctoral level. The AACSB Accreditation Standards challenge post-secondary educators to pursue excellence and continuous improvement throughout their business programs. AACSB Accreditation is known, worldwide, as the longest standing, most recognized form of specialized/professional accreditation an institution and its business programs can earn.

<http://www.aacsb.edu/accreditation> (<http://www.aacsb.edu/accreditation/>)

## Special Requirements

Admission to any John Chambers College of Business and Economics graduate program requires a bachelor's degree from an accredited institution. Visit the program's webpage for specific admissions requirements.

<https://business.wvu.edu/graduate-degrees> (<https://business.wvu.edu/graduate-degrees/>)

## Degree Designation Learning Outcomes

Each degree program has designated learning outcomes. Please refer to the program's webpage for program specific learning outcomes.

## Certificate Programs

- Business Cybersecurity Data Analytics (p. 46)
- Business Cybersecurity Foundations (p. 47)
- Business Cybersecurity Management (p. 47)
- Business Data Analysis (p. 48)
- Business Data Science (p. 48)
- Business Data Technology Management (p. 49)
- Business Operations Research (p. 49)
- Forensic Accounting and Fraud Examination (p. 53)

## Accountancy, M.Acc.

### Degree Offered

Master of Accountancy (MAcc)

### Nature of the Program

Given the changing environment in both the public and private sectors of the economy, many accountants will need an educational background that goes beyond what is taught in an undergraduate degree program. Accountants must be proficient in applying professional concepts and principles to a wide variety of existing and emerging situations as an effective member of a team and also have the ability to adapt to new standards and methods of doing business. Competing in such an environment requires a solid technical foundation, adeptness in analyzing complex business situations, and the ability to effectively communicate recommended solutions and conclusions. Thus, the objectives of the MAcc program include the integration of financial and non-financial data in problem-solving and decision-making, the application of relevant research techniques and information technologies, the integration of varying viewpoints and techniques of conflict resolution, and the importance of adhering to a strong ethical code.

The MAcc program is a 30 credit-hour program, which can be completed in approximately 12 months of full-time study. The program requires that the student has an undergraduate degree and meets very specific accounting and business course prerequisites. Work experience is not a requirement for admission. Careful selection of degree candidates limits the size of classes, leads to high-quality efforts in the program, and permits frequent and direct contact between students and faculty. The full-time program consists of two 12 credit-hour semesters and a six credit-hour summer session.

No thesis is required in the program, but communication skills are emphasized in all courses. Extensive use is made of information technology in accounting applications.

## Accreditation

The undergraduate and graduate accounting programs in the WVU John Chambers of Business and Economics have separate accounting accreditation by the Association to Advance Collegiate Schools of Business International (AACSB). Students pursuing a MAcc degree can also pursue a graduate certificate in forensic accounting and fraud examination.

## Academic Standards

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionanddismissal>) section of the University's Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by the college, their degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#gradestext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradestext)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs and the Program Coordinator.

## Requirements to Sit for C.P.A. Examination

C.P.A. exam preparation is incorporated directly into the MAcc program. MAcc students are required to enroll and demonstrate their progress completing an approved third-party C.P.A. review program. In addition to required coursework and participating in the C.P.A. review program, MAcc students are required to sit for at least two distinct sections of the C.P.A. exam to graduate with a MAcc degree. Students are responsible for the cost of the C.P.A. exam review program and any fees associated with sitting for the C.P.A. exam, which are not included in the cost of tuition.

The specific requirements to sit for the Uniform C.P.A. Examination vary with each state board of accountancy. Some states (or other jurisdictions such as the District of Columbia or Guam) require candidates to have a bachelor's degree with a specified distribution of accounting and business courses as the minimum educational requirement to take the examination, whereas others require a bachelor's degree and the completion of 150 semester hours of academic credit (including a specified distribution of courses) as the minimum. These standards are subject to change; thus, students should review the requirements (including the distribution of courses) of the board in the jurisdiction in which they plan to sit for the examination. Incidentally, these are the requirements to sit for the examination, not to become a licensed C.P.A. Most boards of accountancy require 150 semester hours of academic credit for licensure.

For the specific requirements to sit for the C.P.A. examination in West Virginia, visit the West Virginia Board of Accountancy website (<https://www.boa.wv.gov/>) or call (304) 558-3557. For requirements in other jurisdictions, visit the National Association of State Boards of Accountancy's website at <http://www.nasba.org> (<http://www.nasba.org/>).

Content specification of the C.P.A. examination and related information may be found at <https://nasba.org/exams/cpaexam/>.

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## FACULTY

### CHAIR

- Richard Riley - Ph.D  
University of Tennessee

## **MACC PROGRAM COORDINATOR**

- Gary LeDonne - M.P.A.  
West Virginia University
- Theresa DiPonio - DBA  
Georgia State University

## **ASSOCIATE PROFESSORS**

- Jack Dorminey - Ph.D.  
Virginia Commonwealth University
- Mark Nigrini - Ph.D.  
University of Cincinnati
- John Treu - JD, LL.M.  
New York University

## **ASSISTANT PROFESSORS**

- Lauren Cooper - Ph.D.  
Oklahoma State University

## **ADJUNCT PROFESSORS**

- Robert Elias

## **Admissions**

Admission to the MAcc program is determined by a committee of accounting faculty members. The committee acts upon individual applications within a short period of time after receipt of the completed application.

The admission committee seeks applicants who ideally possess at least a 3.2 Accounting grade point average. Other factors such as work experience, other graduate degree work, and GMAT/GRE scores may also be a part of the committee's decision-making. The GMAT score may be used in consideration for awarding graduate assistantships.

International students are required to submit a TOEFL, IELTS, or Duolingo score. The John Chambers College of Business & Economics TOEFL requirement is higher than the University's - applicants must have a TOEFL-ibt of 79. If you have taken the IELTS, the minimum score is 6.5, and the minimum Duolingo score is 105. English language exam scores should be sent to the Office of Admissions, West Virginia University, PO Box 6009, Morgantown, WV 26506-6009.

## **Prerequisites**

To assure that all students in the program have the same foundation in business, the following prerequisite courses (or their equivalent) must be completed before enrolling in MAcc graduate courses:

- Principles of Accounting (six hours)
- Intermediate Accounting (six hours)
- Cost Accounting
- Income Tax Accounting (six hours)
- Auditing
- Principles of Microeconomics
- Principles of Marketing
- Principles of Management
- Principles of Finance
- Statistics
- Business Law (six hours)
- Accounting Systems

### **Application Deadline**

The Admissions Committee reviews applications on a rolling basis, and students admitted to the program may begin in the fall, spring, or summer semester. Please visit the MAcc program's webpage (<https://business.wvu.edu/academics/accounting-department/macc/>) to learn more about the specific application deadlines and other important information. Students may also contact the John Chambers College of Business and Economics Graduate Programs Office for assistance at (304) 293-5505.



Major Code: 2166

Students are required to maintain a minimum cumulative GPA of 3.0 in coursework applied toward their degree program, as outlined in the academic program of study. Students must also have a minimum cumulative GPA of 3.0 to earn a graduate degree from this program.

## Master of Accountancy Curriculum Requirements

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
<b>Core Requirements</b>		
ACCT 501	Accounting/Economic Decision Making	3
ACCT 511	Financial Accounting Theory and Practice	3
ACCT 512	Mergers and Acquisitions	3
Select one of the following:		3
ACCT 446	Internal Auditing *	
ACCT 452	Assurance Services and Professional Standards **	
<b>Select Two of the following AoEs:</b>		<b>18</b>
Assurance, Forensic and Fraud Examination		
Business Data Analytics		
Tax		
<b>Other MAcc degree requirements</b>		
Complete Required Sections of CPA Examination Review Course		
Sit for CPA Examination (Two Sections)		
Total Hours		30

\*

If ACCT 452 has been taken.

\*\*

If not taken in BSBAD.

## Assurance, FFE AOE & Tax AOE - Plan of Study

First Year					
Fall	Hours	Spring	Hours	Summer	Hours
ACCT 512		3 ACCT 501		3 ACCT 581	3
ACCT 580		3 ACCT 511		3 ACCT 541	3
ACCT 542		3 ACCT 583		3	
Select one:		3 Select one:		3	
ACCT 446 (if ACCT 452 has been taken )		If three tax classes were taken as undergrad - 440, 441, 442, take ACCT 445			
ACCT 452 (if not taken as undergrad)		If three tax classes were not taken as undergrad, choose one: ACCT 441 ACCT 442			
		12		12	6

Total credit hours: 30

## Assurance, FFE AOE & Business Data Analytics AOE - Plan of Study

First Year					
Fall	Hours	Spring	Hours	Summer	Hours
ACCT 512		3 ACCT 511		3 ACCT 581	3
ACCT 580		3 ACCT 501		3 BUDA 550	3

BUDA 525	3 ACCT 520	3	
Select one:	3 ACCT 583	3	
ACCT 446 (if ACCT 452 has been taken )			
ACCT 452 (if not taken as undergrad)			
	12	12	6
Total credit hours: 30			

## Tax AOE & Business Data Analytics AOE - Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
ACCT 512		3 ACCT 511		3 BUDA 550	3
ACCT 542		3 ACCT 501		3 ACCT 541	3
Select one:		3 ACCT 520		3	
ACCT 446 (if ACCT 452 has been taken )		Select one:		3	
ACCT 452 (if not taken as undergrad)		If three tax classes were taken as undergrad - 440, 441, 442, take			
BUDA 525		3 ACCT 445			
		If three tax classes were not taken as undergrad, choose one:			
		ACCT 441			
		ACCT 442			
	12		12		6
Total credit hours: 30					

## Areas of Emphasis Offered:

- Assurance, Forensic and Fraud Examination (p. 354)
- Business Data Analytics (p. 355)
- Tax (p. 355)

## Assurance, Forensic and Fraud Examination Area of Emphasis

The Area of Emphasis in Assurance, Forensic and Fraud Examination is intended to provide MAcc students expertise in assurance. Students will be exposed to course work in detection, prevention, examination/deterrence and remediation of white-collar crime.

**Course Requirements.** In order to satisfy the requirements of the Area of Emphasis, a student must have completed the three required courses with a passing grade (a grade of C- or better). Note, that a cumulative GPA of 3.0 is required for graduation from the MAcc program. The courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA in the MAcc program. The courses will be required for the Area of Emphasis in a prescriptive plan of study.

Code	Title	Hours
A minimum grade of C- is required in AOE coursework		
ACCT 580	Accounting for Forensic and Fraud Investigators	3
ACCT 581	Fraud Investigation	3
ACCT 583	Fraud: Criminology/Legal Issues	3
Total Hours		9

## Business Data Analytics Area of Emphasis

The AoE in Business Data Analytics is intended to provide MAcc students expertise in analytics commonly used by accounting professionals. Students will be exposed to coursework in advanced technology for accounting, data visualization, and statistical methods for analyzing data.

**Course Requirements.** In order to satisfy the requirements of this AOE, students must complete the three required courses with a passing grade (grade of C or better). Note that a cumulative GPA of 3.0 is required for graduation from the MAcc program; the grades from this AOE will be counted towards students' cumulative GPA in the MAcc program.

Code	Title	Hours
ACCT 520	Advanced Technology for Accounting	3
BUDA 525	Business Statistical Methods 1	3
BUDA 550	Business Data Visualization	3
Total Hours		9

## Tax Area of Emphasis

The Area of Emphasis in Tax is intended to provide MAcc students deeper tax knowledge. Students will be exposed to course work in detection, prevention, examination/deterrence and remediation of white-collar crime.

**Course Requirements.** In order to satisfy the requirements of the Area of Emphasis, a student must have completed the three required courses with a passing grade (a grade of C- or better). Note, that a cumulative GPA of 3.0 is required for graduation from the MAcc program. The courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA in the MAcc program. The courses will be required for the Area of Emphasis in a prescriptive plan of study.

Code	Title	Hours
A minimum grade of C- is required in AOE coursework		
ACCT 541	Federal Tax Research and Writing	3
ACCT 542	Advanced Federal Corporate Tax	3
Select one of the following:		3
ACCT 445	Corporate Financial Management *	
ACCT 441	Individual Income Tax Accounting **	
or ACCT 442	Entity Income Tax Accounting	
Total Hours		9

\*

If three tax courses were taken as an Undergraduate - ACCT 440, ACCT 441, ACCT 442.

\*\*

If three tax courses were not taken as an undergraduate.

## Major Learning Outcomes

### ACCOUNTANCY

Goal 1: Students will demonstrate competence in advanced technical skills

Goal 2: Students will demonstrate research skills by finding and interpreting authoritative literature.

Goal 3: Students will communicate the results of research and/or analysis.

Goal 4: Students will identify an ethical dilemma and propose a solution.

## Business Administration

### Degrees Offered

- Master of Business Administration
- Doctor of Business Administration
- Doctor of Philosophy

## Nature of the Program

The John Chambers College of Business and Economics Master of Business Administration (M.B.A.) program is accredited by the AACSB. The program is offered in two formats. An accelerated full-time, day-class program on the WVU-Morgantown campus can be completed in 12 months. The online program can be completed in one-to-two years. The online program, referred to as the Online M.B.A. (O.M.B.A.), is designed for working professionals. The standards of excellence that support accreditation by the AACSB are maintained across both formats of the program.

The M.B.A. degree program recognizes the need for future managers to be able to anticipate and recognize change and then to manage resources advantageously in that environment. Thus, the curriculum emphasizes a general, broad-based approach to graduate education in management which provides the student with the qualitative and quantitative skills necessary for a manager to succeed in such an environment. The program develops a managerial perspective that is primarily line-oriented as opposed to staff-oriented and is relevant to those in both private and public organizations.

## Academic Standards

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionanddismissal>) section of the University's Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by their college, degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#gradestext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradestext)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs and the Program Coordinator.

## Full-Time M.B.A. Program

The M.B.A. program is a full-time, on-campus program beginning in June with graduation the following May. This program prepares students for business leadership and administration primarily through three developmental avenues. First, at the core of the M.B.A. program is its unique implementation of an experiential learning orientation. Students engage in consulting activities with actual businesses throughout the State, the region, and, in some cases, internationally. Consulting engagements are sometimes arranged in conjunction with the *Encova Center for Innovation and Entrepreneurship*, and typically involve teams of four to six students deployed on each engagement. Second, the program also incorporates seminar sessions where guest speakers are invited to relay professional and practical experiences, and/or practicum events where students interact with executives and administrators in solving case problems based on actual events at a given organization. Third, business theory, practice, and implementation tools are provided through traditional in-class delivery (eight-week courses). The program is designed for individuals with varying educational and professional backgrounds.

## Online M.B.A. Program

The Online M.B.A. plan of study requires 30 credit hours of graduate coursework. Students also have the opportunity to earn a graduate certificate in a specialized area by taking two additional courses. The program is designed for working professionals with varying educational and professional backgrounds. Students may enter the O.M.B.A. program at the start of the fall or spring semester, completing the program one-to-two years later.

## Approved Dual Degree Programs

The John Chambers College of Business of Economics offers a number of dual degree programs through the Online M.B.A. programs.

Dual degree programs in conjunction with the O.M.B.A.:

- M.B.A./J.D.
- M.B.A./Pharm.D.

- M.B.A./M.S.N.
- M.B.A./D.D.S.

## Admissions

### FULL-TIME M.B.A. PROGRAM

To gain admission to the full-time M.B.A. program, an applicant must have a bachelor's degree from an accredited institution. Admissions decisions are based on an assessment of expected success in the program shown by the application materials and on space available. The Admissions Committee considers grade point average in all previous college-level work, as well as the grade-point average in the last 60 hours of coursework. Applications for admission to the M.B.A. program and official transcripts of all prior academic work should be submitted to the WVU Office of Graduate Admissions and Recruitment as early as possible. Applicants must have a minimum grade point average of 2.75 to be considered for admission. Applicants who have attended institutions other than WVU must request the registrar or records office of those institutions to forward a complete official transcript directly to the WVU Office of Graduate Admissions and Recruitment. Each applicant must also submit a resume, statement of purpose, and one letter of recommendation with the application. The priority deadline for the full-time M.B.A. program is March 1st of each year. For full admissions consideration, all applications must be completed by May 1st. This accelerated program begins in the summer of each year.

Please visit the full-time MBA's webpage (<https://business.wvu.edu/academics/business-administration/business-administration-mba/>) to learn more about the specific application deadlines and other important information. Students may also contact the John Chambers College of Business and Economics Graduate Programs Office for assistance at (304) 293-5505.

### ONLINE M.B.A. PROGRAM

To gain admission to the Online M.B.A. (OMBA) program, an applicant must have a bachelor's degree from an accredited institution and a minimum of two years of full-time work experience post bachelor's degree. Admissions decisions are based on an assessment of expected success in the program shown by the application materials and on space available. Each applicant must submit a resume showing prior work experience. For applicants with less than five years of work experience, the undergraduate record provides the strongest indicators of success. For applicants with five or more years of experience, the Admissions Committee will place greater emphasis on the work history. Additionally, applicants are required to submit a statement of purpose and a letter of reference.

The Admissions Committee reviews applications on a rolling basis, and students admitted to the program may begin in the fall or spring semester. The priority deadline for receipt of applications and transcripts in the College's Office of Graduate Programs is July 1st for the fall intake and December 1st for the spring intake. Admission to the program is competitive and subject to space being available. Students applying for admission into the OMBA program as a dual degree student are not required to have work experience.

Please visit the OMBA program's webpage (<https://business.wvu.edu/academics/business-administration/online-hybrid-mba/>) to learn more about the specific application deadlines and other important information. Students may also contact the John Chambers College of Business and Economics Graduate Programs Office for assistance at (304) 293-5505 or [BeGradPrograms@mail.wvu.edu](mailto:BeGradPrograms@mail.wvu.edu).

\*Note -International Students interested in either MBA program are required to submit a TOEFL, IELTS, or Duolingo score. Applicants must have a TOEFL-ibt score of 79. If you have taken the IELTS, the minimum score must be 6.5, and the minimum Duolingo score is a 105. English language exam scores should be sent to the Office of Admissions, West Virginia University, PO Box 6009, Morgantown, WV 26506-6009.

### Admission Requirements 2024-2025

Major Code: 2110

Major Code: 2188

## Major Learning Outcomes

### FULL-TIME MASTER OF BUSINESS ADMINISTRATION PROGRAM

Learning goal #1: Students will be able to integrate and apply the functional areas of business to experiential business problems

Learning goal #2: Students will be able to identify problems, collect appropriate data and analyze the data to make informed management decisions

Learning goal #3: Students will be able to articulate a succinct business analysis and make recommendations

Learning goal #4: Students will be able to make management decisions in an ethical and socially responsible manner

Learning goal #5: Students will be able to effectively manage teams and work units and implement strategies to achieve organizational goals

## ONLINE MASTER OF BUSINESS ADMINISTRATION PROGRAM

Learning goal #1:: Students will be able to integrate the functional areas of business into management decisions in a global environment

Learning goal #2: Students will be able to identify problems, collect appropriate data and analyze the data to make informed management decisions

Learning goal #3: Students will be able to articulate a succinct business analysis and make recommendations

Learning goal #4: Students will be able to make management decisions in an ethically sensitive and socially responsible manner

Learning goal #5: Students will be effective team members in a virtual environment

Learning goal #6: Students will be an effective leader who influences people toward the attainment of organizational goals

## Business Administration, D.B.A.

### Degree Offered

- Doctor of Business Administration

### Nature of the Program

The Doctorate of Business Administration with a concentration in Accounting (DBA-A) is comprised of 3 foundational aspects; a core set of research methods courses that remain the same for each DBA-A cohort, a collection of cohort/department specific content courses, and a research/dissertation component. The Accounting DBA Departmental Subcommittee will coordinate mentorship, annual progress requirements, subject matter expertise, and any other non-course curricular requirements for students admitted into the DBA-A.

Pursuing the DBA-A is a serious commitment that generally requires three full years of study. The DBA-A is split into three foundational areas: (1) (Research) Methods Courses (2) Cohort/Department Specific Content Courses, including meeting annual research progress requirements and (3) the Dissertation.

Completion of courses in a timely manner as outlined in the plan of study is expected. Further, students are required to maintain a 3.0 grade point average (on a 4.0 scale). Two course grades of C, or a single grade of D or F, will result in termination from the program. A grade of "incomplete" in a course is rare and only given in exceptional circumstances.

### Admissions

Admission to the DBA-A is highly competitive; meeting the minimum standards for admission does not guarantee admission. A holistic admissions process considers minimum requirements as well as professional accomplishments and certifications. The program is delivered in a cohort-based online asynchronous format and begins in the fall semester. Success in the program requires significant commitment and time. The cohort design does not permit for students to take courses outside of the prescribed sequence. Consideration for admission is only given to those applicants that have a complete application package on file with the WVU College of Business and Economics.

To be eligible for consideration for the DBA-A program applicants must:

- Have a minimum of 5 years of work experience.
- Have a Master's degree or equivalent from an accredited college or university. For students who do not possess a Master's degree, an accelerated Master's to DBA-A program is available.

Once qualified to proceed with the application to the DBA-A, applicants will be required to submit additional documents, including:

- Official transcripts from all previously attended colleges and/or universities
- Current resume
- Statement of purpose
- Two letters of recommendation from employers, faculty or professional associates
- A minimum TOEFL-ibt of 100, 7.0 on the IELTS.

The integrity of the admissions process is of paramount importance. All grade and/or score reports received are subject to verification.

### Degree Requirements

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
<b>Research Methods Coursework</b>		
BADM 700	Statistics Bootcamp	2

BADM 701	Research Methods 1	3
BADM 702	Research Methods 2	3
BADM 703	Research Methods 3	3
BADM 704	Research Methods 4	3
BADM 705	Research Methods 5	3
<b>Disciplinary Content Coursework</b>		
BADM 714	Accounting Information Systems Research Seminar	3
BADM 706	Scholarly Ethics, Diversity & Inclusion	2
BADM 715	Archival Accounting Research Seminar	3
BADM 711	Behavioral Accounting Research Seminar	3
BADM 707	Business Pedagogy	2
BADM 713	Forensic Accounting Research Seminar	3
Research		20
BADM 797	Research	
Total Hours		53

## Additional Requirements

Beyond timely completion of courses listed in the plan of study, maintaining course grades, and overall GPA requirements, admitted students are expected to demonstrate progress towards the completion of high-quality research likely publishable in a high-quality academic journal. The expectations are as follows:

## MAINTAIN A PORTFOLIO OF RESEARCH IDEAS

At the completion of each research seminar (course), admitted students are expected to create and maintain a portfolio of research ideas that may be completed in the future. Research ideas represent “gaps” that exists in previously published research. Identifying research opportunities (“gaps”) in published manuscripts will occur during the coursework phase of the program and be reflected in the Portfolio. After the completion of each course, admitted students are expected to meet with their Department Mentor to review the ideas outlined in the Portfolio and discuss next steps towards converting select ideas into high-quality, publishable research manuscripts.

## YEAR 1 – RESEARCH PROPOSAL

By the end of the first summer in the program (the completion of the first year), admitted students are expected to have converted at least one research idea into a research proposal. The research proposal will consist of an abstract, introduction, discussion of prior research / theory / hypotheses and methods sections of a journal manuscript. The proposal should be approximately 15 pages of text, excluding the title page, references, figures, and appendices.

Admitted students should work with their mentor and draw on material from their Portfolio of Research Ideas. Only ideas (proposals) that have a perceived probability of publication in a high-quality journal (e.g., included on the Department of Accounting's Journal Listing) will be considered. The research topic must be approved by the student's Department Mentor, should relate to the student's expertise and should also be grounded in theory and methods as discussed in completed research seminars and other coursework.

For year 1, successful completion will be judged by the student's Department Mentor based on an assessment of (a) the quality of the written proposal and (b) perceived probability that the proposal can be successfully converted into completed research with eventual publication in a high-quality academic journal.

## YEAR 2 – RESEARCH MANUSCRIPT

By the end of the second summer in the program (the completion of the second year), admitted students are expected to have converted the research proposal developed in year 1 (or an alternative research proposal approved, in advance, by the admitted student's Department Mentor) into a high-quality research manuscript (a completed research project).

At a minimum, the research manuscript should be of such quality that it can be submitted to and accepted for presentation at an academic research meeting and should be close to being ready for submission to a high-quality academic journal.

## YEAR 3 – DISSERTATION

The Dissertation will consist of two completed research manuscripts, the research manuscript completed in Years 1 and 2 of the program (discussed above) and a second solo-authored research manuscript. The purpose of the dissertation is for the DBA-A student to engage in a research study, leveraging the student's expertise, that makes a contribution to the academic literature.

Undertaking the DBA-A Dissertation is a serious commitment of both time and mental energy. The second research manuscript of the DBA-A Dissertation is a solo effort, conducted individually by the student under the tutelage of the Student's Department Mentor and Dissertation Committee. The Dissertation will include an oral defense, possible necessary revisions, and a final formal defense.

## Major Learning Outcomes

### BUSINESS ADMINISTRATION

#### Educational Goals and Objectives

Learning Goal 1: Students will be able to apply the holistic nature of research to business opportunities and problems.

Learning Goal 2: Students will be able to apply research methods and data analysis to solve business problems.

Learning Goal 3: Students will be able develop a theory-based research plan to address unique business problems.

Learning Goal 4: Students will be able to apply research skills to analyze and develop solutions to business problems.

Learning Goal 5: Students will be able to create and communicate original scholarship that addresses researched solutions to business problems

## M.B.A. Business Administration

### M.B.A. Program

The M.B.A. requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

### M.B.A. Requirements

Code	Title	Hours
All students are required to complete BADM 503 and 504 (ECON/FIN/ACCT/ Bootcamps) unless waived by Program Coordinator		
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
A grade of C or higher must be earned in all required courses		
BADM 503	Accounting Essentials	3
BADM 504	Economic Essentials	3
BADM 523	Decision Analysis	3
BADM 525	Marketing Management	3
BADM 531	Supply Chain Design and Innovation	3
BADM 535	Organizational Behavior	3
BADM 536	Leading with Ethics	3
BADM 551	Global Planning and Strategy	3
BADM 555	Financial Management	3
BADM 556	Data Analytics for Management	3
BADM 557	Experiential 1	3
BADM 558	Experiential 2	3
Students may complete an optional internship for credit.		
Total Hours		36

### M.B.A. SUGGESTED PLAN OF STUDY

First Semester	Hours
Summer	
BADM 503	3
BADM 504	3
	6
Second Semester	Hours
Fall	



BADM 551	3
BADM 523	3
BADM 531	3
BADM 555	3
BADM 557	3
<hr/>	
	15
<b>Third Semester</b>	<b>Hours</b>
Spring	
BADM 525	3
BADM 536	3
BADM 535	3
BADM 556	3
BADM 558	3
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	15

Total credit hours: 36

## Integrated Marketing Communications Area of Emphasis Requirements

The Integrated Marketing Communications AOE is intended to prepare non-IMC students for careers utilizing an integrated marketing communications strategy. Students will be exposed to course work focused in IMC, audience insight and behavior, brand management and emerging media.

Course Requirements. To satisfy the requirements of the Integrated Marketing Communications Area of Emphasis, a student must complete the four required courses below.

- For MBA students, two of the courses required for an AOE in IMC may also be applied to a student's elective requirement, with the other two taken in addition to their MBA degree requirements. Note that a cumulative GPA of 3.0 is required for graduation from the Online Hybrid MBA program. The courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 3.0) in the MBA program.
- For DMC students, one of the courses required for an AOE may also be applied to an DMC student's elective requirement, with the other three taken in addition to the general IMC master's degree requirements. Note that a cumulative GPA of 2.75 is required for graduation from the DMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
IMC 519	Emerging Media and the Market	3
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Total Hours		12

EMBA students who elect to enroll in this Area of Emphasis will be required to complete IMC 410 before moving on to the other courses in the Area of Emphasis.

## Major Learning Outcomes

### FULL-TIME MASTER OF BUSINESS ADMINISTRATION PROGRAM

Learning goal #1: Students will be able to integrate and apply the functional areas of business to experiential business problems

Learning goal #2: Students will be able to identify problems, collect appropriate data and analyze the data to make informed management decisions

Learning goal #3: Students will be able to articulate a succinct business analysis and make recommendations

Learning goal #4: Students will be able to make management decisions in an ethical and socially responsible manner

Learning goal #5: Students will be able to effectively manage teams and work units and implement strategies to achieve organizational goals

### ONLINE MASTER OF BUSINESS ADMINISTRATION PROGRAM

Learning goal #1:: Students will be able to integrate the functional areas of business into management decisions in a global environment

Learning goal #2: Students will be able to identify problems, collect appropriate data and analyze the data to make informed management decisions

Learning goal #3: Students will be able to articulate a succinct business analysis and make recommendations

Learning goal #4: Students will be able to make management decisions in an ethically sensitive and socially responsible manner

Learning goal #5: Students will be effective team members in a virtual environment

Learning goal #6: Students will be an effective leader who influences people toward the attainment of organizational goals

## M.B.A. Online Business Administration

### Online MBA Requirements

The Online MBA program requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
BADM 611	Management Information Systems	3
BADM 612	Managerial and Team Skills	3
BADM 618	Macroeconomics and Managerial Economics	3
BADM 621	Business Research	3
BADM 622	Financial Statements Analysis	3
BADM 630	Corporate Leadership	3
BADM 641	Decision Analysis for Executives	3
BADM 644	Legal Environment and Ethics	3
BADM 650	Global Trade and Supply Chain	3
BADM 652	Marketing Strategy	3
Total Hours		30

### Online MBA Suggested Plan of Study

#### First Year

Fall	Hours	Spring	Hours	Summer	Hours
BADM 612		3 BADM 611		3 BADM 618	3
BADM 621		3 BADM 641		3 BADM 622	3
		6		6	6

#### Second Year

Fall	Hours	Spring	Hours
BADM 644		3 BADM 630	3
BADM 652		3 BADM 650	3
		6	6

Total credit hours: 30

### Integrated Marketing Communications Area of Emphasis Requirements

The Integrated Marketing Communications AOE is intended to prepare non-IMC students for careers utilizing an integrated marketing communications strategy. Students will be exposed to course work focused in IMC, audience insight and behavior, brand management and emerging media.

Course Requirements. To satisfy the requirements of the Integrated Marketing Communications Area of Emphasis, a student must complete the four required courses below.

- For MBA students, two of the courses required for an AOE in IMC may also be applied to a student's elective requirement, with the other two taken in addition to their MBA degree requirements. Note that a cumulative GPA of 3.0 is required for graduation from the Online Hybrid MBA program. The courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 3.0) in the MBA program.

- For DMC students, one of the courses required for an AOE may also be applied to an DMC student's elective requirement, with the other three taken in addition to the general IMC master's degree requirements. Note that a cumulative GPA of 2.75 is required for graduation from the DMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
IMC 519	Emerging Media and the Market	3
Total Hours		12

EMBA students who elect to enroll in this Area of Emphasis will be required to complete IMC 410 before moving on to the other courses in the Area of Emphasis.

## Dual Degrees

- Doctor of Dental Surgery/Master of Business Administration (p. 363)
- Doctor of Jurisprudence/Master of Business Administration (p. 365)
- Doctor of Pharmacy/Master of Business Administration (p. 366)
- Master of Science in Nursing (Executive Focus)/Master of Business Administration (p. 368)

## DOCTOR OF DENTAL SURGERY/MASTER OF BUSINESS ADMINISTRATION

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the SoD's DDS and Chamber's OMBA programs. Students must apply for the OMBA portion of the dual degree program by May 15th of their first year in the DDS program. Students interested in the dual degree program will have already undergone the rigorous process of being accepted into the DDS program. To be eligible for the DDS/OMBA program, students must be in good academic standing and have a letter of reference from the DDS Associate Dean for Academic Affairs. However, it is still essential that the students officially apply to the program using the online graduate application for the OMBA program. Students will be expected to submit: official transcripts, current resume, statement of purpose, and one letter of reference from the Associate Dean for Academic Affairs.
- For additional details and requirements for each program, please visit the DDS (<http://catalog.wvu.edu/graduate/schoolofdentistry/docdentalsurg/#doctoraltext>) or OMBA page ([http://catalog.wvu.edu/graduate/collegeofbusinessandeconomics/businessadministration/mba\\_ohmba/](http://catalog.wvu.edu/graduate/collegeofbusinessandeconomics/businessadministration/mba_ohmba/)).
- Students will develop a combined plan of study with their graduate advisors in each program.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Students must meet the academic standards of both degrees earned.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

Code	Title	Hours
<b>Online Hybrid MBA</b>		
BADM Coursework		24
DENT Coursework (share 6 credits)		
<b>Doctor of Dental Surgery</b>		
DENT Coursework		195
Total Hours		219

## ONLINE MBA REQUIREMENTS

The Online MBA program requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
BADM 611	Management Information Systems	3
BADM 612	Managerial and Team Skills	3
BADM 618	Macroeconomics and Managerial Economics	3

BADM 622	Financial Statements Analysis	3
BADM 630	Corporate Leadership	3
BADM 641	Decision Analysis for Executives	3
BADM 650	Global Trade and Supply Chain	3
BADM 652	Marketing Strategy	3
Total Hours		24

## DOCTOR OF DENTAL SURGERY REQUIREMENTS

Code	Title	Hours
<b>Oral Health Sciences Courses</b>		
DENT 700	Anesthesiology	1
DENT 701	Arts & Sciences of Preventive Dentistry	2
DENT 703	Introduction to Patient Care	3
DENT 704	Operative Dentistry	4
Interprofessional Education		2
DENT 706	Interprofessional Education	
DENT 707	Introduction to Clinical Dentistry	2
DENT 710	Dental Anatomy and Occlusion	4
DENT 711	Periodontics	2
DENT 712	Dental Materials	3
DENT 713	Dental Radiology	1
DENT 714	Oral and Maxillofacial Radiology	1
DENT 715	Dental Public Health 1	2
DENT 717	Physical Diagnosis and Urgent Care	1
DENT 721	Endodontics	2
DENT 724	Advanced Treatment Planning	2
DENT 722	Tooth-Colored Restorations	4
DENT 723	Advanced Restorations and Esthetics in Dentistry	2
DENT 725	Practice Management	1
DENT 726	Removable Partial Dentures	5
DENT 729	Indirect Restorations	3
DENT 730	Dental Public Health 2	2
DENT 731	Occlusion	2
DENT 732	Advanced Endodontics 1: Biological Applications in Endodontics	1
DENT 733	Advanced Endodontics 2: Biological Applications in Endodontics	1
DENT 734	Complete Dentures	6
DENT 735	Pediatric Dentistry	1
DENT 737	Treatment Planning	3
DENT 739	Oral Surgery	1
DENT 740	Periodontics	2
DENT 744	Orthodontic Diagnosis and Treatment Planning	1
DENT 745	Principles of Orthodontics	1
DENT 746	Orthodontic Techniques	1
DENT 747	Management of Medical and Dental Emergencies	1
DENT 752	Professional Communication in Dentistry	2
DENT 754	Introduction to Dental Implantology	2
DENT 756	Fixed Prosthodontics: Part 1	4
DENT 757	Fixed Prosthodontics: Part 2	4
DENT 758	Senior Seminar	2
DENT 759	Oral Surgery	2
DENT 761	Special Needs in Dentistry	1
DENT 762	Anxiety and Pain Control	1

DENT 763	Periodontics	2
DENT 765	Orthodontics	1
DENT 766	Applied Pediatric Dentistry	2
DENT 767	Community Dentistry	1
DENT 770	Clinical Oral Radiology	4
DENT 771	Practice Management	2
DENT 774	Principles of Medicine	2
DENT 775	Practice Management	1
DENT 776	Removable Prosthodontics	5
DENT 777	Periodontics	5
DENT 778	Law & Ethics in Dentistry	2
DENT 780	Endodontics	4
DENT 781	Patient Management 1	4
DENT 782	Clinical Patient Management 2	2
DENT 783	Operative Dentistry	6
DENT 784	Oral Surgery	6
DENT 785	Orthodontics	2
DENT 786	Pediatric Dentistry	4
DENT 787	Clinical Oral Diagnosis	1
DENT 788	Clinic Completion Practicum *	3
DENT 789	Fixed Prosthodontics	5
<b>Biomedical Sciences Courses</b>		
BIOC 705	General Biochemistry	5
MICB 702	Microbiology	5
PALM 718	Dental Histology	6
PALM 724	Human Gross Anatomy	7
PALM 728	General Pathology	5
PALM 738	Oral Pathology 1	3
PALM 753	Oral Pathology 2	2
PCOL 760	Pharmacology & Therapeutics	3
PCOL 763	Applied Dental Pharmacology	2
PSIO 743	Fundamentals of Physiology	5
Total Hours		195

## DOCTOR OF JURISPRUDENCE/MASTER OF BUSINESS ADMINISTRATION

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the CoL's JD and Chambers' OMBA by each college's standard admission procedure.
- For additional details and requirements for each program, please visit the JD ([http://catalog.wvu.edu/graduate/law/academic\\_policies\\_and\\_procedures/academic\\_programs/jd/#majortext](http://catalog.wvu.edu/graduate/law/academic_policies_and_procedures/academic_programs/jd/#majortext)) or OMBA pages.
- Students will develop a combined plan of study with their graduate advisors in each program.
- Students must meet the academic standards of both degrees earned.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

## ONLINE MBA REQUIREMENTS

The Online MBA program requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
BADM 611	Management Information Systems	3
BADM 612	Managerial and Team Skills	3
BADM 618	Macroeconomics and Managerial Economics	3
BADM 621	Business Research	3
BADM 622	Financial Statements Analysis	3
BADM 630	Corporate Leadership	3
BADM 641	Decision Analysis for Executives	3
BADM 650	Global Trade and Supply Chain	3
BADM 652	Marketing Strategy	3
Total Hours		27

## DOCTOR OF JURISPRUDENCE DEGREE REQUIREMENTS

Code	Title	Hours
Minimum GPA of 2.50		
First-Year Required Courses		
LAW 641	Introduction to Legal Research	1
LAW 700	Legal Analysis, Research and Writing 1	3
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 725	Constitutional Law 1	4
LAW 793	Civil Procedure	4
LAW 793	Introduction to the Profession	1
Upper-Level Requirements		
LAW 715	Appellate Advocacy	2
LAW 742	Professional Responsibility	3
Seminar (any 688, 689, or 796 course)		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives (credit may vary - used to reach the minimum of 91 hours for the degree)		39
Total Hours		85

## DOCTOR OF PHARMACY/MASTER OF BUSINESS ADMINISTRATION

- Admission. Students seeking to enter the dual degree program must apply separately and be admitted independently to each program in accordance with each college's standard admission procedures.
- For additional details and requirements for each program, please visit the PharmD (<http://catalog.wvu.edu/graduate/schoolofpharmacy/pharmd/#majortext>) or the OHMBA page ([http://catalog.wvu.edu/graduate/collegeofbusinessandeconomics/businessadministration/mba\\_ohmba/](http://catalog.wvu.edu/graduate/collegeofbusinessandeconomics/businessadministration/mba_ohmba/)).
- Students will develop a combined plan of study with their graduate advisors in each program.
- Students must meet the academic standards of both degrees earned.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

## ONLINE MBA REQUIREMENTS

The Online MBA program requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while

enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
BADM 611	Management Information Systems	3
BADM 612	Managerial and Team Skills	3
BADM 618	Macroeconomics and Managerial Economics	3
BADM 622	Financial Statements Analysis	3
BADM 630	Corporate Leadership	3
BADM 641	Decision Analysis for Executives	3
BADM 650	Global Trade and Supply Chain	3
BADM 652	Marketing Strategy	3
Total Hours		24

## PHARMACY REQUIREMENTS

The School of Pharmacy Committee on Academic and Professional Standards reviews the performance of each student in every course at the end of each academic period. If a student has been found to have unsatisfactory performance in any course as indicated by a grade less than a C or a grade less than pass (for pass/fail courses), or a cumulative GPA less than 2.5, a student will be placed on probation. Students may be required to step out of the OHMBA program if placed on probation. Students failing to successfully complete any required remedial actions or meet the specified performance requirements during the probationary period may be subject to academic suspension or dismissal from the PharmD program.

Code	Title	Hours
PALM 301	Principles of Human Anatomy	3
PSIO 541	Integrative Physiology	4
PHAR 703	Pharmacy Practice Experience 1	1
PHAR 710	Pharmacy Practice Experience 2	1
PHAR 800	Introduction to Pharmacy	4
PHAR 801	Drug Delivery	5
PHAR 802	Preparation of Pharmaceutical Products	1
PHAR 807	Pharmacy Calculations	1
PHAR 810	Community Pharmacy Practice	2
PHAR 811	Foundational Pharmacy Skills	1
PHAR 812	Drug Chemistry and Biotechnology	3
PHAR 813	Biopharmaceutics and Pharmacogenomics	4
PHAR 814	Biochemical Pharmacology	4
PHAR 815	Self-Care	3
PHAR 817	Principles of Immunology and Microbiology	2
Community Rotation Requirement		4
PHAR 818	Intro Community Rotation	
PHAR 820	Population Health and Policy	3
PHAR 821	Pain	1
PHAR 823	Pulmonology	3
PHAR 824	Cardiology	5
PHAR 826	Evidence-Based Practice	3
PHAR 825	Nephrology	2
PHAR 830	Health Systems Pharmacy Practice	2
PHAR 833	Endocrinology	3
PHAR 835	Autoimmune Diseases	2
Research in the Pharmaceutical Sciences		2
PHAR 836	Research in the Pharmaceutical Sciences	
PHAR 837	Quality and Outcomes in Pharmacy Practice	2
Intro to Institutional Rotation (repeated for a total of 2 credit hours)		2
PHAR 838	Intro Institutional Rotation	

PHAR 840	Pharmacy Practice Management	3
PHAR 843	Gastroenterology and Nutrition	3
PHAR 844	Infectious Diseases	3
PHAR 845	Neurology and Psychiatry	4
PHAR 848	Acute Care Practice Experience	2
PHAR 849	Ambulatory Care Practice Experience	2
PHAR 853	Hematology/Oncology	3
PHAR 854	Special Populations	3
PHAR 858	Comprehensive Assessment of Practice	3
PHAR 859	Pharmacy Law and Ethics	3
Rotations		40
PHAR 760	Acute Care Rotation 1	
PHAR 761	Acute Care Rotation 2	
PHAR 762	Ambulatory Care Rotation 1	
PHAR 763	Ambulatory Care Rotation 2	
PHAR 764	Elective Rotation 1	
PHAR 765	Elective Rotation 2	
PHAR 766	Selective Rotations	
PHAR 770	Community Rotation	
PHAR 772	Institutional Rotation	
Current Topics Requirement		2
PHAR 860	Current Topics in Pharmacy	
Total Hours		144

## MASTER OF NURSING/MASTER OF BUSINESS ADMINISTRATION

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to each degree program's standard admission procedure.
- For additional details and requirements for each program, please visit the MSN or OMBA pages.
- Students will develop a combined plan of study with their graduate advisors in each program.
- Students must meet the academic standards of both degrees earned.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

## MASTER OF NURSING REQUIREMENTS

Code	Title	Hours
NSG 611	System Based Decision Making	2
NSG 616	Role Seminar for Leadership MSN	2
NSG 617	Leadership Practicum 1	3
NSG 618	Leadership Practicum 2	3
NSG 622	Theory and Disciplined Reasoning	3
NSG 625	Statistics	3
NSG 626	Lifespan Health Promotion	3
NSG 627	Evidence Based Practice	3
NSG 628	Leadership/Policy/Ethics	3
NSG 709	Health Care Informatics	3
Total Hours		28

## MASTER OF BUSINESS ADMINISTRATION REQUIREMENTS

Code	Title	Hours
BADM 612	Managerial and Team Skills	3
BADM 618	Macroeconomics and Managerial Economics	3
BADM 622	Financial Statements Analysis	3



BADM 641	Decision Analysis for Executives	3
BADM 644	Legal Environment and Ethics	3
BADM 630	Corporate Leadership	3
BADM 650	Global Trade and Supply Chain	3
BADM 652	Marketing Strategy	3
Total Hours		24

## Major Learning Outcomes

### ONLINE MASTER OF BUSINESS ADMINISTRATION PROGRAM

Learning goal #1:: Students will be able to integrate the functional areas of business into management decisions in a global environment

Learning goal #2: Students will be able to identify problems, collect appropriate data and analyze the data to make informed management decisions

Learning goal #3: Students will be able to articulate a succinct business analysis and make recommendations

Learning goal #4: Students will be able to make management decisions in an ethically sensitive and socially responsible manner

Learning goal #5: Students will be effective team members in a virtual environment

Learning goal #6: Students will be an effective leader who influences people toward the attainment of organizational goals

## Ph.D. in Business Administration-Accounting

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The Ph.D. in Business Administration with a major in Accounting is designed to prepare qualified individuals for a career in scholarly accounting research and teaching at the university level. The doctoral program is offered to a relatively small, highly qualified, and motivated group of students who demonstrate the potential to become highly regarded scholars in the field. Doctoral students are expected to be in residence on a full-time basis throughout the duration of the program. Typically, a student will be in-residence, full-time for a period of four years.

### Individualized Program

Each doctoral student is paired with a faculty member with similar research interests. The faculty member will work closely with the student and will serve as a research mentor throughout the duration of the program. Currently, the training, background, and interests of the doctoral faculty support behavioral and archival research in fraud, forensics, and ethics across the functional accounting areas of audit, financial, governmental, information systems, international, managerial, and tax accounting. The individual plan of study for each candidate will be determined by the student, the faculty mentor, and the Ph.D. committee.

### Academic Standards

The following criteria must be met for a student to remain in good standing:

1. Maintain a minimum 3.0 cumulative grade point average in all graduate courses taken at WVU.\*
2. Earn grades of "A" or "B" in all graduate courses taken at WVU.\*
3. Earn no more than two incomplete grades per semester, barring exceptional circumstances in which a deferment is officially granted by the Ph.D. Program Coordinator.
4. Resolve any incomplete grade in a timely manner.
5. Successfully complete any qualifying/summer papers and/or qualifying exams within the prescribed timeframe.
6. Successfully complete a comprehensive exam within four years of starting the program. Failure to pass the comprehensive exam after two attempts will result in dismissal from the program.
7. Successfully defend a dissertation proposal within five years of matriculation.
8. Successfully defend a dissertation within seven years of matriculation.
9. Attend scholarly presentations and interact as part of the community of scholars.
10. Perform Graduate Assistantship duties in a satisfactory manner (if applicable).
11. Observation of and adherence to the WVU *Campus Student Code* (<https://studentconduct.wvu.edu/files/d/f0ae69b9-1461-45cb-81ee-40e48e2d978b/main-campus-revised-final-student-conduct-code-8-21-15c.pdf>).

12. Observation of and adherence to WVU's Academic and Professional Standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#text>).
13. Observance of and adherence to the professional standards of the student's home discipline, as defined by the recognized scholarly organization that governs the progression (as identified by the Program Ph.D. Committee)

*\*Where either of these conditions are not met, the student will be placed on probation and a remediation plan will be developed by the Ph.D. Program Coordinator. Where the conditions of the remediation plan are not met within the prescribed timeline, the student will be dismissed from the program.*

## Admissions

Admission to the Ph.D. program in accounting is open to qualified individuals. To be considered for admission into the program, prospective students must:

- Submit an online application by December 1 to be considered for admission and University fellowships. Applications will be accepted after this date as space is available.
- Have a bachelor's degree in accounting from an accredited college/university **OR** a bachelor's degree in any field **AND** a master's degree in accounting from an accredited university
- Provide a statement of purpose describing why the applicant is pursuing a Ph.D. and the applicant's career aspirations upon completion of the degree (typically submitted as part of the application)
- Provide a current resume or curriculum vitae (typically submitted as part of the application)
- Provide three letters of reference (typically coordinated and submitted as part of the application)
- Have official transcripts from all colleges and universities attended sent directly from the applicant's colleges and/or universities to the West Virginia University Office of Graduate Admissions and Recruitment. A cumulative GPA on undergraduate courses should be 3.0 or higher and a cumulative GPA on graduate courses should be 3.25 or higher (based on the U.S. standard of 4.0)
- Have an official score on the Graduate Management Admissions Test (GMAT) or Graduate Record Examination (GRE) sent directly from the test administrator to the West Virginia University Office of Graduate Admissions and Recruitment. The GMAT score should be 620 or higher.
- Obtain a score of at least 100 on the TOEFL-ibt or a score of at least 7.5 on the IELTS test if English is not the applicant's native language. It should be noted that the John Chambers College of Business and Economics TOEFL requirement for applicants to the Ph.D. in Business Administration is higher than the University requirement. Go to [www.toefl.org](http://www.toefl.org) or [www.ielts.org](http://www.ielts.org) to register and find out more about these tests.
- Applicants who have received a high school diploma or a bachelor's degree from an accredited college or university in the United States, United Kingdom, or other predominately English-speaking country (<https://graduateadmissions.wvu.edu/information-for/international-students/>) are usually exempt from the TOEFL/IELTS requirement. However, applicants having only a master's degree from one of these countries must still provide acceptable TOEFL or IELTS scores.

The items listed above are minimum requirements for admission into the program. Since there is limited space in each class, meeting the above requirements does not guarantee admission. Applicants will not be admitted on a provisional basis.

Major Code: 2126

## Doctor of Philosophy

The requirements for a Doctor of Philosophy with a major in Accounting includes successful coursework, a comprehensive examination, a dissertation proposal, and a dissertation defense.

Additionally, candidates are required to work under the guidance of tenure-track research-oriented faculty as graduate research and teaching assistants and are required to teach four courses after successfully passing their comprehensive exams. The program requires full-time enrollment and on-campus attendance, and requires attendance and participation in research workshops and presentations.

The plan of study for each candidate is individualized by the faculty mentor and student, based upon the nature and objectives of the selected research stream. This plan is to be developed by the student and the faculty mentor during the first year.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
<b>Research Seminars</b>		
ACCT 710	Accounting Research Methods Seminar	3
ACCT 711	Behavioral Accounting Research	3
ACCT 712	Archival Accounting Research	3
ACCT 713	Forensic Accounting and Fraud Examination	3
<b>Restricted Electives (four courses in support of your research focus to be approved by the program coordinator)</b>		<b>12</b>
<b>Statistics Courses</b>		

STAT 511	Statistical Methods 1 *	3
STAT 512	Statistical Methods 2 *	3
Two additional 500 level STAT courses (or equivalent) approved by the program coordinator		6
<b>Graduate Seminar</b>		<b>4</b>
ACCT 796	Graduate Seminar (1 Credit for each of the first four semesters)	
<b>Research Hours</b>		<b>30</b>
ACCT 797	Research	
Qualifying Paper		
Comprehensive Exam		
Dissertation Defense		
Total Hours		70

\*

Or equivalent statistics course approved by the program coordinator.

## SEMINAR

The first doctoral seminar provides an introduction to research and the philosophy of research. This course will be taken with other business doctoral students within the college. Then, each student must take the three accounting focused seminars: Behavioral Research, Archival Research, and Fraud and Forensic Accounting. Each course covers seminal research within the functional areas of accounting.

## INDEPENDENT STUDY

One graduate independent study course is required. The course will be centered on a research project selected in conjunction with the faculty mentor.

## MINOR AREA

A minimum of fifteen semester hours of graduate coursework is required in a minor supporting area. A minor area is one that is outside, but complementary to, the major area of accounting and the research in which the candidate is interested, e.g., information systems, finance, economics, public finance, psychology, sociology, operations management, law, and industrial engineering. The minor area focus and courses will be selected with the faculty mentor.

## WORKSHOPS

Throughout the student's tenure at West Virginia University, the faculty expect the doctoral students to attend the accounting workshops. These workshops consist of internal (faculty and students) and external scholars invited to present their research. Doctoral students are expected to read the research papers carefully and are encouraged to participate in the workshop by asking questions and making comments.

## COMPREHENSIVE EXAMINATION

At the end of the second year and after successfully completing at least 39 credit hours of course work from the plan of study, which must include all accounting graduate seminars, each student is required to take a written comprehensive examination. This two-day exam will cover course-related topics and materials from the candidate's plan of study.

Upon successful completion of the comprehensive exam, candidates are considered to be ABD, or "all but dissertation". In the event that all or parts of the exam are not considered to be successful, the candidate may be asked either to re-take select courses and the entire exam or re-take select deficient parts of the exam. A student may retake part of all of the examination only once, and if their efforts are still considered to be unsuccessful, will be asked to leave the doctoral program.

## DISSERTATION PROPOSAL

During the third year after a successful comprehensive examination, the doctoral candidate must select a dissertation committee comprised of five members, one of which will be outside of the Accounting Department. The candidate will develop a dissertation proposal through work with the Chair of the Committee (presumably the faculty mentor) and the Committee members. Once the Chair and Committee members feel that the candidate and the research idea is ready, a public presentation of the dissertation proposal is to be made by the candidate. The Chair and Committee will take note of comments, suggestions, and critiques by those in attendance, and make certain requirements of alteration to the candidate to the proposal. Once the alterations to the proposal are incorporated by the candidate, the Chair and the Committee will approve the candidate's dissertation proposal.

After a successful dissertation proposal the candidate may begin the specific research related to the dissertation. It is recommended that the candidate continue to work closely with the Chair and Committee and keep them apprised of progress towards completion of the dissertation, and to timely notify the Chair and Committee of any unforeseen difficulties as it relates to the dissertation process.

## DISSERTATION DEFENSE

After a successfully executing the dissertation proposal and writing the results in a manner appropriate and consistent to the accounting academe and the University guidelines for dissertations, the candidate must defend the dissertation. The dissertation defense should occur during the fourth year, and is conducted in a formal setting with the Chair and the Committee. The candidate will present the information, field questions from the Chair and the Committee, and make adjustments to the dissertation as deemed necessary by the Chair in working with the Committee.

If the changes are minor in nature, the Chair and Committee may approve the dissertation contingent upon making the minor changes. If the changes are substantial, the Chair and Committee may require the candidate to make corrections and defend again at a later date.

Upon a successful dissertation defense, the candidate must follow the University Electronic Thesis and Dissertation (ETD) guidelines for electronic publication. Once the dissertation has been successfully approved by the University, the candidate is eligible for formal graduation ceremonies.

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
ACCT 710		3 ACCT 711		3 Qualifying Examination	
Statistics Course		3 Restricted Elective		3	
Restricted Elective		3 Statistics Course		3	
		9		9	0

### Second Year

Fall	Hours	Spring	Hours		
ACCT 712		3 ACCT 713		3	
Restricted Elective		3 Minor Area Course 2		3	
Minor Area Course 1		3 Minor Area Course 3		3	
		9		9	

### Third Year

Fall	Hours	Spring	Hours		
ACCT 795		3 ACCT 797		9	
Minor Area Course 4		3 Dissertation Proposal Defense			
Minor Area Course 5		3			
		9		9	

### Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
ACCT 797		9 ACCT 797		9 Dissertation Defense	
		9		9	0

Total credit hours: 72

## Ph.D. in Business Administration-Finance

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The Ph.D. in Business Administration with a major in Finance is a full-time, in-residence program lasting 4-5 years. It is a relatively small, high-quality program. The primary goal of the program is to prepare students for careers in research and teaching at comprehensive universities. The program of study requires the satisfactory completion of coursework, a first year summer research paper, a comprehensive examination, and a dissertation. Students will take courses in various finance topics, economics, econometrics, research methods, and statistics. The program distinguishes itself with small classes and an "open-door" policy, which allows for close interaction between students and faculty (<https://business.wvu.edu/faculty-and-staff/directory/?dname=Finance>) to discuss ideas and work on joint research projects. Early involvement of students in faculty-directed research projects provides students with the opportunity to develop a pipeline of research while in their doctoral program of study. Our aim is that all students will present their work at academic conferences and have at least one published scholarly paper by the time they graduate. Students also gain teaching experience by teaching undergraduate finance courses typically after their first year in the program.

## Academic Standards

The following criteria must be met for a student to remain in good standing:

1. Maintain a minimum 3.0 cumulative grade point average in all graduate courses taken at WVU.\*
2. Earn grades of "A" or "B" in all graduate courses taken at WVU.\*
3. Earn no more than two incomplete grades per semester, barring exceptional circumstances in which a deferment is officially granted by the Ph.D. Program Coordinator.
4. Resolve any incomplete grade in a timely manner.
5. Successfully complete any qualifying/summer papers and/or qualifying exams within the prescribed timeframe.
6. Successfully complete a comprehensive exam within four years of starting the program. Failure to pass the comprehensive exam after two attempts will result in dismissal from the program.
7. Successfully defend a dissertation proposal within five years of matriculation.
8. Successfully defend a dissertation within seven years of matriculation.
9. Attend scholarly presentations and interact as part of the community of scholars.
10. Perform Graduate Assistantship duties in a satisfactory manner (if applicable).
11. Observation of and adherence to the WVU *Campus Student Code* (<https://studentconduct.wvu.edu/files/d/f0ae69b9-1461-45cb-81ee-40e48e2d978b/main-campus-revised-final-student-conduct-code-8-21-15c.pdf>).
12. Observation of and adherence to WVU's Academic and Professional Standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#text>).
13. Observance of and adherence to the professional standards of the student's home discipline, as defined by the recognized scholarly organization that governs the progression (as identified by the Program Ph.D. Committee)

*\*Where either of these conditions are not met, the student will be placed on probation and a remediation plan will be developed by the Ph.D. Program Coordinator. Where the conditions of the remediation plan are not met within the prescribed timeline, the student will be dismissed from the program.*

## Admissions

Students who have an M.S. in Finance or an MBA with a concentration in finance from an accredited academic institution can enter into the Ph.D. program directly. Alternatively, if students lack sufficient academic background in finance, our M.S. in Finance program (p. 401) will serve as an essential preliminary step towards a Ph.D. degree. The following will be considered for admission into the program:

- A completed application received by December 1 is required for admission and to be considered for University fellowships. Late applications will be accepted as space is available.
- A bachelor's degree or equivalent from an accredited university.
- A statement of purpose regarding the Ph.D. program describing why the applicant is pursuing a Ph.D. in Business Administration with a major in Finance and the applicant's career aspirations upon completion of the degree.
- A current résumé.
- Two letters of reference.
- Official copies of all university transcripts with cumulative GPA scores of 3.25 or better on all undergraduate courses and 3.5 on graduate courses (based on U.S. standard of 4.0).
- An official Graduate Management Admissions Test (GMAT) score is preferred; however, in some cases a GRE (Graduate Record Examination) will be accepted. A high GMAT/GRE score is required for admission to the Ph.D. Program in Business Administration with a major in finance. Successful applicants to our program usually have GMAT or GRE scores in the 80+ percentile.
- The John Chambers College of Business and Economics TOEFL requirement for Ph.D. in Business Administration applicants is higher than the University's. Students whose first language is not English must obtain a score of at least 100 on the TOEFL-ibt or a score of at least 7.5 on the IELTS test to be admitted to graduate study. Go to [www.toefl.org](http://www.toefl.org) (<https://www.ets.org/toefl.html>) or [www.ielts.org](http://www.ielts.org) (<http://www.ielts.org/>) to register and find out more about the test. This is a University requirement.
- Applicants who have received a high school diploma or a bachelor's degree from an accredited college or university in the United States or some other predominantly English-speaking countries (<https://graduateadmissions.wvu.edu/information-for/international-students/>) are usually exempt from the TOEFL/IELTS requirement. Applicants with only a master's degree from a predominantly English-speaking country must still provide acceptable TOEFL or IELTS scores.

These entrance requirements are the minimum requirements for regular admission. Since there is limited space in each year's class, meeting these entrance requirements does not guarantee admission. Applicants will not be accepted on a provisional basis.

Apply Here (<https://graduateadmissions.wvu.edu/how-to-apply/>)

## Program Requirements

The program is designed to be completed in four or five years, depending on the student's background, interests, and dissertation progress. The program of study requires the satisfactory completion of coursework plus dissertation research. Students will take courses in economic theory, econometrics, and finance, followed by a comprehensive examination and dissertation research.

The Ph.D. program in Business Administration with a major in Finance is a full-time graduate program and requires at least three years in residence. The residency requirement is important because the doctoral degree has aspects of an apprenticeship which can only be accomplished on campus. Additionally, teaching on campus is a requirement of the program. Students are expected to teach after their first year in the program. They will work closely with faculty to ensure quality instruction and receive feedback on their development as university-level teachers, predominantly English-speaking country.

Major Code: 2127

## Doctor of Philosophy

Our program is built around an applied curriculum with a strong theoretical and quantitative foundation. The program involves doctoral level coursework, a first year research paper, and presentation to faculty, passing a finance comprehensive exam, and defending a dissertation.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
ECON 701	Advanced Micro-Economic Theory 1	4
ECON 702	Advanced Macro-Economic Theory 1	3
ECON 711	Advanced Micro-Economic Theory 2	4
ECON 721	Mathematical Economics	3
ECON 725	Econometrics 1	3
ECON 726	Econometrics 2	3
ECON 727	Econometrics 3	3
FIN 736	Asset Pricing	3
FIN 741	Corporate Finance Seminar	3
FIN 742	Investments Seminar	3
FIN 743	Advanced Topics Seminar	3
<b>Research Hours</b>		<b>39</b>
FIN 797	Research	
1st Year Research Paper		
Comprehensive Exam		
Dissertation Proposal Defense		
Dissertation Defense		
Total Hours		74

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
ECON 701		4 ECON 711		4 Student Research Paper	
ECON 721		3 ECON 725		3	
ECON 702		3 FIN 736		3	
		10		10	0

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
ECON 726		3 ECON 727		3 Finance Comprehensive Examination	
FIN 741		3 FIN 742		3	

FIN 797		3 FIN 743		3	
		9		9	0
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
FIN 797		9 FIN 797		9	
		9		9	
<b>Fourth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
FIN 797		9 FIN 797		9	
		9		9	

Total credit hours: 74

## Ph.D. in Business Administration-Management

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The Ph.D. in Business Administration with a major in Management is a high-quality, full-time, residential program designed to prepare qualified individuals for a career in scholarly research and teaching at the university level. Our program is supported by faculty who actively publish research on a variety of topics in organizational behavior and strategic management that reflect the most relevant and interesting questions from the standpoint of advancing academic knowledge and managerial practice. As such, our Ph.D. students are exposed to a greater scope of scholarly knowledge while getting an in-depth training on a specific topic of their dissertation research. We also believe that an effective scholar should be trained as both a researcher and a teacher. Our Ph.D. program provides Ph.D. students with an opportunity to learn from the best faculty instructors. We also care about what happens to our Ph.D. students after they graduate. Job search training and support are part of our program.

Our program is small and student-centered, which provides students the opportunity to work closely with faculty on various research projects. This personal attention extends to the small, research-oriented doctoral seminars that form the core of our academic program. Students are an integral part of our department and viewed more as junior colleagues, research partners, and co-authors than as traditional students. Consequently, we encourage all students to work with multiple faculty, not just their advisor or dissertation chair.

*"The size of WVU's program is a real competitive advantage for us needy Ph.D. students – at WVU, the Ph.D. students can dip their brush into experiences and opportunities that they couldn't get at any other place."* -- Drew Carnes, Ph.D., Associate Professor of Management at Western Carolina University (graduated from WVU in 2015).

*"The WVU PhD program prepared me for academic research at all levels, and from all angles. My favorite memories of the PhD are of discussing research with faculty who supported my initial ideas yet pushed me further."* -- Karen Nicholas, Ph.D., Assistant Professor of Management at Boise State University (graduated from WVU in 2018).

*"The training I received at WVU highly prepared me for success as a scholarly academic. The methods training is highly rigorous and the seminars challenged me to think in new ways and also complemented my existing experience in both academia and industry. Completing the program was certainly the biggest challenge of my life, but I left knowing that I had everything I needed to move forward."* -- Curtis Sproul, Ph.D., Assistant Professor of Management at Georgia Southern University (graduated from WVU in 2017).

### WHAT MAKES OUR PH.D. PROGRAM UNIQUE?

**People** are our competitive advantage! If you join our program, you'll find yourself in a very stimulating and supportive environment. Our Ph.D. students do not compete with each other. The small size of our program allows each student to closely interact with more than one faculty.

**Place** – Joining West Virginia University will certainly convince you that the Mountaineer spirit is great! Our program is residential and located in Morgantown, West Virginia, an hour and a half away from Pittsburgh, Pennsylvania. On the Best Places to Live (<https://livability.com/best-places/top-100-best-places-to-live/2018/wv/morgantown/>) list for 2018, Morgantown also appears on the Livability.com Top 10 Cities for Affordable Health Care. (<https://livability.com/top-10/health/10-best-cities-for-affordable-healthcare/2014/wv/morgantown/>) Known primarily as home to West Virginia University and its 25,000 students, Morgantown has a wide variety of housing options and neighborhoods as well as downtown shops, restaurants and entertainment nightspots for students and residents. The median age here is 22.6 years old, which contributes to a youthful and fun local culture.

**Profession** – We are an R1 (highest research activity) university, and our College and Department, in particular, correspond to this prestigious status. Faculty in our Department publish in top academic journals and are recognized well beyond West Virginia University for their research and service to the profession. The vast professional network of our faculty is a great asset for our Ph.D. students in their job search.



Our Ph.D. program is looking for people who share our values of curiosity, respect, accountability, service and appreciation.

## Academic Standards

The following criteria must be met for a student to remain in good standing:

1. Maintain a minimum 3.0 cumulative grade point average in all graduate courses taken at WVU.\*
2. Earn grades of "A" or "B" in all graduate courses taken at WVU.\*
3. Earn no more than two incomplete grades per semester, barring exceptional circumstances in which a deferment is officially granted by the Ph.D. Program Coordinator.
4. Resolve any incomplete grade in a timely manner.
5. Successfully complete any qualifying/summer papers and/or qualifying exams within the prescribed timeframe.
6. Successfully complete a comprehensive exam within four years of starting the program. Failure to pass the comprehensive exam after two attempts will result in dismissal from the program.
7. Successfully defend a dissertation proposal within five years of matriculation.
8. Successfully defend a dissertation within seven years of matriculation.
9. Attend scholarly presentations and interact as part of the community of scholars.
10. Perform Graduate Assistantship duties in a satisfactory manner (if applicable).
11. Observation of and adherence to the WVU *Campus Student Code* (<https://studentconduct.wvu.edu/files/d/f0ae69b9-1461-45cb-81ee-40e48e2d978b/main-campus-revised-final-student-conduct-code-8-21-15c.pdf>).
12. Observation of and adherence to WVU's Academic and Professional Standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#text>).
13. Observance of and adherence to the professional standards of the student's home discipline, as defined by the recognized scholarly organization that governs the progression (as identified by the Program Ph.D. Committee)

*\*Where either of these conditions are not met, the student will be placed on probation and a remediation plan will be developed by the Ph.D. Program Coordinator. Where the conditions of the remediation plan are not met within the prescribed timeline, the student will be dismissed from the program.*

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## FACULTY

### COORDINATOR

- Kayla Follmer - Ph.D. (Penn State University)  
Program Coordinator - Management Ph.D.

### PROFESSORS

- Mark Gavin - Ph.D. (Purdue University)  
Expertise: trust, emotions, leadership, and multilevel phenomena
- Jodi Goodman - Ph.D. (Georgia Institute of Technology)  
Expertise: learning processes, adaptive expertise, institutional environments, and research methods
- Jeff Houghton - Ph.D. (Virginia Tech University)  
Expertise: leadership, self-leadership, team processes and performance, international HR, creativity and innovation, and personality and individual differences
- Edward Tomlinson - Ph.D. (The Ohio State University)  
Expertise: interpersonal trust, behavioral integrity, and deviant workplace behavior

### ASSOCIATE PROFESSORS

- Olga Bruyaka Collignon - Ph.D. (EM Lyon Business School and Jean Moulin University, Lyon, France)  
Expertise: inter-firm alliances and alliance portfolios, technology and innovation, resource-based theories, signaling theory, and organizational stigma
- Tianxu Chen - Ph.D. (Drexel University)  
competitive dynamics, technology and innovation, and entrepreneurship
- David Dawley - Ph.D. (Florida State University)  
Expertise: organization turn-around, bankruptcy, organizational crisis, signaling theory, and multilevel phenomena
- James Field - Ph.D. (Virginia Commonwealth University)  
meta-analysis, sensitivity analysis, open science, big data, employee turnover, and employee motivation
- Kayla Follmer - Ph.D. (Penn State University)  
concealable identity management, mental illness, diversity and inclusion
- Xiaoxiao Hu - Ph.D. (George Mason University)  
Expertise: workplace affect, social dynamics in organizations, leadership, and employee development



- Nancy McIntyre - Ph.D. (University of Rhode Island)  
Expertise: curiosity, self concept-based motivation, emotional intelligence, and perfectionism
- Abhishek Srivastava - Ph.D. (University of Maryland)  
Expertise: leadership, team effectiveness, and the factors that support knowledge sharing

## ASSISTANT PROFESSORS

- Ryan Angus - (University of Utah)  
Expertise: value creation, uncertainty, entrepreneurship, pivoting, theory of the firm, and human capital
- Hyeonsuh Lee - Ph.D. (University of Illinois Urbana-Champaign)  
Expertise: knowledge of entrepreneurs, new venture experimentation, nascent industries
- Lily Morse - Ph.D. (Carnegie Mellon University)  
Expertise: behavioral ethics, prosocial deviance, moral character, and negotiation

## Admissions

The following will be considered for admission into the program:

### • TRANSCRIPTS/ GRADUATE POINT AVERAGE (GPA) SCORES

To be admitted into the Ph.D. in Business Administration with a major in Management program, applicants must have completed a bachelor's degree from an accredited university and should have a cumulative GPA of 3.25 or better for undergraduate work, and a cumulative GPA of 3.5 or better for graduate work (based on the U.S. standard scale of 4.0).

### • GMAT OR GRE SCORES

GMAT (Graduate Management Admission Test) or GRE (Graduate Record Exam) score must be submitted. Successful Ph.D. applicants to our Program usually have GMAT or GRE scores in the 70+ percentile. The GRE-GMAT comparison tool (<https://www.ets.org/gre.html>) will be used to evaluate the GRE scores.

#### Graduate Management Admission Test (GMAT)

Visit [www.mba.com](http://www.mba.com) (<http://www.mba.com/>) for information on the GMAT, including a testing center, scheduling your test, and downloading a sample test. We suggest that you take a few months to study for the GMAT and sit for the test in the autumn prior to the year in which you apply, so that if a re-take is necessary, you will have sufficient time to schedule it. In West Virginia, the test is administered in Morgantown and Charleston (<https://www.mba.com/exams/gmat/before-the-exam/register-for-the-gmat-exam/find-a-test-center> (<https://www.mba.com/exams/gmat/before-the-exam/register-for-the-gmat-exam/find-a-test-center/>)). Scores are valid for five years from the date of the test.

#### Graduate Record Examination (GRE)

As an alternative, applicants to the Management Ph.D. program may submit their GRE scores. The GRE revised General Test is available at more than 850 test centers in more than 160 countries. In most regions of the world, the computer-delivered test is available on a continuous basis throughout the year. In Mainland China, Hong Kong, Taiwan, and Korea, the computer-delivered test is available one to three times per month. In areas of the world where computer-delivered testing is not available, the paper-delivered test is available up to three times a year in October, November, and February. For more information about the GRE, visit [www.ets.org/gre](http://www.ets.org/gre) (<http://www.ets.org/gre/>).

### • LANGUAGE SKILLS TESTS – TOEFL OR IELTS

Applicants whose native language is not English or who did not complete an **undergraduate degree** at an institution in an English-speaking country (<https://graduateadmissions.wvu.edu/information-for/international-students/>) must demonstrate their ability to perform successfully in university-level coursework where English is the language of instruction and assessment. WVU requires candidates to submit the appropriate English test scores. The minimum acceptable scores are 100 on the TOEFL-iBT, or 7.5 on the IELTS. Note- applicants are required to take the Academic Reading/ Writing test within IELTS, not the General Training Reading/Writing test. PTE Academic: 68. Duolingo English Test: 120. Go to [www.toefl.org](http://www.toefl.org) (<http://www.toefl.org/>) or [www.ielts.org](http://www.ielts.org) (<http://www.ielts.org/>) to register and find out more about the test.

**For GMAT / GRE and for TOEFL, our Institution code is 5904, Department code is 1801.** Generally, West Virginia University and our department will accept test scores that are no more than five years old as long as the applicant can provide a valid copy of the official score report.

## Application Process

Students begin their graduate work in the fall semester. To be assured full consideration for August admission and/or financial aid, the department encourages all interested candidates to submit their completed applications by **December 1st**. Potential applicants who are interested in applying after this deadline should contact the Program Coordinator to determine if there are spaces still available. With the typical application processing time, we encourage potential students to apply early to ensure all materials are received prior to the due date.

1. **Upload an up-to-date resume (Curricula Vitae):** Your resume should include enough information for the admissions committee to trace your entire professional work history and should indicate any relevant affiliations.
2. **Request two letters of recommendation** through the online portal. Individual letters should not exceed one page: We recommend that your reference provide some information that is not found in the other materials being submitted. Topics with regards to your ability to work with others, your discipline and ambition, leadership potential, etc. should be addressed. Your reference letter(s) should discuss the aptitude necessary for your success in the Ph.D. program.
3. **Create a Statement of Purpose:** Your statement of purpose should address why you are interested in earning your Ph.D. from WVU (what you hope to learn, career goals, etc.). You should demonstrate your understanding of what academic research is and your commitment to doing this type of work, both in the Ph.D. program and throughout your career. You should discuss any research experience you have, your general area of interest and your specific research interests.
4. **Writing Sample** (if available): Examples include class research papers, conference papers, published research articles, research manuscripts in progress, white papers, technical reports, etc.
5. You may also send other **supporting materials** you wish to have considered with your application. All these materials can now be submitted electronically as part of the online application process. This method is strongly preferred, since it assures timely receipt of the documents.
6. **Pay application fee (\$60.00 payable by Visa, Mastercard, or Discover Card).**
7. **Submit application.**
8. To complete your application, you must submit **GMAT or GRE scores** as well as your **TOEFL / IELTS scores (For GMAT / GRE and for TOEFL, our Institution code is 5904, Department code is 1801)**. Generally, West Virginia University and our department will accept test scores that are no more than five years old as long as the applicant can provide a valid copy of the official score report.

The entrance requirements are minimum requirements for admission. Since there is limited space in each year's class, meeting entrance requirements does not guarantee admission. Applicants will not be accepted on a provisional basis.

Start your submission now (<https://graduateeducation.wvu.edu/>)

Major Code: 2129

## Doctor of Philosophy

The coursework in management is designed to provide a theoretical, methodological, and statistical foundation for critically evaluating extant research and conducting independent research. Students will take six content courses in management and six research methods and statistics courses. Additional requirements include a qualifying paper and a comprehensive examination. Subsequent to completing coursework and passing comprehensive examinations, students will be admitted to doctoral candidacy. Remaining hours will focus on completing a dissertation.

## MAJOR REQUIREMENTS

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
<b>Methods and Statistics Courses - all required</b>		<b>18</b>
MANG 709	Applied Univariate Statistics	
MANG 710	Philosophy of Research	
MANG 711	Research Methods	
MANG 713	Structural Equation Modeling	
or STAT 512	Statistical Methods 2	
MANG 793	Special Topics (Research Methods II)	
MANG 793	Special Topics (Multivariate Analysis)	
<b>Management Content Seminars (6 courses required)</b>		<b>18</b>
MANG 720	Human Resource Management	
MANG 730	Leadership	
MANG 740	Org Behavior: Groups and Teams	
or MANG 770	Strategic Management Theory	
MANG 760	Organizational Theory	
MANG 780	Organizational Behavior: Individuals	
or MANG 785	Contemporary Strategic Mgmt	
MANG 793	Special Topics (Entrepreneurship)	
Open Elective (Doctoral seminars; approval of Management PhD Coordinator required)		
<b>Research Hours</b>		<b>36</b>
MANG 797	Research	

Qualifying Paper

Comprehensive Exam

Dissertation Proposal Defense

Dissertation Defense

Total Hours

72

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
MANG 709		3 MANG 711		3 Work on Qualifying Paper	
MANG 710		3 MANG 740 or 780		3	
MANG 770 or 785		3 MANG 760		3	
		9		9	0

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
MANG 785 or 770		3 MANG 740 or 780		3 Research	
MANG 793 (Multivariate Analysis)		3 MANG 713 or 793		3	
MANG 730 or PSYC 512 (MANG 730, Org. Behavior; PSYC 512, Strategy)		3 MANG 720 or 793		3	
		9		9	0

### Third Year

Fall	Hours	Spring	Hours	Summer	Hours
MANG 797		9 MANG 797		9 Research	
Comprehensive Exam		Dissertation defense proposal			
		9		9	0

### Fourth Year

Fall	Hours	Spring	Hours		
MANG 797		9 MANG 797		9	
		Dissertation Defense			
		9		9	

Total credit hours: 72

## Ph.D. in Business Administration-Marketing

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The Ph.D. in Business Administration with a major in Marketing is a full-time, residential program that seeks to prepare students to contribute to the marketing discipline through the discovery, development, and dissemination of knowledge. The goal is to strive for continuous improvement in training world-class researchers and college professors who are able to conduct independent, original academic research and teach university-level courses in their major areas of study.

### Academic Standards

The following criteria must be met for a student to remain in good standing:

1. Maintain a minimum 3.0 cumulative grade point average in all graduate courses taken at WVU.\*
2. Earn grades of "A" or "B" in all graduate courses taken at WVU.\*
3. Earn no more than two incomplete grades per semester, barring exceptional circumstances in which a deferment is officially granted by the Ph.D. Program Coordinator.
4. Resolve any incomplete grade in a timely manner.
5. Successfully complete any qualifying/summer papers and/or qualifying exams within the prescribed timeframe.
6. Successfully complete a comprehensive exam within four years of starting the program. Failure to pass the comprehensive exam after two attempts will result in dismissal from the program.
7. Successfully defend a dissertation proposal within five years of matriculation.
8. Successfully defend a dissertation within seven years of matriculation.
9. Attend scholarly presentations and interact as part of the community of scholars.
10. Perform Graduate Assistantship duties in a satisfactory manner (if applicable).
11. Observation of and adherence to the WVU *Campus Student Code* (<https://studentconduct.wvu.edu/files/d/f0ae69b9-1461-45cb-81ee-40e48e2d978b/main-campus-revised-final-student-conduct-code-8-21-15c.pdf>).
12. Observation of and adherence to WVU's Academic and Professional Standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#text>).
13. Observance of and adherence to the professional standards of the student's home discipline, as defined by the recognized scholarly organization that governs the progression (as identified by the Program Ph.D. Committee)

*\*Where either of these conditions are not met, the student will be placed on probation and a remediation plan will be developed by the Ph.D. Program Coordinator. Where the conditions of the remediation plan are not met within the prescribed timeline, the student will be dismissed from the program.*

## Admissions

The following will be considered for admission into the program:

- A completed application received by December 1 is required for admission and to be considered for University fellowships. Late applications will be accepted as space is available.
- A master's degree or equivalent from an accredited university
- A statement of purpose regarding the Ph.D. program describing why the applicant is pursuing a Ph.D. in Business Administration and the applicant's career aspirations upon completion of the degree
- A current résumé
- Two letters of reference
- Official copies of all university transcripts with cumulative GPA scores of 3.0 or better on all undergraduate courses and 3.25 on graduate courses (based on U.S. standard of 4.0)
- An official Graduate Management Admissions Test (GMAT) score is preferred; however, in some cases a GRE (Graduate Record Examination) may be accepted. A high GMAT/GRE score is required for admission to the PhD Program in Business Administration.
- The John Chambers College of Business and Economics' TOEFL requirement for Ph.D. in Business Administration applicants is higher than the University's. Students whose first language is not English must obtain a score of at least 100 on the TOEFL-ibt or a score of at least 7.5 on the IELTS test to be admitted to graduate study. Go to [www.toefl.org](http://www.toefl.org) or [www.ielts.org](http://www.ielts.org) to register and find out more about the test. This is a university requirement.
- Applicants who have received a high school diploma or a bachelor's degree from an accredited college or university in the United States, the United Kingdom, or other predominately English-speaking country (<https://graduateadmissions.wvu.edu/information-for/international-students/>) usually are exempt from the TOEFL/IELTS requirement. However, applicants only having a master's degree from one of these countries must still provide acceptable TOEFL or IELTS scores.

The entrance requirements are minimum requirements for regular admission. Since there is limited space in each year's class, meeting these entrance requirements does not guarantee admission. Applicants will not be accepted on a provisional basis.

Major Code: 2128

## Doctor of Philosophy

### MAJOR REQUIREMENTS

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
<b>Research Hours</b>		
Research		36
MKTG 797	Research	

**Marketing Content Courses**

MKTG 710	Philosophy of Research	3
MKTG 711	Advanced Topics in Marketing 1	3
MKTG 720	Seminar in Buyer Behavior	3
MKTG 721	Special Topics in Marketing	3
MKTG 730	Advanced Marketing Research	3
MKTG 740	Seminar in Marketing Strategy	3

**Methods and Statistics Courses**

MANG 709	Applied Univariate Statistics	3
MANG 711	Research Methods	3
MANG 713	Structural Equation Modeling	3
PSYC 612	Multivariate Analysis	3
or STAT 541	Applied Multivariate Analysis	

**Restricted Electives \*** **6**

Qualifying Exam	
Comprehensive Exam	
Dissertation Proposal Defense	
Dissertation Defense	

Total Hours	72
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\*

Restricted Electives are typically used to aid and inform the dissertation process and should be relevant to the student's area of research and are approved by the student's advisor.

**SUGGESTED PLAN OF STUDY****First Year**

Fall	Hours	Spring	Hours	Summer	Hours
MANG 709		3 MKTG 711		3 Qualifying Exam	
MKTG 710		3 MKTG 720		3	
Restricted Elective		3 PSYC 612		3	
		9		9	0

**Second Year**

Fall	Hours	Spring	Hours		
MKTG 721		3 MKTG 730		3	
MANG 713		3 MKTG 740		3	
Restricted Elective		3 MANG 711		3	
		9		9	

**Third Year**

Fall	Hours	Spring	Hours		
MKTG 797		9 MKTG 797		9	
Comprehensive Exam		Dissertation Proposal Defense			
		9		9	

**Fourth Year**

Fall	Hours	Spring	Hours		
MKTG 797		9 MKTG 797		9	
		Dissertation Defense			
		9		9	

Total credit hours: 72

# Business Cybersecurity Management, M.S.

## Degree Offered

- Master of Science in Business Cybersecurity Management

## Certificates Offered

- Business Cybersecurity Data Analytics
- Business Cybersecurity Foundations
- Business Cybersecurity Management

## Nature of the Program

The M.S. in Business Cybersecurity Management Program is a 12-month or 24-month online program. The online course delivery of this program allows students to work in teams with expert faculty conducting hands-on technical labs, learning complex technologies while working with a flexible schedule and location independence.

This Business Cybersecurity Data Analytics certificate orients both data and technology analysts to the demands and requirements of both securing and analyzing data. The Business Cybersecurity Foundations certificate focuses on the development of a new or overhaul of existing cybersecurity structures in firms of all sizes. The Business Cybersecurity Management certificate prepares students to manage and improve existing cybersecurity programs with an emphasis on the evaluation of risks and where cybersecurity management meets the law.

Although the master's and certificate programs require the learning of challenging technical material, entry into the program does not assume or require depth in technology fields. The program is constructed in such a way as to allow students from all backgrounds to get up to speed quickly, while simultaneously challenging those with deep technical expertise.

## Academic Standards

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionanddismissal>) section of the University's Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by the college, their degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#gradestext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradestext)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs **and** the Program Coordinator.

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## FACULTY

### COORDINATOR

- Christopher Ramezan - Ph.D. (West Virginia University)  
Security Architecture, Machine Learning, IT/OT Convergence, Remote Sensing, Cybersecurity Education

### TEACHING ASSISTANT PROFESSORS

- Mohammad J. Ahmad - Ph.D. (West Virginia University)  
Software Vulnerability and Fault-Proneness Detection, Analysis, and Classification, Machine Learning, Software Engineering, Cybersecurity

## ADJUNCT PROFESSORS

- Lydia Greaser - M.S. (West Virginia University)  
Director of HSC Information Security, West Virginia University Health Sciences Center
- Frank Hatten - M.S. (West Virginia University)  
Cybersecurity Analyst, John Chambers College of Business and Economics
- John Lympany - Ed.D. (Spalding University)  
Assistant Dean for Administration and Planning, John Chambers College of Business and Economics

## Admissions

The M.S. in Business Cybersecurity Management program seeks individuals from diverse academic backgrounds who have an interest and aptitude to be successful in the cybersecurity domain. This program prepares students to become cybersecurity professionals, as well as sharpen the skills of those who currently work in the cybersecurity industry so that they can adapt to growing changes in security technology.

The Admissions Committee will take a holistic approach to the application review process and will consider the strength of the following admissions application requirements:

- GPA - To be competitive, an applicant would present a cumulative undergraduate GPA of 3.25
- Resume
- Statement of Purpose
- Letter of Recommendation - Applicants must have one letter of recommendation from an individual who is not a friend or family member and can provide information about their ability to work with others, discipline and ambition, leadership potential, etc.

The Admissions Committee reviews applications on a rolling basis, and students admitted to the program may begin in the fall or spring semester. Please visit this program's webpage (<https://business.wvu.edu/academics/management-information-systems/business-cybersecurity-management/>) to learn more about the specific application deadlines and other important information. Students may also contact the John Chambers College of Business and Economics Graduate Programs Office for assistance at (304) 293-5505.

Major Code: 2140

\* Note- International Students are required to submit a TOEFL, IELTS, or Duolingo score. Applicants must have a TOEFL-ibt score of 79. If you have taken the IELTS, the minimum score must be 6.5, and the minimum Duolingo score is a 105. English language exam scores should be sent to the Office of Admissions, West Virginia University, PO Box 6009, Morgantown, WV 26506-6009.

All graduate programs in the John Chambers College of Business and Economics require that enrolled students maintain a minimum cumulative GPA of 3.0 in coursework applied toward their degree program, as outlined in the specific academic program of study.

## Degree Requirements

Each student who completes an MS in Business Cybersecurity Management will complete a 10 course online sequence in a one year time period. Students are required to attend an on-campus residency and also are required to attend an on-campus residency to present their capstone project at the conclusion of their one year program.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
CYBR 510	Cybersecurity Information Systems Management	3
CYBR 520	Business Cybersecurity Analytics	3
CYBR 525	Information Security Assurance Management	3
CYBR 530	Business Data Communications	3
CYBR 535	Business Network Security *	3
CYBR 540	Information Ethics and Legal Procedures **	3
CYBR 545	Business Cybercrime Management	3
CYBR 550	Business Enterprise Security Architecture	3
BUDA 550	Business Data Visualization	3
CYBR 555	Business Cybersecurity Practicum	3
Total Hours		30

\*

Students may select CPE 538 in place of the CYBR 535 in the Spring semester, on campus.

\*\*

Students may select CS 539 in place of the CYBR 540 in the Spring semester, on campus

## Suggested Plan of Study - 1 Year

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
CYBR 510		3 CYBR 535		3 BUDA 550	3
CYBR 520		3 CYBR 540		3 CYBR 555	3
CYBR 525		3 CYBR 545		3	
CYBR 530		3 CYBR 550		3	
		12		12	6

Total credit hours: 30

## SPRING START - 18 MONTH

### First Year

		Spring	Hours	Summer	Hours
		CYBR 535		3 BUDA 550	3
		CYBR 540		3	
		6		3	

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
CYBR 510		3 CYBR 545		3 CYBR 555	3
CYBR 520		3 CYBR 550		3	
CYBR 525		3			
CYBR 530		3			
		12		6	3

Total credit hours: 30

## FALL START - 2 YEAR

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
CYBR 525		3 CYBR 535		3 BUDA 550	3
CYBR 530		3 CYBR 540		3	
		6		6	3

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
CYBR 510		3 CYBR 545		3 CYBR 555	3
CYBR 520		3 CYBR 550		3	
		6		6	3

Total credit hours: 30

## Dual Degree

- Doctor of Jurisprudence/Master of Science in Business Cybersecurity Management (p. )

## DOCTOR OF JURISPRUDENCE/MASTER OF SCIENCE IN BUSINESS CYBERSECURITY MANAGEMENT

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to CoL's JD program and Chambers' CYBER program by each College's standard admission procedure.
- For additional details and requirements for each program, please visit the JD ([http://catalog.wvu.edu/graduate/law/academic\\_policies\\_and\\_procedures/academic\\_programs/jd/#majortext](http://catalog.wvu.edu/graduate/law/academic_policies_and_procedures/academic_programs/jd/#majortext)) or MS-CYBR pages.
- Students will develop a combined plan of study with their graduate advisors in each program.



- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Students must meet the academic standards of both degrees earned.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

## MASTER OF SCIENCE DEGREE REQUIREMENTS

Each student who completes an MS in Business Cybersecurity Management will complete a 10 course online sequence in a one year time period. Students are required to attend an on-campus residency and also are required to attend an on-campus residency to present their capstone project at the conclusion of their one year program.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
CYBR 510	Cybersecurity Information Systems Management	3
CYBR 520	Business Cybersecurity Analytics	3
CYBR 525	Information Security Assurance Management	3
CYBR 530	Business Data Communications	3
CYBR 535	Business Network Security	3
CYBR 540	Information Ethics and Legal Procedures	3
CYBR 545	Business Cybercrime Management	3
CYBR 550	Business Enterprise Security Architecture	3
CYBR 555	Business Cybersecurity Practicum	3
BUDA 550	Business Data Visualization	3
Total Hours		30

## DOCTOR OF JURISPRUDENCE DEGREE REQUIREMENTS

Code	Title	Hours
Minimum GPA of 2.50		
First-Year Required Courses		
LAW 641	Introduction to Legal Research	1
LAW 700	Legal Analysis, Research and Writing 1	2
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 725	Constitutional Law 1	4
LAW 793	Civil Procedure	4
LAW 793	Introduction to the Profession	1
LAW 793	Legal Writing Intensive	1
Upper-Level Requirements		
LAW 715	Appellate Advocacy	2
LAW 742	Professional Responsibility	3
Seminar (any 688, 689, or 796 course)		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives (credit may vary - used to reach the minimum of 91 hours for the degree)		39
Total Hours		85

\*

Students admitted to an approved dual degree program should plan to have their two degrees. Each student who completes an MS in Business Cybersecurity Management will complete a 10 course online sequence in a one year time period. Students are required to attend an on-campus residency and also are required to attend an on-campus residency to present their capstone project at the conclusion of their one year program.

## Major Learning Outcomes

### BUSINESS CYBERSECURITY MANAGEMENT

Upon completion of this program, students will:

- Students will be able to demonstrate managerial expertise in understanding and investigating complex cybersecurity ideas.
- Students will be able to evaluate the data security of businesses from a data and systems security perspective, and to recommend and initiate appropriate procedures, policies, and security controls to ensure improved data and systems security.
- Students will be able to use appropriate tools to mitigate cybersecurity threats by applying knowledge of topics such as risk management, disaster recovery, business continuity, digital forensics, and computer network defenses.
- Students will be able to communicate the analysis and findings of a comprehensive security audit initiative to enhance the protection and security of an organization.

## Business Data Analytics, M.S.

### Degree Offered

- Master of Science in Business Data Analytics

### Certificates Offered

- Business Data Analysis
- Business Data Science
- Business Data Technology Management
- Business Operations Research

### Nature of the Program

This program is designed to provide students with the ability to perform data analytics in order to enhance business decision making and increase organizational value. The Business Data Analytics degree provides students with a set of tools applicable in every business and industry, for this reason the program is attractive to both recent graduates in entry-level positions and experienced professionals. The certificate programs allow students to dive deeply in a specific area over the course of one or two semesters. Both the M.S. and certificate programs are designed for working professionals with one- and two-year plans of study, and many find they are able to apply the concepts learned to their work before graduation.

The M.S. and certificates in Business Data Analytics are delivered online and may be completed from anywhere in the world. One hybrid residency at the conclusion of the Capstone project is required. Students may choose to come to Morgantown or participate from home. Capstone presentations are an opportunity to present findings of a Capstone project to the sponsoring company. Corporate Capstone participants represent a broad range of industries, including banking, government contracting, manufacturing, and healthcare.

M.S. Business Data Analytics graduates will understand emerging technology trends in the job market and be well-positioned, by way of their strong technology and analytical and quantitative skills, for career and lifelong success. Data analytics is a rapidly emerging segment in business and industry, and all indications are that it represents one of the fastest growing job markets and has a sustainable future. This program seeks to provide students with the knowledge, skills, and tools to successfully compete for a variety of positions in the emerging job market.

### Academic Standards

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionanddismissal>) section of the University's Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by their college, degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.

- Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#gradetext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradetext)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs **and** the Program Coordinator.

## FACULTY

### COORDINATOR

- Janet Fraser - Ph.D. (Pennsylvania State University)  
Teaching Assistant Professor, Business Data Analytics

### ASSOCIATE PROFESSOR

- Stephane Collignon - Ph.D. (Virginia Tech)  
Associate Professor, Management Information Systems
- Brad Price - Ph.D. (University of Minnesota)  
Associate Professor, Management Information Systems

### ASSISTANT PROFESSORS

- Jeongsub Choi - Ph.D. (Rutgers)  
Assistant Professor, Management Information Systems
- Bin Liu - Ph.D. (Rutgers)  
Assistant Professor, Management Information Systems

## Admissions

The Admissions Committee is made up of faculty teaching in the M.S. in Business Data Analytics Program. The committee members are looking for individuals who have an interest and demonstrated aptitude in quantitative and analytical domains. The committee takes a holistic approach to the admission process and will consider the following factors:

- Undergraduate Degree: students can have an undergraduate degree in any field, but the Admissions Committee looks for strong undergraduate records in quantitative, analytical, and/or programming coursework. Successful students come from many academic backgrounds.
- Applicants must have had a minimum undergraduate grade point average of 2.75 to be considered for admission.
- Applicants must provide one letter of recommendation from an individual who is not a friend or family member and can provide information about their academic promise, ability to work with others, professionalism, and potential to succeed in this program.
- Statement of purpose outlining your interest and unique qualifications for the program
- Work or additional experience in the following areas – business intelligence, business analytics, data mining, data warehousing, database management, computer science, programming, web development, web analytics, risk management and related fields – are considered favorably.

The Admissions Committee reviews applications on a rolling basis, and students admitted to the program may begin in the fall semester. Please visit this program's webpage (<https://business.wvu.edu/academics/management-information-systems/business-data-analytics-certificates/>) to learn more about the specific application deadlines and other important information. Students may also contact the John Chambers College of Business and Economics Graduate Programs Office for assistance at (304) 293-5505.

## Admission Requirements 2024-2025

Major Code: 2159

\* Note- International Students are required to submit a TOEFL, IELTS, or Duolingo score. Applicants must have a TOEFL-ibt score of 79. If you have taken the IELTS, the minimum score must be 6.5, and the minimum Duolingo score is a 105. English language exam scores should be sent to the Office of Admissions, West Virginia University, PO Box 6009, Morgantown, WV 26506-6009.

All graduate programs in the John Chambers College of Business and Economics require that enrolled students maintain a minimum cumulative GPA of 3.0 in coursework applied toward their degree program, as outlined in the specific academic program of study. Students must also have a minimum cumulative GPA of 3.0 to earn a graduate degree from their respective program.

## Degree Requirements

The 30-hour online program is comprised of ten courses that collectively expose students to data uses to facilitate business operations and decision making. The introductory course (BUDA 510) helps students understand the role of data analytics in the context of business. The next set of courses (BUDA 515 and BUDA 520) covers the collection of data as well as the building, manipulation and management of large databases. This is followed

by a set of courses (BUDA 525, BUDA 530, BUDA 535, BUDA 540, BUDA 545 and BUDA 550) that cover analytical tools that can be applied to the large databases, including statistical, data mining, visualization, and simulation modeling tools. Formal coursework concludes with a capstone course (BUDA 555) that requires students to take the knowledge and skills built in the previous nine courses and apply them to a real-world business problem. Throughout all ten courses, there will be an overarching emphasis on 1) the application of data analytics to a business context, and 2) the ethical issues surrounding the collection and use of data. The MS in BUDA program also has two virtual residency requirements. The first residency will occur at the front-end of the program. Students will meet and interact with faculty and staff associated with the MS in BUDA program, as well as their fellow students. This will also provide an opportunity to cover the logistics of the program and build networking capacity. The second residency will occur at the end of the program. This residency will include presentations by student teams of their capstone project and a recognition/celebratory event surrounding completion of the program.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
BUDA 510	Foundations of Business Intelligence	3
BUDA 515	Ethics and Data Collection	3
BUDA 520	Data Management	3
BUDA 525	Business Statistical Methods 1	3
BUDA 530	Business Statistical Methods 2	3
BUDA 535	Business Data Mining	3
BUDA 540	Decision Sciences and Analytics	3
BUDA 545	Business Simulation Modeling	3
BUDA 550	Business Data Visualization	3
BUDA 555	Business Analytics Practicum	3
Total Hours		30

\*

Students whose cumulative GPA falls below 2.75 will be placed on academic probation. If the GPA is not brought up to 2.75 by the end of the following semester, the student will be suspended from the MS in Business Data Analytics program. Students who are suspended from the program will not be allowed to enroll in program courses for one year.

## Suggested Plan of Study (1-year option)

Fall	Hours	Spring	Hours	Summer	Hours
BUDA 510		3 BUDA 530		3 BUDA 550	3
BUDA 515		3 BUDA 535		3 BUDA 555	3
BUDA 520		3 BUDA 540		3	
BUDA 525		3 BUDA 545		3	
		12		12	6

Total credit hours: 30

## Suggested Plan of Study (2-year option)

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
BUDA 515		3 BUDA 530		3 BUDA 550	3
BUDA 525		3 BUDA 535		3	
		6		6	3

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
BUDA 510		3 BUDA 540		3 BUDA 555	3
BUDA 520		3 BUDA 545		3	
		6		6	3

Total credit hours: 30

## Major Learning Outcomes

### BUSINESS DATA ANALYTICS

The educational goals and objectives of the M.S. in Business Data Analytics are as follows:

- Students will be able to demonstrate expertise in statistical techniques, data mining, utilizing databases, and analytical tools.
- Students will be able to apply data analytics to enhance the decision-making of the firm in performance metrics and measurement, risk indicators, assessment and response, and compliance.
- Students will be able to use business analytics to synthesize data trends and competitive drivers.
- Students will be able to communicate the analysis and findings of an analytics initiative in moving an organization forward.

## Economics

### Degrees Offered

- Master of Arts
- Master of Science
- Doctor of Philosophy

### Nature of the Program

#### MASTER OF ARTS AND DOCTOR OF PHILOSOPHY

The master of arts and doctor of philosophy degrees in economics enable students to broaden and refine their knowledge of the concepts and methods of economic analysis. These programs are designed to prepare students for careers in higher education, government, and business. Student programs are planned with the assistance of a faculty advisor and approval of the director of graduate programs. Additional information about the graduate programs in economics and the regulations and requirements pertaining to them is available at <https://business.wvu.edu/academics/economics-department/economics-ph-d> (<https://business.wvu.edu/academics/economics-department/economics-ph-d>). Students are bound by these regulations and requirements, as well as those of the College of Business and Economics.

#### MASTER OF SCIENCE

The M.S. in Economics program contains 30 credit hours of material and is designed to be completed in one or two years. Students will begin the program with a set of economic theory and data analysis courses, followed by an Area of Emphasis in either Empirical Economics or Political Economy.

### Prerequisites

Applicants with a bachelor's degree may apply directly to the Ph.D. program. To be admitted as a regular Ph.D. student, applicants must have a grade point average of 3.0 or better for all undergraduate work completed. Applicants must also complete the general aptitude portion of the Graduate Record Examination (GRE) and receive a minimum combined score of 300 for the verbal and quantitative sections and a minimum score of 3.0 for the analytical writing section. International students must submit their scores on the Test of English as a Foreign Language (TOEFL) or, alternatively, the scores on the International English Language Testing System (IELTS). In addition, applicants must have completed at least one semester of each of the following courses: intermediate microeconomic theory, intermediate macro-economic theory, calculus, and statistics. Applicants not meeting these entrance requirements may be admitted on a provisional and/or deficiency basis, subject to certain performance conditions during their first semester in residence.

### Assistantships

Virtually all full-time students newly accepted into the Ph.D. program are offered a graduate assistantship, which includes a cash stipend and tuition waiver. Graduate assistants engage in research and teaching activities under the supervision of a faculty member. Assistantships are evaluated and renewed each year for four years, so long as the student remains full-time, in good standing, and performs duties satisfactorily. A fifth year is also typically available to full-time students who are making satisfactory progress on their dissertations. The faculty of the Department of Economics also nominates outstanding applicants for university fellowships. Special scholarships are available on a competitive basis to minority students. For further information, see <https://business.wvu.edu/academics/economics-department/economics-ph-d> (<https://business.wvu.edu/academics/economics-department/economics-ph-d>).

### Academic Standards

To qualify for an M.A. or Ph.D. degree in economics, students must earn a cumulative grade point average (GPA) of 3.0 or better for all courses completed as a graduate student at WVU. A regular graduate student in economics whose cumulative GPA falls below 3.0 (B) upon completion of the first nine hours of graduate study is not in good-standing and will be placed on probation at the end of the semester in which the GPA fell below 3.0. Such a student, placed on probation, who fails to raise his or her cumulative GPA to 3.0 by the end of the semester succeeding that in which his or her GPA fell below 3.0 is subject to suspension from the program at the end of that probationary semester.

Other academic reasons for dismissal from the program include failing grades on more than fifty percent of the coursework taken in any semester, a third failure on either a microeconomic theory or macroeconomic theory comprehensive examination, or failure to complete all degree requirements within the specified time limits.

## MASTER OF SCIENCE

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionanddismissal>) section of the University's Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by the college, their degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#gradestext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradestext)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs **and** the Program Coordinator.

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## FACULTY

### CHAIR

- Feng Yao - Ph.D. (Oregon State University)  
Theoretical Econometrics, Applied Econometrics

### PROFESSORS

- Roger Congleton - Ph.D. (Virginia Polytechnic Institute and State University)  
Public Economics, Public Choice, Constitutional Political Economy
- Joshua Hall - Milan Puskar Dean - Ph.D. (West Virginia University)  
Public Economics, Public Choice, Urban and Regional Economics
- Brad Humphreys - Ph.D. (Johns Hopkins University)  
Urban and Regional Economics, Sports Economics
- Jane Ruseski - Ph.D. (Johns Hopkins University)  
Ph.D. Coordinator - Health Economics, Sports Economics
- Feng Yao - Ph.D. (Oregon State University)  
Theoretical Econometrics, Applied Econometrics

### ASSOCIATE PROFESSORS

- Arabinda Basistha - Ph.D. (University of Washington)  
Empirical Macroeconomics, International Finance
- John Deskins - Ph.D. (University of Tennessee)  
Public Economics
- Daniel Grossman - Ph.D. (Cornell University)  
Health Economics
- Shuichiro Nishioka - Ph.D. (University of Colorado at Boulder)  
International Trade, Economic Development
- Adam Nowak - Ph.D. (Arizona State University)  
Applied Econometrics, Urban and Regional Economics

- Scott Schuh - Ph.D. (Johns Hopkins University)  
Applied Macroeconomic Theory, Monetary Economics, Household Finance

## ASSISTANT PROFESSORS

- Nathaniel Burke - Ph.D. (University of Arkansas)  
Experimental Economics, Economics of Education, Group Identity
- Cathleen Johnson - Ph.D. (Virginia Polytechnic Institute and State University)  
MS ECON Coordinator - Experimental Economics, Economic Education
- Kole Reddig - Ph.D. (Carnegie Mellon University)  
Health Economics, Industrial Organization, Applied Microeconomics
- Palak Suri - Ph.D. (University of Maryland)  
Urban Economics, Labor Economics

## ADJUNCT PROFESSORS

- Victor Chow - Ph.D. (University of Alabama)
- Randall Jackson - Ph.D. (University of Illinois at Urbana-Champaign)
- David Martinelli - Ph.D. (University of Maryland)
- Brad Price - Ph.D. (University of Minnesota)
- Peter Schaeffer - Ph.D. (University of Southern California)
- Paul Speaker - Ph.D. (Purdue University)
- Heather Stephens - Ph.D. (Ohio State University)
- Meg Tuszynski - Ph.D. (George Mason University)

## SERVICE ASSOCIATE PROFESSOR

- Edward Timmons - Ph.D. (Lehigh University)  
Labor Economics, Health Economics

## PROFESSORS EMERITI

- Brian Cushing
- Stratford Douglas
- Clifford Hawley
- Ming-Jeng Hwang
- Patrick Mann
- William Reece
- Tom Witt

## Admissions

### DOCTOR OF PHILOSOPHY

Students who have first been admitted into the Doctor of Philosophy in Economics program with the intention of earning a doctorate may apply for the Masters degree either as a "milepost" on their way to the Ph.D. or as a degree in lieu of the Ph.D. when leaving the program.

Applicants with a bachelor's degree may apply directly to the Ph.D. program. To be admitted as a regular Ph.D. student, applicants must have a grade-point average of 3.0 or better for all undergraduate work completed. Applicants must also complete the general aptitude portion of the Graduate Record Examination (GRE) and receive a minimum combined score of 300 in the new GRE scale for the verbal and quantitative sections and a minimum score of 3.0 for the analytical writing section. Applicants are also required to submit a CV, 2 Letters of Recommendation, and a Statement of Purpose. International students must submit their scores on the Test of English as a Foreign Language (TOEFL) or, alternatively, the scores on the International English Language Testing System (IELTS). For full consideration applicants should have all materials submitted by December 1st.

In addition, applicants are required to complete one semester of each of the following courses:

- Intermediate Microeconomic Theory
- Intermediate Macroeconomic Theory
- Calculus
- Statistics

Grades in these courses play an important role in admission and assistantship decisions.



The entrance requirements are minimum requirements for regular admission. Since there is limited space in each year's class, meeting these entrance requirements does not guarantee admission. Applicants not meeting all entrance requirements may be admitted on a provisional basis, subject to certain performance conditions during their first semester in residence.

Applicants are strongly encouraged to take additional math and statistics courses beyond the required minimum. Only rarely are students admitted without at least the first two courses of the standard calculus sequence. Courses in multivariate calculus, linear algebra, and mathematical economics are also particularly useful. We encourage applicants to take advanced undergraduate or masters level courses in economics.

MASTER OF ARTS AND MASTER OF SCIENCE

The MS and MA in Economics Admissions Committee is made up of John Chambers College of Business and Economics faculty. The Committee reviews applications holistically and will admit students based on strength of their admissions application and potential to succeed in this program.

Applications will be reviewed on a rolling basis once all required parts of the application are received, including transcripts, resume, personal statement, and letter of recommendation.

Admissions Requirements:

- Transcripts
- Resume
- One-page personal statement
- Letter of recommendation from individuals who are not friends or family and can provide information about the applicant's academic promise, ability to work with others, professionalism, and potential to succeed in this program

Applicants should send their transcripts to WVU's Office of Admissions, One Waterfront Place, PO Box 6510, Morgantown, WV, 26506-6510 or electronically to [graduateadmissions@mail.wvu.edu](mailto:graduateadmissions@mail.wvu.edu)

Admission Requirements 2024-2025

Major Code: 2135

For specific information on the following programs, please see the links to the right:

- Economics, M.A.
- Economics, M.S.

For specific information on the following program, please see the link to the right:

- Economics, Ph.D.

Economics, M.A.

Master of Arts

Code	Title	Hours
A program GPA of 3.0 is required by the Chambers College.		
ECON 701	Advanced Micro-Economic Theory 1	4
ECON 702	Advanced Macro-Economic Theory 1	3
ECON 711	Advanced Micro-Economic Theory 2	4
ECON 712	Advanced Macro-Economic Theory 2	3
ECON 721	Mathematical Economics	3
ECON 725	Econometrics 1	3
ECON 726	Econometrics 2	3
ECON 795	Independent Study	2
700-level ECON Electives (minimum grade of B- required)		6
Research Paper		
Total Hours		31



## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
ECON 701		4 ECON 711		4 ECON 795		2
ECON 702		3 ECON 712		3		
ECON 721		3 ECON 725		3		
		Elective		3		
		10		13		2

### Second Year

Fall	Hours	
ECON 726		3
Elective		3
Research Paper		
		6

Total credit hours: 31

## Major Learning Outcomes

### MASTER OF ARTS IN ECONOMICS

The masters of arts program in economics prepares students for doctoral study in economics by training students to 1) conduct independent and original research in economics of publishable quality; 2) analyze questions of interest to economists and policymakers, employing tools and methods of theoretical and empirical economics in a manner that meets or exceeds the expectations of doctoral admissions committees.

- Students will apply modern economic theory and modern econometric methods to evaluate economic problems, develop policy evaluations, and make policy recommendations.
- Students will produce a research paper suitable to submit to a refereed economics journal.
- Students will demonstrate the ability to formulate original economic research questions, develop an appropriate research design to explore these questions, and conduct appropriate statistical analyses. This includes the ability to create, use and manipulate data that are appropriate for the research question.

## Economics, M.S.

### Masters of Science

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
ECON 509	Research Design/Methodology *	3
ECON 510	Microeconomic Theory	3
ECON 520	Small Data Methods	3
ECON 582	MS Economics Practicum	3
Required Area of Emphasis		9
Empirical Economics		
Political Economy		
Choose Three Electives or Additional AoE		9
ECON 521	History of Economic Thought **	
ECON 522	Institutional Economics **	
ECON 523	American Economic History **	
ECON 525	Econometric Theory and Practice **	
ECON 526	Causal Inference **	
ECON 541	Public Economics Theory and Practice	
ECON 561	Regional Economics **	
ECON 565	Health Economics Theory and Practice	
ECON 571	Economics of Labor	

ECON 572	Economics of Education	
Total Hours		30

\*

MS in Economics students are required to take ECON 509 every semester during the program until they reach 3 credits.

\*\*

A course cannot be used to satisfy both the AOE and Elective requirement. Students in the Empirical Economics AoE cannot take ECON 525, 526, or 561 as an Elective and students in the Political Economy AoE cannot take ECON 521, 522 or 523 as an Elective.

## Full-Time Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
ECON 510		3 AoE		3 AoE	3
ECON 520		3 Elective		3 Elective	3
ECON 509		1 AoE or Elective		3 ECON 582	3
AoE or Elective		3 ECON 509		1 ECON 509	1
		10		10	10

Total credit hours: 30

## Part-Time Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
ECON 510		3 AoE		3 AoE or Elective	3
ECON 520		3 Elective		3 ECON 509	1
		6		6	4

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
AoE		3 AoE or Elective		3 Elective	3
ECON 509		1 ECON 509		1 ECON 582	3
		4		4	6

Total credit hours: 30

## Areas of Emphasis

- Empirical Economics (p. 394)
- Political Economy (p. 394)

## EMPIRICAL ECONOMICS AREA OF EMPHASIS

Code	Title	Hours
A minimum grade of C- is required.		
ECON 525	Econometric Theory and Practice	3
ECON 526	Causal Inference	3
ECON 561	Regional Economics	3
Total Hours		9

## POLITICAL ECONOMY AREA OF EMPHASIS

Code	Title	Hours
A minimum grade of C-is required.		
ECON 521	History of Economic Thought	3
ECON 522	Institutional Economics	3

ECON 523	American Economic History	3
Total Hours		9

## Accelerated Program

- B.S. Economics and M.S. Economics

## BSBA Degree Requirements

The Chambers College Accelerated Bachelor's to Master's (ABM) program offers highly motivated economics students with an interest in the Master of Science in Economics the opportunity to complete a Bachelor of Science and a Master's degree in an accelerated format. In order to be eligible for this program, you must:

- Have a 3.0 after the fall semester of your sophomore year,
- Have completed 24 undergraduate credits in residence,
- Indicate your interest in the program by March of your junior year, and
- Successfully complete the required courses.

Code	Title	Hours
University Requirements		34
Program Requirements		23
Economics Major Requirements		51
Total Hours		108

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives		20
Total Hours		34

## Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	

MATH 155	Calculus 1	
Total Hours		23

## Economics Major Requirements

Most economics electives should not be attempted until ECON 301 has been completed with a minimum grade of C-. Students interested in graduate work in economics should take ECON 421 and ECON 425.

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
ECON 301	Intermediate Micro-Economic Theory (Minimum grade of C-)	3
ECON 302	Intermediate Macro-Economic Theory (Minimum grade of C-)	3
ECON 482	Applied Economic Research	3
Economics Electives		15
Business Electives		21
Total Hours		51

\*

Economics Electives and Business Electives must be completed by 300- or 400-level coursework.

\*\*

Business Electives include all subject codes offered by the John Chambers College of Business and Economics.

## Masters of Science

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required.		
BUDA 520	Data Management	3
Research Design and Methodology *		3
ECON 509	Research Design/Methodology *	
ECON 510	Microeconomic Theory	3
ECON 525	Econometric Theory and Practice	3
ECON 526	Causal Inference	3
ECON 541	Public Economics Theory and Practice	3
ECON 561	Regional Economics	3
ECON 565	Health Economics Theory and Practice	3
ECON 571	Economics of Labor	3
ECON 582	MS Economics Practicum	3
Total Hours		30

\*

MS in Economics students are required to take ECON 509 every semester during the program until they reach 3 credits.

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
BCOR 121		2 ACCT 201	3
BCOR 191		1 ECON 201	3
BCOR 199		3 ENGL 101	3
Select one of the following:		3 MATH 150	3
MATH 122		GEF 2B, 5, 6, or 7	3
MATH 124			
MATH 150			

Minor/Unrestricted Elective	3				
GEF 2B, 5, 6, or 7	3				
	15			15	
<b>Second Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
ECON 202		3 BCOR 299		3	
ECON 225		3 ECON 301		3	
ENGL 102		3 Business Elective		6	
GEF 2B, 5, 6, or 7		6 Minor/Unrestricted Elective		3	
	15			15	
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
ECON 302		3 Business Elective		3	
Business Elective		3 Economics Elective		6	
Economics Elective		3 Minor/Unrestricted Elective		6	
Minor/Unrestricted Elective		6			
	15			15	
<b>Fourth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
Business Elective		6 Business Elective		3 ECON 561	3
ECON 510		3 ECON 482		3 ECON 571	3
ECON 525		3 ECON 526		3	
Minor/Unrestricted Elective		3 ECON 565		3	
		Minor/Unrestricted Elective		3	
	15			15	6
<b>Fifth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
BUDA 520		3 ECON 509		3 ECON 509	3
ECON 509		3 ECON 541		3 ECON 582	3
	6			6	6

Total credit hours: 144

\*

In order to register on time for Fall, students must apply for ABM by March 1 prior to Senior year.

## Major Learning Outcomes

### MASTER OF SCIENCE IN ECONOMICS

Learning Goal 1: Students will be able to demonstrate economics expertise in the application of microeconomic theory to local, state, and federal policy.

Learning Goal 2: Students will be able to identify the impacts of economic activity and policy on multiple stakeholders through the application of economic theory and modern quantitative methods.

Learning Goal 3: Students will be able to collect data and analyze it using modern data analysis tools and econometric methods.

Learning Goal 4: Students will be able to analyze and summarize the scholarly literature to identify areas of agreement and disagreement.

Learning Goal 5: Students will be able to communicate complex economic analysis to diverse audiences orally and in writing.

# Economics, Ph.D.

## Doctor of Philosophy

The Ph.D. degree is not awarded for the mere accumulation of course credits nor for the completion of the specified residence requirements. At least four years of full-time graduate work beyond the baccalaureate degree are usually required to complete the doctorate. A minimum of two consecutive semesters in actual residence as a full-time graduate student is required.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
<b>Core Courses</b>		
ECON 701	Advanced Micro-Economic Theory 1	4
ECON 702	Advanced Macro-Economic Theory 1	3
ECON 709	Research Design and Methodology	1
ECON 711	Advanced Micro-Economic Theory 2	4
ECON 712	Advanced Macro-Economic Theory 2	3
ECON 721	Mathematical Economics	3
ECON 725	Econometrics 1	3
ECON 726	Econometrics 2	3
ECON 727	Econometrics 3	3
Complete two required Area of Emphasis		12
700-level ECON electives (minimum grade of B- required)		6
Dissertation		
Total Hours		45

## COMPREHENSIVE EXAMINATIONS

Students must pass written comprehensive examinations in microeconomic theory and macroeconomic theory. For detailed rules, see the Rules and Regulations (<https://business.wvu.edu/graduate-degrees/phd-economics/current-student-resources/rules-and-regulations/>) page on our website.

## DISSERTATION INITIAL PROGRESS REPORT

By the end of the first semester of their third year in the Program each student must file a completed Dissertation Initial Progress Report, signed by the student's faculty dissertation advisor and the Economics Graduate Coordinator. The Dissertation Initial Progress Report must contain evidence that the student has performed substantial initial work on his or her dissertation research. Such evidence should include a title, an outline of the proposed dissertation, a review of relevant literature, a description of the sources, availability, and characteristics of any data the student plans to analyze in the dissertation, and a discussion of empirical and analytical methods the student plans to employ. It should also include drafts of completed chapters, if any, and any other materials deemed relevant by the student's faculty advisor. The faculty advisor's signature will signify that the advisor has reviewed the material and consulted with the student, and believes the student's dissertation research project is sufficiently detailed, concrete, and significant as to show promise of ultimate success. The Graduate Coordinator's signature will attest that the Dissertation Initial Progress Report is complete and satisfactory.

## CANDIDACY AND DISSERTATION

When an applicant has passed the written comprehensive examinations and submits a Dissertation Initial Progress Report approved by the Economics Graduate Coordinator, the applicant will be formally promoted to candidacy for the Ph.D. degree. The candidate must submit a dissertation pursued under the supervision of a member of the graduate faculty in economics on some problem in the area of the candidate's major interest. The dissertation must present the results of the candidate's individual investigation and must embody a definite contribution to knowledge. It must be approved by a committee of the graduate faculty in economics. After approval of the candidate's dissertation and satisfactory completion of other graduate requirements, a final oral examination on the dissertation is required.

Each Ph.D. candidate is required to present a dissertation proposal to the graduate director after approval by at least three members of his or her dissertation committee including the chairperson. This proposal will include a statement of the problem (topic summary), a preliminary survey of the literature, a description of the research methodology, and other pertinent material. With the approval of the graduate director, the student is then required to present the proposal in a faculty-student seminar. Credit for dissertation research and writing is available under ECON 797, but only if the student has a dissertation chairperson and an approved topic.

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
ECON 701		4 ECON 711	4
ECON 702		3 ECON 712	3
ECON 721		3 ECON 725	3
		10	10

### Second Year

Fall	Hours	Spring	Hours
ECON 726		3 ECON 727	3
AOE 1 Course 1 *		3 AOE 1 Course 2 *	3
AOE 2 Course 1 *		3 AOE 2 Course 2 *	3
		9	9

### Third Year

Fall	Hours		
ECON 709		1	
Elective Course 1 **		3	
Elective Course 2		3	
		7	

Total credit hours: 45

\*

Six semester hours (or the equivalent) must be taken in each of the student's two Areas of Emphasis. The Areas of Emphasis offered by the Department are Health Economics, International Economics, Monetary Economics, Public Economics, Regional and Urban Economics, and Resource Economics. Other fields, conducted in cooperation with other units on campus, may possibly be approved in unusual cases. Only one of the Areas of Emphasis may be in an outside area; selection must be approved by the graduate economics faculty.

\*\*

Students must complete two additional three-hour 700-level elective courses in Economics in addition to their core courses, field courses, ECON 795, and ECON 797.

## Areas of Emphasis Offered:

- Health Economics (p. 399)
- International Economics (p. 399)
- Monetary Economics (p. 400)
- Public Economics (p. 400)
- Regional and Urban Economics (p. 400)
- Resource Economics (p. 400)

## Health Economics Area of Emphasis Requirements

Code	Title	Hours
ECON 765	Health Economics 1	3
ECON 766	Health Economics 2	3
Total Hours		6

## International Economics Area of Emphasis Requirements

Code	Title	Hours
Select 2 of the following		6
ECON 751	International Trade	
ECON 752	International Macro-Economics	
ECON 754	Comparative Economic Systems	

ECON 755	Development Economics	
Total Hours		6

## Monetary Economics Area of Emphasis Requirements

Code	Title	Hours
ECON 731	Monetary Economics 1	3
ECON 732	Monetary Economics 2	3
Total Hours		6

## Public Economics Area of Emphasis Requirements

Code	Title	Hours
Select 2 of the following		6
ECON 741	Public Economics 1	
ECON 742	Public Economics 2	
ECON 743	State and Local Public Economics	
Total Hours		6

## Regional and Urban Economics Area of Emphasis Requirements

Code	Title	Hours
ECON 761	Advanced Regional Economics	3
ECON 762	Advanced Urban Economics	3
Total Hours		6

## Resource Economics Area of Emphasis Requirements

Code	Title	Hours
ARE 703	Advanced Natural Resource Economic Theory	3
ARE 710	Advanced Environmental Economics	3
Total Hours		6

## Major Learning Outcomes

### DOCTOR OF PHILOSOPHY IN ECONOMICS

The doctoral program in economics trains students to 1) conduct independent and original research in economics of publishable quality; 2) analyze questions of interest to economists and policymakers, employing tools and methods of theoretical and empirical economics in a manner that meets or exceeds the expectations of the economics profession for a doctorate in economics; and 3) effectively communicate both what economists in general know and the fruits of the student's own research.

- Students will demonstrate the ability to teach, at any undergraduate level or beyond, core courses in economics and courses in at least two areas of specialization within economics.
- Students will produce research papers that lead to refereed publications in economics journals.
- Students will apply modern economic theory and modern econometric methods to evaluate economic problems, develop policy evaluations, and make policy recommendations.
- Students will demonstrate the ability to formulate original economic research questions, develop an appropriate research design to explore these questions, and conduct appropriate statistical analyses. This includes the ability to create, use and manipulate data that are appropriate for the research question.
- Students will compose, communicate and disseminate knowledge of economics effectively both within and outside academia.



# Finance, M.S.

## Degree Offered

- Master of Science in Finance

## Nature of the Program

The M.S. Finance program is ideal for potential candidates with undergraduate degrees in Accounting, Finance, Engineering, Mathematics, Physics, Geology, or Economics, or those with industry experience and the drive to be successful. M.S. Finance graduates, especially those earning the Chartered Financial Analyst credential, enjoy careers with leadership positions across the gamut of financial positions. This includes investment banking positions, portfolio management, financial analyst, fund management, and corporate finance positions, among others.

## Academic Standards

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionanddismissal>) section of the University's Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by their college, degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#grades](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#grades)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Undergraduate and Graduate Programs **and** the Program Coordinator.

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## FACULTY

### CHAIR

- Ann Marie Hibbert - Ph.D. (Florida International University)  
Behavioral Finance, Corporate Finance, Fixed Income Securities, Derivative Securities

### PROFESSORS

- K. Victor Chow - Ph.D. (University of Alabama), C.F.A.  
Portfolio Management, Investments
- Ann Marie Hibbert - Ph.D. (Florida International University)  
Behavioral Finance, Corporate Finance, Fixed Income Securities, Derivative Securities
- Alex Kurov - Ph.D. (State University of New York, Binghamton), C.F.A.  
Financial Market Microstructure, Future Markets
- Paul Speaker - Ph.D. (Purdue University)

### ASSOCIATE PROFESSORS

- Ashok Abbott - Ph.D. (Virginia Polytechnic Institute and State University)  
Financial Institutions, Corporate Finance, Mergers and Acquisitions
- Ruiyuan Chen - Ph.D. (University of South Carolina)  
Empirical Corporate Finance, Banking, International Finance, Government Ownership.
- Bingxin Li - Ph.D. (University of Houston)

Derivatives Modeling, Financial Risk Management, Empirical Asset Pricing, and Energy Finance

- Gulnara Zaynutdinova - Ph.D. (Washington State University)  
Empirical Asset Pricing, Institutional Investors, Mutual Funds and Investor Behavior

## ASSISTANT PROFESSORS

- Pawan Jain - Ph.D. (University of Memphis), C.F.A., C.F.P.  
Stock Market Regulations, Blockchain
- Helen Wang - Ph.D. (University of South Carolina)  
Corporate Governance, Corporate Social Responsibility

## TEACHING ASSISTANT PROFESSORS

- Frank DeGeorge, C.P.A. - M.S.A. (Duquesne University)  
Financial Statement Analysis
- Jiahao (Leo) Gu - Ph.D. (West Virginia University) C.F.A.  
Principles of Finance, Financial Markets and Institutions, and Portfolio Theory
- Robert Brant Hammer - M.S. (West Virginia University)  
Business Valuation, Disruptive Financial Technology

## Admissions

To gain admission to the M.S. in Finance program, an applicant must have a bachelor's degree from an accredited institution. Admissions decisions are based on an assessment of expected success in the program shown by the application materials and according to space available. The Admissions Committee considers grade point average in all previous college-level work and also the grade point average in the last sixty hours of coursework. Applicants must have had a minimum undergraduate grade point average of 2.75 to be considered. Admissions decisions will be based on strength of the following application requirements:

- Academic transcript(s)
- GMAT test scores
- Applicants must provide two letters of recommendation from individuals who can provide information about the applicant's academic promise, ability to work with others, professionalism, and potential to succeed in this program.
- Statement of purpose
- Resume or CV

**Note:** The following prerequisite courses may be taken at other institutions but must be successfully completed prior to entering the M.S. in Finance program:

- Principles of Economics – six hours
- Principles of Accounting – six hours
- Investments
- Business Finance
- Statistics
- Calculus

The Admissions Committee reviews applications on a rolling basis, and students admitted to the program may begin in the fall. Please visit this program's webpage (<https://business.wvu.edu/academics/finance-department/finance/>) to learn more about the specific application deadlines and other important information. Students may also contact the John Chambers College of Business and Economics Graduate Programs Office for assistance at (304) 293-5505 or BeGradPrograms@mail.wvu.edu.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2157

\*Note- International Students are required to submit a TOEFL, IELTS, or Duolingo score. The John Chambers College of Business & Economics TOEFL requirement is higher than the University's—applicants must have a TOEFL-ibt score of 92. If you have taken the IELTS, the minimum score must be 6.5, and the minimum Duolingo score is a 105. English language exam scores should be sent to the Office of Admissions, West Virginia University, PO Box 6009, Morgantown, WV 26506-6009.

Students are required to maintain a minimum cumulative GPA of 3.0 in coursework applied toward their degree program, as outlined in the academic program of study. Students must also have a minimum cumulative GPA of 3.0 to earn a graduate degree from this program.

## M.S. Finance Requirements

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
<b>Core Coursework</b>		
FIN 511	Financial Economics	3
FIN 512	Ethical Standards in Finance	2
FIN 513	Macroeconomics and Financial Markets	2
FIN 520	Quantitative Finance	3
FIN 521	Financial Reporting and Analysis	3
FIN 523	Equity Investment	3
FIN 525	Derivative Securities	3
FIN 526	Portfolio Management	3
FIN 527	Alternative Investments	3
FIN 528	Integrated Financial Analysis	3
FIN 529	FinTech	3
Total Hours		31

## M.S. Finance Suggested Plan of Study

First Semester	Hours
FIN 511	3
FIN 512	2
FIN 513	2
FIN 520	3
FIN 521	3
FIN 523	3
<hr/>	
	16
Second Semester	Hours
FIN 525	3
FIN 526	3
FIN 527	3
FIN 528	3
FIN 529	3
<hr/>	
	15

Total credit hours: 31

## Major Learning Outcomes

### FINANCE

Goal 1: Students will demonstrate understanding of the ethical and professional standards in the securities industry.

Goal 2: Students will demonstrate understanding of how microeconomic and macroeconomic factors influence the values of financial assets.

Goal 3: Three: Students will apply appropriate quantitative investment analysis tools.

Goal 4: Students will interpret and analyze external financial information from the viewpoint of investors and creditors.

Goal 5: Students will master the fundamental economic techniques for valuing financial assets.

Goal 6: Students will construct, evaluate, and manage diversified portfolios and effectively communicate the process.

## Forensic and Fraud Examination, M.S.

### Degree Offered

- Master of Science in Forensic and Fraud Examination

## Certificate Offered

- Forensic Accounting and Fraud Examination

## Nature of the Program

The 30 credit-hour online program is comprised of a core curriculum of forensic and fraud examination classes centered on data analytics for success in this career path. Students complete this program in one-to-two years with two required virtual residencies. The core curriculum is paired with an area of emphasis in either Business Cybersecurity, Data Analytics, or Management to create a well-balanced approach to the field. Courses build throughout the program to incorporate previously acquired skills and allow students to immediately put those skills to use through hands-on experiential learning. During the first residency, students will evaluate a simulated crime scene to collect electronic and paper financial evidence and make a pitch to a prosecutor as to whether or not an indictment should be pursued. In the second residency, students will concentrate on the detection of deception during an interview and testify as expert witnesses in moot court. Content incorporates auditing, information technology, financial, and managerial accounting, etc. particularly as these topics interface with forensic and fraud examination material.

## Academic Standards

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionanddismissal>) section of the University's Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by their college, degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#gradestext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradestext)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs **and** the Program Coordinator.

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## ADMINISTRATION

### PROGRAM COORDINATOR

- Kip Holderness - Ph.D. (Bentley University)

## Admissions

To gain admission to the M.S. in FFE or FAFE Certificate programs, an applicant must have a bachelor's degree from an accredited institution. Admissions decisions are based on an assessment of expected success in the program shown by the application materials and according to space available. Each applicant must submit the following as part of their application:

- Academic transcript(s) of all prior academic work
  - A minimum GPA of 2.9 is required for admission to this program
- Statement of purpose - A short essay in which an applicant reflects on the expected contribution of the MS in FFE degree (or FAFE Certificate) to the applicant's future and the special characteristics that the applicant brings to the program. We are interested in value-added experiences, both from the program to the student and from the individual student to the program.
- Current resume - Applicants round out their profile with other evidence provided in their resume. The resume should include enough information for the admissions committee to trace the applicant's entire professional work history and should indicate any relevant affiliations.

The Admissions Committee reviews applications on a rolling basis, and students admitted to the program may begin in the fall, spring, or summer semester. Please visit the MS in FFE program's webpage (<https://business.wvu.edu/academics/accounting-department/forensic-and-fraud->

examination/) to learn more about the specific application deadlines and other important information. Students may also contact the John Chambers College of Business and Economics Graduate Programs Office for assistance at (304) 293-5505.

#### Prerequisite Courses

- ACCT 201
- ACCT 311
- ACCT 322
- ACCT 451

The prerequisites may be taken at any accredited institution of higher education including online courses. Two years of related professional experience may be substituted for the prerequisite courses. The Admissions Committee will assess prior experience.

## International Students

International Students are required to submit a TOEFL, IELTS, or Duolingo score. Applicants must have a TOEFL-ibt score of 79. If you have taken the IELTS the minimum score is a 6.5. The minimum DuoLingo score is 105.

## Admission Requirements 2023-2024

Students are required to maintain a minimum cumulative GPA of 3.0 in coursework applied toward their degree program, as outlined in the academic program of study. Students must also have a minimum cumulative GPA of 3.0 to earn a graduate degree from this program.

## Forensic and Fraud Examination Master of Science Requirements

Code	Title	Hours
A program GPA of 3.0 is required by the Chambers College.		
A minimum grade of C- is required in all courses applied toward the degree.		
<b>FAFE Core Courses</b>		
ACCT 580	Accounting for Forensic and Fraud Investigators	3
ACCT 581	Fraud Investigation	3
ACCT 582	Fraud Data Analysis	3
ACCT 583	Fraud: Criminology/Legal Issues	3
ACCT 584	Advanced Fraud Investigation	3
ACCT 585	Forensic and Fraud Examination Advanced Analytical Techniques	3
ACCT 586	Private Company Valuation	3
<b>Select an Area of Emphasis</b>		<b>9</b>
Business Cybersecurity Management/Compliance		
Business Cybersecurity Technically-Focused		
Business Data Analytics		
Management		
Total Hours		30

## PLAN OF STUDY - BUSINESS CYBERSECURITY MANAGEMENT/COMPLIANCE AOE

#### First Year

Fall	Hours	Spring	Hours	Summer	Hours
ACCT 580		3 ACCT 583		3 ACCT 582	3
ACCT 581		3 ACCT 585		3 ACCT 584	3
ACCT 586		3 CYBR 535		3	
CYBR 525		3 CYBR 540		3	
		12		12	6

Total credit hours: 30

## PLAN OF STUDY - BUSINESS CYBERSECURITY TECHNICALLY-FOCUSED AOE

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
ACCT 580		3 ACCT 583		3 ACCT 582		3
ACCT 581		3 ACCT 585		3 ACCT 584		3
ACCT 586		3 CYBR 535		3		
CYBR 530		3 CYBR 545		3		
		12		12		6

Total credit hours: 30

## PLAN OF STUDY - BUSINESS DATA ANALYTICS AOE

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
ACCT 580		3 ACCT 583		3 ACCT 582		3
ACCT 581		3 ACCT 585		3 ACCT 584		3
ACCT 586		3 BUDA 540 or 545		3 BUDA 550		3
BUDA 525		3				
		12		9		9

Total credit hours: 30

## PLAN OF STUDY - MANAGEMENT AOE

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
ACCT 580		3 ACCT 583		3 ACCT 582		3
ACCT 581		3 ACCT 585		3 ACCT 584		3
ACCT 586		3 BADM 621, 641, or 622		3 BADM 644 or 658		3
BADM 621 or 641		3				
		12		9		9

Total credit hours: 30

## Areas of Emphasis

- Business Cybersecurity Management/Compliance (p. 406)
- Business Cybersecurity Technically-Focused (p. 406)
- Business Data Analytics (p. 407)
- Management (p. 407)

## BUSINESS CYBERSECURITY MANAGEMENT/COMPLIANCE AOE

**Course Requirements:** In order to satisfy the requirements of this AOE, students must complete the three required courses with a passing grade (grade of C or better). Note that a cumulative GPA of a 3.0 is required for graduation from the FAFE program. The grades from this AOE will be counted towards students' cumulative GPA.

Code	Title	Hours
CYBR 525	Information Security Assurance Management	3
CYBR 535	Business Network Security	3
CYBR 540	Information Ethics and Legal Procedures	3
Total Hours		9

## BUSINESS CYBERSECURITY TECHNICALLY-FOCUSED AREA OF EMPHASIS

**Course Requirements:** In order to satisfy the requirements of this AOE, students must complete the three required courses with a passing grade (grade of C or better). Note that a cumulative GPA of a 3.0 is required for graduation from the FAFE program. The grades from this AOE will be counted towards students' cumulative GPA.

Code	Title	Hours
CYBR 530	Business Data Communications	3
CYBR 535	Business Network Security	3
CYBR 545	Business Cybercrime Management *	3
Total Hours		9

\*

CYBR 545 has a prerequisite of CYBR 530, and requires CYBR 535 to be taken as a prerequisite or concurrently.

## BUSINESS DATA ANALYTICS AREA OF EMPHASIS

**Course Requirements:** In order to satisfy the requirements of this AOE, students must complete three of the courses listed below with a passing grade (grade of C or better). Note that a cumulative GPA of a 3.0 is required for graduation from the FAFE program. The grades from this AOE will be counted towards students' cumulative GPA.

Code	Title	Hours
<b>Select three of the following:</b>		<b>9</b>
BUDA 525	Business Statistical Methods 1	
BUDA 540	Decision Sciences and Analytics	
BUDA 545	Business Simulation Modeling	
BUDA 550	Business Data Visualization	
Total Hours		9

## MANAGEMENT AREA OF EMPHASIS

**Course Requirements:** In order to satisfy the requirements of this AOE, students must complete three of the courses listed below with a passing grade (grade of C or better). Note that a cumulative GPA of a 3.0 is required for graduation from the FAFE program. The grades from this AOE will be counted towards students' cumulative GPA.

Code	Title	Hours
<b>Select three of the following:</b>		<b>9</b>
BADM 621	Business Research	
BADM 622	Financial Statements Analysis	
BADM 641	Decision Analysis for Executives	
BADM 644	Legal Environment and Ethics	
Total Hours		9

## Accelerated Program

- B.S.B.AD. Accounting and M.S. Forensic and Fraud Examination

## BSBA Degree Requirements

The Chambers College Accelerated Bachelor's to Master's (ABM) program offers highly motivated accounting students with an interest in the Forensic and Fraud Examination Master of Science the opportunity to complete a Bachelor of Science in Business Administration (BSBA) and a Master's degree in an accelerated format. In order to be eligible for this program, you must:

- Have a cumulative 3.0 after the fall semester of your sophomore year,
- Have completed 24 undergraduate credits in residence,
- Indicate your interest in the program by March of your sophomore year and approved for program admission by the beginning of your junior year, and
- Successfully complete the required courses.

Code	Title	Hours
University Requirements		19
Program Requirements		26
Business Core Requirements		33

Accounting Major Requirements	30
Total Hours	108

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives *		5
Total Hours		19

## Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of B-)	3
ACCT 202	Principles of Accounting 2 (Minimum grade of B-)	3
BCOR 121	Introduction to Business Applications (Minimum Grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (may fulfill GEF 1; minimum grade of C-):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of C- in MATH 150 or D- in MATH 154 or higher (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		26

## Business Core Requirements

Code	Title	Hours
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy (Fulfills University Capstone requirement)	3
Select one of the following (may fulfill GEF 4):		3
PSYC 101	Introduction to Psychology	



SOC 101	Introduction to Sociology	
Total Hours		33

## Accounting Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
ACCT 311	Intermediate Accounting (Minimum grade of C- to attempt ACCT 312)	3
ACCT 312	Intermediate Accounting	3
ACCT 321	Introduction to Accounting Systems	3
ACCT 322	Accounting Systems	3
ACCT 431	Cost Management	3
ACCT 441	Individual Income Tax Accounting	3
ACCT 451	Auditing Theory	3
ACCT 442	Entity Income Tax Accounting	3
Any 300-level or 400-level ACCT Electives		6
Total Hours		30

\*

A maximum of six credit hours of ACCT 491, Professional Field Experience, may apply towards the 120 credit hours required for the degree.

## Master of Science Degree Requirements

Code	Title	Hours
Overall 3.0 GPA required.		
Minimum grade of C required in all courses applied toward the degree.		
<b>FAFE Core Courses</b>		
ACCT 580	Accounting for Forensic and Fraud Investigators	3
ACCT 581	Fraud Investigation	3
ACCT 582	Fraud Data Analysis	3
ACCT 583	Fraud: Criminology/Legal Issues	3
ACCT 584	Advanced Fraud Investigation	3
ACCT 585	Forensic and Fraud Examination Advanced Analytical Techniques	3
ACCT 586	Private Company Valuation	3
<b>Select an Area of Emphasis</b>		<b>9</b>
Business Cybersecurity Management/Compliance		
Business Cybersecurity Technically-Focused		
Business Data Analytics		
Management		
Total Hours		30

### Suggested Plan of Study

#### First Year

Fall	Hours	Spring	Hours
BCOR 121		2 ACCT 201	3
BCOR 191		1 ECON 201	3
BCOR 199		3 ENGL 101	3
ENTR 102		3 MATH 150	3
Select one of the following:		3 GEF 2B, 5, 6, or 7	3
MATH 122			
MATH 124			
MATH 150			

GEF 2B, 5, 6, or 7	3				
	15			15	
<b>Second Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
ACCT 202		3 ACCT 311		3	
ECON 202		3 ACCT 321		3	
ECON 225		3 BCOR 299		3	
ENGL 102		3 BCOR 330		3	
GEF 2B, 5, 6, or 7		3 BCOR 370		3	
	15			15	
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
ACCT 312		3 ACCT 442		3	
ACCT 441		3 ACCT 451		3	
BCOR 340		3 BCOR 360		3	
BCOR 350		3 BCOR 380		3	
ACCT 580		3 ACCT 585		3	
	15			15	
<b>Fourth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
ACCT 431		3 ACCT 322		3 ACCT 582	3
BCOR 320		3 BCOR 460		3 ACCT 584	3
Minor/Unrestricted Elective		3 GEF 2B, 5, 6, or 7		3	
Minor/Unrestricted Elective		3 Minor/Unrestricted Elective		3	
ACCT 581		3 ACCT 583		3	
	15			15	6
<b>Fifth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
ACCT 586		3 AOE Course		3	
AOE Course		3 AOE Course		3	
	6			6	

Total credit hours: 138

\*

In order to register on time for Fall, students must apply for ABM by March 1 prior to Junior year.

## Major Learning Outcomes

### FORENSIC AND FRAUD EXAMINATION

After completing the program, graduates will be able to:

- Discuss the impact of legal, societal, and ethical considerations on business decision-making and strategic planning in forensic and fraud examination, and how civil litigation and fraud interact with and impact the global economy.
- Explain how money laundering schemes and policies influence organizations around the world from a microeconomic perspective, and how these issues affect economic profitability and success.
- Evaluate financial reports focusing on fraudulent financial statements and the associated nuances regarding fraud examination.
- Evaluate evidentiary material associated with asset misappropriation (i.e., theft of assets) and complete fraud examinations that meet judicial standards of investigation
- Complete examination of facts and circumstances associated with fraud acts and other financial violations of the law with the goal of remediating those issues based on investigative outcomes.
- Discuss and apply the various investigative tools in forensic and fraud examination across different industries.

- Develop an analytical skill set including the utilization of electronic techniques and data mining software used to assist forensic professionals and fraud examiners in developing litigation.
- Develop anti-fraud knowledge, skills, and abilities that address the issues of prevention, deterrence, and detections of financial shenanigans.

## Healthcare Business Administration, M.B.A.

### Degree Offered

- Master of Business Administration

### Nature of the Program

The program includes 39 credit hours that represent graduate-level course work in all the functional areas of business delivered with a healthcare lens where students will take deep dives in cases, assignments and real word applications of the business of healthcare. The program is taught by expert faculty who understand the intersection of business and healthcare and executive professionals who are industry leaders. The program offers electives in the areas of business intelligence, business cybersecurity, and strategic communication. Additionally, students will have the opportunity to apply the knowledge they've acquired through the program in either an applied executive project or an innovation course. The online courses are delivered in 8-week segments that are primarily asynchronous but will offer students the opportunity to work in talented teams and participate in virtual synchronous experiential learning.

### Academic Standards

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionanddismissal>) section of the University's Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by their college, degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#gradestext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradestext)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs **and** the Program Coordinator.

### Admissions

The HMBA Admissions Committee is made up of John Chambers College of Business and Economics faculty. The Committee reviews applications holistically and will admit students based on strength of their admissions application and potential to succeed in this program.

Applications will be reviewed on a rolling basis. Accepted students begin the program in the fall term.

HMBA Admissions Requirements:

- Transcripts. Applicants must have had a minimum undergraduate grade point average of 2.75 to be considered for admission.
- Resume
- A one-page personal statement
- One letter of recommendation from an individual who is not a family member or friend and can provide information about their academic promise, ability to work with others, professionalism, and potential to succeed in this program

Applicants should send their transcripts to WVU's Office of Admissions, One Waterfront Place, PO Box 6510, Morgantown, WV, 26506-6510 or electronically to [graduateadmissions@mail.wvu.edu](mailto:graduateadmissions@mail.wvu.edu).

## Admission Requirements 2023-2024

Major Code: 2111

\*International Students are required to submit a TOEFL, IELTS, or Duolingo score. Applicants must have a TOEFL-ibt of 79. If you have taken the IELTS, the minimum score must be 6.5, and the minimum Duolingo score is a 105. English language exam scores should be sent to the Office of Admissions, West Virginia University, PO Box 6009, Morgantown, WV 26506-6009.

## Degree Requirements

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
HMBA 611	Healthcare: Management Information Systems	2
HMBA 612	Healthcare - Managerial and Team Skills	2
HMBA 614	Health Services Management	3
HMBA 621	Healthcare Analytics	3
HMBA 622	Healthcare Finance- Reporting and Analysis	3
HMBA 625	Healthcare Financial Management	3
HMBA 626	Health Economics	3
HMBA 633	Healthcare Leadership & Cultural Competency	3
HMBA 634	Healthcare Services Marketing	2
HMBA 638	Healthcare Supply Chain Management	3
HMBA 646	Management Science and Health Services	3
HMBA 656	Law and Medicine	2
HMBA 661	Healthcare Innovation and Commercialization	4
<b>Elective</b>		<b>3</b>
Select one of the following:		
BADM 658	Communication & Public Relations for Executives	
BUDA 510	Foundations of Business Intelligence	
CYBR 535	Business Network Security	
Total Hours		39

## Major Learning Goals

### HEALTHCARE BUSINESS ADMINISTRATION

Learning Goal 1: Students will be able to integrate both managerial and financial expertise across the various business functional areas while applying a healthcare lens.

Learning Goal 2: Students will be able to identify problems, collect appropriate data and analyze the data to make informed healthcare management decisions.

Learning Goal 3: Students will be able to effectively communicate and articulate a succinct business analysis in a healthcare environment.

Learning Goal 4: Students will be able to make healthcare management, personnel and patient-based decisions in an inclusive, ethically sensitive and socially responsible manner.

Learning Goal 5: Students will be an effective healthcare leader who influences people toward the attainment of organizational goals and benefits all stakeholders.

## Human Resource Leadership, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

Students in the AACSB accredited 30 credit-hour online MS in Human Resource Leadership are expected to be able to:

- Explain choices in human capital policies and procedures using established theory.
- Evaluate the impact of HR practices on organization and individual-level performance and strategic goal attainment.
- Recommend, implement, and assess changes to human capital management both to increase organizational performance, and in response to externalities and change in organization strategy.
- Effectively lead teams and organizations through change management initiatives.
- Foster the creation and growth of positive work environments and effective organizational cultures.
- Utilize data and business analytics to assess performance and value-creation.
- Effectively communicate across all levels of organizational hierarchy.

By focusing on developing advanced professional knowledge, data-driven decision-making skills, and leadership capabilities, our MS in Human Resource Leadership graduates will be positioned to compete in a growing market and see continued upward movement along their career-path. In attaining the MS Human Resource Leadership degree, those with HR-related undergraduate degrees will benefit by strengthening their data analytic skills and strategic mindset. Additional prospective students will include individuals seeking to transition their current careers into the HR function. This group will acquire specialized knowledge and skills they have not had the opportunity to receive working in other business functions.

Our MS Human Resource Leadership graduates will be subject matter experts with the ability to make data-driven managerial decisions, and the skills to assume leadership roles within their organizations. Graduates will possess both the technical skills in demand by national employers, as well as the “soft” or “people” skills frequently absent from on-the-job training. Our students will be educated in how to understand business practice and strategy from an integrated perspective that is not limited to a functional “silo.” Graduates will apply their learning to improve the performance of organizations in local, state, and federal contexts by leveraging the diverse talents of human capital including the residents of West Virginia and the world.

## Academic Standards

In addition to the University’s academic and professional standards, students enrolled in a John Chambers College of Business and Economics master’s degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and Dismissal section of the University’s Graduate Catalog for more information about this topic.
- Students must follow the professional standards established by the college, their degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student’s overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student’s academic transcript/permanent record. Visit the Grades section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs **and** the Program Coordinator.

## Admissions

The MSHRL Admissions Committee is made up of John Chambers College of Business and Economics faculty. The Committee reviews applications holistically and will admit students based on strength of their admissions application and potential to succeed in this program.

MSHRL Admissions Requirements:

- Resume detailing applicant’s employment history, job responsibilities and professional accomplishments.
- Two years of full-time work experience.
- Academic Transcripts
- Statement of Purpose (500 words) – Describe your academic background and work experience (roles and responsibilities) and how they have prepared you to pursue a graduate degree in HR. Explain why you would like to pursue the online MSHRL at WVU. What are your career plans/goals after completing the MSHRL?
- Two letters of recommendation (preferably one letter related to professional experience and another related to academic background).
- International Applicants are required to submit a TOEFL, IELTS, or Duolingo score. Applicants must have a TOEFL-ibt score of 79. If you have taken the IELTS, the minimum score is a 6.5, and the minimum Duolingo score is a 105. English language exam scores should be sent to the Office of Admissions, West Virginia University, PO Box 6009, Morgantown WV 26506-6009.

Major Code: 2170

All graduate programs in the John Chambers College of Business and Economics require that enrolled students maintain a minimum cumulative GPA of 3.0 in coursework applied toward their degree program, as outlined in the specific academic program of study. Students must also have a minimum cumulative GPA of 3.0 to earn a graduate degree from their respective program.

## Human Resource Leadership Master of Science Curriculum Requirements

### REGULAR STANDING CURRICULUM REQUIREMENTS

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
HRL 503	Performance Management Systems & Strategies	3
HRL 510	Recruitment, Assessment, and Selection	3
HRL 541	Total Reward Systems	3
HRL 551	Human Resource Development	3
HRMG 548	Strategic Management for Human Resources	3
BADM 633	Leadership	3
BADM 621	Business Research	3
BADM 641	Decision Analysis for Executives	3
BADM 644	Legal Environment and Ethics	3
ECON 571	Economics of Labor	3
Total Hours		30

**Grade Point Average:** The MSHRL program requires that the student maintain a grade point average of at least 3.0 on all work taken as a graduate student while enrolled in the Chambers College of Business and Economics. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree. A student whose cumulative grade point average falls below 2.75 will be placed on probation. If the student's average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program.

### Suggested Plan of Study

#### First Year

Fall	Hours	Spring	Hours	Summer	Hours
BADM 633		3 HRL 510		3 HRL 541	3
BADM 621		3 BADM 644		3 BADM 641	3
HRL 503		3 HRL 551		3	
ECON 571		3 HRMG 548		3	
		12		12	6

Total credit hours: 30

### Major Learning Outcomes

#### HUMAN RESOURCE LEADERSHIP

Learning Goal 1: Students will be able to articulate expertise in the functional areas of Human Resource Management including recruitment, selection, performance management, training & development, total rewards, and labor relations.

Learning Goal 2: Students will be able to synthesize advanced knowledge of human resource management with business operations to facilitate strategic solutions that align stakeholder interests, HR practices, and business needs to drive organizational performance.

Learning Goal 3: Students will be able to collect, analyze, and integrate demographic and business data using appropriate tools and methods to effectively assess human capital decision alternatives and make recommendations.

Learning Goal 4: Students will build ethical, long-term partnerships within and between organizational business units that enhance employee satisfaction and motivation while balancing effectiveness and efficiency.

# Human Resource Management, M.S.

## Degree Offered

- Master of Science in Human Resource Management

## Nature of the Program

The Department of Management offers the Master of Science in Human Resource Management (MSHRM). This AACSB-accredited program of study prepares students for professional positions in human resource management and labor relations. The curriculum is aligned with the standards set forth by the Society for Human Resource Management (<http://www.shrm.org>).

Professional opportunities for MSHRM graduates include such positions as human resource business partner, human resource manager, labor relations specialist, training coordinator, talent acquisition specialist, compensation analyst, and benefits administrator. Many graduates find employment with Fortune 500 companies. Other positions include opportunities in government such as National Labor Relations Board Field Examiner, positions with the Federal Mediation and Conciliation Service, state and local Human Rights Commission representatives, and Department of Labor compliance officers. Some find positions with organized labor, all levels of government, and advocacy organizations. The Management Department, in conjunction with the John Chambers College of Business and Economics Center for Career Development, makes a concerted effort to place graduates in positions that fulfill students' career objectives.

The MSHRM program is a full-time program of instruction designed to be completed in three semesters. Accepted students will begin in the fall semester, with a planned graduation after completing program requirements at the end of the following fall semester (fall, spring, fall). The program requires students to complete an applied, non-credit internship experience (or equivalent) designed to occur during the summer between the second and third semesters.

Experiential learning opportunities are embedded into many courses in the curriculum, enabling students to work on meaningful, applied projects while learning core content. Additionally, all students complete an applied internship experience. Many organizations return to WVU each year seeking MSHRM students as summer interns, and many of those lead to full time employment offers upon degree completion. Other co-curricular learning opportunities include the General Electric Interview Competition (GEIC), PepsiCo Case Study Competition, WVU Talent & Culture Fellowship opportunity, collective bargaining simulations, site visits with HR professionals, and the opportunity to develop international HR skills while traveling abroad.

Another program highlight is the Practicum series. Through a series of required practicum courses, students engage in a variety of professional development activities including resume building, mock interviews, and engaging in formal and informal networking opportunities. The Practicum series brings HR practitioners to the classroom to share knowledge, insights, and best practices with students on a variety of topics. These topics complement their in-class studies by presenting diverse perspectives that cut across the academic/practitioner landscape.

### One-Year Option

Incoming students who already possess a master's degree in a complementary discipline may be eligible for the condensed, one-year version of the MSHRM program. Completed applications will undergo a transcript review to ensure equivalency of prior coursework and will be admitted to the one-year program upon approval of the Program Coordinator. One-year students will be required to complete an applied, non-credit internship experience (or equivalent) prior to graduation.

## Tuition Loyalty Program

Students completing an undergraduate degree at any West Virginia college or university, are eligible for current, in-state (resident) tuition rates while enrolled in the MSHRM program.

## Student Organizations

Students are encouraged to participate in academic-related extracurricular activities. Many are co-sponsored by the Human Resource Management Student Association including: the IRSA Newsletter, the mentorship program, company site visits, guest speakers, community service efforts, social events, and honors banquets. Outstanding academic achievement is recognized by membership in the Human Resource Management Honor Society. A student SHRM chapter is operational within the John Chambers College of Business and Economics and is an additional student-centered organization that emphasizes the career specialties of the MSHRM degree.

## Academic Standards

In addition to the University's academic and professional standards (<http://catalog.wvu.edu/graduate/enrollmentandregistration/>), students enrolled in a John Chambers College of Business and Economics master's degree program must also abide by the following standards:

- Students must have a minimum cumulative GPA of 3.0 to earn a degree from their graduate program, without exception.
  - A student who cannot mathematically meet the 3.0 GPA requirement to successfully complete the degree, within a reasonable period of time (as defined by the Program Coordinator or designee), will be dismissed from their academic program. Visit the Probation, Suspension, and



Dismissal (<http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensionstext>) section of the University's Graduate Catalog for more information about this topic.

- Students must follow the professional standards established by the college, their degree program and/or department. A student who violates the established professional standards may be placed on probation, suspended, or dismissed from their program.
- A student whose cumulative GPA falls below 2.75 will automatically be placed on academic probation.
  - A student will be suspended from their program, for up to one year, if their GPA is not raised to 2.75 by the end of their subsequent semester of enrollment. The program will reevaluate the student after the term of suspension to determine whether they may return to the program or be dismissed.
- A student will be suspended from their program if they earn a letter grade below C- in more than one required course.
- A student who earns a letter grade of D or F in any required course must repeat the course and earn a minimum letter grade of C-.
  - Any grade earned in a repeated course at the graduate level is included in the calculation of a student's overall and major GPA, along with the original grade earned in the course. Additionally, the original grade earned in the course will remain on the student's academic transcript/permanent record. Visit the Grades ([http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising\\_and\\_evaluation/#gradestext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/advising_and_evaluation/#gradestext)) section of the University Graduate Catalog for more information about this topic.

Any exceptions to the above standards must be approved in writing by the Associate Dean for Graduate Programs **and** the Program Coordinator.

## ADMINISTRATION

### CHAIR, DEPARTMENT OF MANAGEMENT

- Abhishek Srivastava - Ph.D. (University of Maryland)

### PROGRAM COORDINATOR

- Jeff Houghton - Ph.D. (Virginia Polytechnic Institute & State University)

## FACULTY

### PROFESSORS

- Jeff Houghton - Ph.D. (Virginia Polytechnic Institute & State University)  
Workgroup Dynamics & Leadership
- Edward Tomlinson - Ph.D. (Ohio State University)  
Compensation Issues

### ASSOCIATE PROFESSORS

- James Field - Ph.D. (Virginia Commonwealth University)  
HR Data Analytics
- Kayla Follmer - Ph.D. (Penn State University)  
Diversity Management, Performance Management

### ASSISTANT PROFESSOR

- Lily Morse - Ph.D. (Carnegie Mellon University)  
Conflict Management Processes

### TEACHING ASSOCIATE PROFESSOR

- Thomas A. Zeni - Ph.D. (University of Oklahoma)  
Talent Acquisition; Organizational Change

### TEACHING ASSISTANT PROFESSORS

- Brant Hammer - M.S. (West Virginia University)
- Rebecca Thacker - Ph.D. (Texas A&M University)  
Performance Management, Strategy for HR

### LECTURERS

- Emily Dennis - Ph.D. (Robert Morris University)  
Training & Development
- Tina Parton - MSIR (West Virginia University)  
Benefits Management



## PROFESSORS EMERITI

- Neil Bucklew - Ph.D.
- Randy Elkins - Ph.D.

## Admissions

The MSHRM degree is interdisciplinary in nature and no specific undergraduate major is required. Coursework in psychology, labor economics, statistics, and business disciplines is helpful. To gain admission into the MSHRM program, an applicant must have a bachelor's degree from an accredited institution. Overall grade point average is considered with additional attention given to the grade point average achieved in the last sixty hours of coursework, and/or major-specific coursework. Additionally, several other criteria are evaluated as requested in the Application Requirements below. Only completed applications will be considered.

Admission to the MSHRM is determined by the Program Coordinator at the recommendation of the MSHRM Admissions Committee. This is a multiple-hurdle process where completed applications are reviewed by the MSHRM Admissions Committee, and those selected to move forward in the process are then interviewed either face-to-face or via telephone/video-conference. The MSHRM Admissions Committee then makes an admittance recommendation to the Program Coordinator. Completed applications are reviewed on a rolling basis beginning in January for the following Fall semester. The priority deadline for MSHRM applications is March 1st, although applications may continue to be reviewed and accepted later based on available space in the cohort. Admission to the program is highly competitive and total enrollment is limited to approximately 35 students per year.

## Application Requirements

A completed electronic application will consist of:

- Official copy of undergraduate transcripts. Applicants must have had an undergraduate grade point average of 2.75 to be considered for admission.
- Up-to-date resume including all prior professional experiences and affiliations
- 1 letter of recommendation from individuals who are not friends or family and that can directly speak to the applicant's fit and ability to complete the MSHRM program, and their desire to be an HR professional.
- Statement of Purpose (not to exceed one page): The statement of purpose should describe your interest in the MSHRM program at WVU, your interest in an HR career and career aspirations, how you believe the MSHRM program will help you meet those aspirations, and any other relevant information you would like to share with the MSHRM Admissions Committee and Program Coordinator that will help us to better understand your candidacy.
- International Students (only) are required to submit TOEFL or IELTS scores. Applicants must have a TOEFL-ibt score of 79. If you have taken the IELTS instead of the TOEFL, the minimum score must be 6.5. English language exam scores should be sent to the Office of Graduate Admissions and Recruitment, West Virginia University, PO Box 6009, Morgantown, WV 26506-6009.

## Application Deadline

Please visit the MSHRM program's webpage (<https://business.wvu.edu/academics/management-department/ms-industrial-relations/>) for specific application deadlines and other important information. Students may also contact the John Chambers College of Business and Economics Graduate Programs Office for assistance at (304) 293-5505.

## Admission Requirements 2024-2025

Major Code: 2168

All graduate programs in the John Chambers College of Business and Economics require that enrolled students maintain a minimum cumulative GPA of 3.0 in coursework applied toward their degree program, as outlined in the specific academic program of study. Students must also have a minimum cumulative GPA of 3.0 to earn a graduate degree from their respective program.

## Human Resource Management Master of Science Degree Program Requirements

### REGULAR STANDING CURRICULUM REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses *		
A grade of C or higher must be earned in all required courses		
HRMG 505	Employment Law	3
HRMG 509	Talent Acquisition	3
HRMG 515	Business and Human Resource Integration	3
HRMG 525	HR Analytics	3
HRMG 530	Compensation Issues	3
HRMG 534	Work Group Dynamics and Leadership	3

HRMG 545	Diversity and Inclusion Management	3
HRMG 546	Training and Development	3
HRMG 562	Labor Relations	3
HRMG 571	Human Resource/Industrial Relations Practicum 1	1
HRMG 572	Human Resource/Industrial Relations Practicum 2	1
<b>Elective ***</b>		<b>3</b>
HRMG 507	Conflict Management Processes	
HRMG 522	International Industrial Relations	
HRMG 581	Collective Bargaining Practice	
HRMG 595	Independent Study	
HRMG 506	Performance Management	3
HRMG 508	Organizational Change and Renewal	3
HRMG 544	Benefits Management	3
HRMG 548	Strategic Management for Human Resources	3
HRMG 573	Human Resource/Industrial Relations Practicum 3	1
Internship Requirement **		
Total Hours		45

\*

**Grade Point Average:** The MSHRM program requires that the student maintain a grade point average of at least 3.0 on all work taken as a graduate student while enrolled in the John Chambers College of Business and Economics. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree. A student whose cumulative grade point average falls below 2.75 will be placed on probation. If the student's average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program.

\*\*

Successful completion of the degree program requires participating in a supervised, non-credit internship experience. Internships are typically completed in the summer between semester two and three. Students will not be able to graduate without an internship.

\*\*\*

Other elective options may be approved by Program Coordinator.

## SUGGESTED PLAN OF STUDY

Three semester course of study with a fall start: (forty-five credit hours including thirteen core courses and \*one elective)

### First Year

Fall	Hours	Spring	Hours
HRMG 505		3 HRMG 506	3
HRMG 509		3 HRMG 515	3
HRMG 525		3 HRMG 530	3
HRMG 534		3 HRMG 545	3
HRMG 562		3 HRMG 546	3
HRMG 571		1 HRMG 572	1
		16	16

### Second Year

Fall	Hours
HRMG 508	3
HRMG 544	3
HRMG 548	3
HRMG 573	1
Elective	3
	13

Total credit hours: 45

## ONE-YEAR PROGRAM CURRICULUM REQUIREMENTS

Admission to the One-Year Program:

Students entering the program with a Master's degree in an associated discipline may be considered for the one-year option. During the application process, the program coordinator will determine if the applicant qualifies for the one-year program.

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses *		
A grade of C or higher must be earned in all required courses		
HRMG 505	Employment Law	3
HRMG 506	Performance Management	3
HRMG 509	Talent Acquisition	3
HRMG 515	Business and Human Resource Integration	3
HRMG 530	Compensation Issues	3
HRMG 544	Benefits Management	3
HRMG 545	Diversity and Inclusion Management	3
HRMG 546	Training and Development	3
HRMG 562	Labor Relations	3
HRMG 571	Human Resource/Industrial Relations Practicum 1	1
HRMG 572	Human Resource/Industrial Relations Practicum 2	1
<b>Elective</b>		<b>3</b>
HRMG 507	Conflict Management Processes	
HRMG 522	International Industrial Relations	
HRMG 581	Collective Bargaining Practice	
HRMG 595	Independent Study	
Internship Requirement *		
Total Hours		32

\*

Successful completion of the degree program requires participating in a supervised, non-credit internship experience.

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
HRMG 505		3 HRMG 515	3
HRMG 506		3 HRMG 530	3
HRMG 509		3 HRMG 545	3
HRMG 544		3 HRMG 546	3
HRMG 562		3 HRMG 572	1
HRMG 571		1 Elective	3
		16	16

Total credit hours: 32

## Major Learning Outcomes

### HUMAN RESOURCE MANAGEMENT

#### STUDENT LEARNING GOALS

##### Goal 1: The HR Functional Environment

Graduates acquire knowledge and skills in basic HR functional areas that prepare them for their future careers in human resources management and industrial relations and related fields

1.1 Selection, Performance Management, and Training and Development. Graduates are able to participate and lead in the selection processes in their organizations as well as in the measurement of performance of the human asset and the identification of training and development activities either to enhance performance or correct deficiencies in the output of human assets.

1.2 Compensation and Benefits. Graduates are able to establish and maintain equitable compensation programs and associated benefits and insurance in their organizations. Graduates are familiar with and able to impact organizational economics through the development, modification, and implementation of compensation systems and benefit plan design and administration.

#### **Goal 2: The Current Global Environment**

Graduates have capabilities and knowledge relating to current HR/IR trends, both domestically and internationally, that prepare them for their future careers in human resources management and related fields.

2.1 International HR/IR and Understanding Cultural Differences. Graduates are able to apply human resource and industrial relations functional tools in an international context based on a detailed comprehension of the economic, social and moral ramifications of globalization and cultural differences.

2.2 Management of Change, Current Trends, and Technologies. Graduates are able to participate in managing change processes within their organizations and to apply knowledge of current events, trends and developments in the human resources profession and in the overall business environment, including contemporary information systems and associated technologies, in order to solve problems and perform functions commonly encountered in human resource management.

#### **Goal 3: The Employee and Labor Relations Environment**

Graduates acquire knowledge and skills in employee and labor relations that prepare them for their careers in human resources management and industrial relations and related fields.

3.1 Management of Conflict. Graduates are able to use foundational knowledge of individual behavior and interpersonal relations in order to successfully manage and resolve conflict through processes such as mediation and facilitation.

3.2 Negotiation. Graduates are able to demonstrate effective negotiating capacities and competencies in win-win and position bargaining in general and specifically in labor relations. Students are effective advocates in labor relations, mediation, alternate dispute resolution, employee/management concerns and disputes.

#### **Goal 4: The Legal and Ethical Environment**

Graduates develop comprehensive knowledge and skill in the areas of employment law and ethical decision making.

4.1 Legal and Ethical Decision Making. Graduates are able to successfully implement the procedural and substantive aspects of labor and employment law in making ethical decisions and taking ethical actions that reflect a standard of professional behavior and values within their organizations. Employment law principles are embedded in each of the major course offerings to insure a solid fact-based application of legal practices, precedents, and contemporary interpretations.

#### **Goal 5: The Strategic Environment**

Graduates develop knowledge and skills in strategic decision making, leadership, teamwork and communications

5.1 Strategic Decision Making. Graduates are able to participate in and support strategic decision-making in human resources, industrial relations and beyond. Students are knowledgeable in the use and application of strategic planning tools and techniques and are aware of the economic and social impact of strategic business decisions.

5.2 Leadership, Teamwork and Communication. Graduates possess leadership and teamwork skills and abilities and are able to effectively communicate recommendations to management and other constituencies, orally and in writing.

# Creative Arts

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## Degrees Offered

- Master of Arts in Art (Art Education, Game Design, or Studio Art)
- Master of Fine Arts in Art & Design (with areas of emphasis in Ceramics, Graphic Design, Painting, Photography, Printmaking, Sculpture, or Time-Based Art)
- Master of Fine Arts in Theatre (Acting, Costume Design and Technology, Lighting Design and Technology, Scenic Design and Technology, or Technical Direction)
- Master of Arts in Music (Music Business and Industry, Musicology, or Music Theory)
- Master of Music (Collaborative Piano, Composition, Conducting, Jazz Pedagogy, Music Education, Performance, or Piano Pedagogy)
- Doctor of Musical Arts (Collaborative Piano, Composition, Conducting, or Performance)
- Graduate Certificates (Artist Diploma in Music Performance, Music Industry, or Therapeutic Art)

## Introduction

Creative development in art, dance, music, and theatre is central to the College of Creative Arts. The College provides graduate students with a place where they can forge a personal understanding between artistic practice and theory, and form both personal and professional insights that explore and expand the nature of human creativity. Combining performance, exhibition, and scholarship in ways that address both traditional and innovative approaches to art, dance, music, and theatre, graduate students gain a greater understanding of the arts and--in turn--themselves.

A distinguished faculty of scholars and artists brings to the college's outstanding facilities a commitment to a creative process of artistic growth and advanced education. In a rich environment of plays, exhibitions, and concerts, the college offers graduate students the knowledge, skills, and inspiration necessary for artistic and professional success.

Graduate programs in art, music, and theatre are characterized by the quality of faculty, students, and curricular opportunity. Each school is an accredited member of the nationally recognized accrediting agency for professional instruction in the discipline: art programs by the National Association of Schools of Art and Design, music programs by the National Association of Schools of Music, and theatre programs by the National Association of Schools of Theatre.

## VISION STATEMENT

As an integral part of modern society, the arts play a pivotal role in expressing the culture of the moment and the past. In the College of Creative Arts, we balance tradition, innovation, creativity, authenticity and courage to fill our role of serving the land grant mission of West Virginia University. By working as an engaged community, we create an environment where inclusive historical context informs future artistic endeavors.

## MISSION STATEMENT

The College of Creative Arts educates succeeding generations of artists, teachers, and scholars through an experimental student-centered approach to learning. The college advocates the arts as a medium through which the diversity of human experience is understood and valued. Exemplifying excellence and innovation in performance, exhibition, scholarship, and creative research, the college offers artistic and cultural opportunities for the citizens of West Virginia and the global community.

## ARTISTIC ACHIEVEMENT

The College of Creative Arts is committed to supporting students in vigorous artistic and cultural endeavors at the national and international levels through individualized advising to determine goals for artistic and scholarly distinction and travel grants to support those activities. Students receive mentoring to create specific plans to apply for targeted opportunities, and receive support, encouragement, expertise, and resource guidance for successful applications. The College is dedicated to an ever-increasing presence of current West Virginia University College of Creative Arts students on the national and international stages of art, dance, music, and theatre.

## FACILITIES

The Canady Creative Arts Center, which houses the College, is a modern, multimillion-dollar instructional and performance facility with five theatres, recital halls, and recording studio; scenery, painting, drawing, design, costume, printmaking, sculpture, ceramic, puppet, and instrumental studios; additional art studios and two art galleries.

The Art Museum of WVU, located beside the Creative Arts Center, makes education, opportunity, engagement, culture, and creativity possible. The Art Museum's collection numbers nearly 5,000 objects and is international in scope, including paintings, prints, works on paper, sculpture, and ceramics.

## PROGRAMS OF STUDY

The doctor of musical arts (D.M.A.) curricula in performance (piano, collaborative piano, voice, flute, oboe, clarinet, bassoon, saxophone, horn, trumpet, trombone, tuba, low brass, percussion, violin, viola, cello, double bass, or conducting) or composition prepares students for careers as teachers in higher education.

The master of fine arts (M.F.A.) is a terminal degree in art and theatre that prepares students for careers in art and design (with emphasis in ceramics, graphic design, painting, photography, printmaking, sculpture, or time-based art), acting, theatre technical direction, or theatre design and technology (costume, scenery, and lighting).

The master of music (M.M) degree enhances undergraduate training in performance, music education, composition, collaborative piano, piano pedagogy, jazz pedagogy, and conducting.

The master of arts (M.A.) has concentrations in art education, game design, music business and industry, musicology, music theory, and studio art.

## For More Information

Additional information on programs of study and areas of emphasis within each degree can be found in the individual school's description in this catalog and/or on the school's website listed below. Students may also contact the individual Graduate Directors for each School's graduate program.

## ART & DESIGN

Graduate Director, School of Art & Design

Phone: (304) 293-4077. Website: <http://artanddesign.wvu.edu/>

## MUSIC

Graduate Director, School of Music

Phone: (304) 293-4532. Website: <http://music.wvu.edu/>

## THEATRE

Graduate Director, School of Theatre and Dance

Phone: (304) 293-6806. Website: <http://theatre.wvu.edu/>

Written requests for information should be sent to the appropriate Graduate Director and school at the following address: College of Creative Arts, Creative Arts Center, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-6111.

General information about graduate study and life at West Virginia University can be found at <https://graduate.wvu.edu/>

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## ADMINISTRATION

### DEAN

- Keith Jackson - D.M.A. (Arizona State University)

### ASSOCIATE DEAN

- Sandra Schwartz - Ph.D. (University of Miami)

### ASSOCIATE DEAN OF ARTISTIC AND SCHOLARLY ACHIEVEMENT

- Mikylah Myers - D.M.A. (University of Houston)

### ASSISTANT TO THE DEAN - RECRUITMENT AND RETENTION

- James Froemel - Ed.D. (West Virginia University)

### DEAN EMERITUS

- Philip J. Faini

### DEAN AND PROFESSOR EMERITUS

- J. Bernard Schultz

## Degree Designation Learning Outcomes

The language stated in the learning goals for the College of Creative Arts graduate programs is based on (directly quoted, paraphrased or modified) current standards written and employed by the Council of Arts Accrediting Associations (National Association of Schools of Art and Design, National Association of Schools of Dance, National Association of Schools of Music, and National Association of Schools of Theatre).

The appropriate association of the Council has awarded accreditation to all of West Virginia University's graduate degree programs within the College of Creative Arts.

As stated by the Council of Arts Accrediting Association:

*National accreditation requirements outline threshold standards for institutional and individual achievement. These thresholds indicate essentials; they are rigorous. Attaining them represents a significant accomplishment. Therefore, these standards are both a foundation and a framework for specific achievements and evaluations of their quality.*

The general learning goals listed below are for graduate degrees offered by the College. **Specific learning goals for individual programs are listed under each School's section of the catalog.** Due to the nature of the College's specialized degrees, none of these goals listed are intended to be comprehensive.

### MASTER OF ARTS

The following are general learning goals for students pursuing a Master of Arts (MA):

- Develop advanced capacities to work independently and make effective artistic and intellectual judgments and professional decisions in the area of specialization.
- Demonstrate professional competence in the area of specialization before peers and faculty.
- Gain knowledge and skills in one or more areas outside the major.

### MASTER OF MUSIC

The Master of Music (MM) degree focuses on the development of professional competence in a music specialization or in a music-related field.

- Develop advanced capacities to work independently and make effective artistic and intellectual judgments and professional decisions in the area of specialization.
- Demonstrate professional competence in the area of specialization before peers and faculty.
- Gain knowledge of repertory and historical performance practices.
- Gain knowledge and skills in one or more fields of music outside the major such as theory, history, musicology, ethnomusicology and performance.

### MASTER OF FINE ARTS

The Master of Fine Arts (MFA) degree is for advanced graduate-level programs that focus on the practice in a specific discipline of the Visual and Performing Arts.

- Awareness of current issues and developments that influence the principal field of study, and professional ability and clear potential to contribute to the practice and advancement of the field.
- Writing and speaking skills to communicate clearly and effectively to the public and in formal or informal teaching situations.
- Understanding of appropriate related disciplines, the ability to think independently, and to integrate and synthesize information associated with high levels of practice in an area of specialization.
- Develop advanced competencies to work independently and make effective artistic and intellectual judgments and professional decisions in the area of specialization.
- Demonstrate professional competence in the area of specialization before peers and faculty.
- Understanding of professional ethics and practice associated with the major field.

## Admissions

### ADMISSION REQUIREMENTS

The College of Creative Arts uses the admission standards and procedures of the university for the admission of graduate students. Each school within the college also has individual admission requirements.

Potential graduate students should refer to the specific admission criteria of each school found in their program descriptions in this catalog and on the school's website.

Because of the creative nature of the arts, some students may be admitted under the individual consideration clause of the university's general admission policy. This category allows admission of exceptionally talented students in art, music, and theatre who might not meet the criteria for grade point averages and standardized test scores to be admitted to one of the College's programs of study.

## **TUITION**

In addition to University tuition and fees, College of Creative Art students will also be charged College tuition. Music students (undergraduate and most graduate) and musical theatre undergraduate students will also be charged an Applied Lesson tuition. Music minor students who must take applied lessons for their programs will also be assessed the Applied Lesson tuition.

## **ASSISTANTSHIPS, TUITION WAIVERS AND FINANCIAL AWARDS**

To assist in funding the cost of graduate education, West Virginia University and the College of Creative Arts offer a number of financial assistance packages for qualified applicants. These include graduate assistantships, graduate tuition waivers, and cash awards.

Assistantships are offered in each school; however, the number of assistantships is limited and their award is competitive based on their availability as well as the quality of the applicants and their potential for significant contribution to the school and college. Assistantships pay stipends, health insurance, and a university tuition waiver; there are some University and College fees not covered by assistantships. In return, graduate assistants provide approximately twenty hours of work per week during the nine month academic year with duties that range from instructional to service positions within each school.

For more information on assistantships, graduate tuition waivers, cash awards, application process, and important deadlines, please refer to each school's individual website.

Additional information on funding for graduate study at West Virginia University can be found at <https://graduate.wvu.edu/>

## **Certificate Programs**

- Artist Diploma in Music Performance (p. 45)
- Music Industry (p. 59)
- Therapeutic Art (p. 67)

## **Accreditation**

College of Creative Arts degree programs at West Virginia University are accredited by the National Association of Schools of Art and Design, National Association of Schools of Dance, National Association of Schools of Music, and National Association of Schools of Theatre.

## **School of Art and Design**

### **Degrees Offered**

- Master of Arts
- Master of Fine Arts

### **Graduate Certificate Offered**

- Therapeutic Art

The graduate programs in the School of Art and Design lead to a master of arts (M.A.) with emphasis in art education, game design, or studio art (two years and a minimum of thirty credit hours; thirty-six is recommended) or to a master of fine arts (M.F.A.) with emphasis in a studio art (three years and sixty credit hours). These programs are highly selective and closely integrated. All applicants are expected to have academic competence, artistic maturity, and the motivation to achieve excellence in their areas of concentration.

The master of fine arts (M.F.A.) is a professionally-oriented terminal degree in the studio arts, with concentration in ceramics, graphic design, painting, photography, printmaking, sculpture, or time-based art. Applicants typically hold a baccalaureate degree in art or its equivalent for admission. Recommended preparation includes twelve hours of art history, seventy hours of studio art or equivalent experience, and thirty-six hours of general education.

The School also offers a Graduate Certificate in Therapeutic Art to provide additional training in the use of a variety of advanced art methods and therapeutic art approaches for art educators, fine artists, and students in helping professions on how engagement in art-making can facilitate self-reflection, promote healing, and improve overall mental health and awareness. This field offers new professional opportunities to art educators who are trained, knowledgeable, and versed in therapeutic art concepts and technical skills within their teaching practice in the PreK-21 classroom.



## Accreditation

WVU is an accredited institutional member of the National Association of Schools of Art and Design (NASAD) and the School of Art & Design's degree programs are regularly evaluated to assure they are meeting these national standards. Applicants for graduate studies must comply with the standards for admission set by West Virginia University, the College of Creative Arts, and the School of Art and Design.

## Reviews

All students enter the graduate programs in art as preliminary candidates. Students in the M.F.A. program are reviewed for advancement to degree candidacy at the end of their third semester of study or upon the completion of a minimum of twenty-seven credit hours. Candidacy status is obtained upon review by the full faculty of the School and must be approved by the student's graduate committee. Students in the M.A. program are reviewed for advancement to degree candidacy at the end of their first semester of study or upon the completion of a minimum of twelve credit hours.

The School of Art and Design has high expectations for its graduate students. Because of this, certain standards of achievement exceed the minimum standards set by the university for all graduate students. The School of Art and Design reserves the right to impose stricter limitations on all art graduate students. Credit hours in courses with an earned grade of C do not automatically count toward graduate degree requirements. The graduate committee and the school director have the right to declare such credit hours unacceptable.

## Program Transfer

A preliminary candidate in a graduate art program is not guaranteed acceptance into another graduate art program. A change from the M.F.A. program to the M.A. program (or the reverse) must be approved by the graduate faculty of the School of Art and Design. Under normal conditions, such a change is not considered until the student has established credibility by successfully completing a minimum of nine approved credit hours of study at WVU. Transfer to a program outside the School of Art and Design must be approved by the receiving unit. To make an application for a double degree program or a special interdepartmental program at the graduate level, students must have prior written approval of the School of Art and Design Director.

## Thesis

All candidates for a graduate degree in art must prepare a written thesis (or graduate project) related to their work and activity as a graduate student (see specific requirements for each major). The chair of the student's graduate committee supervises the preparation of the thesis. The thesis must be prepared according to the form prescribed in the WVU regulations governing the preparation and electronic submission of dissertations and theses as well as School guidelines, unless an exception is authorized in advance by the student's graduate committee and the School Director. A final draft of the thesis must be submitted to committee members at least one month prior to the electronic filing date for review and approval.

## Residence Requirements

M.F.A. students take nine to fifteen hours per semester. All students accepted into the M.F.A. program are required to spend six full-time semesters (excluding summer sessions) in residence. Approved study abroad semesters count toward the residency requirement.

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## FACULTY

### DIRECTOR

- Kristina Olson - M.A. (Stony Brook University)  
Art History-Modern and Contemporary, Art Criticism

### ASSOCIATE DIRECTOR AND GRADUATE ADVISOR

- Joseph Lupo - M.F.A. (University of Georgia)  
Printmaking

### UNDERGRADUATE ADVISOR

- Dylan Collins - M.F.A. (Kent State University)  
Sculpture, Drawing

### PROFESSORS

- Alison Helm - M.F.A. (Syracuse University)  
Sculpture
- Joseph Lupo - M.F.A. (University of Georgia)  
Printmaking
- Kristina Olson - M.A. (Stony Brook University)  
Art History-Modern and Contemporary, Art Criticism

- Naijun Zhang - M.F.A. (West Virginia University)  
Painting, Drawing

## **ASSOCIATE PROFESSOR**

- Dylan Collins - M.F.A. (Kent State University)  
Sculpture, Drawing
- Joseph Galbreath - M.F.A. (Maryland Institute College of Art)  
Graphic Design
- Terese Giobbia - Ph.D. (Northern Illinois University)  
Art Education
- Gerald Habarth - M.F.A. (University of South Florida)  
Time-Based Art
- Jason Lee - M.F.A. (University of Wisconsin-Madison)  
Sculpture, Foundations
- Robert Moore - M.F.A. (Utah State University)  
Ceramics
- Kofi Opoku - M.F.A. (West Virginia University)  
Graphic Design
- Rhonda Reymond - Ph.D. (University of Georgia)  
Art History-American, African American, 17th-19th century European art
- Shoji Satake - M.F.A. (University of Indiana-Bloomington)  
Ceramics
- Michael Sherwin - M.F.A. (University of Oregon)  
Photography, Digital Imaging

## **ASSISTANT PROFESSOR**

- Kent Kerr - M.F.A. (Radford University)  
Graphic Design
- Anne McFarland - Ph.D. (Florida State University)  
Art Therapy, Art Education
- Jeffrey Moser - M.F.A. (University of Delaware)  
Game Design, Interactive Media

## **SERVICE ASSISTANT PROFESSORS**

- Heather Harris - Ph.D. (University of Illinois at Urbana-Champaign)  
Museum Studies

## **TEACHING ASSISTANT PROFESSORS**

- Megan Leight - Ph.D. candidate (City University of New York)  
Art History-Ancient, Anthropology, Archaeology, Mesoamerican, Museum Studies

## **VISITING ASSISTANT PROFESSORS**

- Nichole van Beek - M.F.A. (University of California, Santa Barbara)  
Painting, Foundations

## **LECTURERS**

- Jennifer Allen - M.F.A. (Indiana University-Bloomington)  
Ceramics
- Douglas Barkey - M.F.A. (University of Iowa)  
Photography, Game Design
- Aaron Blum - M.F.A. (Syracuse University)  
Photography
- Sarah Ceci Dadisman - B.M. (West Virginia University)  
Arts Administration
- Kelley Galbreath - M.F.A. (Maryland Institute College of Art)  
Graphic Design
- Ronald Hollingshead - M.F.A. (West Virginia University)  
Sculpture

- Katherine Inge - Ph.D. candidate (University of Arizona)  
Art History
- Patrick Jones - M.F.A. and M.A. (West Virginia University)  
Painting, Drawing, Contemporary Art History
- Lourdes Karas - B.A. (Allegheny College)  
Arts Administration
- Eowyn Kerr-Di Carlo - Ph.D. candidate (Courtauld Institute of Art)  
Technical Art History
- Michael Loop - M.F.A. (West Virginia University)  
Foundations, Sculpture
- Jack Moffett - Master of Design in Interaction Design (Carnegie Mellon University)  
Graphic Design
- Abigail Ruppert - M.A. (West Virginia University)  
Foundations
- Ian Sampson - M.F.A. (University of Delaware)  
Game Design, Interactive Media
- Charles Scott - M.F.A. (Southern Illinois University)  
Foundations, Sculpture
- Nathan Ward - M.F.A. (University of Oregon)  
Photography
- Jason Zeh - M.F.A. (University of Kansas)  
Time-Based Art

## PROFESSORS EMERITI

- Eve Faulkes  
Graphic Design
- J. Bernard Schultz  
Dean, Art History
- Janet Snyder  
Art History

## ASSOCIATE PROFESSORS EMERITI

- Victoria Fergus  
Art Education

## Admissions

The application deadline occurs annually on January 15. There is a two-step process for graduate applications.

Step 1: Apply (<http://graduateadmissions.wvu.edu>) to West Virginia University Graduate School online. This application will require you to upload your transcripts, resume, letter of intent, three letters of recommendation, and pay an application fee.

Step 2: Submit your portfolio (<https://wvuart.slideroom.com/>) to the WVU School of Art & Design.

Submit the following material for the degree you are interested in:

MFA Studio Art concentration and MA Studio Art: Portfolio: 20 images or video documentation of recent work

MA Art Education: PDF writing sample; Applicants with teaching experience may include images of student work

MA Game Design: Portfolio of creative work

Applicants may be required to take additional course work after careful review of undergraduate transcripts.

In addition to the application materials listed, transfer students must officially submit graduate credits completed elsewhere. Transcripts must accompany the written request. The acceptance of transfer credit is not automatic. The graduate faculty, the graduate advisor, and the School Director will determine how much, if any, previous graduate-level work may be transferred. The maximum allowable number of graduate transfer credits toward the degree is nine. All transfer credits must be in place by the end of the first semester.

## Financial Aid

Financial aid information is available through the Student Financial Aid Office, West Virginia University, P.O. Box 6004, Morgantown WV 26506-6004.

## Graduate Assistantships

Graduate assistantships and other forms of financial aid are awarded to students of exceptional promise by the faculty of the School of Art and Design.

## Certificate Program

- Therapeutic Art (p. 67)

## Art and Design, M.F.A.

### Degree Offered

- Master of Fine Arts

### Nature of the Program

This interdisciplinary, terminal studio major is designed to allow graduate students to gain experience in all areas of the visual arts while pursuing a focused area of emphasis (choices include: ceramics, graphic design, painting, photography, printmaking, sculpture, or time-based art) to prepare them for the professions. Students take a total of 39 hours of studio art with a minimum of 15 of those hours in the student's area of emphasis. Nine (9) hours of Art History are required along with three (3) hours of Teaching Practicum/Professional Practice, three (3) hours of Graduate Seminar, and six (6) hours for the Graduate Exhibition and Thesis. The 3-year major can be completed in 60 hours.

- Three years of graduate courses totaling at least 60 credit hours.
- Successful committee evaluation at the end of each semester.
- Passing a full-faculty review at the end of the third semester.
- Production of a graduate exhibition and written thesis.
- Oral defense of the exhibition and thesis.
- A minimum overall grade point average of 2.75.

## Admissions

The application deadline occurs annually on January 15. There is a two-step process for graduate applications.

Step 1: Apply (<http://graduateadmissions.wvu.edu/>) to West Virginia University Graduate School online. This application will require you to upload your transcripts, resume, letter of intent, three letters of recommendation, and pay an application fee.

Step 2: Submit your portfolio (<https://wvuart.slideroom.com/>) to the WVU School of Art & Design.

Submit the following material for the degree you are interested in:

MFA Studio Art: 20 images or video documentation of recent work

Applicants may be required to take additional course work after careful review of undergraduate transcripts.

In addition to the application materials listed, transfer students must officially submit graduate credits completed elsewhere. Transcripts must accompany the written request. The acceptance of transfer credit is not automatic. The graduate faculty, the graduate advisor, and the School Director will determine how much, if any, previous graduate-level work may be transferred. The maximum allowable number of graduate transfer credits toward the degree is nine. All transfer credits must be in place by the end of the first semester.

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## Graduate Assistantships

Graduate assistantships and other forms of financial aid are awarded to students of exceptional promise by the faculty of the School of Art and Design.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2555

## Degree Requirements

Code	Title	Hours
ART 590	Teaching Practicum/Professional Practice	3
ART 600	Graduate Exhibition and Thesis	6
<b>Graduate Seminar</b>		<b>3</b>
ART 696	Graduate Seminar	
<b>Art History</b>		<b>9</b>
ARHS 500-Level and 600-Level Courses *		
<b>Additional Studio Electives</b>		<b>24</b>
ART 500-Level and 600-Level Courses		
<b>Studio Area of Emphasis</b>		<b>15</b>
Ceramics		
Graphic Design		
Painting		
Photography		
Printmaking		
Sculpture		
Time-Based Art		
Total Hours		60

\*

This is the exhaustive list of ART options based in CAC. With advisor approval, graduate students may also take graduate course credits in other disciplinary areas.

This interdisciplinary, terminal studio major is designed to allow graduate students to gain experience in all areas of the visual arts while pursuing a focused area of emphasis (choices include: ceramics, graphic design, painting, photography, printmaking, sculpture, or time-based art) to prepare them for the professions. Students take a total of 39 hours of studio art with a minimum of 15 of those hours in the student's area of emphasis. Nine (9) hours of Art History are required along with three (3) hours of Teaching Practicum/Professional Practice, three (3) hours of Graduate Seminar, and six (6) hours for the Graduate Exhibition and Thesis. The 3-year major can be completed in 60 hours.

## Areas of Emphasis

- Ceramics (p. 429)
- Graphic Design (p. 429)
- Painting (p. 430)
- Photography (p. 430)
- Printmaking (p. 430)
- Sculpture (p. 430)
- Time-Based Art (p. 430)

## Ceramics Area of Emphasis Requirements

Code	Title	Hours
ART 640S	Graduate Ceramics	15
Total Hours		15

## Graphic Design Area of Emphasis Requirements

Code	Title	Hours
ART 623S	Graduate Graphic Design	15
Total Hours		15

## Painting Area of Emphasis Requirements

Code	Title	Hours
ART 614S	Graduate Painting	15
Total Hours		15

## Photography Area of Emphasis Requirements

Code	Title	Hours
ART 632S	Graduate Photography	15
Total Hours		15

## Printmaking Area of Emphasis Requirements

Code	Title	Hours
ART 630S	Graduate Printmaking	15
Total Hours		15

## Sculpture Area of Emphasis Requirements

Code	Title	Hours
ART 626S	Graduate Sculpture	15
Total Hours		15

## Time-Based Art Area of Emphasis Requirements

Code	Title	Hours
ART 634S	Alternative Media	15
Total Hours		15

## Major Learning Outcomes

### ART AND DESIGN

Students graduating from the MFA Art and Design program will be able to:

- Synthesize advanced skills in related, interdisciplinary studio skills into higher level practice.
- Have a functional knowledge of the diverse histories, traditions, theories, conventions, and evolution of the visual arts in a global context.
- Develop advanced competencies to work independently and make effective artistic and intellectual judgments and professional decisions.
- Demonstrate professional art making competence in the area of specialization before peers and faculty.
- Communicate clearly and effectively in written and oral form regarding their original artistic practice and research.

## Art Education, M.A.

### Degree Offered

- Master of Arts

### Nature of the Program

Specialization in art education requires the completion of a minimum of thirty hours with a recommended total of thirty-six. The exact course of study is determined through consultation with the student's advisor and graduate committee. This degree can also lead to certification with an additional semester for student teaching.

M.A. art education students are required to produce a written thesis or, at the graduate committee's discretion, may complete a research project.

A graduate certificate in Therapeutic Art is also offered.

## Admissions

The application deadline occurs annually on January 15. There is a two-step process for graduate applications.

Step 1: Apply (<http://graduateadmissions.wvu.edu/>) to West Virginia University Graduate School online. This application will require you to upload your transcripts, resume, letter of intent, three letters of recommendation, and pay an application fee. Applicants must have had an undergraduate GPA of 2.75 or higher on a 4.0 scale.

Step 2: Submit your portfolio (<https://wvuart.slideroom.com/>) to the WVU School of Art & Design.

For the MA in Art Education, a writing sample needs to be submitted. Applicants with teaching experience may include images of student work. Contact the School of Art and Design for further information regarding the submission process.

The M.A. in art Education requires a minimum GPA of 2.75 for admission into the program.

Major Code: 2506

## Degree Requirements

Code	Title	Hours
Studio and/or Academic Electives *		12-18
Art Education or Approved Studies *		12
ART 602	Master's in Art Education Project	6
Total Hours		30-36

\*

Additional courses may be approved with advisor consent.

## STUDIO AND/OR ACADEMIC ELECTIVES

Code	Title	Hours
ARHS 501	Independent Study	
ARHS 520	Greek and Roman	
ARHS 531	Medieval	
ARHS 533	Medieval Architecture	
ARHS 541	Art of the Review	
ARHS 544	Art Theory	
ARHS 545	Modern Art Theory	
ARHS 546	Medieval Painting	
ARHS 547	Romantic Painting	
ARHS 548	Women in Art	
ARHS 550	Northern Renaissance	
ARHS 554	Italian Renaissance	
ARHS 560	Baroque	
ARHS 570	American	
ARHS 575	Nineteenth Century	
ARHS 580	Modern	
ARHS 581	Modern Architecture	
ARHS 582	GPS-Architect Frank Lloyd Wright	
ARHS 585	Print, Propaganda and Art	
ARHS 588	The Art of Andy Warhol	
ART 614S	Graduate Painting	
ART 623S	Graduate Graphic Design	
ART 624S	Graduate Graphic Design/Professional Practice	
ART 626S	Graduate Sculpture	
ART 630S	Graduate Printmaking	
ART 632S	Graduate Photography	
ART 634S	Alternative Media	

ART 640S	Graduate Ceramics
ART 580	Art and Environment
ART 593	Special Topics (Mold Making)
ART 593	Special Topics (3D Printing)
ART 595	Independent Study: Graduate Studio
ART 693	Special Topics (Kiln Building)
ARHS 589	Contemporary **
EDP 600	Educational Psychology **
SPED 500	Legal/Educational Foundations: Special Education **
SPED 601	Academic Interventions for Special Needs **
or SPED 609	Technology Applications for Special Needs

\*\*

Required for students pursuing the certification track.

## ART EDUCATION OR APPROVED STUDIES

Code	Title	Hours
ART 564	Intro to Art Education	
ART 565	Pre-Student Teaching	
ART 566	Art Education: Secondary	
ART 567	Technology Methods in Art Education	
ART 590	Teaching Practicum/Professional Practice	
ART 610	Introduction to Visual Arts Therapy	
ART 611	Theory of Art Education & Art Therapy	
ART 612	Art Methods/Materials for Special Populations	
ART 613	Art Assessments and Evaluations with Special Populations	
ART 620	Advanced Problems in Art Making	
ART 690	Teaching Practicum	

## Major Learning Outcomes

### ART EDUCATION

The following are general learning goals for students pursuing a Master of Arts:

- Develop advanced capacities to work independently and make effective artistic and intellectual judgments and professional decisions in the area of specialization.
- Demonstrate professional competence in the area of specialization before peers and faculty.
- Gain knowledge and skills in one or more areas outside the major.

## Game Design, M.A.

### Degree Offered

- Master of Arts

### Nature of the Program

The MA in Game Design is a 30-credit low-residency program for emerging game designers seeking to expand and build upon their conceptual, production, and project management skills, as well as to further their professional credentials.

The curriculum includes a 3-course foundational sequence that addresses game design, game theory and game production. In addition a series of 1-credit micro-courses allows each candidate to advance a specialized skill set. All courses are only available online, however a campus residency component brings all students and faculty together every summer for a dynamic games conference and game jam. Early in the degree course sequence, a capstone project is conceived and planned out for which the candidate designs and develops a functional and playable game prototype in order to complete the degree. For the capstone project each candidate serves simultaneously as the director of their project while also working in a production specialization role for a peer's capstone project. The final requirement of the program is that each student present their capstone game project at their final residency.



Our selective enrollment ensures regular individual contact with dedicated, diverse faculty who are committed to a sustained professional exchange with each student. Students must be able to apply and communicate a diverse body of knowledge of historical, cultural, contemporary, and aesthetic issues to their professional practice. Students are expected to articulate and defend their capstone project proposal and final prototype within the context of the contemporary game field.

## Admissions

The application deadline occurs annually on January 15. There is a two-step process for graduate applications.

Step 1: Apply (<http://graduateadmissions.wvu.edu/>) to West Virginia University Graduate School online. This application will require you to upload your transcripts, resume, letter of intent, three letters of recommendation and pay an application fee. Applicants must have had a minimum undergraduate grade point average of 2.75 to be considered for admission.

Step 2: Submit your portfolio (<https://wvuart.slideroom.com/>) to the WVU School of Art & Design.

Submit the following material for the degree you are interested in:

MA in Game Design: Portfolio: Up to 5 representative samples of your work with a total viewing duration of no longer than 60 minutes, including interactive projects, game prototypes, game components, graphic imagery, virtual environments, virtual character studies, photographs, or video documentation of the same. WVU School of Art & Design faculty will review portfolios and make recommendations for program acceptance.

Applicants may be required to take additional course work after careful review of undergraduate transcripts.

In addition to the application materials listed, transfer students must transfer graduate work completed elsewhere. Transcripts must accompany the written request. The acceptance of transfer credit is not automatic. The graduate faculty, the graduate advisor, and the School Director will determine how much, if any, previous graduate-level work may be transferred. The maximum allowable number of graduate transfer credits toward the degree is nine. All transfer credits must be in place by the end of the first semester.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2546

## Degree Requirements

Code	Title	Hours
ART 502S	Game Design	3
ART 503	Game Theory	3
ART 505S	Game Production	3
ART 603S	Thesis: Concept & Research	3
ART 604S	Thesis: Design & Project Plan	3
ART 606S	Thesis: Project Launch	3
ART 607S	Thesis: Production	6
Select six hours from the following:		6
ART 608	Game Design Residency	
ART 507	Focus Module	
Electives		
Total Hours		30

## Suggested Plan of Study

First Semester	Hours
ART 608	1
	1
Second Semester	Hours
ART 502S	3
ART 503	3
ART 507	1
	7

<b>Third Semester</b>	<b>Hours</b>
ART 505S	3
ART 603S	3
ART 507	1
	7
<b>Fourth Semester</b>	<b>Hours</b>
ART 608	1
	1
<b>Fifth Semester</b>	<b>Hours</b>
ART 604S	3
ART 606S	3
ART 507	1
	7
<b>Sixth Semester</b>	<b>Hours</b>
ART 607S	6
	6
<b>Seventh Semester</b>	<b>Hours</b>
ART 608	1
	1

Total credit hours: 30

\*

The first semester in this program is a summer term.

\*\*

An accelerated track is also available. Candidates may consult their faculty advisor to learn more details.

## Major Learning Outcomes

### GAME DESIGN

1. Graduates of this program will be able to analyze the structure of a game to address theory, narrative, character, environment, and sound elements.
2. Graduates of this program will be able to produce functional game prototypes based on theoretical insight, factual observation, iterative processes, and a game design document.
3. Graduates of this program will be able to develop executive leadership, project management, and team management abilities to organize and manage a production pipeline in a remote team-based environment.
4. Graduates of this program will develop competence in usability testing for game quality control.

## Studio Art, M.A.

### Degree Offered

- Master of Arts

### Nature of the Program

The studio art concentration promotes advanced study in ceramics, graphic design, painting, photography, printmaking, sculpture, and time-based art. M.A. studio art students are required to produce a written thesis and, at the graduate committee's discretion, may be required to hold a thesis exhibition.

### Admissions

The application deadline occurs annually on January 15. There is a two-step process for graduate applications.

Step 1: Apply (<http://graduateadmissions.wvu.edu/>) to West Virginia University Graduate School online. This application will require you to upload your transcripts, resume, letter of intent, three letters of recommendation and pay an application fee. Applicants must have had an undergraduate grade point average of at least 2.75 to be considered for admission.

Step 2: Submit your portfolio (<https://wvuart.slideroom.com/>) to the WVU School of Art & Design.

Submit the following material:

20 images or video documentation of recent work

Applicants may be required to take additional course work after careful review of undergraduate transcripts.

In addition to the application materials listed, transfer students must transfer graduate work completed elsewhere. Transcripts must accompany the written request. The acceptance of transfer credit is not automatic. The graduate faculty, the graduate advisor, and the School Director will determine how much, if any, previous graduate-level work may be transferred. The maximum allowable number of graduate transfer credits toward the degree is nine. All transfer credits must be in place by the end of the first semester.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2505

## Degree Requirements

Code	Title	Hours
<b>Studio Art</b>		<b>18</b>
ART 614S	Graduate Painting	
ART 515	Arts Administration	
ART 623S	Graduate Graphic Design	
ART 624S	Graduate Graphic Design/Professional Practice	
ART 626S	Graduate Sculpture	
ART 630S	Graduate Printmaking	
ART 632S	Graduate Photography	
ART 634S	Alternative Media	
ART 640S	Graduate Ceramics	
ART 580	Art and Environment	
ART 595	Independent Study: Graduate Studio	
ART 593	Special Topics (Mold Making)	
ART 593	Special Topics (3D Printing)	
ART 693	Special Topics (Kiln Building)	
<b>Cognates/Electives</b>		<b>6</b>
<b>Art History</b>		<b>6</b>
Select 2 from the following:		
ARHS 501	Independent Study	
ARHS 507	Native American	
ARHS 510	Intro Curatorial Practice	
ARHS 520	Greek and Roman	
ARHS 531	Medieval	
ARHS 533	Medieval Architecture	
ARHS 538	History of Stained Glass	
ARHS 544	Art Theory	
ARHS 545	Modern Art Theory	
ARHS 548	Women in Art	
ARHS 550	Northern Renaissance	
ARHS 554	Italian Renaissance	
ARHS 560	Baroque	
ARHS 570	American	
ARHS 575	Nineteenth Century	
ARHS 580	Modern	
ARHS 581	Modern Architecture	
ARHS 582	GPS-Architect Frank Lloyd Wright	
ARHS 585	Print, Propaganda and Art	

ARHS 588	The Art of Andy Warhol	
ARHS 589	Contemporary	
ARHS 593	Special Topics	
ARHS 595	Independent Study	
ARHS 601	Thesis	
ARHS 693	Special Topics	
ARHS 696	Graduate Seminar	
ART 696	Graduate Seminar	3
ART 600	Graduate Exhibition and Thesis	3
Total Hours		36

## Major Learning Outcomes

### STUDIO ART

The following are general learning goals for students pursuing a Master of Arts:

- Develop advanced capacities to work independently and make effective artistic and intellectual judgments and professional decisions in the area of specialization.
- Demonstrate professional competence in the area of specialization before peers and faculty.
- Gain knowledge and skills in one or more areas outside the major.

## School of Music

### Degrees Offered

- Master of Arts (options: Music Business and Industry, Musicology, and Music Theory)
- Master of Music (options: Collaborative Piano, Composition, Conducting, Jazz Pedagogy, Music Education, Performance, and Piano Pedagogy)
- Doctor of Musical Arts (options: Collaborative Piano, Composition, Conducting, and Performance)

### Graduate Certificates Offered

- Artist Diploma in Music Performance
- Music Industry

The School of Music is an accredited institutional member of the National Association of Schools of Music, the only nationally recognized accrediting agency for professional music instruction. All programs comply with the objectives and guidelines required by this organization.

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## FACULTY

### DIRECTOR

- Kelly Burke - D.M.A. (University of Michigan)  
Clarinet

### DIRECTOR OF GRADUATE STUDIES

- Michael Vercelli - D.M.A. (University of Arizona)  
Director of World Music Performance Center

### PROFESSORS

- Peter Amstutz - D.M.A. (Peabody Conservatory)  
Piano
- Cynthia Anderson - M.M. (Manhattan School of Music)  
Oboe, Theory
- Hope Koehler - D.M.A. (University of Kentucky)  
Voice
- Andrew Kohn - Ph.D. (University of Pittsburgh)  
Double Bass, Theory
- Mikylah Myers - D.M.A. (University of Houston)  
Violin, Chamber Music

- Sandra Schwartz - Ph.D. (University of Miami)  
Music Education
- Travis Stimeling - Ph.D. (University of North Carolina - Chapel Hill)  
Ethnomusicology/Musicology
- Darko Velichkovski - M.A. (City University of New York)  
Director of Music Industry
- Michael Vercelli - D.M.A. (University of Arizona)  
Director of World Music Performance Center
- John Weigand - D.M.A. (Florida State University)  
Clarinet, Chamber Music
- George Willis - M.M. (Temple University)  
Percussion Studies

## ASSOCIATE PROFESSOR

- Nina Assimakopoulos - M.M. (Munich Academy of Music)  
Flute, Chamber Music
- Mark Benincosa - M.S. (West Virginia University)  
Recording Technology
- Erin Ellis - D.M.A. (Eastman School of Music)  
Cello, Chamber Music, String Pedagogy
- Matthew Heap - Ph.D. (University of Pittsburgh)  
Theory, Composition
- Andrea Houde - M.M. (Peabody Institute)  
Viola, String Pedagogy, Chamber Music
- Lucy Mauro - D.M.A. (Peabody Institute)  
Piano Pedagogy, Class Piano, Piano, Chamber Music
- Kym Scott - D.M.A. (University of Southern California)  
Director of Choral Activities
- Jared Sims - D.M.A. (Boston University)  
Director of Jazz Studies
- Scott Tobias - D.M.A. (The University of Georgia)  
Director of Bands

## ASSISTANT PROFESSOR

- Thomas Erik Angerhofer - D.M.A. (University of Colorado Boulder)  
Voice
- Katelyn Best - Ph.D. (Florida State University)  
Ethnomusicology/Musicology
- Hakeem Bilal - M.M. (Carnegie Mellon University)  
Trombone
- Jason Gossett - Ph.D. (The Pennsylvania State University)  
Music Education
- Alan Hankers - Ph.D. (Stony Brook University)  
Composition
- Albert Houde - D.M.A.-ABD (West Virginia University)  
Horn
- Mary Grace Johnson - D.M.A. - ABD (Rice University)  
Violin and Chamber Music
- William Koehler - D.M.A. (University of Minnesota)  
Voice
- Emily Lambert - Ph.D. - ABD (University of Miami)  
Music Therapy
- Alton Merrell - Ph.D. (University of Pittsburgh)  
Jazz/Gospel/Commercial Piano
- Angela Munroe - Ph.D. (University of Colorado Boulder)  
Music Education
- Jake Sandridge - Ph.D.- ABD (Rice University)

#### Composition and Music Theory

- Robert Sears - D.M.A. (University of Illinois at Urbana-Champaign)  
Trumpet, Jazz, Chamber Music
- Jeffrey Siegfried - D.M.A. (University of Michigan)  
Saxophone, Chamber Music
- Andy Sledge - D.M.A.- ABD (Yale School of Music)  
Bassoon and Music Theory
- Joshua Swiger - M.A. (West Virginia University)  
Music Industry
- Karen Roethlisberger Verm - Visiting - M.M. (University of Cincinnati/College-Conservatory of Music)  
Opera and Vocal Coaching
- Laura Knoop Very - M.M. (Yale University)  
Voice
- Jennifer Walker - Ph.D. (University of North Carolina - Chapel Hill)  
Musicology
- Rotem Weinberg - D.M.A. (University of Michigan)  
Director of Orchestral Activities (Visiting)
- Cheldon Williams - D.M.A. (University of Texas at Austin)  
Associate Director of Bands

### LECTURERS

- Hannah Ivey Bush - M.M. (University of Georgia)  
Music Therapy
- Timothy DeWitt - D.M.A. (Eastman School of Music)  
Music Education
- Rebecca Kreider - M.M. (Indiana University)  
General Education Courses
- Sun Jung Lee - D.M.A. (West Virginia University)  
Accompanying, Piano, Chamber Music
- Christine Mazza - M.M. (Cleveland Institute of Music)  
Harp
- Carson McTeer - B.A. (Rice University)  
Tuba, Euphonium, Chamber Music
- Adam Osmianski - M.M. (West Virginia University)  
General Education Courses
- Stacey Russell - D.M.A. (University of South Carolina)  
Theory
- Brian Wolfe - B.M. (West Virginia University)  
Drum Set, Percussion, Jazz
- Renee Wyatt - M.M. (West Virginia University)  
Music Education

### PROFESSORS EMERITI

- John Beall
- James W. Benner
- Thomas S. Brown
- Philip J. Faini
- Mary T. Ferer
- William Haller
- John Hendricks III
- Leo Horacek, Jr.
- Barton Hudson
- Christine B. Kefferstan
- Gerald Lefkoff
- James Miltenberger
- Janet Robbins

- William Skidmore
- Connie Arau Sturm
- David Taddie
- Robert H. Thieme
- Virginia Thompson
- Gilbert Trythall
- Molly Weaver
- Don G. Wilcox
- Christopher Wilkinson
- John Winkler

## ASSOCIATE PROFESSORS EMERITI

- David Bess
- Joyce A. Catalfano
- Rose M. Crain
- John E. Crotty
- June D. Swartwout

## Admissions

Prospective graduate students in music are required to have completed the appropriate curriculum of undergraduate study in music at WVU or its equivalent at another institution of recognized-standing. For acceptance into a degree program, the applicant should make inquiry to the Director of Graduate Studies, School of Music, College of Creative Arts, P.O. Box 6111, Morgantown, WV 26506-6111.

Applicants for degree study in composition, music theory, musicology, and performance (including conducting) must take a diagnostic test in music theory; with the exception of the master of arts in musicology and master of arts in music business and industry, all masters students must pass a piano proficiency. In addition, performance majors in voice and conducting take diagnostic tests in pedagogy and literature. Applicants for degree study in music education must take proficiencies in piano and voice. Applicants in music education have the option to take the diagnostic exam in music theory. The results of these tests may indicate the need for remedial study, which must be completed before admission to candidacy.

## Admission to Masters Program

Applicants to the program leading to the degree of master of music, master of arts in musicology, or master of arts in music theory must present necessary credentials for evaluation of previous training and experience to the School of Music. These include transcripts from all institutions previously attended showing a grade point average of at least 3.0 in all undergraduate study submitted through the WVU Office of Admissions. Three letters of recommendation from individuals who are qualified to judge the applicant's potential success as a graduate student in music may be submitted to the WVU Office of Graduate Admissions or directly to the Director of Graduate Studies in Music.

With the exception of applicants in composition, musicology, music theory, and music business and industry, all applicants are also required to demonstrate, by audition, their level of attainment in a principal performance area. The evaluation of performance proficiency is based on technical ability, repertoire, and musicianship. A listing of representative material for each performance area, graded by proficiency level, is available upon request. A recording may be submitted in cases where travel makes an audition impractical. Each degree option has established standards which must be met for admission. For performance majors, the estimated proficiency level must be confirmed by a jury examination at the end of the first semester of performance study. Credit in performance may be counted toward degree requirements only after the proficiency-level prerequisite has been reached.

Applicants seeking admission as composition majors must submit representative compositions for evaluation and approval. When the application for composition is complete, it will be reviewed by the composition faculty. If this review is favorable, a representative of the composition faculty will contact the applicant to schedule an entrance audition and interview.

Applicants seeking admission as music theory or musicology majors must submit a sample of writing, such as a term paper. A musical subject is recommended but not required. Musicology applicants must have taken the equivalent of four semesters of training in a language other than English; remedial work in languages may be recommended during masters degree study, if necessary.

Applicants seeking admission to the master of arts in music business and industry must submit transcripts from a bachelor's degree from an accredited university showing a GPA of 3.0 or higher. GPA exceptions will be made on an individual case-by-case basis, depending upon previous experience and/or years of applicable professional experience. Applicants must submit GRE scores, as well as a CV, and a 500 word essay describing the student's professional preferences, goals and aspirations. Students must achieve 153 on the verbal and 144 on the quantitative GRE sections. The GRE requirement may be waived if the student's bachelor's degree GPA is 3.3 or higher (on 4.0 scale), and/or if his/her professional experience in the industry exceeds 5 years, with strong academic and/or professional recommendations. The master of arts in music business and industry degree is offered online through <https://online.wvu.edu> (<https://online.wvu.edu/>). Admission to the master of arts in music business and industry is selective and competitive.

Applicants seeking admission to the music education major must submit the following:

1. An essay describing and discussing your training, experiences, present interests, and career aspirations in the field of music education
2. A current résumé
3. A video recording of teaching, preferably a K-12 music class or rehearsal (Please submit a detailed lesson plan for each class or rehearsal presented on your video of teaching. When the application for music education is complete, it will be reviewed by the music education faculty. If this review is favorable, a representative of the music education faculty will contact the applicant to schedule an entrance interview and audition. Note: This is not required of those who are applying for the certification option.)

## PROVISIONAL ADMISSION

Applicants whose admission profile does not meet the qualifications outlined above may be considered for provisional admission. The decision to offer provisional admission will be made by the School of Music Committee on Graduate Studies based upon information available for review. If a student is offered and accepts enrollment as a provisional admit, the student may thereafter be accepted as degree student if, upon completion of up to twelve semester hours of graduate study, the student has earned a minimum of a B (3.0) average and satisfied any previous undergraduate deficiencies or other conditions.

## Admission to Doctor of Musical Arts Programs

Acceptance into doctoral programs is competitive. Applicants to the program leading to the D.M.A. must present necessary credentials for evaluation of previous training and experience. These include transcripts showing an average of at least a 3.0 grade point average in a minimum of twenty-eight hours in liberal arts studies submitted through the WVU Office of Admissions. Copies of programs of recent major recitals must be submitted directly to the Director of Graduate Studies in Music. Three letters of recommendation from individuals who are qualified to judge the applicant's potential success as a graduate student in music may be submitted to the WVU Office of Graduate Admissions or directly to the Director of Graduate Studies in Music. Normally, the admission process also includes an on-campus audition and interview with the faculty of the major performance area. Applicants to the D.M.A. in composition must also submit scores and recordings for review. Applicants who do not meet all of the criteria for regular admission to the D.M.A. degree program may be considered for provisional admission subject to the satisfactory completion of certain specified courses or the attainment of a specified grade point average within a semester's work. The decision to offer or deny provisional admission will be made by the School of Music Committee on Graduate Studies based upon information available for review at the time of the application.

Applicants for the D.M.A. in conducting must meet language prerequisites: at least two years of undergraduate study of one language (French, Italian, German, or Spanish) or appropriate undergraduate study in diction (English, French, Italian, German, or Latin). At the discretion of the conducting faculty, a demonstrated ability to read in a language other than English may be accepted as meeting the prerequisite. Students who have not taken the required courses at the undergraduate level may meet the prerequisite by passing a proficiency exam subsequent to admission or may be directed to take additional language or diction courses to address any deficiencies, as determined by the conducting faculty, and as appropriate to the expectations of the degree.

## AUDITION REQUIREMENTS

Have a résumé and prepared list of your completed repertoire in hand for examination by the audition committee. On this list, using asterisks indicate those numbers that you have performed from memory. Auditions are approximately sixty minutes of performance. Live auditions are strongly recommended, but recordings can be considered when travel distance poses a hardship.

The following repertoire guidelines are intended to be flexible and to encourage diversity of individual interests, but they also provide a sense of expected scope. Offering repertoire from all the categories listed below is not mandatory at your audition, but you should certainly choose a program that contains stylistic variety and represents your own strengths. Works customarily performed from memory in public recitals should be performed from memory at your audition.

## PERCUSSION

- Keyboard
  - a. Major contemporary marimba work
  - b. Solo violin work (one movement) from J.S. Bach Sonatas and Partitas
  - c. Vibraphone solo of any style
  - d. Perform six orchestral excerpts (xylophone and glockenspiel)
- Snare Drum
  - a. Solo or etude from the advanced classical repertoire
  - b. Solo or etude from the advanced rudimental repertoire
  - c. Three orchestral excerpts
- Drumset
  - a. Perform at least four varying styles
  - b. World percussion (optional) - possibilities include steel drums, African drumming, taiko, etc.



- Multi-media
  - a. Video recording of last solo percussion recital that includes multiple percussion and chamber music (if possible)

## PIANO

- A major Baroque work, such as a group of Scarlatti sonatas, a suite by Bach, or one or more preludes and fugues from the *Well-Tempered Clavier*
- A complete sonata, variation set, or similar work by Beethoven or another classical composer
- A major Romantic or Impressionist work
- Another work of your choice, preferably a major composition (or several shorter pieces) representative of twentieth-century style

## COLLABORATIVE PIANO

- Sixty minutes of music, including a major instrumental sonata and art songs, as well as one solo memorized major work

## VOICE

Have a prepared list of your previous vocal teachers and vocal coaches and a precise statement of your present language background, e.g., foreign language study, diction, phonetics, etc.

1. An Aria from an Oratorio: Handel, Haydn, or Mendelssohn
2. One selection of your own; preferably a major operatic aria
3. At least two selections from each of the four language categories:
  - Italian - 17th and 18th-century, Aria by Mozart, 19th and 20th-century opera
  - German - An Aria by Bach, Lieder, Mozart, Schubert, Schumann, Brahms, Wolf, Mahler, Strauss
  - French - Art Songs: Debussy, Ravel, Faure, Poulenc
  - English - Early Songs: Purcell or Arne, Contemporary American and British songs (such as Britten, Menotti, or Floyd)

## STRINGS

Audition repertoire for the D.M.A. in music performance should be chosen to demonstrate the applicant's current level of achievement. Early in the application process, potential students should contact the major teacher in the area and discuss audition repertoire possibilities. Suggested repertoire could include a concerto, sonata, show piece, solo Bach, and for the double bass, three major orchestral excerpts.

## WOODWINDS, BRASS

Audition repertoire for the D.M.A. in music performance should be chosen to demonstrate the applicant's current level of achievement. Early in the application process, potential students should contact the major teacher in their area and discuss audition repertoire possibilities.

## CONDUCTING

An on-campus audition with the WVU Wind Symphony, Chamber Singers, or Symphony Orchestra is preferred, although video recorded auditions are allowed when great distance precludes a visit to campus. The student is encouraged to audition in his/her strongest performance area: wind band, choir, or orchestra. Further audition requirements are as follows:

1. The applicant will perform a conducting audition with an appropriate WVU ensemble which will consist of twenty to thirty minutes of rehearsal of repertoire to be assigned at least two weeks in advance by the appropriate conducting faculty.
2. The applicant will perform an audition on his/her major instrument or voice before appropriate music faculty. Those who have been away from solo performance for a period of several years may offer evidence of past proficiency (e.g. recital programs, letters, reviews, video or audio recording, etc.)
3. Knowledge of literature and techniques appropriate to the applicant's desired area of emphasis will be assessed by appropriate faculty.
4. Applicants desiring a choral emphasis will also be asked to demonstrate knowledge of appropriate vocal pedagogy within the choral rehearsal as well as appropriate piano skills.

## In this Section:

### 1. MASTER OF MUSIC/MASTER OF ARTS

- Requirements (p. 442)

### 2. DOCTOR OF MUSICAL ARTS

- Curriculum (p. 442)
- Candidacy (p. 442)
- Residency Requirements (p. 443)
- Academic Requirements (p. 443)

- Performance Requirements (p. 443)
- Composition Requirements (p. 443)
- Research Requirements (p. 443)
- Final Examination (p. 443)
- Time Limitation (p. 443)

## Master of Music/Master of Arts

The Master of Music degree may be taken in music education, performance (including conducting), composition, collaborative piano, piano pedagogy, or jazz pedagogy. The Master of Arts degree may be taken in musicology, music theory, or music business and industry.

### ADDITIONAL REQUIREMENTS FOR MASTER OF MUSIC DEGREES, MASTER OF ARTS IN MUSICOLOGY, AND MASTER OF ARTS IN MUSIC THEORY:

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master of music programs, the master of arts in musicology, and the master of arts in music theory:

- Master's degree students must establish an overall grade point average of 3.0.
- Except for master of arts in music theory, a representative public recital is required of candidates majoring in performance. Composition majors must submit a composition in a large form as a thesis.
- All candidates for the master of music degree are required to participate for credit for two semesters (or summer sessions) in a performing group which meets at least two clock-hours per week and which is selected with the advisor's approval. Candidates for the master of arts in musicology are required to participate for credit in a performing ensemble for two semesters.
- A general comprehensive oral examination must be passed by all candidates for the master of music degrees, the master of arts in musicology, and the master of arts in music theory. Unsuccessful candidates may repeat this examination after a three-month period. The results of the second oral examination will normally be considered final. The examining committee will decide immediately after an unsuccessful second attempt whether a petition for a third attempt will be granted.
- Students must complete their programs within eight calendar years. Failure to do so will result in the loss of credit for courses taken at the outset of the program.

### ADDITIONAL REQUIREMENTS FOR MASTER OF ARTS IN MUSIC BUSINESS AND INDUSTRY:

- Students must complete their programs within eight calendar years. Failure to do so will result in the loss of credit for courses taken at the outset of the program.

## Doctor of Musical Arts

The primary objective of the doctor of musical arts degree is the recognition of the highest achievement in music performance and teaching. The principal objective of the degree is to prepare artist-pedagogues for careers in higher education and in the professional world.

The degree may be taken in performance and literature (with specialization in piano, collaborative piano, voice, percussion, flute, oboe, clarinet, saxophone, bassoon, horn, trumpet, trombone, tuba, low brass, violin, viola, cello, double bass, or conducting) or in composition. Historical and theoretical knowledge sufficient to support individualized interpretations for performers, original voice research for vocal pedagogues, and original creative work for composers is expected, as are writing and speaking skills needed to communicate clearly and effectively. To assist the student in achieving these objectives, the course of study includes requirements in performance or composition, pedagogy, academic coursework, and research.

The doctor of musical arts curriculum in conducting prepares students for careers in higher education and in the professional world. During the program of study, students will study repertoire and technique specific to ensembles in all three major performance areas: wind band, choir, and orchestra. Demonstration of knowledge, skill, expressive fluency, and general conducting competency will be developed through public performance preparation with all three areas; however, most performing will be completed in the student's primary area of emphasis.

## CURRICULUM

The exact amount and nature of coursework undertaken will be determined by the student's advisor with the approval of the committee on graduate studies in light of previous preparation and field of specialization. A paradigm detailing recommended courses and other requirements is available upon request.

## CANDIDACY

Upon completion of the requirements of the School of Music and the general WVU graduate studies requirements, the student will be recommended for admission to candidacy for the degree. These requirements are (in order of occurrence):

1. Pass written qualifying examinations satisfactorily to show the following:

- Broad knowledge in music theory and music history and literature
- In-depth knowledge of the literature of the field of specialization or of the craft of composition

2. Satisfactorily pass a comprehensive oral qualifying examination.

The qualifying examinations shall be considered one integral examination consisting of written and oral parts. If the first attempt is unsuccessful, the student is allowed to try the entire examination a second time. The second attempt will be considered final. The applicant's committee may elect to discourage a second attempt if the first does not indicate probable success upon repetition. Graduate students who have met these requirements and who have maintained a minimum average of B (3.0) in courses completed shall be admitted to candidacy.

## RESIDENCY REQUIREMENTS

Completion of the requirements for this degree normally requires at least three years of full-time graduate work. A minimum of two consecutive semesters must be spent in full-time graduate study at WVU beyond the master's degree or its equivalent.

## ACADEMIC REQUIREMENTS

- Academic requirements include courses in music theory, musicology, and music literature.

## PERFORMANCE REQUIREMENTS (FOR D.M.A. IN PERFORMANCE)

Performance requirements include private lessons, master classes in applied repertory, and public performance of at least two solo recitals and other types of presentations appropriate for the preparation of an artist-teacher, such as chamber music programs, concerto performances, lecture recitals, major roles in opera oratorio, musical theater, or major accompaniments. Collaborative piano requirements include private lessons, master classes in applied collaborative repertory, and public performances of collaborative vocal and instrumental repertoire, along with presentations appropriate for the preparation of a collaborative artist-teacher, such as chamber music programs, concerto performances, piano in large ensemble works, major large ensemble accompaniments, and lecture recitals. Credit for each public performance is determined in advance, usually during the first semester of study, along with the establishment of the student's doctoral committee. A performance prospectus indicating projected performance repertoire is prepared by the student in consultation with their committee and the major ensemble directors as appropriate.

## COMPOSITION REQUIREMENTS (FOR D.M.A. IN COMPOSITION)

Composition requirements include private lessons and the creation of a composition portfolio. The student will be encouraged by the major professor to compose works in a timely manner in a wide variety of genres from which can be drawn a select number of pieces for the portfolio. The comprehensive examination determines the admission to candidacy and is normally taken after the successful completion of required coursework in music theory and music history. Work on the major project and research document normally will commence only after admission to candidacy. The candidate will submit to their doctoral committee for approval a prospectus for the portfolio to include the proposed major work, the proposed research document, and the other compositions with proposed credit weighting for each.

## RESEARCH REQUIREMENTS (FOR ALL D.M.A. PROGRAMS)

Research requirements are intended to develop theoretical and historical investigative techniques sufficient to enable the performer to form valid individualized interpretations and to assist the composer in developing an original style. These requirements consist of the course Music Research and Bibliography (MUSC 771); for composers, a doctoral seminar; and for all students, a research project culminating in an extended written study related to the student's area, although not necessarily constituting original research. Research projects require an approved research prospectus completed after a student enters candidacy. Projects will be supervised by an approved graduate faculty member who is a member of the student's doctoral committee in consultation with the entire doctoral committee.

## FINAL EXAMINATION

For performers, the final examination will consist of a major solo recital (which will be regarded as the equivalent of the Ph.D. dissertation defense). Immediately following the public performance, the candidate's committee will meet to evaluate the performance as evidence of mature musicianship and finished technique. The final recital will not occur in the same semester as the qualifying examination.

For composers, when all compositions and the major project have been approved and all other requirements have been fulfilled, the candidate's doctoral committee will administer the final oral examination. At the option of the committee, a written examination may also be required. The final examination(s) shall be concerned with the compositions, the major project, and the candidate's grasp of the field of specialization and its relation to other fields. The final examination will not be given in the same semester as the qualifying examination.

## TIME LIMITATION

Following admission to candidacy, doctoral students are allowed five years to complete all remaining degree requirements. An extension of time not to exceed one year may be permitted only upon repetition of the qualifying examination and completion of any other requirements specified by the student's doctoral committee.

# Collaborative Piano, M.M., D.M.A.

## Degrees Offered

- Master of Music
- Doctor of Musical Arts

## Nature of the Program

The Master of Music in Collaborative Piano provides students wishing to specialize in piano accompaniment an opportunity to study and achieve an advanced degree in this highly demanding and lucrative professional field. Students in the Master of Music in Collaborative Piano program will develop the necessary skills for collaborative performance in today’s market, including opera and art song coaching techniques, diction, and vocal and instrumental accompanying, and will engage in a wide array of performing ensemble settings already in place in the School of Music. Applicants should hold an undergraduate performance or collaborative piano degree. In the MM in Collaborative Piano degree, students will further develop their performing abilities as highly skilled and marketable pianists.

The Doctor of Musical Arts in Collaborative Piano represents a high achievement in collaborative performance, teaching, and coaching, and is intended to help students prepare for careers in higher education and the professional world. The program offers courses in literature, theory, and history as well as applied lessons centered on collaborative repertoire. A performance and research component is also included, allowing students flexibility to develop a variety of collaborative vocal, instrumental and chamber recitals and a research paper. Applicants should hold an undergraduate and Master’s degree in piano performance and/or collaborative piano.

## Admissions

All applicants to the MM and DMA in Performance degrees must demonstrate proficiency in the primary area of specialization via an audition before a panel of School of Music faculty; in-person auditions are preferred, but video auditions may be considered via consultation with appropriate faculty. Applicants must earn a Performance Level ten for admission. An undergraduate piano performance or collaborative piano degree is required. A jury is required at the end of the first semester. Students must have an appropriate amount of diction at the undergraduate level, or they will be required to register for two semesters of diction as remedial work.

Applicants to the program must present the necessary credentials for evaluation of previous training and experience to the School of Music. These include transcripts from all institutions previously attended showing a grade point average of at least 3.0 in all undergraduate studies submitted through the WVU Office of Admissions.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MM Major Code: 2527  
DMA Major Code: 2528

For specific information on the following program please see the link to the right:

- Collaborative Piano, M.M.

For specific information on the following program please see the link to the right:

Collaborative Piano, D.M.A.

# Collaborative Piano, M.M.

## Degree Requirements

Code	Title	Hours
Overall GPA of 3.0 or higher required.		
Performance: Piano (four semesters at two credit hours each)		8
MUSC 700E	Performance: Piano	
MUSC 647	Chamber Music: Piano	2
MUSC 689	Master's Recital (Vocal) *	2
MUSC 689	Master's Recital (Instrumental) *	2
MUSC 771	Music Research and Bibliography	3
Complete one Music Theory course and one Music History course from the following		5-6
Music Theory:		

MUSC 460S	Upper Division Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 763	Analytical Techniques	
MUSC 764	Compositional Techniques in Contemporary Music	
Music History:		
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
Music Electives (no more than four hours in the major performance area)		7-8
Ensembles (two semesters) **		2
Comprehensive Oral Examination ***		
Total Hours		31-33

\*

A representative public recital is required of candidates majoring in performance.

\*\*

All candidates for the master of music degree are required to participate for credit for two semesters (or summer sessions) in a performing group which meets at least two clock-hours per week and which is selected with the advisor's approval.

\*\*\*

A general comprehensive oral examination must be passed by all candidates for the master of music degree.

## Major Learning Outcomes

### COLLABORATIVE PIANO

Students who earn graduate degrees in Collaborative Piano will develop:

- Advanced competencies in vocal and/or instrumental collaboration.
- Knowledge and skills in one or more fields of music outside the major such as theory, history, musicology, ethnomusicology, and performance.
- Knowledge of repertory and historical performance practices.
- Language diction competencies.
- Competencies in chamber music.

# Collaborative Piano, D.M.A.

## Degree Requirements

Code	Title	Hours
Performance: Piano (four semesters at four credit hours each)		16
MUSC 700E	Performance: Piano	
MUSC 771	Music Research and Bibliography	3
Music History and Literature		
Select from the following including at least one doctoral level seminar:		9
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
Music Theory		6
Select from the following including at least one doctoral level seminar:		
MUSC 460S	Upper Division Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 764	Compositional Techniques in Contemporary Music	
MUSC 763	Analytical Techniques	
Recitals/Research		20
MUSC 788	Doctoral Recital (Minimum of 12 credits required)	
MUSC 797	Research (Minimum of 2 credits required)	
Master Class in Applied Repertoire		6
MUSC 730	Master Class in Applied Repertoire: Keyboard (Repeated)	
Written Qualifying Examination		
Comprehensive Oral Qualifying Examination		
Final Oral Examination of Research and Performance of Final Recital		
Total Hours		60

## Major Learning Outcomes

### COLLABORATIVE PIANO

Students who earn graduate degrees in Collaborative Piano will develop:

- Advanced competencies in vocal and/or instrumental collaboration.
- Knowledge and skills in one or more fields of music outside the major such as theory, history, musicology, ethnomusicology, and performance.
- Knowledge of repertory and historical performance practices.
- Language diction competencies.
- Competencies in chamber music.

## Composition, M.M., D.M.A.

### Degrees Offered

- Master of Music
- Doctor of Musical Arts

### Nature of the Program

Graduate instruction in composition at the masters level is generally in contemporary art music styles but also includes work in various electronic mediums (fixed playback pieces, instrument(s) and electronics, interactive electronics, etc.) with studies available in jazz, world music, and other vernacular musical styles. At least one submitted work must be in the style of art (concert) music for traditional acoustic instruments.

The primary objective of the Doctor of Musical Arts degree is the recognition of the highest achievement in music performance and teaching, preparing artist-pedagogues for careers in higher education and in the professional world. The degree may be taken in composition or in performance and literature. Historical and theoretical knowledge sufficient to support individualized interpretations for performers and original creative work for composers is expected, as are writing and speaking skills needed to communicate clearly and effectively. To assist the student in achieving these objectives, the course of study includes requirements in performance or composition, academic coursework, and research.

### Admissions

Applicants must demonstrate piano proficiency (level four); evaluation of previously completed compositions is required.

Applicants for entrance to the MM in Composition should send a portfolio of compositions that include a major work (a work of at least a ten-minute duration and/or a work for large ensemble with or without voice) and two or three other works in various genres. Scores may be submitted as Finale or Sibelius files or as pdf's. Recordings and/or MIDI realizations of application compositions are strongly encouraged but not mandatory. Electronic submission of both score and audio files is highly recommended.

Applicants for entrance to the DMA in Composition should send a portfolio of compositions that include a major work (master's thesis or equivalent) and two or three other works in various genres. Scores may be submitted as Finale or Sibelius files or as pdf's. Recordings and/or MIDI realizations of application compositions are strongly encouraged but not mandatory. Electronic submission of both score and audio files is highly recommended.

Applicants to the program must present the necessary credentials for evaluation of previous training and experience to the School of Music. These include transcripts from all institutions previously attended showing a grade point average of at least 3.0 in all undergraduate studies submitted through the WVU Office of Admissions.

### ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MM Major Code: 2534

DMA Major Code: 2535

For specific information on the following program please see the link to the right:

- Composition, M.M.

For specific information on the following program please see the link to the right:

- Composition, D.M.A.

# Composition, M.M.

## Degree Requirements

Code	Title	Hours
Overall GPA of 3.0 or higher required.		
One semester of counterpoint and 1 of electronic music are required if not taken in the undergraduate degree.		
Composition (two semesters at three credit hours each)		6
MUSC 660S	Composition (Repeated) *	
MUSC 670	Perspectives of Musicology and Ethnomusicology (or other as approved)	3
MUSC 771	Music Research and Bibliography	3
MUSC 764	Compositional Techniques in Contemporary Music	3
or MUSC 464	Analysis of Twentieth Century Art Music	
Music Theory Electives:		6
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
or MUSC 763	Analytical Techniques	
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 765	Transcription and Arranging	
Music Electives (must be selected from available offerings above MUSC 400)		5
MUSC 697	Research	4
Composition/Thesis **		
Ensemble (two semesters) ***		2
Comprehensive Oral Examination ****		
Total Hours		32

\*

If MUSC 660 is taken above 6 credits, it can be used as a Music or Music Theory Elective.

\*\*

Composition majors must submit a composition in a large form as a thesis.

\*\*\*

All candidates for the master of music degree are required to participate for credit for two semesters (or summer sessions) in a performing group which meets at least two clock-hours per week and which is selected with the advisor's approval.

\*\*\*\*

A general comprehensive oral examination must be passed by all candidates for the master of music degree.

## Major Learning Outcomes

### COMPOSITION

Students who earn graduate degrees in Composition will develop:

- Advanced competencies in composition.
- Knowledge and skills in one or more fields of music outside the major such as history and literature, theory and analysis, musicology and ethnomusicology, performance, and pedagogy.

# Composition, D.M.A.

## Degree Requirements

Code	Title	Hours
One semester of electronic music and 2 of counterpoint or equivalent, if not taken in previous study.		
Composition		18
MUSC 660S	Composition (Repeated; at least 3 credits must be in electronic music)	
Music History and Literature		9
Select from the following including at least one doctoral level seminar.		



MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature *	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
Music Theory		12
MUSC 762	Pedagogy of Theory	
MUSC 764	Compositional Techniques in Contemporary Music	
MUSC 690	Teaching Practicum	
One additional course selected from the following:		
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 761	Theory Topics	
MUSC 763	Analytical Techniques	
MUSC 765	Transcription and Arranging	
MUSC 771	Music Research and Bibliography	3
Research/Recitals		20
MUSC 788	Doctoral Recital (May be repeated -- 8-12 hours)	
MUSC 797	Research (major composition project -- 4-8 hours)	
MUSC 797	Research (research document -- 2-6 hours)	
Qualifying Examination, which includes both written and oral components		
Final Oral Examination		
Total Hours		62

\*

MUSC 731 Keyboard Literature is open to Keyboard Majors only.

## Major Learning Outcomes

### COMPOSITION

Students who earn graduate degrees in Composition will develop:

- Advanced competencies in composition.
- Knowledge and skills in one or more fields of music outside the major such as history and literature, theory and analysis, musicology and ethnomusicology, performance, and pedagogy.

## Conducting, M.M., D.M.A.

### Degrees Offered

- Master of Music
- Doctor of Musical Arts

## Nature of the Program

During the program of study, students at both the masters and doctoral levels will have the opportunity to study repertoire and techniques specific to ensembles in all three major performance areas: wind band, choir, and orchestra. Demonstration of knowledge, skill, expressive fluency, and general conducting competency will be developed through public performance preparation.

For the M.M. in Conducting, it is strongly recommended that those desiring admission to this degree have a minimum of 2 years successful teaching/ conducting experience beyond their undergraduate conducting courses.

The doctor of musical arts curriculum in conducting prepares students for careers in higher education and in the professional world.

An on-campus audition with the Wind Symphony, Chamber Singers, or Symphony Orchestra is preferred, although video recorded auditions are allowed when great distance precludes a visit to campus. The student is encouraged to audition in his/her strongest performance area: wind band, choir, or orchestra. Further audition information is located on the WVU School of Music website.

## Admissions

All applicants to the MM and DMA in Performance degrees must demonstrate proficiency in the primary area of specialization via an audition. An on-campus audition with the Wind Symphony, Chamber Singers, or Symphony Orchestra is preferred, although video recorded auditions are allowed when great distance precludes a visit to campus. The student is encouraged to audition in his/her strongest performance area: wind band, choir, or orchestra. Further audition information is located on the WVU School of Music website.

For the M.M. in Conducting, it is strongly recommended that those desiring admission to this degree have a minimum of 2 years successful teaching/ conducting experience beyond their undergraduate conducting courses.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MM Major Code: 2536

DMA Major Code: 2537

For specific information on the following program please see the link to the right:

- Conducting, M.M.

For specific information on the following program please see the link to the right:

- Conducting, D.M.A.

## Conducting, M.M.

### Degree Requirements

Code	Title	Hours
Overall GPA of 3.0 or higher required.		
Conducting		14
MUSC 700J	Performance: Conducting (four semesters at two credit hours each, total 8 credit hours)	
MUSC 710	Conducting (two semesters at three credit hours each, total of 6 credit hours)	
MUSC 771	Music Research and Bibliography	3
Select one survey course from the following in the major performance area		3
MUSC 631	Survey of Orchestral Music	
MUSC 632	Survey of Wind Music	
MUSC 633	Survey of Vocal Music	
Select one techniques course from the following in the secondary area		2
MUSC 780	Choral Techniques	
MUSC 781	Instrumental Techniques	
Music Theory		3
Select one of the following:		
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	

MUSC 763	Analytical Techniques	
MUSC 764	Compositional Techniques in Contemporary Music	
Complete one Music Theory or Music History course from the following:		2-3
Music Theory		
MUSC 460S	Upper Division Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
If not taken above:		
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 763	Analytical Techniques	
MUSC 764	Compositional Techniques in Contemporary Music	
Music History		
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature *	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
MUSC 689	Master's Recital (Qualifying Recital)	2
MUSC 689	Master's Recital (Major Recital)	4
Ensemble (2 semesters) **		2
Comprehensive Oral Examination ***		
Total Hours		35-36

\*

MUSC 731 Keyboard Literature is open to Keyboard Majors only.

\*\*

All candidates for the master of music degree are required to participate for credit for two semesters (or summer sessions) in a performing group which meets at least two clock-hours per week and which is selected with the advisor's approval.

\*\*\*

A general comprehensive oral examination must be passed by all candidates for the master of music degree.

## Major Learning Outcomes

### CONDUCTING

Students who earn graduate degrees in Conducting will develop:

- Advanced knowledge in major field of study (wind band, choral, or orchestra) and competencies in the other two areas
- Advanced competencies in conducting, score study, and rehearsal techniques
- Advanced knowledge of repertoire
- Knowledge and skills in one or more fields of music outside the major such as history and literature, theory and analysis, musicology and ethnomusicology, performance, and pedagogy.

## Conducting, D.M.A.

### Degree Requirements

Code	Title	Hours
Conducting		22
MUSC 700J	Performance: Conducting (four semesters at four credit hours each, total 16 credit hours)	
MUSC 710	Conducting (two semesters at three credit hours each, total of 6 credit hours)	
MUSC 771	Music Research and Bibliography	3
MUSC 670	Perspectives of Musicology and Ethnomusicology (or another graduate level Music History course as determined by graduate entrance examination)	3
Select one survey course from the following in the secondary area or a Music History course		3
MUSC 631	Survey of Orchestral Music	
MUSC 632	Survey of Wind Music	
MUSC 633	Survey of Vocal Music	
Music History		3
Select one of the following:		
MUSC 731	Keyboard Literature (*)	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
Music Theory		6
Selected from one of the following with at least one doctoral level seminar:		
MUSC 460S	Upper Division Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 763	Analytical Techniques	
MUSC 764	Compositional Techniques in Contemporary Music	
Recitals/Research		20
MUSC 788	Doctoral Recital (Minimum of 12 credits required)	
MUSC 797	Research (Minimum of 2 credits required)	
Written Qualifying Examination		
Final Oral Examination of Research and Performance of Final Recital		
Total Hours		60

\*

MUSC 731 Keyboard Literature is open to Keyboard Majors only.

## Major Learning Outcomes

### CONDUCTING

Students who earn graduate degrees in Conducting will develop:

- Advanced knowledge in major field of study (wind band, choral, or orchestra) and competencies in the other two areas
- Advanced competencies in conducting, score study, and rehearsal techniques
- Advanced knowledge of repertoire
- Knowledge and skills in one or more fields of music outside the major such as history and literature, theory and analysis, musicology and ethnomusicology, performance, and pedagogy.

## Jazz Pedagogy, M.M.

### Degree Offered

- Master of Music

### Nature of the Program

The program is designed to prepare students for independent jazz teaching, public school teaching, college or university studio or group teaching, ensemble coaching, and the teaching of jazz improvisation and pedagogy at the college or university level.

### Admissions

Admission to the program requires a score of level nine in the major performance area, piano proficiency (level three), and one year of jazz pedagogy/group or equivalent teaching experience.

Applicants are required to sight-read both musical notation and chord changes. Applicants should be prepared to play common jazz scale forms and improvise in a number of jazz and contemporary styles. In addition, applicants may choose additional music that best reflects their technical ability, overall musicianship, and musical interests. The applicant should demonstrate their versatility and creativity.

Applicants to the program must present the necessary credentials for evaluation of previous training and experience to the School of Music. These include transcripts from all institutions previously attended showing a grade point average of at least 3.0 in all undergraduate studies submitted through the WVU Office of Admissions.

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2532

### Degree Requirements

Code	Title	Hours
Overall GPA of 3.0 or higher required.		
Performance: (four semesters at two credit hours each)		8
MUSC 700	Performance (major performance area)	
MUSC 771	Music Research and Bibliography	3
MUSC 689	Master's Recital	2
Jazz Performance/Pedagogy		6
MUSC 634S	Jazz Performance and Pedagogy	
Complete one Music Theory course or one Music History course from the following:		2-3
Music Theory		
MUSC 460S	Upper Division Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	

MUSC 468	Jazz and Commercial Music Harmony	
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 763	Analytical Techniques	
MUSC 764	Compositional Techniques in Contemporary Music	
Music History		
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature *	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
Music Electives (must be selected from available offerings above MUSC 400)		4-5
MUSC 797	Research	4
Ensemble (two semesters)		2
Comprehensive Oral Examination		
Total Hours		31-33

\*

Open to Keyboard Majors only.

## Major Learning Outcomes

### JAZZ PEDAGOGY

Students who earn the Master of Music in Jazz Pedagogy will develop:

- Advanced competencies in jazz studies including areas such as jazz performance, improvisation, composition, and arranging.
- Advanced competencies in pedagogy specific to the study of jazz and its repertoire.
- Knowledge and skills in one or more fields of music outside the major such as history and literature, theory and analysis, musicology and ethnomusicology, and recording and studio techniques.

## Music Education, M.M.

### Degrees Offered

- Master of Music

### Nature of the Program

The M.M. music education degree is designed to cultivate continued development of professional competence beyond the baccalaureate degree. High levels of musicianship and pedagogical expertise are integrated into a comprehensive program of study. Unique to the degree in music education are four degree options that enable students to pursue individual interests and talents. At the core of each of the 30-hour degree option is coursework that immerses students in the foundations and research of music education, performance studies, music history, and music theory. To complete the degree, students can select from the following four options of coursework and culminating projects:

- **Field Study Option:** This degree option emphasizes teaching and includes opportunities to integrate performance studies and research with a school-based field study that demonstrates application of knowledge and skills from graduate study as a culminating project.
- **Recital Option:** This degree option emphasizes performance studies and includes opportunities to integrate research and teaching with a representative public recital that demonstrates advanced performance competence as a culminating project.
- **Thesis Option:** This degree option emphasizes research and includes opportunities to integrate performance and teaching with an original thesis that demonstrates advanced research and writing competence as a culminating project.
- **Certification Option:** This degree option is designed for persons who obtained an undergraduate degree in music other than music education. Coursework (including student teaching) leads to a professional certificate (birth-adult music, West Virginia) and is combined with a master's degree in music education with the generation of a professional portfolio as a culminating project. Students begin the program with a series of undergraduate courses that are necessary for certification. This block of undergraduate courses ranges from zero to twenty credits depending on the student's previous coursework.

## Admissions

### STUDENTS APPLYING TO THE MUSIC EDUCATION GRADUATE DEGREE PROGRAM MUST:

- Apply to West Virginia University through the Office of Graduate Admissions.
- Submit a current resume to the Office of Graduate Studies in Music.
- Submit an essay to the Office of Graduate Studies in Music describing and discussing your training, experiences, and present interests in the field of Music Education. Also, discuss your career aspirations five years from now as they relate to earning the master's degree in Music Education.
- Applicants must have had an undergraduate grade point average of at least 3.0 to be considered for admission.
- Submit a video recording of teaching, preferably a K-12 music class or rehearsal, and a lesson plan to accompany the recording. Please submit a detailed lesson plan for each class or rehearsal presented on your video of teaching. The video recording container should clearly indicate your name. Recordings should have been made within the six months prior to the submission of the application. Video recordings must be of high quality. The preferable format is DVD, and the disc should clearly indicate that it is a DVD format. Applicants should review the video recording in its entirety to ensure audio, visual, and technical clarity before mailing to the Office of Graduate Studies in Music. (This is not required if you are applying for the Master of Music, Music Education Certification option.)

Any recordings or videos on disc submitted for your admissions file will be held no more than one year. If you would like such materials to be returned to you, please provide a self-addressed, stamped envelope.

Students may find more information about admission to graduate study in Music Education online: <https://www.music.wvu.edu/academics/masters-programs/>

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2023-2024 Academic Year.

MM Major Code: 2526

## Degree Requirements

Code	Title	Hours
Ensemble (2 Semesters)		2
MUSC 783	Foundations of Music Education	3
MUSC 784	Introduction to Research in Music Education	3
Advanced seminars *		6
Complete one Music Theory course and one Music History course from the following:		5-6
Music Theory:		
MUSC 460S	Upper Division Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 763	Analytical Techniques	

MUSC 764	Compositional Techniques in Contemporary Music	
Music History:		
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature **	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
<b>Field Study, Recital, and Thesis Options ***</b>		
Select 1 of the following options:		12
Field Study		
MUSC 678	Masters Field Study (4 hours)	
MUSC 500 or MUSC 700 Performance (4 hours)		
Music Electives (4 hours)		
Recital Option		
MUSC 500 or MUSC 700 Performance (8 hours)		
MUSC 689	Master's Recital (2 hours)	
Music electives (2 hours)		
Thesis Option		
MUSC 500 or MUSC 700 Performance (4 hours)		
MUSC 697	Research (4 hours)	
Music Electives (4 hours)		
Total Hours		31-32

\*

Advanced seminars in music education, methods, workshops, and directed studies. (Maximum of two hours from workshops; maximum of two hours from directed studies.)

\*\*

MUSC 731 Keyboard Literature is open to Keyboard Majors only.

\*\*\*

**Certification Option:** In lieu of completing the Field Study, Recital, or Thesis Option, students may complete the Core Requirements and the Certification Requirements to earn the Masters Degree in Music Education and be eligible for certification.

## CERTIFICATION REQUIREMENTS

Code	Title	Hours
C&I 491	Professional Field Experience	4
Select one of the following:		3
EDP 600	Educational Psychology	
EDP 700	Psychological Foundations of Learning	
MUSC 200S	Fundamentals of Conducting	2
MUSC 201S	Conducting and Score Interpretation	2
MUSC 202S	Conducting and Rehearsing	2



MUSC 280S	Woodwind Instrument Pedagogy	2
MUSC 281S	Brass Instrument Pedagogy	2
MUSC 282S	String Instrument Pedagogy	2
MUSC 283 & 283S	Percussion Instrument Pedagogy and Percussion Instrument Pedagogy	2
MUSC 284	Vocal Pedagogy	2
MUSC 380	Instrumental Methods and Technology Applications	3
MUSC 381	Choral Music Methods and Technology Applications	3
MUSC 382S	General Music Methods and Technology Applications	3
MUSC 487	Student Teaching Seminar	2
MUSC 491	Professional Field Experience	10
MUSC 500 or MUSC 700	Performance	4
RDNG 422	Reading in the Content Areas	3
SPED 500	Legal/Educational Foundations: Special Education	3
SPED 601	Academic Interventions for Special Needs	3
Total Hours		57

## Major Learning Outcomes

### MUSIC EDUCATION

Students who earn the graduate degrees in Music Education will develop:

- Advanced competencies in music education.
- Graduate-level perspectives on contemporary issues and problems in music education.
- Knowledge and skills in one or more fields of music outside the major such as performance, conducting, theory and analysis, and history and literature.

## Music Business and Industry, M.A.

### Degree Offered

- Master of Arts

### Nature of the Program

The music industry is a vibrant, multi-billion dollar global industry, vast in scope and reach, offering a product that is deeply ingrained into the fabric of every country and culture, across social strata, around the world. As such, it offers extensive professional opportunities to those who are trained, knowledgeable, and versed in its systems, methods, and practices.

The Master of Arts Program in Music Business and Industry at the School of Music offers such knowledge and training by providing an engaging, systematic, and rigorous course of study leading to analytical, creative, regulatory, and entrepreneurial understanding and skills necessary to succeed in today's complex and challenging music industry field.

The program is offered online as a high quality graduate-level distance-learning opportunity. The program will provide all students possessing appropriate interest, qualifications, and ambition, regardless of their geographic location, access to extensive academic training and acquisition of professional skills necessary for building or furthering their careers in music business and industry.

The School of Music also offers a Graduate Certificate in Music Industry.

### Admissions

Admission is selective and competitive. Minimum application materials will include the following:

- a bachelor's degree from an accredited university and a GPA of 3.0 or higher;
- GRE results with minimum scores including 153 on the verbal and 144 on the quantitative GRE sections. (The GRE requirement may be waived if the student's Bachelor's Degree GPA is 3.3 or higher [on a 4.0 scale], and/or if professional experience in the industry exceeds 5 years, with strong academic and/or professional recommendations.)
- a curriculum vitae
- a 500-word essay describing student's professional preferences, goals and aspirations.

COURSE REQUIREMENTS

If a student has not already completed the following undergraduate course(s) prior to registering for the program, they must complete them during the first year of the program:

- Bachelor's Degree in Music earned - Undergraduate Accounting / Financial Management course needed
- Bachelor's Degree in Business earned - Undergraduate Music Appreciation course needed
- Other Bachelor Degree(s) earned - Undergraduate Accounting / Financial Management course and Undergraduate Music Appreciation course needed

Admission Requirements 2023-2024

The Admission Requirements above will be the same for the 2023-2024 Academic Year.

Major Code: 2552

Degree Requirements

Code	Title	Hours
Minimum Grade in any course: C-.		
Minimum GPA requirement: 2.75.		
Music Industry Foundations Module		9
MUSC 611	Music Industry Regulations	
MUSC 610	Foundations of Recording Industry	
MUSC 617	Development of Music Technology	
Music Commerce, Management, and Operations Module		
Required courses:		12
MUSC 612	Music Product Advancement	
MUSC 613	Music Performance Organization and Commerce	
MUSC 614	Advanced Recording Industry	
MUSC 615	Advanced Music Publishing	
Select two from the following:		6
MUSC 619	Music in Multimedia	
MUSC 620	International Music Industry	
MUSC 621	Artist Representation	
Music Production Methods and Technology Module		3
Select one from the following:		
MUSC 623	Recording Production	
MUSC 624	Live Music Production	
Industry Project		3
MUSC 626	Music Industry Project	
Total Hours		33

Suggested Plan of Study

The required Music Industry Foundations course, MUSC 611, must be taken prior to any of the required and elective Music Commerce, Management, and Operations Module courses can be taken. All of the other elective courses can be taken anytime. MUSC 626 can only be taken after all required and elective courses are successfully completed, and a student has earned 30 credits in the program.

First Year					
Fall	Hours	Spring	Hours	Summer	Hours
MUSC 611		3 MUSC 613		3 Select one of the following:	3
MUSC 615		3 MUSC 614		3 MUSC 619	
		Select one of the following:		3 MUSC 620	
		MUSC 610		MUSC 621	

MUSC 617				
	6		9	3
<b>Second Year</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Select one of the following:		3 MUSC 612		3
MUSC 619		MUSC 626		3
MUSC 620				
MUSC 621				
Select one of the following:		3		
MUSC 623				
MUSC 624				
Select one of the following:		3		
MUSC 610				
MUSC 617				
	9		6	

Total credit hours: 33

## Major Learning Outcomes

### MUSIC BUSINESS AND INDUSTRY

Students who earn the Master of Arts in Music Business and Industry will develop the following:

- The ability to delineate and analyze current music industry regulations regarding their commercial implications, business opportunities, and appropriate music industry management practices across the industry income streams.
- The knowledge of the historical progress and development of various music business sectors and relevant regulatory frameworks in demonstrating mastery and understanding of the present music business regulations, systems and methods.
- The ability to perform and manage standard and management level music business procedures and processes utilized in the music publishing, recording, and live music industries, including conception and management of various music product development and placement strategies and plans.
- The ability to construct and evaluate budgets and financial projections across the music industry income streams based on the project parameters, and the relevant market level, regulations, indicators and trends.
- The ability to plan and manage music production processes and activities in recording and live music business sectors including scheduling, budgeting, equipment, personnel, union issues, and regulatory requirements.
- The ability to utilize the music industry research and analysis knowledge and skills to make a constructive contribution to the scholarship in the field, and/or to create a proper business opportunity, or to productively manage a music product, so to create new value and generate positive returns on investments.

## Music Theory, M.A.

### Degree Offered

- Master of Arts

### Nature of the Program

The Master of Arts in Music Theory is intended for performers and music educators who desire advanced training in the analysis of Western art music and preparation for teaching music theory in either a high school or college setting. This degree can also prepare students for doctoral work in either academic or applied areas, depending upon the electives chosen.

### Admissions

Applicants for the MA in Music Theory must submit a sample of writing, such as a term paper; a music theory paper is strongly recommended. The paper may be uploaded as part of the WVU Graduate Application or may be sent directly to the School of Music. Admission to the program requires demonstrated proficiency on piano (the student should be able to perform a Bach chorale), and demonstrated knowledge of 16th and 18th Century Counterpoint (MUSC 461 and MUSC 462 will be required as deficiency courses in the MA program if not taken at the undergraduate level.)

Applicants to the program must present the necessary credentials to evaluate previous training and experience to the School of Music. These include transcripts from all institutions previously attended showing a grade point average of at least 3.0 in all undergraduate studies submitted through the WVU Office of Admissions.

Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2548

Degree Requirements

Code	Title	Hours
Overall GPA of 3.0 or higher is required.		
MUSC 771	Music Research and Bibliography	3
MUSC 763	Analytical Techniques	3
MUSC 764	Compositional Techniques in Contemporary Music	3
MUSC 762	Pedagogy of Theory	3
MUSC 690	Teaching Practicum	3
Select one of the following:		3
MUSC 761	Theory Topics	
MUSC 695	Independent Study	
Music History		
Select one of the following:		3
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
Electives - With advisor approval, select from all courses in musicology, composition, or performance that are 400-level or higher.		7
MUSC 697	Research	4
Ensemble (one semester)		1
Comprehensive Oral Examination		
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
Total Hours		33

Major Learning Outcomes

MUSIC THEORY

Students who earn the Master of Arts in Music Theory will be able to:

- 1. Analyze works from all periods of music using advanced techniques and communicate clearly about them in both written and oral formats.
- 2. Demonstrate knowledge and skills in one or more fields of music outside the major such as history and literature, composition, musicology and ethnomusicology, and performance
- 3. Design and implement an undergraduate music theory class and demonstrate instructional delivery and management skills.

Musicology, M.A.

Degree Offered

- Master of Arts

## Nature of the Program

Students completing the Master's Program in Musicology develop a broad understanding of the primary methods used in musicological and ethnomusicological research. Courses and seminars explore a wide range of musical repertoires and scholarly debates, and the curriculum encourages students to engage meaningfully with the field through pedagogical training and focused research.

The theses of recent graduates have explored the construction of female identity through sheet music collection in the post-bellum U.S. South, early twentieth-century violin pedagogy and African American racial uplift, sexual consent in contemporary country songs, performance practice in the music of Brahms, and the ethics of musical improvisation with computer agents.

Recent graduates have entered leading North American doctoral programs or have found employment in occupations drawing heavily upon the expertise and skills developed through our degree program.

## Admissions

Admission to the Master of Arts in Musicology requires academic transcripts, three letters of reference from academic faculty, a personal statement, and a representative sample of academic writing (minimum of 10 pages in length). Applicants must demonstrate a grade point average of at least 3.0 in all undergraduate studies to be considered for admission.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2540

## Degree Requirements

Students must demonstrate the equivalent of four semesters of training in a language other than English and must demonstrate Level 2 piano proficiency.

Code	Title	Hours
Overall GPA of 3.0 or higher is required.		
MUSC 670	Perspectives of Musicology and Ethnomusicology	3
MUSC 671	Music History Pedagogy (Music History Pedagogy)	3
MUSC 771	Music Research and Bibliography	3
MUSC 697	Research	4
Ensembles (at least 1 credit must be a world music ensemble)		2
Select 2 of the following courses:		6
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
Select two of the following courses		6
MUSC 593	Special Topics	
MUSC 793	Special Topics	
MUSC 796	Graduate Seminar	
Select one of the following courses		2
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	

MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 763	Analytical Techniques	
MUSC 764	Compositional Techniques in Contemporary Music	
Electives		6
Comprehensive Oral Qualifying Examination		
Total Hours		35

## Major Learning Outcomes

### MUSICOLOGY

Students who successfully complete the MA in Musicology will be able to:

1. Demonstrate a working understanding of the intellectual history of musicology;
2. Discuss recent trends in musicological scholarship and in related fields, including music theory and analysis;
3. Develop level-appropriate course materials using best practices in music history pedagogy;
4. Develop and implement an independent research project using musicological research methods;
5. Communicate effectively in written and oral venues.

## Performance, M.M., D.M.A.

### Degrees Offered

- Master of Music
- Doctor of Musical Arts

### Nature of the Program

Performance majors may specialize in the following:

- Piano
- Voice
- Flute
- Oboe
- Clarinet
- Bassoon
- Saxophone
- Horn
- Trumpet
- Trombone
- Tuba
- Low brass (DMA only)
- Percussion
- Violin
- Viola
- Cello
- Double Bass

An Artist Diploma in Music Performance at the graduate level is also offered by the School of Music.

### Admissions

Applicants to the program must present the necessary credentials for evaluation of previous training and experience to the School of Music. These include transcripts from all institutions previously attended, showing a grade point average of at least 3.0 in all undergraduate studies submitted through the WVU Office of Admissions.

## MASTER OF MUSIC IN PERFORMANCE

All applicants to the Master of Music in Performance must demonstrate appropriate proficiency in the primary area of specialization via an audition before a panel of School of Music faculty; in-person auditions are preferred but video auditions may be considered via consultation with appropriate faculty. Audition repertoire for the Master of Music in Music Performance should be chosen that allows candidates to demonstrate their current level of achievement. Early in the application process, potential students should contact the major teacher in their area and discuss audition repertoire possibilities. Initial inquiries may be sent to the Director of Graduate Studies in Music.

## DOCTOR OF MUSICAL ARTS IN PERFORMANCE

All applicants to the Doctor of Musical Arts in Performance must demonstrate appropriate proficiency in the primary area of specialization via an audition before a panel of School of Music faculty; in-person auditions are preferred but video auditions may be considered via consultation with appropriate faculty.

Applicants should have a complete résumé and prepared list of their completed repertoire in hand for examination by the Audition Committee. On this list, use asterisks to indicate those numbers that you have performed from memory. Auditions are approximately 60 minutes of performance.

Repertoire guidelines for doctoral applicants to individual areas of specialization can be found on the School of Music Website (<https://www.music.wvu.edu/academics/doctoral-programs/>). These guidelines are intended to be flexible and to encourage diversity of individual interests; you should choose a program that contains stylistic variety and that represents your own strengths. Works customarily performed from memory in public recitals should be performed from memory at your audition. Early in the application process, potential students should contact the major teacher in their area and discuss audition repertoire possibilities. Initial inquiries may be sent to the Director of Graduate Studies in Music; you will be given contact information for the major teacher in your area to facilitate your audition preparation.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MM Major Code: 2530

DMA Major Code: 2531

For specific information on the following program please see the link to the right:

- Performance, M.M.

For specific information on the following program please see the link to the right:

- Performance, D.M.A.

## Performance, M.M.

### Degree Requirements

Code	Title	Hours
Overall GPA of 3.0 or higher required.		
Performance: (four semesters at two credit hours each)		8
MUSC 700	Performance (major performance area)	
MUSC 689	Master's Recital	4
MUSC 689	Master's Recital	2
MUSC 771	Music Research and Bibliography	3
Complete one Music Theory course and one Music History course from the following:		5-6
Select one Music Theory course from the following:		
MUSC 460S	Upper Division Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 761	Theory Topics	

MUSC 762	Pedagogy of Theory
MUSC 763	Analytical Techniques
MUSC 764	Compositional Techniques in Contemporary Music

Select one Music History course from the following:

MUSC 470A	Topics in Popular Music
MUSC 470B	Topics in the Study of Western Art Music
MUSC 470C	Topics in the History of Jazz
MUSC 470D	Topics in Music of Sub-Saharan Africa
MUSC 470E	Topics in Musics of the Americas
MUSC 470F	Topics in Musics of East Asia
MUSC 470G	Topics in Musics of South Asia
MUSC 470H	Topics in Gender and Sexuality in Music
MUSC 470I	Topics in Race and Ethnicity in Music
MUSC 470J	Topics in Musics of the Arab World
MUSC 477	Music of Africa
MUSC 593	Special Topics
MUSC 670	Perspectives of Musicology and Ethnomusicology
MUSC 731	Keyboard Literature *
MUSC 793	Special Topics
MUSC 795	Independent Study
MUSC 796	Graduate Seminar

Music Electives (no more than four hours in the major performance area) 7-8

Ensemble (two semesters) 2

Comprehensive Oral Examination

Total Hours 31-33

\*

MUSC 731 Keyboard Literature is open to Keyboard Majors only.

## Major Learning Outcomes

### PERFORMANCE

Students who earn the graduate degrees in Performance will:

- Demonstrate advanced competencies in performance.
- Develop knowledge and skills in one or more fields of music outside the major such as theory and analysis, history and literature, musicology and ethnomusicology, and pedagogy.
- Expand competencies sufficient to understand texts in the repertoire. Voice majors are expected to be proficient in English, German, French, and Italian diction and to have general phonetic knowledge and skills that can be applied to other languages.

## Performance, D.M.A.

### Degree Requirements

Code	Title	Hours
MUSC 771	Music Research and Bibliography	3
Performance: (four semesters at four credit hours each)		16
MUSC 700	Performance (major performance area)	
Music History and Literature		9

Selected from the following including at least one doctoral level seminar:

MUSC 470A	Topics in Popular Music
MUSC 470B	Topics in the Study of Western Art Music
MUSC 470C	Topics in the History of Jazz
MUSC 470D	Topics in Music of Sub-Saharan Africa
MUSC 470E	Topics in Musics of the Americas



MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature *	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
Music Theory		6
Selected from the following with at least one doctoral level seminar:		
MUSC 460S	Upper Division Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 763	Analytical Techniques	
MUSC 764	Compositional Techniques in Contemporary Music	
Applied Repertoire (two semesters at three credit hours each, total of 6 credit hours)		6
MUSC 730	Master Class in Applied Repertoire	
Recital/Research		20
MUSC 788	Doctoral Recital (Minimum 12 credits required)	
MUSC 797	Research (Minimum 2 credits required)	
Written Qualifying Examination		
Comprehensive Oral Qualifying Examination		
Final Oral Examination of Research and Performance of Final Recital		
Total Hours		60

\*

MUSC 731 Keyboard Literature is open to Keyboard Majors only.

## Major Learning Outcomes

### PERFORMANCE

Students who earn the graduate degrees in Performance will:

- Demonstrate advanced competencies in performance.
- Develop knowledge and skills in one or more fields of music outside the major such as theory and analysis, history and literature, musicology and ethnomusicology, and pedagogy.
- Expand competencies sufficient to understand texts in the repertoire. Voice majors are expected to be proficient in English, German, French, and Italian diction and to have general phonetic knowledge and skills that can be applied to other languages.

## Piano Pedagogy, M.M.

### Degree Offered

- Master of Music

## Nature of the Program

WVU offers a Master of Music degree in Piano Pedagogy. This program offers a variety of courses and comprehensive experience in individual and group piano instruction.

This Master of Music degree is designed to provide advanced training to help prepare students to teach piano successfully in an independent studio, community music program or college. Topics covered may include:

- Teaching students of all ages
- Teaching students at beginning, intermediate and advanced levels
- Teaching in private- and group-lesson formats
- Evaluating recommended music, methods and materials
- Using technology to enhance music teaching
- Developing well-rounded curriculum for pre-college students
- Teaching students how to help their pupils develop a healthy and efficient technique as well as musical and stylistic playing
- Reviewing research on learning theory, memorization and other topics of importance to piano teachers
- Operating the independent studio as a successful business
- Special topics related to teaching college group instruction and private students
- Special topics related to teaching pre-college and advanced students

## Admissions

All applicants to the MM in Performance degree must demonstrate proficiency in the primary area of specialization via an audition before a panel of School of Music faculty; in-person auditions are preferred, but video auditions may be considered via consultation with appropriate faculty. Applicants must earn a Performance Level nine for admission.

An undergraduate piano performance or collaborative piano degree is required. Applicants to this program must present the necessary credentials to evaluate previous training and experience to the School of Music.

These include transcripts from all institutions previously attended showing a grade point average of at least 3.0 in all undergraduate studies to be considered for admission. A jury is required at the end of the first semester.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2529

## Degree Requirements

Code	Title	Hours
Overall GPA of 3.0 or higher required.		
Performance: Piano (four semesters at two credit hours each)		8
MUSC 700E	Performance: Piano (Repeated)	
MUSC 689	Master's Recital	2
MUSC 771	Music Research and Bibliography	3
Keyboard Performance/Pedagogy		6
MUSC 630	Keyboard Performance and Pedagogy (Repeated)	
Pedagogy Project		4
MUSC 695	Independent Study	
Complete one Music Theory course or one Music History course from the following:		2-3
Music Theory		
MUSC 460S	Upper Division Composition	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	

MUSC 761	Theory Topics	
MUSC 762	Pedagogy of Theory	
MUSC 763	Analytical Techniques	
MUSC 764	Compositional Techniques in Contemporary Music	
Music History		
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
MUSC 593	Special Topics	
MUSC 670	Perspectives of Musicology and Ethnomusicology	
MUSC 731	Keyboard Literature	
MUSC 793	Special Topics	
MUSC 795	Independent Study	
MUSC 796	Graduate Seminar	
Music Electives		4-5
Ensembles (2 semesters)		2
Comprehensive Oral Examination		
Total Hours		31-33

## Major Learning Outcomes

### PIANO PEDAGOGY

Students who earn the Master of Music in Piano Pedagogy will develop:

- Advanced competencies in pedagogy specific to the study of piano and its repertory.
- Knowledge and skills in one or more fields of music outside the major such as history and literature, theory and analysis, musicology and ethnomusicology, and recording and studio techniques.

## School of Theatre & Dance

e-mail: theatre@mail.wvu.edu

### Degree Offered

- Master of Fine Arts
  - Acting
  - Costume Design & Technology
  - Lighting Design & Technology
  - Scenic Design & Technology
  - Technical Direction

All MFA degree programs in the School of Theatre & Dance are 3-year, 6-semester programs resulting in a terminal degree in that field of study.

West Virginia University is accredited by the National Association of Schools of Theatre (NAST). The School of Theatre & Dance is a member of the University/Resident Theatre Association (URTA).

## **FACULTY**

### **DIRECTOR**

- Joshua Williamson - M.F.A. (University of Wisconsin - Madison)  
Professor of Lighting Design

### **PROFESSORS**

- Yoav Kaddar - Ph.D. (State University of New York - Albany) and M.F.A. (University of Washington - Seattle)  
Dance
- Mary McClung - M.F.A. (West Virginia University)  
Costume Design & Technology
- Jerry McGonigle - M.F.A. (American Conservatory Theatre)  
Acting, Directing

### **TEACHING PROFESSOR**

- Cathy O'Dell - M.F.A. (West Virginia University)  
Acting

### **SERVICE PROFESSORS**

- Alan McEwen - M.F.A. (University of Oregon)  
Lighting & Sound Design
- Steven Neuenschwander - M.F.A. (Yale School of Drama)  
Technical Direction

### **ASSOCIATE PROFESSORS**

- Lee Blair - M.F.A. (University of Florida)  
Head of Performance/Acting & Musical Theatre
- Cornel Gabara - M.F.A. (Columbia University)  
Acting
- Radhica Ganapathy - Ph.D. (Texas Tech University)  
Theatre History, Literature, & Criticism
- General McArthur Hambrick - M.F.A. (University of Washington)  
Dance & Musical Theatre
- Tamara Honesty - M.F.A. (West Virginia University)  
Scene Design
- Jay Malarcher - Ph.D. (Louisiana State University)  
Theatre History, Literature, & Criticism
- Jessica Morgan - M.F.A. (The Ohio State University)  
Stage Movement

### **TEACHING ASSOCIATE PROFESSOR**

- Irene Alby - M.F.A. (Columbia University)  
Acting, Directing

### **SERVICE ASSOCIATE PROFESSOR**

- Tiffany Delligatti - M.F.A. (University of Connecticut)  
Costume Construction

### **ASSISTANT PROFESSORS**

- Ryan Scoble - M.F.A. (Kent State University)  
Musical Theatre
- Brianne Taylor - M.F.A. (West Virginia University)  
Voice for the Stage

### **TEACHING ASSISTANT PROFESSOR**

- Maureen Kaddar - MFA (University of Wisconsin-Milwaukee)  
Dance

## SERVICE ASSISTANT PROFESSOR

- Aubrey Sirtutus - M.F.A. (Carnegie Mellon University)  
Production and Stage Management

## Admissions

Prospective candidates for the degree of master of fine arts in theatre must have a B.A. or B.F.A. degree or equivalent from an accredited institution. Ordinarily, a minimum of thirty semester hours in theatre at the undergraduate level is expected to have been completed with a grade point average of no less than 2.75; although, students with an undergraduate grade point average of 2.25 to 2.75 may be admitted with probationary status.

## Auditions

Applicants must audition/interview to gain admittance into the program. Applicants intending to specialize in acting must submit a complete resume of their acting experience, at least two letters of recommendation from acting coaches or directors, and must present an audition before at least one member of the acting faculty. Those intending to specialize in design must submit a complete portfolio of their work, a resume of their design experience, and at least two letters of recommendation from design instructors or directors. An interview with members of the design faculty is also required.

For further details regarding these requirements, please contact the School of Theatre & Dance, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-6111, visit [theatre.wvu.edu](http://theatre.wvu.edu) (<http://theatre.wvu.edu>), or call (304) 293-2020.

## Advanced Standing

Students may be eligible for eighteen hours of graduate transfer credit for advanced-standing if they meet the regular requirements of graduate admission. Students admitted with advanced standing are required to be in residence at WVU for a minimum of two semesters and a summer session. The request for advanced standing should be made to the school director at the time of application.

## Acting, M.F.A.

### Degree Offered

- Master of Fine Arts

### Nature of the Program

The M.F.A. acting program is an intensive three-year course of study designed to train students for the professional theatre world and its related fields including teaching pedagogy. The graduate acting studio program offers conservatory-style actor training in all aspects of acting, voice/speech, and movement. In addition to the studio program, students are required to complete coursework in theatre history, text analysis, criticism, and research methods. An overall grade point average of 3.0 is needed to remain in the program.

M.F.A. acting students are accepted every three years and must follow the prescribed course sequence in the order that they are offered. The School of Theatre and Dance will be recruiting and auditioning the next incoming M.F.A. acting class during the 2023-24 academic year. These students will start their enrollment in Fall 2024.

## Admissions

Prospective candidates for the degree of master of fine arts in theatre must have a B.A. or B.F.A. degree or equivalent from an accredited institution. Ordinarily, a minimum of thirty semester hours in theatre at the undergraduate level is expected to have been completed with a grade point average of no less than 2.75; although, students with an undergraduate grade point average of 2.25 to 2.75 may be admitted with probationary status.

## Auditions

Applicants must audition/interview to gain admittance into the program. Applicants intending to specialize in acting must submit a complete resume of their acting experience, at least two letters of recommendation from acting coaches or directors, and must present an audition before at least one member of the acting faculty. Those intending to specialize in design must submit a complete portfolio of their work, a resume of their design experience, and at least two letters of recommendation from design instructors or directors. An interview with members of the design faculty is also required.

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## Advanced Standing

Students may be eligible for eighteen hours of graduate transfer credit for advanced-standing if they meet the regular requirements of graduate admission. Students admitted with advanced standing are required to be in residence at WVU for a minimum of two semesters and a summer session. The request for advanced standing should be made to the school director at the time of application.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2515

## Degree Requirements

Code	Title	Hours
<b>An overall minimum GPA 3.0 is required.</b>		
<b>Theatre Studies</b>		
THET 610	Research Methods	3
<b>Seminar</b>		
THET 696	Graduate Seminar	9
<b>Research</b>		
THET 697	Research	3
<b>Performance Studies</b>		
THET 540S	Graduate Vocal Techniques	2
THET 541S	Graduate Voice Techniques	2
THET 542S	Graduate Stage Movement 1	2
THET 543S	Graduate Stage Movement 2	2
THET 544S	Graduate Acting Studio 1	3
THET 545S	Graduate Acting 2	3
Graduate Scene Study 1 (take twice, 1 credit each)		2
THET 546S	Graduate Scene Study 1	
Graduate Scene Study 2 (taken twice, 1 credit each)		2
THET 547S	Graduate Scene Study 2	
Graduate Production Practicum (taken 5 times, 1 credit each)		5
THET 600	Graduate Production Practicum	
THET 640S	Advanced Graduate Vocal Techniques	2
THET 641S	Advanced Graduate Vocal Techniques 2	2
THET 642S	Advanced Graduate Stage Movement	2
THET 643S	Advanced Graduate Stage Movement 2	2
THET 644S	Advanced Graduate Acting Studio 1	3
THET 645S	Advanced Acting Studio	3
THET 650S	Graduate Study in Musical Theatre	2
THET 651S	Graduate Acting for the Camera	2
THET 740S	Advanced Graduate Vocal Techniques 3	2
THET 742S	Advanced Graduate Stage Movement 3	2
THET 750S	Graduate Showcase 1	1
THET 751S	Showcase Development	2
Advance Study Electives		6
Oral Defense		
Evaluation (semesterly)		
Total Hours		69

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
THET 540S		2 THET 541S	2
THET 542S		2 THET 543S	2
THET 544S		3 THET 545S	3
THET 546S		1 THET 546S	1
THET 610		3 THET 600	1
		Graduate Seminar	3
		THET 696	
	11		12

### Second Year

Fall	Hours	Spring	Hours
THET 547S		1 THET 547S	1
THET 640S		2 THET 641S	2
THET 642S		2 THET 643S	2
THET 644S		3 THET 645S	3
THET 600		1 THET 600	1
Graduate Seminar		3 Graduate Seminar	3
THET 696		THET 696	
	12		12

### Third Year

Fall	Hours	Spring	Hours
THET 600		1 THET 600	1
THET 650S		2 THET 697	3
THET 651S		2 THET 751S	2
THET 740S		2 Advance Study Elective	3
THET 742S		2	
THET 750S		1	
Advance Study Elective		3	
	13		9

Total credit hours: 69

## Major Learning Outcomes

### ACTING

#### General Requirements:

Graduates of M.F.A. programs in the School of Theatre & Dance must exhibit exceptional skill in theatre practice and a well-developed personal aesthetic. The competencies outlined below are combined and synthesized to achieve this result. The standards do not require a specific course for each competency.

1. Advanced professional competence in some aspect of theatre practice as exemplified by a considerable depth of knowledge and achievement demonstrated by a significant body of work.
2. A breadth of understanding in theatre and any appropriate related disciplines, the ability to think independently, and to integrate and synthesize information associated with high levels of practice in an area of specialization.
3. Awareness of current issues and developments that are influencing the principal field(s) of study, and professional ability and clear potential to contribute to the practice and advancement of the field.
4. Writing and speaking skills to communicate clearly and effectively to the theatre communities and the public.
5. Advanced capabilities with technologies normally utilized in the creation of work.

6. An understanding of professional ethics and practice associated with the major field.

#### **Specific Requirements:**

The graduate must demonstrate advanced professional competence in acting including, but not limited to:

1. The ability to employ a broad range of acting knowledge and skills in the creation and presentation of roles.
2. The ability to perform in plays of various types and from various periods.
3. The acquisition of advanced understanding and capabilities in voice and speech, movement, and play analysis.
4. A working knowledge of historical, critical, and theoretical content and the ways they inform playwriting and dramatic writing, the creation of roles, and other aspects of production.

The student must perform regularly and should have at least two significant roles in full-length, public productions during the period of study.

## **Costume Design and Technology, M.F.A.**

### **Degree Offered**

- Master of Fine Arts

### **Nature of the Program**

The M.F.A. design program is an intense three-year course of study for students seeking professional preparation in scenic, costume, or lighting design.

Studio design courses, together with fully realized production experience, offer expectations found in the real world.

- Three years of graduate courses and production work totaling at least sixty-four designated credit hours
- A production or research thesis
- Oral defense of the thesis project
- A successful evaluation at the end of each semester of study
- An overall grade point average of 3.0

### **Admissions**

Prospective candidates for the degree of master of fine arts in theatre must have a B.A. or B.F.A. degree or equivalent from an accredited institution. Ordinarily, a minimum of thirty semester hours in theatre at the undergraduate level is expected to have been completed with a grade point average of no less than 2.75; although, students with an undergraduate grade point average of 2.25 to 2.75 may be admitted with probationary status.

### **Auditions**

Applicants must audition/interview to gain admittance into the program. Applicants intending to specialize in acting must submit a complete resume of their acting experience, at least two letters of recommendation from acting coaches or directors, and must present an audition before at least one member of the acting faculty. Those intending to specialize in design must submit a complete portfolio of their work, a resume of their design experience, and at least two letters of recommendation from design instructors or directors. An interview with members of the design faculty is also required.

For further details regarding these requirements, please contact the School of Theatre & Dance, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-6111, visit [theatre.wvu.edu](http://theatre.wvu.edu) (<http://theatre.wvu.edu/>), or call (304) 293-2020.

### **Advanced Standing**

Students may be eligible for eighteen hours of graduate transfer credit for advanced-standing if they meet the regular requirements of graduate admission. Students admitted with advanced standing are required to be in residence at WVU for a minimum of two semesters and a summer session. The request for advanced standing should be made to the school director at the time of application.

### **Admission Requirements 2024-2025**

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2516



## Degree Requirements

Code	Title	Hours
Minimum GPA 3.0 required.		
<b>Theatre Studies</b>		
THET 610	Research Methods	3
THET 627S	Graduate Costume and Decoration 1	3
THET 628S	Graduate Costume and Decoration 2	3
THET 697	Research	3
THET 697	Research	3
THET 697	Research	3
<b>Theatre Design and Technology</b>		
THET 425S	Advanced Costume Construction	3
THET 520S	Principles of Stage Lighting	2
THET 523S	Costume Crafts Studio	3
THET 621S	Graduate Theatre Make-up	2
THET 624S	Graduate Costume Design 1	3
THET 626S	Graduate Costume Design 2	3
THET 626S	Graduate Costume Design 2	3
THET 630S	Graduate Rendering Techniques	3
THET 725S	Portfolio Development	1
<b>Graduate Design Studies</b>		<b>3</b>
THET 622S	Graduate Scene Design	
or THET 625S	Graduate Lighting Design	
<b>Practicum</b>		
Graduate Production Practicum (taken 4 times, 1 credit each)		4
THET 600	Graduate Production Practicum	
<b>Electives</b>		<b>12</b>
Oral Defense		
Portfolio Review		
Total Hours		60

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
THET 523S		3 THET 425S	3
THET 600		1 THET 621S	2
THET 610		3 THET 626S	3
THET 624S		3 THET 600	1
		10	9

### Second Year

Fall	Hours	Spring	Hours
THET 520S		2 THET 626S	3
THET 622S or 625S		3 THET 628S	3
THET 627S		3 THET 600	1
THET 630S		3 Elective	3
THET 600		1	
		12	10

### Third Year

Fall	Hours	Spring	Hours
THET 697		3 THET 697	3
THET 725S		1 THET 697	3

Elective	3 Elective	3
Elective	3	
	10	9

Total credit hours: 60

## Major Learning Outcomes

### COSTUME DESIGN AND TECHNOLOGY

#### General Requirements:

Graduates of M.F.A. programs in the School of Theatre & Dance must exhibit exceptional skill in theatre practice and a well-developed personal aesthetic. The competencies outlined below are combined and synthesized to achieve this result.

1. Advanced professional competence in some aspect of theatre practice as exemplified by a considerable depth of knowledge and achievement demonstrated by a significant body of work
2. A breadth of understanding in theatre and any appropriate related disciplines, the ability to think independently, and to integrate and synthesize information associated with high levels of practice in an area of specialization
3. Awareness of current issues and developments that are influencing the principal field(s) of study, and professional ability and clear potential to contribute to the practice and advancement of the field
4. Writing and speaking skills to communicate clearly and effectively to the theatre communities and the public
5. Advanced capabilities with technologies normally utilized in the creation of work
6. An understanding of professional ethics and practice associated with the major field

#### Specific Requirements:

The graduate must demonstrate advanced professional competence in costume design including, but not limited to:

1. Thorough understanding of and ability to utilize techniques for producing finished garments.
2. Advanced knowledge and abilities in developing costumes for productions of plays covering a range of styles, periods, and types of theatre, and utilization of techniques for production of a full range of costuming effects.
3. Creative and technical ability to develop the costume design of a production from concept to finished product.
4. A working knowledge of play analysis and an overview understanding of ways that historical, critical, and theoretical content inform various aspects of design and production.
5. The ability to work with theatre professionals in their processes of production

The student must design at least two major productions during the period of study, at least one of which must be fully mounted for the public.

## Scenic Design and Technology, M.F.A.

### Degree Offered

- Master of Fine Arts

### Nature of the Program

The M.F.A. design program is an intense three-year course of study for students seeking professional preparation in scenic, costume, or lighting design.

Studio design courses, together with fully realized production experience, offer expectations found in the real world.

- Three years of graduate courses and production work totaling at least sixty-four designated credit hours
- A production or research thesis
- Oral defense of the thesis project
- A successful evaluation at the end of each semester of study
- An overall grade point average of 3.0

## Admissions

Prospective candidates for the degree of master of fine arts in theatre must have a B.A. or B.F.A. degree or equivalent from an accredited institution. Ordinarily, a minimum of thirty semester hours in theatre at the undergraduate level is expected to have been completed with a grade point average of no less than 2.75; although, students with an undergraduate grade point average of 2.25 to 2.75 may be admitted with probationary status.

## Auditions

Applicants must audition/interview to gain admittance into the program. Applicants intending to specialize in acting must submit a complete resume of their acting experience, at least two letters of recommendation from acting coaches or directors, and must present an audition before at least one member of the acting faculty. Those intending to specialize in design must submit a complete portfolio of their work, a resume of their design experience, and at least two letters of recommendation from design instructors or directors. An interview with members of the design faculty is also required.

For further details regarding these requirements, please contact the School of Theatre & Dance, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-6111, visit [theatre.wvu.edu](http://theatre.wvu.edu) (<http://theatre.wvu.edu/>), or call (304) 293-2020.

## Advanced Standing

Students may be eligible for eighteen hours of graduate transfer credit for advanced-standing if they meet the regular requirements of graduate admission. Students admitted with advanced standing are required to be in residence at WVU for a minimum of two semesters and a summer session. The request for advanced standing should be made to the school director at the time of application.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2517

## Degree Requirements

Code	Title	Hours
Minimum GPA of 3.0 required.		
<b>Theatre Studies</b>		
THET 610	Research Methods	3
THET 627S	Graduate Costume and Decoration 1	3
THET 628S	Graduate Costume and Decoration 2	3
THET 697	Research	3
THET 697	Research	3
THET 697	Research	3
<b>Stage Lighting</b>		<b>2</b>
THET 520S or THET 625S	Principles of Stage Lighting Graduate Lighting Design	
<b>Theatre Performance Design</b>		
THET 524	Production Planning	3
THET 622S	Graduate Scene Design	3
THET 623S	Advanced Graduate Scene Design	3
THET 623S	Advanced Graduate Scene Design	3
THET 629	Graduate Computer Assisted Design Seminar	3
THET 630S	Graduate Rendering Techniques	3
THET 631S	Graduate Drafting for the Stage	3
THET 635S	Graduate Scene Painting	3
THET 725S	Portfolio Development	1
<b>Practicum</b>		
Graduate Production Practicum (taken 4 times, 1 credit each)		4
THET 600	Graduate Production Practicum	
<b>Electives</b>		<b>12</b>
Oral Defense		

## Evaluation and Portfolio Review (semesterly)

Total Hours	61
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**SUGGESTED PLAN OF STUDY****First Year**

Fall	Hours	Spring	Hours
THET 600		1 THET 520S or 625S	2
THET 610		3 THET 623S	3
THET 622S		3 THET 629	3
THET 631S		3 THET 600	1
		10	9

**Second Year**

Fall	Hours	Spring	Hours
THET 627S		3 THET 524	3
THET 630S		3 THET 623S	3
THET 635S		3 THET 628S	3
THET 600		1 THET 600	1
		Elective	3
		10	13

**Third Year**

Fall	Hours	Spring	Hours
THET 697		3 THET 697	6
THET 725S		1 Elective	3
Elective		3	
Elective		3	
		10	9

Total credit hours: 61

**Major Learning Outcomes****SCENIC DESIGN AND TECHNOLOGY****General Requirements:**

Graduates of M.F.A. programs in the School of Theatre & Dance must exhibit exceptional skill in theatre practice and a well-developed personal aesthetic. The competencies outlined below are combined and synthesized to achieve this result.

1. Advanced professional competence in some aspect of theatre practice as exemplified by a considerable depth of knowledge and achievement demonstrated by a significant body of work
2. A breadth of understanding in theatre and any appropriate related disciplines, the ability to think independently, and to integrate and synthesize information associated with high levels of practice in an area of specialization
3. Awareness of current issues and developments that are influencing the principal field(s) of study, and professional ability and clear potential to contribute to the practice and advancement of the field
4. Writing and speaking skills to communicate clearly and effectively to the theatre communities and the public
5. Advanced capabilities with technologies normally utilized in the creation of work
6. An understanding of professional ethics and practice associated with the major field

**Specific Requirements:**

The graduate must demonstrate advanced professional competence in scenic design including, but not limited to:

1. Advanced knowledge and skills in working with drawing and rendering, model making, two- and three- dimensional design, computer/digital technology, video and projection, and functional knowledge of the histories of style and scene design.

2. Advanced knowledge and abilities in developing settings for productions of plays covering a range of styles, periods, and types of theatre, and utilization of techniques for production of a full range of theatrical effects.
3. Creative and technical ability to develop scene designs from concept to finished product.
4. A working knowledge of play analysis and of ways that historical, critical, and theoretical content inform various aspects of design and production.
5. The ability to work with theatre professionals in their processes of production.

The student must design at least two major productions during the period of study, at least one of which must be fully realized for the public.

## Lighting Design and Technology, M.F.A.

### Degree Offered

- Master of Fine Arts

### Nature of the Program

The M.F.A. design program is an intense three-year course of study for students seeking professional preparation in scenic, costume, or lighting design.

Studio design courses, together with fully realized production experience, offer expectations found in the real world.

- Three years of graduate courses and production work totaling at least sixty-four designated credit hours
- A production or research thesis
- Oral defense of the thesis project
- A successful evaluation at the end of each semester of study
- An overall grade point average of 3.0

### Admissions

Prospective candidates for the degree of master of fine arts in theatre must have a B.A. or B.F.A. degree or equivalent from an accredited institution. Ordinarily, a minimum of thirty semester hours in theatre at the undergraduate level is expected to have been completed with a grade point average of no less than 2.75; although, students with an undergraduate grade point average of 2.25 to 2.75 may be admitted with probationary status.

### Auditions

Applicants must audition/interview to gain admittance into the program. Applicants intending to specialize in acting must submit a complete resume of their acting experience, at least two letters of recommendation from acting coaches or directors, and must present an audition before at least one member of the acting faculty. Those intending to specialize in design must submit a complete portfolio of their work, a resume of their design experience, and at least two letters of recommendation from design instructors or directors. An interview with members of the design faculty is also required.

For further details regarding these requirements, please contact the School of Theatre & Dance, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-6111, visit [theatre.wvu.edu](http://theatre.wvu.edu) (<http://theatre.wvu.edu/>), or call (304) 293-2020.

### Advanced Standing

Students may be eligible for eighteen hours of graduate transfer credit for advanced-standing if they meet the regular requirements of graduate admission. Students admitted with advanced standing are required to be in residence at WVU for a minimum of two semesters and a summer session. The request for advanced standing should be made to the school director at the time of application.

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code:2518

### Degree Requirements

Code	Title	Hours
Minimum GPA of 3.0 required.		
<b>Theatre Studies</b>		
THET 610	Research Methods	3
THET 627S	Graduate Costume and Decoration 1	3

THET 628S	Graduate Costume and Decoration 2	3
THET 697	Research	3
THET 697	Research	3
THET 697	Research	3
<b>Graduate Design Studies</b>		<b>3</b>
THET 622S or THET 624S	Graduate Scene Design Graduate Costume Design 1	
<b>Theatre Performance/Design</b>		
THET 427	Lighting Technology	3
THET 520S	Principles of Stage Lighting	2
THET 613S	Stage Management	3
THET 625S	Graduate Lighting Design	3
THET 625S	Graduate Lighting Design	3
THET 630S	Graduate Rendering Techniques	3
THET 629	Graduate Computer Assisted Design Seminar	3
THET 631S	Graduate Drafting for the Stage	3
THET 725S	Portfolio Development	1
<b>Practicum</b>		
Graduate Production Practicum (taken 4 times, 1 credit each)		4
THET 600	Graduate Production Practicum	
<b>Electives</b>		<b>12</b>
Oral Defense		
Evaluation and Portfolio (semesterly)		
Total Hours		61

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
THET 520S		2 THET 427	3
THET 631S		3 THET 625S	3
THET 600		1 THET 629	3
THET 610		3 THET 600	1
		9	10

### Second Year

Fall	Hours	Spring	Hours
THET 622S or 624S		3 THET 613S	3
THET 627S		3 THET 625S	3
THET 630S		3 THET 628S	3
THET 600		1 THET 600	1
		Elective	3
		10	13

### Third Year

Fall	Hours	Spring	Hours
THET 697		3 THET 697	3
THET 725S		1 THET 697	3
Elective		3 Elective	3
Elective		3	
		10	9

Total credit hours: 61

## Major Learning Outcomes

### LIGHTING DESIGN AND TECHNOLOGY

#### General Requirements:

Graduates of M.F.A. programs in the School of Theatre & Dance must exhibit exceptional skill in theatre practice and a well-developed personal aesthetic. The competencies outlined below are combined and synthesized to achieve this result.

1. Advanced professional competence in some aspect of theatre practice as exemplified by a considerable depth of knowledge and achievement demonstrated by a significant body of work
2. A breadth of understanding in theatre and any appropriate related disciplines, the ability to think independently, and to integrate and synthesize information associated with high levels of practice in an area of specialization
3. Awareness of current issues and developments that are influencing the principal field(s) of study, and professional ability and clear potential to contribute to the practice and advancement of the field
4. Writing and speaking skills to communicate clearly and effectively to the theatre communities and the public
5. Advanced capabilities with technologies normally utilized in the creation of work
6. An understanding of professional ethics and practice associated with the major field

#### Specific Requirements:

The graduate must demonstrate advanced professional competence in lighting design including, but not limited to:

1. Advanced knowledge and skills in working with photometrics, brightness relationships, color, computer/digital technology and the history of design.
2. Advanced knowledge and abilities in electrical and optical control and distribution, regulation of lighting equipment, and mechanical drafting or visualization of lighting design.
3. Thorough understanding of (a) human response to light, (b) energy and materials, (c) photographic and photoelectric reproduction technology, and (d) safety codes and practices.
4. Creative and technical ability to develop the lighting design of a production from concept to finished product.
5. A working knowledge of play analysis and an overview understanding of ways that historical, critical, and theoretical content inform various aspects of design and production.
6. The ability to work with theatre professionals in their processes of production.

The student must design at least two fully-mounted, public productions during the period of study.

## Technical Direction, M.F.A.

### Degree Offered

- Master of Fine Arts

### Nature of the Program

The M.F.A. program is an intense three-year course of study for students seeking professional preparation in Technical Direction.

- Three years of graduate courses and production work totaling a minimum of sixty-one designated credit hours
- A production or research thesis
- Oral defense of the thesis project
- A successful evaluation at the end of each semester of study
- An overall grade point average of 3.0

### Admissions

Prospective candidates for the degree of master of fine arts in theatre must have a B.A. or B.F.A. degree or equivalent from an accredited institution. Ordinarily, a minimum of thirty semester hours in theatre at the undergraduate level is expected to have been completed with a grade point average

of no less than 2.75; although, students with an undergraduate grade point average of 2.25 to 2.75 may be admitted with provisional graduate student status.

## Auditions

Applicants must audition/interview to gain admittance into the program. Applicants intending to specialize in acting must submit a complete resume of their acting experience, at least two letters of recommendation from acting coaches or directors, and must present an audition before at least one member of the acting faculty. Those intending to specialize in design must submit a complete portfolio of their work, a resume of their design experience, and at least two letters of recommendation from design instructors or directors. An interview with members of the design faculty is also required.

For further details regarding these requirements, please contact the School of Theatre & Dance, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-6111, visit [theatre.wvu.edu](http://theatre.wvu.edu) (<http://theatre.wvu.edu/>), or call (304) 293-2020.

## Advanced Standing

Students may be eligible for eighteen hours of graduate transfer credit for advanced-standing if they meet the regular requirements of graduate admission. Students admitted with advanced standing are required to be in residence at WVU for a minimum of two semesters and a summer session. The request for advanced standing should be made to the school director at the time of application.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2519

## Degree Requirements

Code	Title	Hours
Minimum GPA of 3.0 required.		
<b>Theatre Studies</b>		
THET 610	Research Methods	3
THET 627S	Graduate Costume and Decoration 1	3
THET 628S	Graduate Costume and Decoration 2	3
THET 697	Research	3
THET 697	Research	3
THET 697	Research	3
<b>Stage Lighting</b>		<b>2</b>
THET 520S or THET 625S	Principles of Stage Lighting Graduate Lighting Design	
<b>Theatre Design and Technology</b>		
THET 524	Production Planning	3
THET 535	Grad Theatre Health and Safety	3
THET 622S	Graduate Scene Design	3
THET 629	Graduate Computer Assisted Design Seminar	3
THET 631S	Graduate Drafting for the Stage	3
THET 635S	Graduate Scene Painting	3
THET 636	Advanced Stagecraft	3
THET 712	Entertainment Rigging	3
THET 725S	Portfolio Development	1
THET 726	Graduate Automation	3
<b>Practicum</b>		
Graduate Production Practicum (Repeated)		4
THET 600	Graduate Production Practicum	
<b>Electives</b>		<b>9</b>
Total Hours		61



## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
THET 520S or 625S		2 THET 524	3
THET 631S		3 THET 600	1
THET 600		1 THET 629	3
THET 610		3 Elective	3
		9	10

### Second Year

Fall	Hours	Spring	Hours
THET 622S		3 THET 535	3
THET 627S		3 THET 628S	3
THET 712		3 THET 636	3
THET 600		1 THET 600	1
		10	10

### Third Year

Fall	Hours	Spring	Hours
THET 725S		1 THET 635S	3
THET 726		3 THET 697	3
THET 697		6 Elective	3
		Elective	3
		10	12

Total credit hours: 61

## Major Learning Outcomes

### TECHNICAL DIRECTION

This degree program may be especially appropriate for students interested in pursuing opportunities as technical directors or theatrical project managers.

- The graduate must demonstrate advanced professional competence in technical direction including, but not limited to:
- The ability to supervise the safe construction of scenery and properties within the scope of allocated/budgeted materials, labor/time, and space.
- The ability to understand various elements related to (a) theatrical design; (b) the set up and operation of lighting components and systems; (c) the use of sound reinforcement and playback systems; (d) methods of scenic art and construction; (e) rigging and motor systems; (f) fluid power systems (pneumatics and hydraulics) and motion control; and (g) mechanical, structural, and electrical engineering. The ability to work with these elements as appropriate to specific productions is essential.
- The ability to read and direct personnel based on computer-aided technical drawings.
- Personnel management, including the ability to safely supervise and, when appropriate, schedule the work of personnel within and across various theatrical shops.
- The ability to work with theatre professionals in their processes of production.
- The ability to articulate and apply federal, state, and local health and safety practices and regulations associated with production and performance including, but not limited to, appropriate Occupational Safety and Health Administration (OSHA) regulations and the National Fire Protection Association (NFPA) Life Safety Code.
- Facilities management, including a) the ability to oversee the daily operations and maintenance of various theatrical shops; and b) the ability to maintain a working schedule of work done in, and outside requests to use, various shops and theatrical facilities.
- The graduate must demonstrate basic competence in the following areas of design and technology including, but not limited to:
- Computer-aided technical drawing
- Sewing
- Technical research
- Welding

The student must successfully serve as the technical director for at least two fully realized productions during the period of study, at least one of which must be fully mounted for the public.

# Dentistry

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## Degrees Offered

- D.D.S. in Dentistry
- M.S. in Dental Specialties (Endodontics, Orthodontics, Periodontics and Prosthodontics)

## Historical Background

The School of Dentistry was established by an act of the West Virginia Legislature on March 9, 1951, and the first class was enrolled in September 1957. A class of twenty-three students graduated in 1961, receiving the first dental degrees awarded in West Virginia. In September 1961, the first two students were enrolled in the school's baccalaureate degree program in dental hygiene and graduated in 1965.

## Mission

Oral Health...Our Priority is the mission of the West Virginia University School of Dentistry. This is accomplished by promoting a diverse and dynamic learning environment that addresses the present and future oral health needs of the citizens of West Virginia and beyond by providing an oral health center committed to excellence and innovation in education, research, patient care, service, and technology.

The WVU School of Dentistry offers degrees of doctor of dental surgery, master of science in dental specialties and bachelor of science in dental hygiene. The Department of Oral and Maxillofacial Surgery offers a four-year residency program, a one-year internship, and a one-year general practice residency program. Programs leading to the master of science and doctor of philosophy degrees are available in the associated basic sciences, public health, and business. Continuing education courses for dentists and auxiliaries are offered throughout the year on a wide variety of oral health related topics.

## Accreditation

All programs are accredited by the Commission on Dental Accreditation of the American Dental Association.

## Administration

The dean is responsible for implementing the established policies of the School of Dentistry, the Health Sciences Center, and the University. The dean of the School of Dentistry reports to the vice president for Health Sciences.

## Dental Clinic

Clinical training and experience constitute a major part of the curriculum for dental and dental hygiene students. Facilities for dental and dental hygiene students include over seventy-five treatment cubicles and all necessary related laboratories. Students treat their assigned patients under close supervision of faculty and receive practical experience while rendering services to thousands of patients annually.

## Books and Instruments

Dental and dental hygiene students are required to obtain necessary textbooks for the scheduled courses and special instruments for use in the various laboratories and clinics. Lists of approved instruments and books will be provided at the time of registration, and these supplies will be made available through University services. Official authorization is essential in the purchase of all instruments and books used in dental courses. All dental students must maintain a library of required textbooks through graduation. Used instruments and equipment are not acceptable. A designated laptop computer must also be purchased prior to the first day of class.

## Organizations

### AMERICAN STUDENT DENTAL ASSOCIATION

Pre-doctoral and advanced education dental students are eligible to become members of the American Student Dental Association. Membership provides for student membership in the American Dental Association.

### AMERICAN ASSOCIATION OF DENTAL RESEARCH

All dental and auxiliary students, including advanced education students, are eligible to become student members of the American Association of Dental Research during the period of enrollment in the School of Dentistry.

### AMERICAN DENTAL EDUCATION ASSOCIATION

All dental and auxiliary students, including advanced education students, are eligible to become student members of the American Dental Education Association during the period of enrollment in the School of Dentistry.

## AMERICAN ASSOCIATION OF WOMEN DENTISTS

The objectives and purposes of the West Virginia University School of Dentistry Chapter of the American Association of Women Dentists are to offer opportunities for personal growth through association with women in the dental profession, support the goals of the American Association of Women Dentists, aid in the advancement of women in dentistry, promote professional support and cooperation among its members, and promote the fundamentals of good oral health.

## SPECIAL CARE DENTISTRY ASSOCIATION

Special Care Dentistry Association (SCDA) is a *unique* international organization of oral health professionals and other individuals who are dedicated to promoting oral health and well being for people with special needs. SCDA provides educational opportunities and information exchange for oral health care professionals who treat patients with special needs. Members of SCDA have complete access to useful resources, important industry news and exclusive networking and educational events.

## WVU SCHOOL OF DENTISTRY ALUMNI ASSOCIATION

In a series of meetings held during May 1961, the first senior class of the School of Dentistry established the WVU School of Dentistry Alumni Association. The association promotes the educational program of the School of Dentistry. Full membership is extended to all graduates of the school, and associate memberships are available to others interested in the aims of the association.

## OMICRON KAPPA UPSILON

On February 6, 1961, the Alpha Beta Chapter of Omicron Kappa Upsilon, national honorary dental society, was chartered at the School of Dentistry. Student membership is limited to twelve percent of each senior class. Candidates are from the academically superior twenty percent.

## DENTAL FRATERNITY

Chapter of Delta Sigma Delta International Dental Fraternity.

## STUDENT AMERICAN DENTAL HYGIENISTS' ASSOCIATION

Dental hygiene students are eligible for membership in the official organization representing the dental hygiene profession.

## SIGMA PHI ALPHA

The Alpha Xi chapter of the national dental hygiene honorary society, Sigma Phi Alpha, was established on March 19, 1968. Student membership is limited to ten percent of each graduating class. Candidates are selected on the basis of scholarship, character, and leadership potential as a dental hygienist.

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## ADMINISTRATION

### DEAN

- Stephen Pachuta - D.D.S. (West Virginia University)

### ASSOCIATE DEANS

- Tammy Chipps - D.D.S. (West Virginia University)  
Clinical Affairs
- Michael Bagby - D.D.S., Ph.D. (Loyola University)  
Academic Affairs
- Gina Graziani - D.D.S, M.S., (University of California - SF)  
Postdoctoral Affairs
- Valerine Perrine - D.D.S. (West Virginia University)  
Associate Dean for Student Affairs, Community Health and Outreach
- Shelia S. Price - D.D.S., Ed.D (West Virginia University)  
Admission, Recruitment and Access

### CHAIRS

- Samuel O. Dorn - D.D.S.  
(Fairleigh Dickinson University)
- Lauren Godwin - D.D.S. (West Virginia University)
- Amy Funk - M.S.D.H. (West Virginia University)
- Gina Graziani - D.D.S., M.S.  
(University of California - SF)

- Peter Ngan - D.M.D. (Harvard)
- Abdul Shakore, Arif Salman - B.D.S., M.D.S.  
(The Tamil Nadu Dr. M.G.R. Medical University)
- Bryan Weaver - D.D.S., M.D. (West Virginia University)
- Steven B. Whitaker - D.D.S. (University of Missouri-Kansas City)

## PROGRAM DIRECTORS

- Shelby Alexander - D.D.S., M.S. (West Virginia University)  
Prosthodontics
- Khaled AlSharif - B.D.S., M.S. (Riyadh Colleges of Dentistry and Pharmacy)  
Orthodontics
- Amy Funk - M.S.D.H. (West Virginia University)  
Dental Hygiene
- Lauren Bakos - D.D.S. (West Virginia University)  
General Practice Residency
- Mark A. Byron - D.D.S., M.S. (West Virginia University)  
Endodontics
- Abdul Shakore, Arif Salman - B.D.S., M.D.S. (The Tamil Nadu Dr. M.G.R. Medical University)  
Periodontics
- Bryan Weaver - D.D.S., M.D. (West Virginia University)  
Oral and Maxillofacial Surgery

## Degree Designation Learning Outcomes

The advanced education programs in dentistry are designed to train well qualified dentists in all aspects of the designated dental specialties offered.

Advanced training consists of an integrated educational program designed to provide both knowledge in the dentally applied basic sciences and experiences in the clinical science of the designated specialty. A series of structured didactic and clinical courses provides the student with a level of knowledge and skill development necessary to practice a specialty and to prepare for a career in teaching and research. The program qualifies the student for examination and certification by the specialty board.

## MASTER OF SCIENCE (MS)

The Master of Science degree program requires the development of an in-depth research problem which must be reported in the form of a thesis.

### LEARNING GOALS:

1. Develop competent and skilled clinicians at the specialty level.
2. Prepare and qualify residents to achieve certification by the specialty board.
3. Prepare residents to successfully manage a specialty practice.
4. Prepare and promote a career long interest in continued professional development.
5. Develop the background and experience necessary to select materials and techniques which will appropriately meet the biological, physiological and biomechanical requirements for various oral rehabilitations.
6. Introduce residents to teaching techniques and experiences enabling them to gain an appreciation for their potential role as educators.
7. Prepare residents to critically evaluate the literature and to formulate and conduct a program of research in their specialty and to write and defend a thesis [Master of Science] presenting the results of original research.

## DOCTOR OF DENTAL SURGERY (DDS)

*Competencies* are the skills, knowledge, attitudes and judgment abilities that a dentist must have at the start of unsupervised independent practice.

A graduating student must possess an array of competencies, although he or she may not be proficient or expert yet. By defining a curriculum-wide spectrum of competencies, the educational mission of the School is enhanced in two ways: First, the competencies guide our curriculum design and enable us to analyze content across the curriculum. Second, we can be more focused and efficient in assessing the students' acquisition of the defined competencies. To the extent that it can be affirmed that the student acquires sufficient competency to enter the independent practice of dentistry both safely and ethically, the curriculum has more value.

The ultimate benefits of Competencies for the Graduating Dentist will be a more efficient and rational curriculum that is responsive to the educational mission of the School of Dentistry.

## **I. SCIENTIFIC AND CRITICAL THINKING**

1. Scientific Process: The graduating dentist must acquire, critically evaluate and assimilate scientific information necessary for the a.) evaluation, diagnosis, treatment, management and prevention of oral health problems, and b.) interpretation of professional literature to ensure evidence-based patient care.

## **II. PATIENT EVALUATION**

2. Examination of the Patient: The graduating dentist must be able to perform an examination that collects the medical, physical, psychological and social information needed to evaluate the systemic and oral condition(s) of patients of all ages (infant through older adult) or with special needs (including, but not limited to, persons with developmental disabilities, complex medical problems and physical limitations) and manage behavioral factors which affect oral health and use the information to implement strategies that facilitate the delivery of oral health care.

## **III. DIAGNOSIS**

3. Diagnosis: The graduating dentist must be able to determine a differential, provisional or definitive diagnosis for patients of all ages by interpreting and correlating findings from the history, clinical and radiographic examination and other diagnostic tests.

## **IV. TREATMENT PLANNING**

4. Treatment Planning: The graduating dentist must be able to develop, present, and discuss individual treatment plans for patients of all ages consistent with the patient's condition, interest, goals and capabilities.

## **V. PATIENT TREATMENT AND MANAGEMENT**

5. Prevention of Disease and Maintenance of Health: The graduating dentist must be able to provide evidence-based interprofessional care for patients of all ages that emphasizes prevention of oral diseases and supports the maintenance of existing systemic and oral health.

6. Tobacco Cessation: The graduating dentist must be able to provide evidence-based tobacco cessation strategies.

7. Diversity Awareness: The graduating dentist must be able to discuss cultural factors that impact oral health and provide culturally-sensitive care to persons with varying individual characteristics and backgrounds.

8. Control of Pain and Anxiety: The graduating dentist must be able to employ techniques to manage orofacial discomfort and psychological distress.

9. Caries Management: The graduating dentist must be able to treat and manage caries in the primary, mixed and permanent dentition.

10. Endodontic Therapy: The graduating dentist must be able to treat diseases of pulpal and periradicular origin in the primary, mixed and permanent dentitions.

11. Periodontal Therapy: The graduating dentist must be able to assess, treat and manage periodontal disease in the primary, mixed, permanent and implant dentitions utilizing a non-surgical approach.

12. Surgical Therapy: The graduating dentist must be able to recognize, evaluate, treat and/or manage conditions requiring surgical procedures on the hard and soft tissues in patients of all ages.

13. Emergency Situations: The graduating dentist must be able to prevent and manage dental and medical emergency situations encountered in the practice of general dentistry.

14. Occlusal/TMD Therapy: The graduating dentist must be able to manage functional disorders of occlusal or non-occlusal origins.

15. Orthodontic Therapy: The graduating dentist must be able to manage developmental or acquired abnormalities in esthetics or occlusion.

16. Stomatology: The graduating dentist must be able to manage limited or common non-life threatening oral mucosal diseases or disorders.

17. Restorative/Prosthodontic Therapy: The graduating dentist must be able to convey laboratory instructions and provide restorations and prostheses that are correct in anatomical form, comfortable and functionally effective, and which satisfy the esthetic requirements of the patient or legal guardian.

18. Implant Therapy: The graduating dentist must be able to assess, diagnose, treatment plan and treat patients requiring single tooth posterior implant-supported restorations and mandibular implant-supported overdentures.

19. Assessment of Patient Treatment: The graduating dentist must be able to determine the prognosis for proposed patient care, evaluate the initial results of the care and determine appropriate periodic maintenance.

## VI. DISEASE PREVENTION AND HEALTH PROMOTION

20. Community Engagement: The graduating dentist must be able to assume a leadership role in improving the oral health of individuals, families and groups in the community by planning, implementing and evaluating programs to eliminate oral health disparities through a dynamic, evidence-based and interprofessional approach to wellness.

## VII. PRACTICE DYNAMICS

21. Ethics: The graduating dentist must be able to discern and manage the ethicolegal issues of dental practice.

22. Dental Informatics and Research: The graduating dentist must be able to effectively utilize computer programming, digital imaging and electronic communication to retrieve and communicate information for patient care, practice management, research and professional development purposes.

23. Professional Practice: The graduating dentist must possess the skills to transition from dental school to various practice settings.

24. Scope of Practice: The graduating dentist must be able to know the limit of one's competence and when to make referrals to colleagues.

25. Dental Sleep Medicine: The graduating dentist must recognize and refer patients at high risk for sleep disorders and prescribe and manage oral appliances, as a member of the sleep medicine team.

## Accreditation

The following programs within the School of Dentistry have specialized accreditation through the Commission on Dental Accreditation of the American Dental Association.

- Dentistry
- Endodontics
- Orthodontics & Dentofacial Orthopedics
- Periodontics
- Prosthodontics
- General Practice Residency
- Oral and Maxillofacial Surgery Residency

## Dentistry, D.D.S.

### Degree Offered

- Doctor of Dental Surgery

### Nature of the Program

The WVU School of Dentistry prepares students to provide high-quality, comprehensive oral health care. Students train using state-of the-art technology which includes, but is not limited to, electronic health record, digital radiography, CAD/CAM and lasers. The school offers enriching interprofessional learning opportunities with the other Health Sciences Center health professions programs to promote their value as essential members of the health care team. Community service is also integral to our mission. Students participate in a plethora of local, state and global community outreach programs. Prior to graduation, students experience a community-based clinical rotation in rural West Virginia for at least six weeks.

A dental degree offers a variety of career options including private practice, teaching, research, and public health dentistry. In addition, after earning the Doctor of Dental Surgery (DDS) degree, specialty practice areas may be pursued by advanced training.

Due to a large number of applications and limited class size, qualified West Virginia residents receive priority consideration, and outstanding nonresident applicants are also considered. Residency status is determined by the WVU Office of Admission in accordance with the Higher Education Policy Commission Rules and Policies, Series 25. The dental admissions committee utilizes a holistic selection process that takes into account cognitive and non-cognitive attributes in accordance with defined admission criteria. Competition for admission has elevated the academic profile of admitted candidates to a rather high plateau. Nonresident applicants generally have earned a GPA of  $\geq 3.75$  and DAT scores of 19 or above. The School of Dentistry recognizes the importance of diversity in fulfilling its mission and encourages individuals from diverse backgrounds to apply.

## Admissions

Admission to the Doctor of Dental Surgery (D.D.S.) program is contingent upon satisfactory completion of all admission requirements, appropriate completion of all application instructions, submission of all transcripts from each college attended, submission of Dental Admission Test (DAT) scores, a personal interview, satisfactory completion of all courses taken before registration in dental school (includes courses taken during the summer session immediately preceding initial enrollment), and all other requirements as set forth by the dental school admissions committee.

The WVU School of Dentistry has minimal technical standards for the assessment of all students admitted to the D.D.S. program. Enrollees must have abilities and skills in the following areas: observation; communication; motor; intellectual, conceptual, integrative, quantitative; behavioral, and social. Technological compensation can be made in certain situations, but candidates should be able to perform in a reasonably independent manner. (Refer to the School of Dentistry website for details about Technical Standards (<https://dentistry.hsc.wvu.edu/students/dds-student-resources/policies-and-standards/>)).

## COURSE REQUIREMENTS:

A minimum of three years of college coursework completed at U.S. or Canadian colleges or universities is required. Applicants must have earned a minimum of 90 semester credit hours at the time of application. Up to 64 semester credit hours completed at community colleges are accepted toward the minimum course hour requirement.

The dental admissions policy is that no online courses are accepted toward the prerequisite courses. An exception to this policy is for courses that transitioned to mandatory online instruction during the COVID-19 pandemic. A letter grade must be documented for all required courses completed through online or hybrid learning platforms. Courses with grades of Pass/Fail or Satisfactory will not be accepted. Non-science prerequisite courses impacted by Pass/Fail grading system will not be evaluated negatively.

The prerequisites for admission include:

English composition and rhetoric, or equivalent	6
Biology or Zoology (with laboratory)	8
General/Inorganic Chemistry (with laboratory)	8
Organic Chemistry (with laboratory)	8
Physics (with laboratory)	8
Biochemistry	3
Anatomy (Comparative or Human)	3
<b>Total Hours</b>	<b>44</b>

Completion of courses in microbiology, embryology/developmental biology, physiology, cellular and molecular biology, genetics, and psychology are strongly recommended. In addition, courses in the humanities and the social sciences are suggested to acquire a well-rounded intellectual background for the study and practice of dentistry. AP credit will be accepted for the English course requirement. All science prerequisites must have a letter grade. Admitted students must complete all required courses by June 1st prior to matriculation.

Considerations:

- Grade Point Average (GPA)
- Science Grade Point Average (SGPA)
- Performance in required courses
- Performance in upper-division science courses
- Performance improvement/consistency
- Course load

## APPLICATION INFORMATION:

1. The School of Dentistry participates in the Associated American Dental Schools Application Service (AADSAS). All applications must be submitted online via AADSAS (<http://www.adea.org>). The application deadline is November 1st of the year, immediately prior to the applicant's anticipated enrollment. Each year the AADSAS application becomes available in mid-May. The school uses a rolling admission process and begins admitting highly qualified individuals on December 15th.
2. Applicants are required to have specific letters of recommendation submitted to AADSAS. Information regarding recommendations is available on the School of Dentistry (<https://dentistry.hsc.wvu.edu/apply-now/doctor-of-dental-surgery/>) website.
3. Satisfactory completion of the Dental Admission Test (DAT) is required. The test is given at testing centers throughout the U.S. and in Canada. DAT registration is available on the American Dental Association (ADA) (<https://www.ada.org/education/testing/exams/dental-admission-test-dat/apply-for-the-dental-admission-test-dat/>) website. DAT scores must be submitted by November 1st of the year preceding the date of matriculation. Scores are valid up to three years after the test date.
4. Applicants must complete shadowing experiences in clinical dental settings, including private offices, community health clinics, and service missions. While there is no specific minimum shadowing hour requirement, successful candidates usually observe at least 100 hours in various dental environments. Due to limitations previously caused by the COVID-19 pandemic, limited virtual shadowing experiences will be accepted and considered on a case-by-case basis.
5. The Dental Admission Committee evaluates all AADSAS applications and invites selected applicants to submit a secondary (WVU Graduate) application. West Virginia resident applicants are usually offered an interview, although the admissions committee may elect not to interview unrealistic applicants. Selected non-resident applicants are invited to interview depending on their qualifications.



6. Individuals who receive provisional acceptance must obtain a criminal background clearance, provide documentation of the specified immunizations, and meet all other requirements as listed in the provisional acceptance offer prior to matriculation and the date specified.

Detailed information is available on the Doctor of Dental Surgery (<https://dentistry.hsc.wvu.edu/apply-now/doctor-of-dental-surgery/>) admissions webpage.

If you have specific questions regarding the West Virginia University School of Dentistry's application procedures and requirements, please email the Office of Dental Admissions ([dentaladmit@hsc.wvu.edu](mailto:dentaladmit@hsc.wvu.edu)) or call 304-293-6646.

### International Dental Graduate Guidelines

International dental graduates who wish to apply to the WVU School of Dentistry Doctor of Dental Surgery (D.D.S.) program as a student in the first-year class should contact the School of Dentistry Office of Dental Admissions for additional information regarding specific guidelines and requirements.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8007

## Promotion

At the end of each grading period (i.e., each academic semester or summer session), all students will have their individual progress reviewed by the Academic and Professional Standards Committee. The progress of each student in the curriculum is governed by minimum acceptable performance standards upon which the committee bases its decisions.

The standards consist of three categories: scholastic performance, clinic performance and utilization, and professional development. Scholastic performance requires that each student must earn a specified grade point average to be promoted to the succeeding year. Clinic performance and utilization requires that each student must utilize a specified percentage of available clinic time to demonstrate steady progress toward attainment of clinical competency in all disciplines. Professional development is an important component of the study of dentistry. The criteria for determining this development are based on the student's personal behavior and patient management skills.

These performance standards are explained in detail in the document entitled WVU School of Dentistry Academic and Professional Standards. All first-year students are presented this document upon entering school and are required to acknowledge, by their signature, that they have read and accept the conditions set by the material contained therein. At the completion of each academic term, following the meeting of the Committee on Academic and Professional Standards, the status of each student is reported to the dean. The committee may decide that a student be promoted unconditionally, be promoted on probation, be allowed to make up deficiencies, be given the opportunity to repeat the year, or be suspended or dismissed from further studies in the School of Dentistry. Final disposition in each case is the prerogative of the Dean of the School of Dentistry.

## Degree Requirements

Candidates for graduation are recommended by the faculty of the School of Dentistry to the Board of Governors for approval and for the conferring of the degree of Doctor of Dental Surgery (D.D.S.), provided they fully meet the following conditions:

- Shall have been a full-time student in regular attendance in the School of Dentistry for the academic period prescribed for each student.
- Shall have completed the prescribed curriculum for each of the academic sessions.
- Shall have shown good moral character and shall have demonstrated a sense of professional responsibility in the performance of all assignments as a student.
- Shall have met in full all financial obligations to the University.

In view of public and professional responsibilities, the faculty of each of the professional schools of WVU has the authority to recommend to the president of the University the removal of any student from its roles whenever, by formal decision reduced to writing, the faculty finds that the student is unfit to meet the qualifications and responsibilities of the profession.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
<b>Oral Health Sciences Courses</b>		
DENT 700	Anesthesiology	1
DENT 701	Arts & Sciences of Preventive Dentistry	2
DENT 703	Introduction to Patient Care	3
DENT 704	Operative Dentistry	4
Interprofessional Education		2
DENT 706	Interprofessional Education	
DENT 707	Introduction to Clinical Dentistry	2



DENT 710	Dental Anatomy and Occlusion	4
DENT 711	Periodontics	2
DENT 712	Dental Materials	3
DENT 713	Dental Radiology	1
DENT 714	Oral and Maxillofacial Radiology	1
DENT 715	Dental Public Health 1	2
DENT 717	Physical Diagnosis and Urgent Care	1
DENT 721	Endodontics	2
DENT 724	Advanced Treatment Planning	2
DENT 722	Tooth-Colored Restorations	4
DENT 723	Advanced Restorations and Esthetics in Dentistry	2
DENT 725	Practice Management	1
DENT 726	Removable Partial Dentures	5
DENT 729	Indirect Restorations	3
DENT 730	Dental Public Health 2	2
DENT 731	Occlusion	2
DENT 732	Advanced Endodontics 1: Biological Applications in Endodontics	1
DENT 733	Advanced Endodontics 2: Biological Applications in Endodontics	1
DENT 734	Complete Dentures	6
DENT 735	Pediatric Dentistry	1
DENT 737	Treatment Planning	3
DENT 739	Oral Surgery	1
DENT 740	Periodontics	2
DENT 744	Orthodontic Diagnosis and Treatment Planning	1
DENT 745	Principles of Orthodontics	1
DENT 746	Orthodontic Techniques	1
DENT 747	Management of Medical and Dental Emergencies	1
DENT 752	Professional Communication in Dentistry	2
DENT 754	Introduction to Dental Implantology	2
DENT 756	Fixed Prosthodontics: Part 1	4
DENT 757	Fixed Prosthodontics: Part 2	4
DENT 758	Senior Seminar	2
DENT 759	Oral Surgery	2
DENT 761	Special Needs in Dentistry	1
DENT 762	Anxiety and Pain Control	1
DENT 763	Periodontics	2
DENT 765	Orthodontics	1
DENT 766	Applied Pediatric Dentistry	2
DENT 767	Community Dentistry	1
DENT 770	Clinical Oral Radiology	4
DENT 771	Practice Management	2
DENT 774	Principles of Medicine	2
DENT 775	Practice Management	1
DENT 776	Removable Prosthodontics	5
DENT 777	Periodontics	5
DENT 778	Law & Ethics in Dentistry	2
DENT 780	Endodontics	4
DENT 781	Patient Management 1	4
DENT 782	Clinical Patient Management 2	2
DENT 783	Operative Dentistry	6
DENT 784	Oral Surgery	6
DENT 785	Orthodontics	2

DENT 786	Pediatric Dentistry	4
DENT 787	Clinical Oral Diagnosis	1
DENT 788	Clinic Completion Practicum *	3
DENT 789	Fixed Prosthodontics	5
<b>Biomedical Sciences Courses</b>		
BIOC 705	General Biochemistry	5
MICB 702	Microbiology	5
PALM 718	Dental Histology	6
PALM 724	Human Gross Anatomy	7
PALM 728	General Pathology	5
PALM 738	Oral Pathology 1	3
PALM 753	Oral Pathology 2	2
PCOL 760	Pharmacology & Therapeutics	3
PCOL 763	Applied Dental Pharmacology	2
PSIO 743	Fundamentals of Physiology	5
Total Hours		195

\*

Hours may vary based on a student's clinical progress.

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
DENT 701		2 BIOC 705		5 DENT 703	3
DENT 710		4 DENT 700		1 DENT 745	1
DENT 712		3 DENT 704		4 DENT 731	2
PALM 724		7 Interprofessional Education		2	
PSIO 743		5 DENT 706			
		DENT 715		2	
		PALM 718		6	
		21		20	6

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
DENT 722		4 DENT 707		2 DENT 725	1
DENT 729		3 DENT 714		1 DENT 746	1
DENT 734		6 DENT 737		3 DENT 763	2
DENT 735		1 DENT 739		1 DENT 724	2
DENT 756		4 DENT 744		1 DENT 721	2
MICB 702		5 DENT 757		4 DENT 788	1
PCOL 760		3 DENT 766		2	
DENT 713		1 DENT 774		2	
		PALM 728		5	
		PALM 738		3	
		DENT 711		2	
		DENT 717		1	
		DENT 726		5	
		27		32	9

### Third Year

Fall	Hours	Spring	Hours	Summer	Hours
DENT 740		2 DENT 730		2 DENT 771	2
DENT 754		2 DENT 747		1 DENT 781	4
DENT 761		1 DENT 752		2 DENT 762	1

DENT 778	2 DENT 759	2 DENT 788	2
PALM 753	2 DENT 765	1	
PCOL 763	2 DENT 723	2	
DENT 732	1 DENT 733	1	
	12	11	9

**Fourth Year**

Fall	Hours	Spring	Hours
DENT 770		4 DENT 758	2
		DENT 767	1
		DENT 775	1
		DENT 776	5
		DENT 777	5
		DENT 780	4
		DENT 782	2
		DENT 783	6
		DENT 784	6
		DENT 785	2
		DENT 786	4
		DENT 787	1
		DENT 789	5
		4	44

Total credit hours: 195

**Dual Degree**

- Doctor of Dental Surgery/Master of Business Administration (p. 491)

**DOCTOR OF DENTAL SURGERY/MASTER OF BUSINESS ADMINISTRATION**

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the SoD's DDS and Chamber's OMBA programs. Students must apply for the OMBA portion of the dual degree program by May 15th of their first year in the DDS program. Students interested in the dual degree program will have already undergone the rigorous process of being accepted into the DDS program. To be eligible for the DDS/OMBA program, students must be in good academic standing and have a letter of reference from the DDS Associate Dean for Academic Affairs. However, it is still essential that the students officially apply to the program using the online graduate application for the OMBA program. Students will be expected to submit: official transcripts, current resume, statement of purpose, and one letter of reference from the Associate Dean for Academic Affairs.
- For additional details and requirements for each program, please visit the DDS (<http://catalog.wvu.edu/graduate/schoolofdentistry/docdentalsurg/#doctoraltext>) or OMBA page ([http://catalog.wvu.edu/graduate/collegeofbusinessandconomics/businessadministration/mba\\_ohmba/](http://catalog.wvu.edu/graduate/collegeofbusinessandconomics/businessadministration/mba_ohmba/)).
- Students will develop a combined plan of study with their graduate advisors in each program.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Students must meet the academic standards of both degrees earned.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

Code	Title	Hours
<b>Online Hybrid MBA</b>		
BADM Coursework		24
DENT Coursework (share 6 credits)		
<b>Doctor of Dental Surgery</b>		
DENT Coursework		195
Total Hours		219

**ONLINE MBA REQUIREMENTS**

The Online MBA program requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up

to 2.75 by the end of the following semester, the student will be suspended from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
BADM 611	Management Information Systems	3
BADM 612	Managerial and Team Skills	3
BADM 618	Macroeconomics and Managerial Economics	3
BADM 622	Financial Statements Analysis	3
BADM 630	Corporate Leadership	3
BADM 641	Decision Analysis for Executives	3
BADM 650	Global Trade and Supply Chain	3
BADM 652	Marketing Strategy	3
Total Hours		24

## DOCTOR OF DENTAL SURGERY REQUIREMENTS

Code	Title	Hours
<b>Oral Health Sciences Courses</b>		
DENT 700	Anesthesiology	1
DENT 701	Arts & Sciences of Preventive Dentistry	2
DENT 703	Introduction to Patient Care	3
DENT 704	Operative Dentistry	4
Interprofessional Education		2
DENT 706	Interprofessional Education	
DENT 707	Introduction to Clinical Dentistry	2
DENT 710	Dental Anatomy and Occlusion	4
DENT 711	Periodontics	2
DENT 712	Dental Materials	3
DENT 713	Dental Radiology	1
DENT 714	Oral and Maxillofacial Radiology	1
DENT 715	Dental Public Health 1	2
DENT 717	Physical Diagnosis and Urgent Care	1
DENT 721	Endodontics	2
DENT 724	Advanced Treatment Planning	2
DENT 722	Tooth-Colored Restorations	4
DENT 723	Advanced Restorations and Esthetics in Dentistry	2
DENT 725	Practice Management	1
DENT 726	Removable Partial Dentures	5
DENT 729	Indirect Restorations	3
DENT 730	Dental Public Health 2	2
DENT 731	Occlusion	2
DENT 732	Advanced Endodontics 1: Biological Applications in Endodontics	1
DENT 733	Advanced Endodontics 2: Biological Applications in Endodontics	1
DENT 734	Complete Dentures	6
DENT 735	Pediatric Dentistry	1
DENT 737	Treatment Planning	3
DENT 739	Oral Surgery	1
DENT 740	Periodontics	2
DENT 744	Orthodontic Diagnosis and Treatment Planning	1
DENT 745	Principles of Orthodontics	1
DENT 746	Orthodontic Techniques	1
DENT 747	Management of Medical and Dental Emergencies	1
DENT 752	Professional Communication in Dentistry	2

DENT 754	Introduction to Dental Implantology	2
DENT 756	Fixed Prosthodontics: Part 1	4
DENT 757	Fixed Prosthodontics: Part 2	4
DENT 758	Senior Seminar	2
DENT 759	Oral Surgery	2
DENT 761	Special Needs in Dentistry	1
DENT 762	Anxiety and Pain Control	1
DENT 763	Periodontics	2
DENT 765	Orthodontics	1
DENT 766	Applied Pediatric Dentistry	2
DENT 767	Community Dentistry	1
DENT 770	Clinical Oral Radiology	4
DENT 771	Practice Management	2
DENT 774	Principles of Medicine	2
DENT 775	Practice Management	1
DENT 776	Removable Prosthodontics	5
DENT 777	Periodontics	5
DENT 778	Law & Ethics in Dentistry	2
DENT 780	Endodontics	4
DENT 781	Patient Management 1	4
DENT 782	Clinical Patient Management 2	2
DENT 783	Operative Dentistry	6
DENT 784	Oral Surgery	6
DENT 785	Orthodontics	2
DENT 786	Pediatric Dentistry	4
DENT 787	Clinical Oral Diagnosis	1
DENT 788	Clinic Completion Practicum *	3
DENT 789	Fixed Prosthodontics	5
<b>Biomedical Sciences Courses</b>		
BIOC 705	General Biochemistry	5
MICB 702	Microbiology	5
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PALM 728	General Pathology	5
PALM 738	Oral Pathology 1	3
PALM 753	Oral Pathology 2	2
PCOL 760	Pharmacology & Therapeutics	3
PCOL 763	Applied Dental Pharmacology	2
PSIO 743	Fundamentals of Physiology	5
Total Hours		195

## Major Learning Outcomes

### DOCTOR OF DENTAL SURGERY

The ultimate benefits of Competencies for the Graduating Dentist will be a more efficient and rational curriculum that is responsive to the educational mission of the School of Dentistry.

The twenty-five major competencies are divided into seven categories of thought, behavior or knowledge. Each major competency is furthered by course objectives the sum total of which, when accomplished by the student, enable acquisition of the competency. Assessment of the acquisition of each competence will occur in many ways that are appropriate to the subject matter.

#### I. Scientific and Critical Thinking

- **Scientific Process:** The graduating dentist must acquire, critically evaluate and assimilate scientific information necessary for the evaluation, diagnosis, treatment, management and prevention of oral health problems.

## **II. Patient Evaluation**

- **Examination of the Patient:** The graduating dentist must be able to perform an examination that collects the medical, physical, psychological and social information needed to evaluate the systemic and oral condition(s) of patients of all ages (infant through older adult) or with special needs (including, but not limited to, persons with developmental disabilities, complex medical problems and physical limitations) and manage behavioral factors which affect oral health and use the information to implement strategies that facilitate the delivery of oral health care.

## **III. Diagnosis**

- **Diagnosis:** The graduating dentist must be able to determine a differential, provisional or definitive diagnosis for patients of all ages by interpreting and correlating findings from the history, clinical and radiographic examination and other diagnostic tests.

## **IV. Treatment Planning**

- **Treatment Planning:** The graduating dentist must be able to develop, present, and discuss individual treatment plans for patients of all ages consistent with the patient's condition, interest, goals and capabilities.

## **V. Patient Treatment and Management (for Patients in all Stages of Life)**

- **Prevention of Disease and Maintenance of Health:** The graduating dentist must be able to provide evidence-based interprofessional care for patients of all ages that emphasizes prevention of oral diseases and supports the maintenance of existing systemic and oral health.
- **Tobacco Cessation:** The graduating dentist must be able to provide evidence-based tobacco cessation strategies.
- **Diversity Awareness:** The graduating dentist must be able to discuss cultural factors that impact oral health and provide culturally-sensitive care to persons with varying individual characteristics and backgrounds.
- **Control of Pain and Anxiety:** The graduating dentist must be able to employ techniques to manage orofacial discomfort and psychological distress.
- **Caries Management:** The graduating dentist must be able to treat and manage caries in the primary, mixed and permanent dentitions.
- **Endodontic Therapy:** The graduating dentist must be able to treat diseases of pulpal and periradicular origin in the primary, mixed and permanent dentitions.
- **Periodontal Therapy:** The graduating dentist must be able to treat and manage periodontal disease in the primary, mixed, permanent and implant dentitions utilizing a non-surgical approach.
- **Surgical Therapy:** The graduating dentist must be able to recognize, evaluate, treat and/or manage conditions requiring surgical procedures on the hard and soft tissues in patients of all ages.
- **Emergency Situations:** The graduating dentist must be able to prevent and manage dental and medical emergency situations encountered in the practice of general dentistry.
- **Occlusal/TMD Therapy:** The graduating dentist must be able to manage functional disorders of occlusal or non-occlusal origins.
- **Orthodontic Therapy:** The graduating dentist must be able to manage developmental or acquired abnormalities in esthetics or occlusion.
- **Stomatology:** The graduating dentist must be able to manage limited or common non-life threatening oral mucosal diseases or disorders.
- **Restorative/Prosthetic Therapy:** The graduating dentist must be able to convey laboratory instructions and provide restorations and prostheses that are correct in anatomical form, comfortable and functionally effective, and which satisfy the esthetic requirements of the patient or legal guardian.
- **Implant Therapy:** The graduating dentist must be able to assess, diagnose, treatment plan and treat patients requiring single tooth posterior implant-supported restorations and mandibular implant-supported overdentures.
- **Assessment of Patient Treatment:** The graduating dentist must be able to determine the prognosis for proposed patient care, evaluate the initial results of the care and determine appropriate periodic maintenance.

## **VI. Disease Prevention and Health Promotion**

- **Community Engagement:** The graduating dentist must be able to assume a leadership role in improving the oral health of individuals of all ages, families and groups in the community by planning, implementing and evaluating programs to eliminate oral health disparities through a dynamic, evidence-based and interprofessional approach to wellness.

## **VII. Practice Dynamics**

- **Ethics:** The graduating dentist must be able to discern and manage the ethicolegal issues of dental practice.
- **Dental Informatics and Research:** The graduating dentist must be able to effectively utilize computer programming, digital imaging and electronic communication to retrieve and communicate information for patient care, practice management, research and professional development purposes.
- **Professional Practice:** The graduating dentist must possess the skills to transition from dental school to various practice settings.
- **Scope of Practice:** The graduating dentist must be able to know the limit of one's competence and when to make referrals to colleagues.

- Dental Sleep Medicine: The graduating dentist must recognize and refer patients at high risk for sleep disorders and prescribe and manage oral appliances, as a member of the sleep medicine team.

## Endodontics, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The twenty-six month Master of Science in Endodontics program is designed to prepare the student for all aspects of the practice of endodontics. The clinical program is modeled on a private practice, state-of-the-art facility. The didactic program prepares the resident for a career in endodontics which includes practice, teaching, and/or research. The program is fully accredited by the Commission on Dental Accreditation (CODA). Our core belief is that a strong evidence-based scientific background prepares our residents for the challenges of the current practice environment and Diplomate status reflects the commitment to our chosen profession.

The master's thesis project is designed to obtain results suitable for publication in a reputable dental journal. The ability to read and understand past and current literature is critical to keeping abreast of the latest advances.

Graduates of the program will be well prepared to successfully pass the examination conducted by the American Board of Endodontics that leads to Board certification and status of Diplomate, American Board of Endodontics. It is a requirement for every second year resident to take the written component of the ABE and all endodontic residents are encouraged to complete the board certification process.

A stipend plus tuition waiver will be provided for graduate students in Endodontics during fall and spring semester of year two and summer semester of year three. Special fees are not covered by the tuition waiver. You must pay these each term/semester.

Inquiries concerning this program should be directed to the Office of Dental Admissions, Recruitment and Access (<https://dentistry.hsc.wvu.edu/departments/dental-admissions-recruitment-access/>). Applications will be processed by the School of Dentistry. Applicants approved for admission to the program will be notified soon after interviews are completed.

This program is accredited by the Commission on Dental Accreditation of the American Dental Association. For details about the faculty, publications, and alumni information, please visit the website at Department of Endodontics. (<https://dentistry.hsc.wvu.edu/students/master-of-science/endodontics/>)

### Program Goals

1. Education - To impart residents with in-depth knowledge of the biologic and mechanical principles involved in endodontics and to encourage continued learning throughout the professional life of the graduate.
  - a. Objective 1.1 - To graduate endodontists who will seek and successfully complete Diplomate status of the American Board of Endodontics.
  - b. Objective 1.2 - To prepare graduates to enter careers centered on the specialty of endodontics whether in practice, teaching, research, or a combination of the three.
2. Patient Care - To graduate residents who will be proficient in endodontics through adequate clinical exposure and broad-based patient case selection.
3. Research - To prepare residents able to contribute to the advancement of the endodontic specialty and the dental profession through basic biomedical, behavioral, clinical and educational research.
4. Service - To produce graduates who provide quality endodontic care to the public and who establish productive, competent and socially responsible professional careers as health care educators and providers.

### Program Curriculum

The program commences with an orientation on July 1 of the first year and runs continuously until the summer semester ends in mid August, twenty-six months later. The semesters are divided into Fall (mid-August to mid-December), Spring (January to early May) and Summer (mid-May to early August). Didactic course work at the WVU Department of Endodontics consists of lectures and seminar sessions that cover all aspects of endodontic therapy. Clinical experience includes the use and evaluation of new technology such as CBCT, microscopy, ultrasonic irrigation, and 3D modeling for surgery. In case presentation seminars, residents are continually stimulated to evaluate the care they provide so they can engage in a lifelong learning process for a career of continual improvement. Joint treatment with Pediatric Dentistry, and treatment of patients in the hospital operating room adds to the full experience of this residency. In addition, residents will have the opportunity to meet many guest lecturers from around the world who will stimulate them with new ideas.

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## **FACULTY**

### **CHAIR**

- Samuel Dorn - D.D.S., C.A.G.S.  
Fairleigh Dickinson University

### **GRADUATE PROGRAM DIRECTOR**

- Mark A. Byron - D.D.S., M.S.  
West Virginia University

### **ASSISTANT PROFESSOR**

- Michael S. Cavender - D.D.S.  
Boston University

## **Admissions**

The program's requirements are as follows:

- Must have passed the National Board Dental Examination - Part 1 at the time of application and Part 2 upon entrance to the program or the Integrated Exam (INBDE).
- Must have earned a D.M.D. or D.D.S. degree or its equivalent.
- Must be proficient in the English language (<https://graduateadmissions.wvu.edu/information-for/international-students/>) and report the most recent TOEFL score (if foreign applicant from a non-English speaking country).
- Must display evidence of scholastic and clinical achievement that would indicate the applicant's ability to progress in a program of this nature. A minimum grade-point average of 3.0 is required.
- Must apply to the program through the Postdoctoral Application Support Service (PASS) (<https://adea.org/PASSapp/applicants/>) and have all application materials submitted by July 15.
- Must complete and submit a WVU Graduate Application if invited for an interview.
- Must participate in an interview.
- Must consent to and pass a criminal background investigation prior to final acceptance.
- Must submit documentation of all required immunizations. A complete list is available on the School of Dentistry website.
- Must become familiar with the West Virginia University School of Dentistry's Policy and Procedure for Bloodborne Pathogens and Infectious Diseases.
- Must meet federal and university standards regarding the Responsible Conduct of Research.
- Must be eligible for and obtain a West Virginia dental license or a dental resident/intern permit prior to the first day of program orientation.

## **ADMISSION REQUIREMENTS 2024-2025**

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8016

## **Degree Requirements**

- Fulfill University requirements for graduate study.
- Complete 26 months (two academic years plus a summer session) of consecutive full-time advanced study and clinical training at the School of Dentistry.
- Complete an approved master's thesis based on original research completed during the course of study in an area related to endodontics.
- Pass a final oral examination.
- Complete all didactic and clinical work in the required curriculum successfully.
- Demonstrate satisfactory clinical competency in endodontics.
- Complete the written portion of the American Board of Endodontics examination.
- Complete a minimum of 84 credit hours, including 60 hours of endodontic courses, a minimum of 7 hours of selected basic sciences subjects, 5 hours teaching practicum, and 12 hours devoted to research/thesis.
- Achieve a 3.0 GPA or an overall competence in the student's field. A minimum grade of B must be earned in all work attempted in the master's program. A grade of C or below in two courses will require a faculty review of the student's progress. A third C or below will result in suspension from the program.



## CURRICULUM REQUIREMENTS

Code	Title	Hours
Minimum GPA of 3.0 is required.		
Minimum grade of B is required in all courses. *		
<b>Biomedical Sciences Courses</b>		
DENT 601	Advanced Oral Microbiology	3
PALM 601	Special Studies in Oral Pathology	2
PALM 716	Craniofacial Growth and Maturation	1
PCOL 765	Advanced Biomedical Sciences: Applied Pharmacology	1
<b>Endodontic Courses</b>		
DENT 600	Advanced Oral Surgery	3
ENDO 681	Fundamentals of Endodontics	2
ENDO 682	Fundamentals of Endodontics Laboratory	2
Endodontic Classic Literature Review		7
ENDO 683	Endodontic Classic Literature Review	7
Endodontic Current Literature Review		7
ENDO 684	Endodontic Current Literature Review	7
Endodontic Case Review and Analysis		7
ENDO 685	Endodontic Case Review and Analysis	7
ENDO 688	Clinical Endodontics (Repeated)	30
Clinical Management of Medically Compromised Patients		2
PERI 644	Clinical Management of Medically Compromised Patients	2
<b>Teaching Practicum</b>		5
ENDO 690	Teaching Practicum	5
<b>Research/Thesis</b>		
DENT 686	Applied Statistics in Dentistry	3
DENT 687	Research Methods	1
ENDO 697	Research	8
Master's Thesis		
Oral Examination		
Demonstrate clinical competency in endodontics		
Total Hours		84

## SUGGESTED PLAN OF STUDY

First Semester	Hours
DENT 600	1
ENDO 681	2
ENDO 682	2
ENDO 683	1
ENDO 684	1
ENDO 685	1
ENDO 697	1
	9
Second Semester	Hours
DENT 600	2
DENT 686	3
ENDO 683	1
ENDO 684	1
ENDO 685	1
ENDO 688	5
ENDO 697	1
PALM 601	2

PCOL 765	1
	17
<b>Third Semester</b>	<b>Hours</b>
DENT 601	3
DENT 687	1
ENDO 683	1
ENDO 684	1
ENDO 685	1
ENDO 688	5
ENDO 690	1
ENDO 697	1
	14
<b>Fourth Semester</b>	<b>Hours</b>
ENDO 683	1
ENDO 684	1
ENDO 685	1
ENDO 688	5
ENDO 690	1
ENDO 697	1
PALM 716	1
	11
<b>Fifth Semester</b>	<b>Hours</b>
ENDO 683	1
ENDO 684	1
ENDO 685	1
ENDO 688	5
ENDO 690	1
ENDO 697	1
PERI 644	1
	11
<b>Sixth Semester</b>	<b>Hours</b>
ENDO 683	1
ENDO 684	1
ENDO 685	1
ENDO 688	5
ENDO 690	1
ENDO 697	1
PERI 644	1
	11
<b>Seventh Semester</b>	<b>Hours</b>
ENDO 683	1
ENDO 684	1
ENDO 685	1
ENDO 688	5
ENDO 697	2
ENDO 690	1
	11
Total credit hours: 84	

## Major Learning Outcomes

### ENDODONTICS

- Provide the education and training necessary for graduate dentists to practice in their specialty.
- Provide the education and training necessary for a specialist to achieve Board Certification.

## Orthodontics, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The School of Dentistry and the Department of Orthodontics at West Virginia University offer a 34-month (three academic years) advanced education Master of Science program. The program models a private practice atmosphere with state-of-the-art clinical facilities. The curriculum is centered on daily clinical seminars and private instruction with each individual class. Also included are regularly scheduled orthognathic surgery conferences and seminars with other dental and medical specialists.

A stipend plus tuition waiver will be provided for graduate students in Orthodontics at the end of the second year for summer session and fall/spring semesters of the third year. Special fees are not covered by the tuition waiver. You must pay special fees each term/semester.

Inquiries concerning this program should be directed to the [Office of Admissions, Recruitment and Access](#). This program is accredited by the Commission on Dental Accreditation of the American Dental Association. Applications will be processed by the School of Dentistry. For details about the faculty, publications, and alumni information, please visit the Department website at Department of Orthodontics. (<https://dentistry.hsc.wvu.edu/departments/orthodontics/>)

### Program Goals

The Advanced Education Program is designed to develop skilled practitioners who can easily transition into and manage a busy orthodontic practice. The goal of this program is to teach a variety of treatment mechanics that are scientifically valid and foster decision making skills based on treatment needed on a case-by-case basis. Clinical experiences are diverse, including cleft lip and palate and orthognathic surgery cases.

An original master's thesis project is required and is designed to obtain results suitable for publication in a reputable dental journal. The curriculum focuses on didactic and clinical materials to prepare residents for taking the American Board of Orthodontics (ABO) Examinations. Classes pertaining to the written board are given throughout the three-year program. It is a requirement for every third year resident to take and pass the written component of the ABO, and all residents are encouraged to complete the board certification process.

### Program Curriculum

The 34-month Master in Science program in Orthodontics begins July 1. First-year residents begin an intensive Orthodontic Technique course on July 1 and begin seeing new patients in mid-July. In August, first year residents begin a full clinic schedule which includes morning and afternoon clinic sessions.

Didactic course work at the WVU Department of Orthodontics consists of faculty led, resident taught lectures and seminar sessions for an average of two hours each day. Seminar topics range from patient diagnosis and treatment planning to practice management and financial planning. In addition, evidence-based products and techniques are reviewed.

Clinical work simulates the private practice environment. There are three dental assistants and a patient service coordinator available in the clinic to aid residents during clinic sessions. All orthodontic records are computerized. Diagnosis and treatment planning can be completed entirely in the digital realm. Billing, scheduling, and record storage is accomplished using a commercial dental office management system. The orthodontic clinic is completely paperless to maximize clinical efficiency so residents are able to increase their patient experiences.

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## FACULTY

### CHAIR

- Peter Ngan - D.M.D.  
Harvard University

### GRADUATE PROGRAM DIRECTOR

- Khaled AlSharif - B.D.S., M.S.  
Riyadh Colleges of Dentistry and Pharmacy

## PROFESSOR

- Chris A. Martin - D.D.S., M.S.  
West Virginia University

## Admissions

The program's admission requirements are as follows:

- Must have passed National Board Dental Examination - Part 1 at the time of application and Part 2 upon entrance to the program or the Integrated Exam (INBDE).
- Must have earned a D.M.D./D.D.S. degree, or its equivalent.
- Must report GRE scores.
- Must be proficient in the English language (<https://graduateadmissions.wvu.edu/information-for/international-students/>) and provide a TOEFL score (if you are a foreign applicant).
- Must display evidence of scholastic and clinical achievement that would indicate the applicant's ability to progress in a program of this nature. A minimum grade point average of 3.0 is required.
- Must apply to the program through the Postdoctoral Application Support Service (PASS) (<https://adea.org/PASSapp/applicants/>) and have all application materials submitted by September 15.
- Must apply to National Matching Services (<https://natmatch.com/dentres/applicants/>) and obtain a MATCH number to be considered of admission to the program. Applicants participating in application to both Match and non-Match programs will not be considered for admission.
- Must complete and submit a WVU Graduate Application if invited for an interview.
- Must participate in an onsite interview.
- Must consent and pass a criminal background investigation prior to final acceptance.
- Must submit documentation of required immunizations. A complete list is available on the School of Dentistry website.
- Must become familiar with the West Virginia University School of Dentistry's policy and procedure for Bloodborne Pathogens and Infectious Diseases (<https://dentistry.hsc.wvu.edu/media/1380/wvu-school-of-dentistry-policy-on-dental-health-care-workers-and-patients-infected-with-bloodborne-diseases-2009.pdf>).
- Must meet federal and university standards regarding the Responsible Conduct of Research.
- Must be eligible for and obtain a West Virginia dental license or dental resident/intern permit prior to the first day of program orientation.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8018

## Degree Requirements

- Fulfill University requirements for graduate study.
- Complete 34 months (three academic years) of consecutive full-time advanced study and clinical training at the School of Dentistry.
- Complete an approved master's thesis based on original research completed during the course of study in an area related to Orthodontics.
- Pass the Mock ABO clinical examination which includes a written and an oral examination.
- Pass the written component of the ABO examination.
- Complete all didactic and clinical work in the required curriculum successfully.
- Demonstrate satisfactory clinical competency in orthodontics.
- Complete a minimum of 89 credit hours, including 63 hours of orthodontic courses and a minimum of 5 hours of selected basic science subjects, 6 hours of teaching practicum, and 15 hours of research/thesis.
- Achieve a 3.0 GPA or an overall competence in the student's field. A minimum grade of B must be earned in all work attempted in the master's program. A grade of C or below in two courses will require a faculty review of the student's progress. A third C or below will result in suspension from the program.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
<b>Biomedical Sciences Courses</b>		
DENT 601	Advanced Oral Microbiology	1
PALM 601	Special Studies in Oral Pathology	2
PALM 716	Craniofacial Growth and Maturation	1
PCOL 765	Advanced Biomedical Sciences: Applied Pharmacology	1

Orthodontic Courses		
ORTH 616	Biomechanics	2
Orthodontic Technique		4
ORTH 617	Orthodontic Technique	
ORTH 618	Orthodontic Materials	1
Orthodontic Diagnosis		12
ORTH 619	Orthodontic Diagnosis	
ORTH 620	Cephalometrics	1
Orthodontic Mechanics		8
ORTH 621	Orthodontic Mechanics (Repeated)	
ORTH 623	Growth and Development	2
ORTH 625	Orthodontic Seminar	1
Orthodontic Clinic		22
ORTH 626	Orthodontic Clinic (Repeated)	
Surgical Orthodontics		2
ORTH 627	Surgical Orthodontics (Repeated)	
Early Orthodontic Treatment		1
ORTH 628	Early Orthodontic Treatment (Repeated; only offered in odd years)	
Orthodontic Patient Management		2
ORTH 629	Orthodontic Patient Management (Repeated)	
ORTH 630	Craniofacial Anomalies	1
Journal Club		2
ORTH 631	Journal Club	
ORTH 632	Dentofacial Orthopedics	1
Orthodontics-Periodontics Seminar		1
ORTH 633	Orthodontics-Periodontics Seminar (Repeated; only offered in even years)	
Teaching Practicum		
ORTH 690	Teaching Practicum (Repeated)	6
Research/Thesis		
DENT 686	Applied Statistics in Dentistry	3
DENT 687	Research Methods	1
ORTH 697	Research (Research)	11
Master's Thesis		
Oral Examination		
Demonstrate clinical competency in orthodontics		
Total Hours		89

## SUGGESTED PLAN OF STUDY

First Semester	Hours
ORTH 617	2
ORTH 618	1
ORTH 619	3
ORTH 621	2
ORTH 625	1
	9
Second Semester	Hours
PALM 601	2
ORTH 616	2
ORTH 617	2
ORTH 619	1
ORTH 621	1
ORTH 626	1

ORTH 632	1
DENT 686	3
	13
<b>Third Semester</b>	<b>Hours</b>
DENT 601	1
DENT 687	1
ORTH 619	2
ORTH 620	1
ORTH 621	1
ORTH 623	2
ORTH 626	3
	11
<b>Fourth Semester</b>	<b>Hours</b>
PALM 716	1
ORTH 619	2
ORTH 626	4
ORTH 631	1
ORTH 697	1
	9
<b>Fifth Semester</b>	<b>Hours</b>
PCOL 765	1
ORTH 619	1
ORTH 621	1
ORTH 626	3
ORTH 627	1
ORTH 628	1
ORTH 697	1
	9
<b>Sixth Semester</b>	<b>Hours</b>
ORTH 619	1
ORTH 621	1
ORTH 626	5
ORTH 697	2
	9
<b>Seventh Semester</b>	<b>Hours</b>
ORTH 626	3
ORTH 631	1
ORTH 690	2
ORTH 697	3
	9
<b>Eighth Semester</b>	<b>Hours</b>
ORTH 619	1
ORTH 621	1
ORTH 626	2
ORTH 629	1
ORTH 690	2
ORTH 697	2
ORTH 628	1
	10
<b>Ninth Semester</b>	<b>Hours</b>
ORTH 619	1
ORTH 621	1

ORTH 626	1
ORTH 627	1
ORTH 629	1
ORTH 630	1
ORTH 690	2
ORTH 697	2
	10

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Total credit hours: 89

## Major Learning Outcomes

### ORTHODONTICS

- Provide the education and training necessary for graduate dentists to practice in their specialty.
- Provide the education and training necessary for a specialist to achieve Board Certification.

## Periodontics, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The School of Dentistry and the Department of Periodontics offer a program of advanced study and clinical training leading to the degree of Master of Science. The program requires a minimum of thirty-four months (three academic years) of full time residency in the School of Dentistry. It is designed to qualify dentists for careers in periodontic clinical practice, teaching and research.

A stipend plus tuition waiver will be provided for graduate students in Periodontics at the end of the second year for summer session and fall/spring semesters of the third year. Special fees are not covered by the tuition waiver. You must pay special fees each term/semester.

Inquiries concerning this program should be directed to the Office of Dental Admissions, Recruitment and Access (<https://dentistry.hsc.wvu.edu/departments/dental-admissions-recruitment-access/>). Applications will be processed by the School of Dentistry. Applicants approved for admission to the program will be notified soon after interviews have been completed.

This program is accredited by the Commission on Dental Accreditation of the American Dental Association. For details about the faculty, publications and alumni information, please visit the Department of Periodontics (<http://dentistry.hsc.wvu.edu/departments/periodontics/>) website.

### Program Goals

The postgraduate program is designed to train well qualified dentists in all aspects of periodontics. The program is organized into five components: biomedical science didactics, periodontal science didactics, clinical science activity, research and teaching. The department philosophy is to provide comprehensive training that encompasses all aspects of periodontal and implant therapy. The program qualifies the student for examination and certification by the American Board of Periodontology.

The Master of Science degree program requires the development of an in-depth research problem which must be reported in the form of a thesis.

### Program Curriculum

#### FIRST-YEAR PROGRAM

In the first year of the program, the resident is introduced to the specialty of periodontics, its scope and its history. The resident receives instruction in the scientific and clinical aspects of periodontics and implant dentistry.

Seminars on current and classic periodontal literature will be offered in addition to case presentations and interdisciplinary seminars. The residents will also participate in didactic courses in biostatistics and research methodology.

The didactic activity will be combined with supervised patient care.

#### SECOND-YEAR PROGRAM

The second year of the program is a continuation of the first year of training, with increased emphasis on the clinical treatment of patients and the advanced concepts of periodontics. The resident will spend more time conducting a research study and in the development of a thesis.

## THIRD-YEAR PROGRAM

Throughout the training, the resident is encouraged to be inquisitive regarding all phases of treatment and to use initiative to be resourceful. The senior resident should become a critic of his or her own accomplishments and be able to support clinical decisions with references from the literature. Completion of a research problem and thesis are required and the resident must successfully defend the thesis at the Committee level. The senior resident will be expected to present lectures and patient presentations in preparation for Board certification and future teaching responsibilities. Satisfactory completion of this year of training qualifies the resident for examination and certification by the American Board of Periodontology.

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## FACULTY

### CHAIR AND GRADUATE PROGRAM DIRECTOR

- Arif Salman - BDS., MDSc

### ASSISTANT PROFESSOR

- Shorouk Elnagdy - BDS., MD

## Admissions

The program's admission requirements are as follows:

- Must have passed National Board Dental Examination - Part I at the time of application and Part 2 upon entrance to the program or the Integrated Exam (INBDE).
- Must have earned a D.M.D./D.D.S. degree, or its equivalent.
- Must be proficient in the English language (<https://graduateadmissions.wvu.edu/information-for/international-students/>) or provide a recent TOEFL score (if from a non-English speaking country).
- Must display evidence of scholastic and clinical achievement that would indicate the applicant's ability to progress in a program of this nature. A minimum grade point average of 3.0 is required.
- Must apply to the program through the Postdoctoral Application Support Service (PASS) (<https://adea.org/PASSapp/applicants/>) and have all application materials in PASS by September 15.
- Must apply to National Match Services (<https://natmatch.com/dentres/applicants/>) and obtain a MATCH number to be considered for admission to the program.
- Must complete and submit a WVU Graduate Application if invited for an interview.
- Must participate in an interview.
- Must consent to and pass a criminal background investigation prior to final acceptance.
- Must submit documentation of required immunizations. A complete list is available on the School of Dentistry website.
- Must become familiar with the West Virginia School of Dentistry's policy and procedure for Bloodborne Pathogens and Infectious Diseases.
- Must meet federal and university standards regarding the Responsible Conduct of Research.
- Must be eligible for and obtain a West Virginia dental license or dental resident/intern permit prior to the first day of program orientation.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8019

## Degree Requirements

- Fulfill University requirements for graduate study.
- Complete 34 months (three academic years) of consecutive full-time advanced study and clinical training at the School of Dentistry.
- Complete an approved master's thesis based on original research completed during the course of study in an area related to Periodontics.
- Pass the American Board of Periodontology written qualifying examination.
- Pass the Mock American Board of Periodontology oral examination.
- Pass the Written American Board of Periodontology Written Exam with a score > 60 percentile.
- Complete all didactic and clinical work in the required curriculum successfully.
- Demonstrate satisfactory clinical competency in periodontics.
- Complete a minimum of 93 credit hours, including 70 hours of periodontic courses and a minimum of 8 hours of selected basic science subjects, 4 hours of teaching practicum, and a research/thesis (11 hours).



- Achieve a 3.0 GPA or an overall competence in the student's field. A minimum grade of B must be earned in all work attempted in the master's program. A grade of C or below in two courses will require a faculty review of the student's progress. A third C or below will result in suspension from the program.

## Curriculum Requirements

Code	Title	Hours
Minimum GPA of 3.0 is required.		
Minimum grade of B- is required in all courses.		
<b>Biomedical Sciences</b>		
DENT 600	Advanced Oral Surgery	3
DENT 601	Advanced Oral Microbiology	1
PALM 601	Special Studies in Oral Pathology	2
PALM 716	Craniofacial Growth and Maturation	1
PCOL 765	Advanced Biomedical Sciences: Applied Pharmacology	1
<b>Periodontic Courses</b>		
ORTH 633	Orthodontics-Periodontics Seminar	1
Core Classic Literature Review		4
PERI 640	Core Classic Literature Review	
Classic Periodontics Literature Review		12
PERI 642	Classic Peri Lit Rev	
Clinical Management of Medically Compromised Patients		6
PERI 644	Clinical Management of Medically Compromised Patients	
Clinical Periodontics		35
PERI 650	Clinical Periodontics	
Implant Dentistry		6
PERI 662	Implant Dentistry	
Advanced Periodontal/Implant Surgery		6
PERI 664	Introduction to Advanced Periodontal/Implant Surgery	
Teaching Practicum		4
DENT 690	Teaching Practicum	
<b>Research/Thesis</b>		
DENT 686	Applied Statistics in Dentistry	3
DENT 687	Research Methods	1
DENT 697	Research	7
Total Hours		93

## SUGGESTED PLAN OF STUDY

First Semester	Hours
DENT 600	1
PERI 640	2
PERI 650	4
PERI 664	2
	9
Second Semester	Hours
DENT 600	2
DENT 686	3
PALM 601	2
PCOL 765	1
PERI 642	2
PERI 644	1
PERI 650	3

PERI 662	1
	15
<b>Third Semester</b>	<b>Hours</b>
DENT 601	1
DENT 687	1
PERI 642	2
PERI 644	1
PERI 650	4
PERI 662	1
	10
<b>Fourth Semester</b>	<b>Hours</b>
DENT 697	1
PALM 716	1
PERI 640	2
PERI 650	3
PERI 664	2
	9
<b>Fifth Semester</b>	<b>Hours</b>
DENT 690	1
DENT 697	1
ORTH 633	1
PERI 642	2
PERI 644	1
PERI 650	4
PERI 662	1
	11
<b>Sixth Semester</b>	<b>Hours</b>
DENT 690	1
DENT 697	1
PERI 642	2
PERI 644	1
PERI 650	4
PERI 662	1
	10
<b>Seventh Semester</b>	<b>Hours</b>
DENT 697	2
PERI 650	5
PERI 664	2
	9
<b>Eighth Semester</b>	<b>Hours</b>
DENT 690	1
DENT 697	1
PERI 642	2
PERI 644	1
PERI 650	4
PERI 662	1
	10
<b>Ninth Semester</b>	<b>Hours</b>
DENT 690	1
DENT 697	1
PERI 642	2
PERI 644	1

PERI 650	4
PERI 662	1
	10

Total credit hours: 93

## Major Learning Outcomes

### PERIODONTICS

- Provide the education and training necessary for graduate dentists to practice in their specialty.
- Provide the education and training necessary for a specialist to achieve Board Certification.

## Prosthodontics, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The School of Dentistry and the Department of Restorative Dentistry offer a program of advanced study and clinical training leading to the degree of Master of Science. The program requires a minimum of 34 months (three academic years) of full-time residency in the School of Dentistry. It is designed to qualify dentists for careers in prosthodontic clinical practice, teaching, and research.

A stipend plus tuition waiver will be provided for graduate students in Prosthodontics at the end of the second year summer session and fall/spring semesters of the third year. Special fees are not covered by the tuition waiver. You must pay special fees each term/semester.

Inquiries concerning this program should be directed to the Office of Dental Admissions and Recruitment. Applications will be processed by the School of Dentistry. Applicants approved for admission to the program will be notified by the MATCH program if they are selected for admission and a formal letter will be sent from the Office of Dental Admissions.

This program is accredited by the Commission on Dental Accreditation of the American Dental Association. For details about the faculty, publications and alumni information, please visit the Department website at Prosthodontics Program. (<https://dentistry.wvu.edu/students/master-of-science/prosthodontics/>)

### Program Goals

The Advanced Education Program is designed to train well qualified dentists in all aspects of prosthodontics. Advanced training in prosthodontics consists of an integrated education program designed to provide both knowledge in the dentally applied basic sciences and experiences in the clinical science of prosthodontics. These include but are not limited to, complete denture prosthodontics, removable partial denture prosthodontics, fixed partial denture prosthodontics, maxillofacial prosthetics, and surgical and prosthodontic dental implantology. A series of structured didactic and clinical courses provide the student with a level of knowledge and skill development necessary to practice prosthodontics as a specialty and to prepare for a career in teaching and research. The program qualifies the student for examination and certification by the American Board of Prosthodontics.

The Master of Science degree program requires the development of an in-depth research problem which must be reported in the form of a thesis.

### Program Curriculum

#### FIRST-YEAR PROGRAM

In the first year of the program, the resident is introduced to the specialty of prosthodontics, its scope, and its history. The resident receives instruction in the laboratory and clinical aspects of complete dentures, removable partial dentures, fixed partial dentures, maxillofacial prosthetics, implant prosthodontics, implant surgery and treatment of temporomandibular dysfunction. The resident is required to know and use the materials and techniques for fabricating oral prostheses and to become proficient in performing all phases of laboratory work related to clinical patients.

The resident will participate in seminars on specific topics in prosthodontics and on the relationship of prosthodontics to the other specialties. The resident will study biostatistics, research methodology, and select an in-depth research problem for thesis development and publication.

#### SECOND-YEAR PROGRAM

The second year of the program is a continuation of the first year of training, with increased emphasis on the clinical treatment of patients and the advanced concepts of prosthodontics. The resident will spend more time conducting a research study and in the development of a thesis. The resident will also expand their clinical skills with the inclusion of surgical implant placement and restoration as well as modern digital dentistry principles to support patient outcomes.

## THIRD-YEAR PROGRAM

The third year of the program continues with more advanced clinical treatment and concepts of prosthodontics, including the completion of a master's thesis and defense. The resident will spend a significant amount of time treating older adult patients. The resident will also be trained to identify patients that meet the current requirements for presentation to the American Board of Prosthodontics.

Throughout the training, the resident is encouraged to be inquisitive regarding all phases of treatment and to use initiative to be resourceful. The senior resident should become a severe critic of his or her own accomplishments and be able to support clinical decisions with references from the literature. Completion of a research problem and thesis are required and the resident must successfully defend the thesis at the Committee level. The Senior resident will be expected to present lectures and patient presentations in preparation for Board certification and future teaching responsibilities. Satisfactory completion of this year of training qualifies the resident for examination and certification by the American Board of Prosthodontics.

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## FACULTY

### CHAIR

- Lauren Godwin - D.D.S.  
West Virginia University

### GRADUATE PROGRAM DIRECTOR

- Shelby Alexander - D.D.S., M.S.  
West Virginia University

### ASSISTANT PROFESSOR

- Bryan Dye - D.D.S., M.S.  
West Virginia University

## Admissions

The program's admission requirements are as follows:

- Must have passed National Dental Board Examination - Part I at the time of application and Part 2 upon entrance to the program or the Integrated Exam (INBDE).
- Must have earned a D.M.D./D.D.S. degree, or its equivalent.
- Must be proficient in the English language (<https://graduateadmissions.wvu.edu/information-for/international-students/>) or provide a recent TOEFL score (if foreign applicant).
- Must display evidence of scholastic and clinical achievement that would indicate the applicant's ability to progress in a program of this nature. A minimum grade point average of 3.0 is required.
- Must apply to the program through the Postdoctoral Application Support Service (PASS) (<https://adea.org/PASSapp/applicants/>) and have all application materials in PASS by September 15.
- Must apply to National Matching Services (<https://natmatch.com/dentres/applicants/>) and obtain a MATCH number to be considered for admission to the program.
- Must complete and submit a WVU Graduate Application if invited for an interview.
- Must participate in an interview.
- Must consent to and pass a criminal background investigation prior to final acceptance.
- Must submit documentation of required immunizations. A complete list is available on the School of Dentistry website.
- Must become familiar with the West Virginia School of Dentistry's policy and procedure for Bloodborne Pathogens and Infectious Diseases.
- Must meet federal and university standards regarding the Responsible Conduct of Research.
- Must be eligible for and obtain a West Virginia dental license or a dental resident/intern permit prior to the first day of program orientation.

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8020

## Degree Requirements

- Fulfill University requirements for graduate study.
- Complete 34 months (three academic years) of consecutive full-time advanced study and clinical training at the School of Dentistry.
- Complete an approved master's thesis based on original research completed during the course of study in an area related to Prosthodontics.

- Pass a final oral examination.
- Complete all didactic and clinical work in the required curriculum successfully.
- Demonstrate satisfactory clinical competency in Prosthodontics.
- Complete a minimum of 90 credit hours. This includes 67 credit hours of Prosthodontic courses, a minimum of 5 credit hours of selected basic science subjects, 6 hours of teaching practicum, and 12 hours devoted to research/thesis.
- Achieve a 3.0 GPA or an overall competence in the student's field. A minimum grade of B must be earned in all work attempted in the master's program. A grade of C or below in two courses will require a faculty review of the student's progress. A third C or below will result in suspension from the program.

## Curriculum Requirements

Code	Title	Hours
Minimum GPA of 3.0 required.		
Minimum grade of B required in each course.		
<b>Biomedical Sciences</b>		
DENT 601	Advanced Oral Microbiology	1
PALM 601	Special Studies in Oral Pathology	2
PALM 716	Craniofacial Growth and Maturation	1
PCOL 765	Advanced Biomedical Sciences: Applied Pharmacology	1
<b>Prosthodontic Courses</b>		
DENT 600	Advanced Oral Surgery	3
Clinical Management of Medically Compromised Patients		2
PERI 644	Clinical Management of Medically Compromised Patients	
Implant Dentistry		6
PERI 662	Implant Dentistry	
PROS 675	Introduction to Advanced Prosthodontics	2
PROS 676	Introduction to Advanced Complete Dentures Prosthodontics	2
PROS 677	Introduction to Removable Prosthodontics	1
PROS 678	Introduction to Fixed Prosthodontic Theory	2
Prosthodontic Classic Literature Review		9
PROS 680	Prosthodontic Classic Literature Review	
Prosthodontic Current Literature Review		9
PROS 681	Prosthodontic Current Literature Review	
PROS 688	Advanced Clinical Prosthodontics (Repeated)	31
<b>Teaching Practicum</b>		
DENT 690	Teaching Practicum (Repeated)	6
<b>Research/Thesis</b>		
DENT 686	Applied Statistics in Dentistry	3
DENT 687	Research Methods	1
DENT 697	Research	8
Master's Thesis		
Oral Examination		
Demonstrate satisfactory clinical competency		
Total Hours		90

## Suggested Plan of Study

First Semester	Hours
DENT 600	1
PROS 675	2
PROS 680	1
PROS 681	1
PROS 688	4
	9

<b>Second Semester</b>	<b>Hours</b>	
DENT 600	2	
DENT 686	3	
PERI 644	1	
PERI 662	1	
PCOL 765	1	
PROS 676	2	
PROS 680	1	
PROS 681	1	
PROS 688	2	
	14	
<b>Third Semester</b>	<b>Hours</b>	
DENT 601	1	
DENT 687	1	
PERI 644	1	
PERI 662	1	
PROS 677	1	
PROS 678	2	
PROS 688	2	
PROS 680	1	
PROS 681	1	
	11	
<b>Fourth Semester</b>	<b>Hours</b>	
DENT 697	1	
PROS 680	1	
PALM 716	1	
PROS 681	1	
PROS 688	5	
	9	
<b>Fifth Semester</b>	<b>Hours</b>	
DENT 697	1	
DENT 690	1	
PALM 601	2	
PERI 662	1	
PROS 680	1	
PROS 681	1	
PROS 688	3	
	10	
<b>Sixth Semester</b>	<b>Hours</b>	
DENT 697	2	
PERI 662	1	
PROS 680	1	
PROS 681	1	
PROS 688	4	
	9	
<b>Seventh Semester</b>	<b>Hours</b>	
DENT 690	2	
DENT 697	1	
PROS 680	1	
PROS 681	1	
PROS 688	4	
	9	

<b>Eighth Semester</b>	<b>Hours</b>
DENT 690	2
DENT 697	1
PERI 662	1
PROS 680	1
PROS 681	1
PROS 688	4
	10
<b>Ninth Semester</b>	<b>Hours</b>
DENT 690	1
DENT 697	2
PERI 662	1
PROS 680	1
PROS 681	1
PROS 688	3
	9

Total credit hours: 90

## Major Learning Outcomes

### PROSTHODONTICS

- Provide the education and training necessary for graduate dentists to practice in their specialty.
- Provide the education and training necessary for a specialist to achieve Board Certification.

# Engineering and Mineral Resources- Benjamin M. Statler College of

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## Contact Information

Website: <http://www.statler.wvu.edu>

E-mail: [statler-info@mail.wvu.edu](mailto:statler-info@mail.wvu.edu)

Phone: (304) 293-4821

## Degrees Offered

- Master of Science, Aerospace Engineering (M.S.A.E.)
- Master of Science, Biomedical Engineering (M.S.Bm.E.)
- Master of Science, Chemical Engineering (M.S.Ch.E.)
- Master of Science, Civil Engineering (M.S.C.E.)
- Master of Science, Computer Science (M.S.C.S.)
- Master of Science, Electrical Engineering (M.S.E.E.)
- Master of Science, Engineering (M.S.E.)
- Master of Science, Engineering Management (M.S.)
- Master of Science, Industrial Engineering (M.S.I.E.)
- Master of Science, Materials Science and Engineering (M.S.M.S.E)
- Master of Science, Mechanical Engineering (M.S.M.E.)
- Master of Science, Mining Engineering (M.S.Min.E.)
- Master of Science, Petroleum and Natural Gas Engineering (M.S.P.N.G.E.)
- Master of Science, Safety Management (M.S.)\*
- Master of Science, Software Engineering (M.S.S.E)
- Doctor of Philosophy, Aerospace Engineering (Ph.D.)
- Doctor of Philosophy, Biomedical Engineering (Ph.D.)
- Doctor of Philosophy, Chemical Engineering (Ph.D.)
- Doctor of Philosophy, Civil Engineering (Ph.D.)
- Doctor of Philosophy, Computer Science (Ph.D.)
- Doctor of Philosophy, Computer Engineering (Ph.D.)
- Doctor of Philosophy, Electrical Engineering (Ph.D.)
- Doctor of Philosophy, Industrial Engineering (Ph.D.)
- Doctor of Philosophy, Materials Science and Engineering (Ph.D.)
- Doctor of Philosophy, Mechanical Engineering (Ph.D.)
- Doctor of Philosophy, Mining Engineering (Ph.D.)
- Doctor of Philosophy, Occupational Safety and Health (Ph.D.)
- Doctor of Philosophy, Petroleum and Natural Gas Engineering (Ph.D.)

\*Accredited by the Applied and Natural Sciences Accreditation Commission of ABET, <http://www.abet.org>.

## Degree Programs

The Benjamin M. Statler College of Engineering and Mineral Resources (Statler College) graduate programs are administered through seven academic departments:

- Chemical and Biomedical Engineering
- Lane Department of Computer Science and Electrical Engineering
- Industrial and Management Systems Engineering
- Mechanical and Aerospace Engineering
- Mining Engineering
- Petroleum and Natural Gas Engineering
- Wadsworth Department of Civil and Environmental Engineering



Statler College facilities are primarily housed on the Evansdale campus in the Engineering Sciences Building, the Mineral Resources Building, the Engineering Research Building, and the Advanced Engineering Research Building. These buildings house state-of-the-art research facilities, well-equipped teaching laboratories, computer classrooms, and offices for the faculty and administration of the graduate programs.

The Master of Science in Engineering (M.S.E.) degree is administered at the college level. This degree can be pursued by students seeking a broad or more diverse advanced degree in engineering, or who may not have the in-depth background required for the designated master's degree programs.

## ADMINISTRATION

### DEAN

- Pedro J. Mago - Ph.D. (University of Florida)

### ASSOCIATE DEAN FOR ACADEMICS AND STUDENT PERFORMANCE

- Robin S. Hissam - Ph.D. (University of Delaware)

### ASSOCIATE DEAN FOR RESEARCH

- Xingbo Liu - Ph.D. (University of Science & Technology, Beijing)

### ASSOCIATE DEAN FOR STUDENT, FACULTY, AND STAFF ENGAGEMENT

- Cerasela Zoica Dinu - Ph.D. (Dresden University of Technology, Germany)

### ASSISTANT DEAN FOR ADMINISTRATION

- R. Jason Dean - M.A. (West Virginia University)

## Admissions

A student desiring to take courses for graduate credit in the college must comply with the appropriate university regulations for graduate study. To become enrolled in a Statler College graduate program, a prospective student must apply for admission through the Office of Admissions and indicating the student's choice of major. Acceptance will depend upon review of the student's academic background, required documentation and available positions in the major.

To enter any of the degree programs, a prospective student must first submit to the WVU Office of Admissions a completed online application, and include:

- Original, official transcripts of all college work attempted
- English proficiency test scores, for international applicants, as required by WVU
- Graduate Record Exam (GRE) scores, if required by the program; the GRE is highly encouraged for all applicants

Depending on the requirements of specific programs, prospective students may also have to submit additional material, such as:

- A resume
- Statement of purpose
- Letters of reference, as specified by the program

## Masters Programs

There are three types of degrees granted within the Statler College:

1. Master of Science in an engineering discipline – The Master of Science degree in an engineering discipline requires an undergraduate degree in the same discipline, or closely allied discipline with appropriate preparatory course work determined by the department.
2. Master of Science in Engineering – The Master of Science in Engineering degree is intended for students who wish to earn an engineering master's degree but do not have an undergraduate degree in the same field or a closely aligned field. The MSE is also appropriate for students seeking a unique or interdisciplinary master's program.
3. Master of Science in an applied science area – The applied science master's programs are intended for students wishing to obtain a master's degree in one of these non-engineering disciplines (Safety Management, Software Engineering, and Computer Science).

For these degree programs, students will normally be required to obtain a baccalaureate level of proficiency in subjects directly related to their area of graduate study by taking undergraduate prerequisite courses, either prior to starting or as an integral part of their degree program. The degree designation and additional course requirements will be determined by the department admitting the student. The two types of engineering degrees both require a calculus-based undergraduate education in an accredited program or an internationally recognized program. The applied science areas do not.

Students who do not hold a correspondingly named bachelor's degree may be admitted into either a discipline-designated program or the Master of Science in Engineering degree program, depending on their credentials.

## Doctoral Program

Additionally, there are three types of doctoral degrees granted in the Statler College of Engineering and Mineral Resources:

1. Doctor of Philosophy in an engineering discipline – To be eligible for admission into an engineering Doctorate of Philosophy program, a candidate is expected to hold or expect to have received, by the time of enrollment, a B.S. or an M.S. degree in:
  - Some discipline of Engineering from an institution which has an ABET-accredited program in that discipline, or which has an internationally recognized program in Engineering or Mineral Resources
  - Mathematics/Physical Sciences (as specified by individual programs)
2. Doctor of Philosophy in Computer Science – To be eligible for admission into the Computer Sciences Doctorate of Philosophy program, a candidate is expected to hold a B.S. or an M.S. degree in:
  - Computer Science, Engineering, or
  - Mathematics/Physical Sciences (as specified by the program)
3. Doctor of Philosophy in Occupational Safety and Health – To be eligible for admission into the Occupational Safety and Health Doctorate of Philosophy program, a candidate is expected to hold a B.S. or an M.S. degree in:
  - Industrial Hygiene, Safety Management, Engineering, or
  - Mathematics/Physical/Life Sciences (as specified by the program)

## ENTRANCE AND CLASSIFICATION

Not all students who meet minimum college and program requirements will necessarily be accepted. Faculty members in a given graduate program have the right to set standards and conditions more restrictive than those set forth in these guidelines and the right to limit enrollment. For example, a program may choose to reject an applicant because their area of interest is not perceived to match the current focus and resources in the program. Similarly, although a student may be admitted solely for the purpose of enrolling in advanced coursework (e.g., non-degree students); program faculty may decline to allow that student to continue toward a degree even though the student has completed all required coursework successfully.

To be admitted as a regular graduate student, an applicant must have an equivalent grade point average (GPA) of 3.0 / 4.0 or better in all previous college work, and must meet all other requirements set by the department or program, including minimum GRE scores. Any exceptions to the stated requirements must be approved by the associate dean.

Any applicant with a GPA below the minimum in any previous college work cannot be admitted without special approval from the associate dean. Students are notified of their status by WVU's Office of Admissions.

A student who does not desire to pursue a degree, may be admitted as a *non-degree* student. Each department determines the minimum qualification requirements for admission as non-degree students. Such students are allowed to take graduate courses but are not allowed to pursue a graduate degree. A non-degree student seeking admission to a graduate program must apply to the specific program.

Admission to a Ph.D. program does not confer or guarantee candidacy for the Ph.D., which requires a separate decision.

## Policies

The Benjamin M. Statler College of Engineering and Mineral Resources (Statler College) at West Virginia University (WVU) is authorized to admit qualified students to graduate programs that lead to successful completion of the degrees of master's of science (M.S.) and doctor of philosophy (Ph.D.). The guidelines presented here and departmental guidelines, describe in detail the minimum College requirements for the above mentioned degrees. Each department and program within a department may impose stricter requirements than those required by the College. These requirements are listed in the department guidelines and procedures, and are available on the department website/catalog to prospective and current students.

## Roles of the Faculty, College, and University

The research and course work requirements of students are administered through research advisors, Advisory and Examining Committees, academic advisors, and graduate program coordinators in the various departments.

- The academic advisor is the faculty member that approves the student's course selections each semester, approves registration and add/drop forms, and maintains the student's files.
- The Advisory and Examining Committee (AEC) advises the student in the selection of courses and in the conduct of the student's research program. The AEC also evaluates the technical quality of the student's research, decides whether to admit the student to candidacy (Ph.D. only), and evaluates the final thesis or dissertation. Normally, the chairman of the AEC is also the director of the student's research (Research Advisor).
- The graduate program coordinator is the person designated by the department chair to assure that the regulations governing the student's graduate program have been fulfilled.

The roles of the research advisor, academic advisor, AEC chair, and graduate program coordinator may be vested in one to four individuals, depending on the policies of the individual department. The administration and oversight of the departments and programs are guided through the department chair, college dean, Office of Student Services, Office of the University Registrar, and Office of Admissions.

- The Department Chair and the College Dean are responsible for ensuring that the guidelines are followed by all parties. The Dean may delegate certain tasks to the Associate Dean for Academic Affairs or to a specified faculty member if there is a special need.
- The Statler College Office of Student Services is the unit the College dean delegate's responsibility to ensuring that the guidelines are followed by student and faculty.
- The Office of the University Registrar (OUR) oversees graduation/degree audits, registration, grading, and all academic record-keeping for the University.
- The University's Office of Admissions manages all applications for the University. Applications, transcripts, and standardized test scores will be submitted to WVU Admissions.

## Course Load

A full-time graduate student must register for at least nine, but no more than fifteen, credit hours during each regular semester, or at least six, but no more than twelve, credit hours in the summer session. A student wishing to carry more than the maximum course load must file a Course Overload Request.

## Student Petition to Resolve Controversies

Attempts to resolve controversies regarding a graduate student's academic progress should first be between the student and the chairperson of the AEC, followed by the graduate program coordinator, the department chair, and the Dean, in that order. If no satisfactory solution of problems can be achieved by the above procedure, the student may then follow the formal University Policies and Procedures for appeals.

The Student Conduct Code addresses both academic and non-academic rights and responsibilities, sanctions, and procedural due process, and includes procedures for undergraduate, graduate, and professional students. The code outlines the procedures to be followed in handling graduate student grievances and appeals.

## Degree Options and Hours

For master's students, the College faculty believes that the desirable characteristics of graduate education are the experience gained in advanced coursework and performing and reporting on a research endeavor. Consistent with that philosophy, the College is authorized to grant master's degrees under each of the following three options:

1. Thesis Option – This option requires a minimum of 24 credit hours of course work and at least 6 credit hours of research leading to the thesis.
2. Problem Report Option – This option requires a minimum of 27 credit hours of course work and at least 3 credit hours of a research or design project leading to a formal written report.
3. Course Work Option – This option requires a minimum of 30 credit hours of course work. In addition, the department may require successful completion of a written or oral comprehensive examination. The department or program can choose to offer students within a designated program the course work only option, where courses are determined by the program or the AEC.

For Ph.D. students, the College, consistent with its philosophy, believes that one of the required characteristics of doctoral education are the experiences gained in performing and reporting in an original research endeavor. For this reason, all doctoral programs require a research track culminating in an original research project.

## Course Requirements

Specific course requirements are determined by the student's program and AEC. For master's students, no more than 40 percent of course work (not including 697/797) at the 400 level can count toward meeting degree requirements.

The College requires Ph.D. programs to have a minimum of 18 semester hours of course work, beyond the course credit required for a master's degree, at the 500 and higher levels with an average of 3.0 or better.

Only courses with grades of "A", "B" or "C" (not "S") can be used to meet the minimum coursework requirements. Grades of "S" or "U" will only be recorded for research credits and select seminar courses. The college normally will not issue a grade of "I" (incomplete) for research courses.

Departments may establish more stringent requirements than those adopted for the college as a whole.

## Research Requirements

The faculty of the college believes that the experience gained in performing and reporting a research endeavor should be over a prolonged period. Therefore, a significant portion of doctoral credit is research based.

- Ph.D. in engineering and the Ph.D. in occupational safety and health degrees require a minimum of 24 credit hours of research at the Ph.D. level (797) leading to a dissertation .
- Ph.D. in computer science degree requires a minimum of 18 credit hours of research at the Ph.D. level (797) leading to a dissertation.

Additionally, master's students (except coursework only students) are also required by their AEC to perform basic research.

- Master's students under the thesis option are required to complete a minimum of 6 credit hours of research at the M.S. level (697).
- Master's students under the problem report options are required to complete a minimum of 3 credit hours of research at the M.S. level (697).

## Plan of Study

A Plan of Study must be prepared by the student and the Advisory and Examining Committee (AEC, see below), which outlines the coursework the student must finish and its timeline, the research topic (if applicable for Master's students and required for Ph.D. students), and the composition of the AEC . This plan must be approved by the student, all members of the AEC, the graduate program coordinator, the department chair, and the college dean by the end of the first semester of the student's attendance. Otherwise the student may be refused permission to register for the following semester. All students:

1. The AEC may add course requirements to the Plan of Study.
2. The plan of study for a student admitted to a Ph.D. program with only a B.S. degree normally will require sufficient coursework to attain the competencies expected of graduates of that master's program as well as the competencies expected for the Ph.D. program.
3. The plan of study must include courses to remove deficiencies as well as courses required by the program curriculum. Deficiency courses requirements are determined by the graduate program coordinator at the time of enrollment.
4. The Plan should schedule deficiency courses in a timely manner such that a decision regarding qualification for change of status to regular status can be made at the end of the semester in which the 18th credit hour is completed.

The college provides templates for M.S. Plan of Study and Ph.D. Plan of Study. Any revisions to a plan of study necessitate submission of a complete, revised plan which incorporates all approval signatures.

## Advisory and Examining Committee

Each graduate student will form an Advisory and Examining Committee (AEC), with:

- M.S. committees consisting of a minimum of three members.
- Ph.D. committees consisting of a minimum of five members.
- For Ph.D. students, at least one of the five members of the committee must be from outside the degree-granting department.
- The majority of the members of the AEC must be regular members of the Statler College Graduate Faculty.
- A minimum of two members for M.S. and four member for Ph.D. committees must be members of the Statler College Graduate Faculty
- The committee chair must be a regular member of the Statler College Graduate Faculty.

Additionally, each department can impose stricter rules on the AEC selection process.

The AEC Chair should be selected by the student in consultation with the Graduate Program Coordinator or the Department Chair. Normally, the AEC Chair should be a member of the degree-granting program. Non-tenure track faculty may serve as Chair if they are a regular member of the College Graduate Faculty.

Members should be selected by the student in consultation with the AEC Chair. All members should be selected based on their perceived ability to contribute to the progress and evaluation of the student's research and their ability to work cooperatively with other members and the student. The College Dean and the Department Chair each has the right to appoint one member to this committee.

Members, including the Chair, may resign from the committee after providing a written explanation to the graduate program coordinator and to the chair of the department. Any changes to the AEC must be signed by the previous and new members of the committee, to the extent that a previous committee member is available on campus. The resigning member must complete an AEC Membership Modification Form.

## Transfer Credit

A student wishing to apply graduate course credit earned at another institution to a master's or Ph.D. degree at WVU must complete an Application for Transfer of Graduate Credit to WVU. This form requires the signature of the appropriate department chair or graduate program coordinator. An official transcript from the institution where the course credit was taken must be on file with the WVU Office of Admissions.

For M.S. students, a maximum of 12 semester (vs. quarter) credit hours from other institutions may be transferred for credit at WVU in master's programs in the college. Individual graduate programs can choose to accept fewer transfer credit hours. Only courses with grades of "A" or "B" may be considered for transfer. For Ph.D. students, appropriateness of accepting transfer credit is left to the discretion of the student's AEC and department with

the restrictions that only courses with grades of "A" or "B" may be considered for transfer and no more than one-third of the minimum semester course credit hours required by the program may be transferred.

After the student completes the appropriate section of the Application for Transfer of Graduate Credit form, the department chair or graduate program coordinator will perform the following tasks:

- Verify that courses from other institutions qualify as valid graduate level work.
- Verify that the request is within the maximum number of allowable credit hours.
- Verify that the credit has been earned within the acceptable time limit.

When the completed application form is returned to the Statler College Office of Student Services, it will then be forwarded to the WVU Office of the University Registrar; they will match forms with transcripts and enter the credit on the student's permanent record.

## Requirements for Ph.D. Candidacy

Programs that admit students with only a B.S. degree are encouraged to require such students to demonstrate the competencies expected of a master's graduate in addition to the competencies required by the doctoral program before achieving candidacy.

Each major under the doctoral program will specify in writing its own requirements and standards for a student to be admitted to candidacy. At a minimum, these requirements will include one written examination, completion of all course requirements and an oral defense of a written research proposal. The AEC may approve the research proposal conditioned upon stipulated changes to the proposal. In such cases, the AEC Chair should ensure that the required changes to the proposal are made by the student before signing the Approval of Candidacy. The AEC Chair must provide a copy of the revised research proposal to all members of the AEC before signing his or her approval.

At the completion of the candidacy requirements, the results must be reported to the dean by the student's AEC using the Admission to Candidacy for the Ph.D. form. For a positive recommendation for admission to candidacy, no more than one negative vote may be cast. A minimum of one opportunity for reexamination must be available for each student. Students who fail to receive a positive recommendation on re-examination for admission to candidacy are terminated at the end of that semester and may not re-enter the program.

## Maximum Time For Completion

All requirements for master's degrees must be completed within eight years preceding the student's graduation. This is a WVU requirement. Courses taken more than eight years previously must be revalidated for master's degree credit and procedures to revalidate are outlined in the policy on Revalidation of MS Course Work.

All requirements for Ph.D. degrees must be completed within five years after the student has been admitted to candidacy.

## Second Degree Masters Students

A student desiring to obtain more than one master's degree, either enrolled concurrently or returning after earning a master's degree at WVU, may use up to 25 percent of previous graduate level coursework toward the second degree. The approval for second/concurrent WVU master degree form must be completed for this coursework and needs to be approved by the degree-granting unit. The student must successfully complete additional credit hours so as to constitute the remaining 75 percent of the credit hours required by the additional master's degree. Individual departments or programs may require higher percentages of original coursework to be earned for a second degree.

## Academic Status

There are two categories of status: regular/non-degree and provisional.

## REQUIREMENTS FOR EACH STATUS

The minimum academic standards for students are as follows:

- Regular and non-degree – To be in good standing, a regular or non-degree student must maintain at least cumulative GPA of 3.0/4.0 grade point average throughout the time enrolled in graduate work. A student failing to achieve this standard will be placed on probation.
- Provisional – A student not admitted as a regular or non-degree will be admitted as provisional. A provisional student must obtain and maintain a minimum cumulative GPA of 3.0/4.0 after the completion of the first 9 credit hours of graduate study or he/she will become eligible for suspension.

## CHANGE OF STATUS

Change of status from provisional to regular may be made for a student with a cumulative GPA of 3.0/4.0 or higher for graduate courses when the student has met the conditions outlined in his/her conditions for acceptance as a provisional student.

For provisional students, by the end of the semester in which the 18th credit hour is completed, the student must be elevated to regular student status, and then the regulations governing good standing for regular students will apply. Failure to meet the provisions of admission, or failure to achieve the required grade point average, will result in suspension.

A non-degree student seeking admission to a graduate program must apply to the specific program. A maximum of 12 credit hours of coursework can be applied toward fulfilling a degree requirement if approved by the graduate program coordinator for that program.

## **Sanction Policy for Academic Integrity Offenses**

Graduates of the Statler College have the obligation to serve humanity with integrity, fairness, tolerance, and respect. Computing and engineering professionals are held to the highest standard of conduct. Academic integrity is fundamental to meeting this obligation and standard of conduct. Each student is responsible to know, observe, abide by, and adhere to the University's Student Code of Conduct, policies, rules and regulations. Violations of these are reported to the Office of Student Rights and Responsibilities for determination of sanctions.

### **Probation and Suspension**

Graduate students are placed on probation the semester after their cumulative GPA falls below 3.0/4.0. Additionally, a grade of unsatisfactory ("U") in graduate-level research (697 or 797) makes the student eligible for probation. Two consecutive grades of "U" in research make the student eligible for suspension. Otherwise, college policies regarding probation and suspension mirror those set by the University.

## **Graduation**

### **THESIS, PROBLEM REPORT AND DISSERTATION APPROVAL PROCEDURES**

The AEC must approve the thesis/problem report or dissertation, with no more than one member not signing the approval sheet, before this requirement for degree completion can be considered completed. The thesis/problem report or dissertation must be produced according to the University's regulations governing the preparation of theses and dissertations. An electronic version of the approved thesis/problem report or dissertation must be submitted to the University library along with the ETD packet. Approval must be obtained from the library.

The student shall furnish each member of the AEC and the department with a copy of the thesis/problem report or dissertation. The copy may be bound, electronic or both, at the discretion of the department.

### **GRADE POINT AVERAGES REQUIRED FOR GRADUATION**

The college requires an overall GPA of at least 3.0/4.0 GPA for (1) all courses taken as a graduate student (graduate or undergraduate level) at WVU; and (2) all courses taken as required for a degree by the Plan of Study. Individual programs and departments may set higher minimum requirements in their written guidelines.

### **FINAL EXAMINATION FOR THESIS/PROBLEM REPORT OR DISSERTATION**

A student should schedule the final oral and/or written examination upon completion of a draft of the thesis/problem report or dissertation, and/or completed coursework, and after fulfilling all requirements set by the AEC. The student will initiate the formal request by the department for the final examination using the Request for Examination form.

The examination is conducted by the AEC. The AEC chair must indicate in advance the time and place of the final examination on the Request for Final Examination form sent to the dean before the examination can be scheduled. Final examinations are open to the public. The final examination must be given:

- No sooner than three weeks after the form is submitted and no later than three weeks before commencement for Ph.D. candidates. This lead time is required for public notice to the University community.
- No sooner than two weeks after the form is submitted and no later than three weeks before commencement for master's students.

The AEC may vote to:

1. Pass unconditionally
2. Pass conditionally with minor modifications to the problem report, thesis or dissertation
3. Defer with recommendations for additional work to satisfactorily complete the research and/or the problem report, thesis or dissertation.
4. Fail

If the vote is to pass with minor modifications, the chair should withhold his or her approval until the student has made all stipulated modifications. A vote to defer is not counted as a "fail," but only one deferral is allowed. More than one negative vote of the committee members will constitute a failure of this examination. The department or program will report the results of the final examination to the Dean's Office. The student must be given at least one opportunity for reexamination. The department or program may establish guidelines to determine how many opportunities are given for reexamination and whether the student is re-examined on the portions failed. Students who fail the additional opportunities for re-examination are terminated at the end of that semester and may not re-enter the program.

All students must pass a final oral and/or written examination to be certified for graduation. The department or program will report the results of the final examination to the Dean's Office.



## GRADUATION REQUEST

After successful completion of the final examination, students must complete the Final Approval for Graduation form and submit it to the Statler College Office of Student Services, along with other college and departmental requirements.

Students must be active and enrolled at WVU in the semester they plan to graduate. Students in their final semester, who have no course work or research to complete, can register for 1 credit hour, usually research, to satisfy the University enrollment requirement.

Students must apply for graduation in the semester in which they plan to graduate. Students failing to graduate in the semester that they applied will be required to enroll again and apply for graduation in the following semester.

## QUALITY

The quality control of each program will be the joint responsibility of the AEC, graduate program coordinator, department chair, and the college dean.

## DEADLINES

The graduation date for each semester can be obtained from the Statler College Office of Student Services. It is the student's responsibility to see that all deadlines are met. Failure to meet the specified deadlines may result in delay of graduation to the following semester.

- Application for Graduation and Diploma - An application for graduation and diploma must be submitted online through the student's MIX/STAR account.
- Request for Final Examination - Requests to the dean's office using the Request for Final Exam. No examination is to be given until the approval is received. A new form must be filed each time the examination is re-scheduled or repeated. Early scheduling of the final examination is recommended. Timelines (two weeks for M.S. and three weeks for Ph.D.) will be strictly adhered.
- Final Examination for Thesis/Problem Report or Dissertation – Final examinations, or oral defense, must be given according to the suggested deadlines set by the University Library for a given semester. Final examination material will be given to the AEC chair after the Request for Final Examination has been made. The results, through the return of the signed shuttle sheet, must be delivered to the Statler College Office of Student Services within 24 hours of the defense.
- Thesis, Problem Report or Dissertation Submission - The student must submit to the University Library an electronic copy of the approved problem report, thesis or dissertation with the ETD packet, according to the deadline set by the library. The library will notify the Statler College Office of Student Services upon the initial submission and again when approval has been given.
- Final Deadlines - The Alumni Data Form must be completed and delivered to the departmental graduate program coordinator at least one week before the graduation date. The Final Approval for Graduation form must be completed and delivered to the dean's office at least one week before the graduation date. If this form is not submitted, the student will not graduate.

## Accreditation

The following program is accredited by the Applied and Natural Sciences Accreditation Commission (ANSAC) of ABET, <http://www.abet.org>:

- Safety Management

## Department of Chemical and Biomedical Engineering

### Degrees Offered

- Masters of Science, Biomedical Engineering (M.S.Bm.E.)
- Masters of Science, Chemical Engineering (M.S.Ch.E.)
- Doctor of Philosophy, Biomedical Engineering (Ph.D.)
- Doctor of Philosophy, Chemical Engineering (Ph.D.)

### Departmental Overview

The Department of Chemical and Biomedical Engineering has one of the oldest doctoral-granting programs in the university. From the initial doctoral degree in 1932, the graduate academic program has been based on advanced engineering fundamentals, while the research program has reflected a balance of fundamental research areas and their application to relevant technological areas such as decarbonization of energy systems, sustainability, precision medicine, flexible manufacturing, novel materials, modeling and computational tools.

### Areas of Research

The Chemical and Biomedical Engineering faculty are presently involved in a broad spectrum of research areas that can be broadly classified into biomedical engineering, catalysis and reaction engineering, materials and interfacial phenomena, and process systems engineering. These research activities impact economic development, national security, the stability and sustainability of the energy supply, and many quality-of-life issues.

Faculty members possess a wide spectrum of industrial experience and are routinely in contact with their counterparts in industry. This contact with real engineering problems enables them to convey a practical experience to students while keeping in perspective many of the fundamental concepts involved in graduate study. The faculty is nationally and internationally recognized through the publication of text books, monograph series, and technical papers as well as presentations in national and international conferences.

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## FACULTY

### CHAIR

- Srinivas Palanki - Ph.D. (University of Michigan)  
Process systems engineering, Chemical process control, Bioengineering

### PROFESSORS

- Debangsu Bhattacharyya - Ph.D. (Clarkson University)  
GE Plastics Material Engineering Professor. Artificial intelligence and machine learning, Biomimetic and other advanced control Nonlinear state estimation, Condition monitoring, Sensor placement, Bayesian analysis, Multi-scale dynamic modeling, Fuel cells and electrolyzers, Carbon capture, H<sub>2</sub> production, Biomass conversion and Energy systems
- Zoica Cerasela Dinu - Ph.D. (Max Planck Inst of Molecular Cell Biology & Genetics & Dresden University of Technology)  
Associate Dean for Student, Faculty and Staff Engagement. Nanomaterials, Bionanotechnology, Biomimetics, Catalysis and Biocatalysis
- Pradeep Fulay - Ph.D. (University of Arizona)  
Advanced Electronics, Magnetic Materials and Devices, Flexible Electronics, Synthesis and Processing of Nanomaterials
- Rakesh Gupta - Ph.D. (University of Delaware)  
Berry Professor. Polymer processing, Rheology, Non-Newtonian fluid mechanics, Composite materials
- John (Jianli) Hu - Ph.D. (Tsinghua University)  
Statler Chair Professor. Catalysis and reaction engineering, Utilization of natural gas, CO<sub>2</sub> and biomass
- David J. Kline - Ph.D. (Northwestern University)  
Systems Biology, Kinetics, Cellular Signal Transduction Pathways, Immunology, Mathematical Modeling, Bioengineering

### ASSOCIATE PROFESSOR

- Fernando V. Lima - Ph.D. (Tufts University)  
Process design and operability, Model-based control and Optimization, State estimation and process identification, Modular energy systems and sustainability

### ASSISTANT PROFESSOR

- Madelyn R. Ball - Ph.D. (University of Wisconsin - Madison)  
Heterogeneous catalysis, Metal nanoparticle development, Operando spectroscopic characterization, Reaction Kinetics, CO<sub>2</sub> utilization, Hydrogenation chemistry
- Margaret F. Bennewitz - Ph.D. (Yale University)  
Biomedical imaging, Fluorescence intravital lung microscopy, MRI contrast agents, Nano drug delivery systems, Microfluidics, Tumor microenvironment, Cancer metastasis, Toxicology
- Stephen M. Cain - Ph.D. (University of Michigan)  
MEMS inertial sensor applications, Wearable sensor applications, Real-world biomechanics, Upper extremity biomechanics, Human gait, Sports biomechanics, Experimental methods, Bicycle dynamics, Medication adherence
- Moriah Katt - Ph.D. (Johns Hopkins University)  
Blood-brain barrier, Tissue engineering, Stroke, Drug delivery, Stem cells
- Wenyuan Li - Ph.D. (West Virginia University)  
Solid state ionics, Solid oxide fuel/electrolysis cells, High temperature electrochemistry, Shale gas conversion and utilization, CO<sub>2</sub> utilization
- Oishi Sanyal - Ph.D. (Michigan State University)  
Membrane for water treatment and desalination, Self-assembly based surface modification, Molecular sieving materials, Natural gas and Flue gas purification
- Soumya K. Srivastava - Ph.D. (Mississippi State University)  
Point-of-care (POC) medical diagnostic platforms and environmental bio-separations using electrokinetics, Transport phenomena, Fluid dynamics, and Dielectric spectroscopy
- Yuhe Tian - Ph.D. (Texas A&M University)  
Process systems engineering, Computer-aided process intensification, Process synthesis and optimization, Multi-scale sustainable energy systems, Hybrid mechanistic/data-driven modeling
- Yuxin Wang - Ph.D. (Chinese Academy of Science)  
Plastic upcycling, Natural gas and CO<sub>2</sub> utilization, Biofuel, and Catalysis



## TEACHING ASSOCIATE PROFESSOR

- Robin S. Hissam - Ph.D. (University of Delaware)  
Associate Dean of Academics and Student Performance. Biomaterials, Polypeptides, Drug delivery, Bioengineering and materials science

## TEACHING ASSISTANT PROFESSOR

- Jeremy S. Hardinger - Ph.D. (West Virginia University)

## PROFESSORS EMERITUS

- Eung H. Cho - Ph.D. (University of Utah)  
Mineral Processing, Leaching, Solvent Extraction, Environmental Science
- Eugene V. Cilento - Ph.D. (University of Cincinnati)  
Physiological Transport Phenomena, Biomedical Engineering, Image Analysis, Mathematical Modeling
- Dady B. Dadyburjor - Ph.D. (Delaware)  
Catalysis, Reaction Engineering
- Edwin L. Kugler - Ph.D. (Johns Hopkins)  
Catalysis, Adsorption, Coal Liquefaction
- Joseph A. Shaeiwitz - Ph.D. (Carnegie-Mellon University)  
Design, Design Education, Outcomes Assessment
- Alfred H. Stiller - Ph.D. (University of Cincinnati)  
Physical/Inorganic/Solution Chemistry, Coal Liquefaction, Carbon Science
- Charter D. Stinespring - Ph.D. (West Virginia University)  
Semiconductor Growth and Etching, Surface Kinetics, Thin Films, Electronic Materials
- Richard Turton - Ph.D. (Oregon State University)  
WVU Bolton Professor, P.E.; Process systems engineering, Particle and powder technology, Chemical process design
- Ray Y.K. Yang - Ph.D. (Princeton)  
Biochemical and Chemical Engineering, Nonlinear Dynamics
- John W. Zondlo - Ph.D. (Carnegie Mellon University)  
Coal Enhancement and Utilization, Carbon Science, Fuel Cells

For specific information on the following programs, please see the links to the right:

- Biomedical Engineering
- Chemical Engineering

## Biomedical Engineering, M.S.Bm.E., Ph.D.

### Degrees Offered

- Masters of Science in Biomedical Engineering (M.S.Bm.E.)
- Doctor of Philosophy, Biomedical Engineering (Ph.D.)

### Nature of the Program

The focus of the graduate program will be to prepare students to be skilled in learning and discovering of processes that aim to integrate engineering and life sciences for the advancement of human health and medical technologies. Just as importantly, the program will build upon current collaborative efforts with local and regional clinicians, industry and academic leaders engaged in state-of-the-art biomedical engineering research. Lastly, the program will foster the production and application of new knowledge in areas that impacts the health and well-being of all West Virginia (WV) citizens, as well as contribute to the providing skilled local workers in biomedical engineering (BMEG), thus driving development of the WV's economy in this exciting area.

### Master Admissions

Students applying for admission to the graduate program in biomedical engineering (BMEG) must meet the general requirements of admission of the WVU graduate school. Admission is expected to be competitive and students will be selected on the basis of their scholastic preparation and intellectual capacity as demonstrated in the application.

To be eligible for admission into the Masters of Science in Biomedical Engineering degree program, a candidate must fulfill the following requirements:

- Applicant has a bachelor's degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall and 3.0/4.0 grade point average in the last 2 years of undergraduate study;

- Strong quantitative skills and background in life sciences, as evidenced by coursework or research experience should be demonstrated;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of recommendation;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely BMEG faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in the CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- Applicant has a bachelor's degree from a recognized 4-year university or an M.S. degree, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall and 3.0/4.0 grade point average in the last 2 years of undergraduate study;
- Strong quantitative skills and background in life sciences, as evidenced by coursework or research experience should be demonstrated;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of recommendation;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely BMEG faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in the CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Direct-Track Doctoral Admissions

To be eligible for admission into the direct-track doctoral program, a candidate must fulfill the following requirements:

- Applicant has a bachelor's degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall and 3.0/4.0 grade point average in the last 2 years of undergraduate study;
- Strong quantitative skills and background in life sciences, as evidenced by coursework or research experience should be demonstrated;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of recommendation;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely BMEG faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in the CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSBmE Major Code: 3008

PhD Major Code: 3007

For specific information on the following programs, please see the links to the right:

- Biomedical Engineering, M.S.Bm.E.

For specific information on the following programs, please see the links to the right:

- Biomedical Engineering, Ph.D.

## Biomedical Engineering, M.S.Bm.E.

### Curriculum in Master of Science in Biomedical Engineering

A candidate for the M.S. degree in biomedical engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Chemical and Biomedical Engineering Department.

### Program Requirements

All M.S. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements\*

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
A maximum of 6 credit hours can be taken at the 400 level		
A grade of C- or higher must be earned in all required courses		
BMEG 501	Principles and Applications of Biomedical Engineering	3
BMEG 601	Numerical and Statistical Methods for Biomedical Engineering	3
BMEG 602	Interfacial Phenomena in Living and Non-Living Systems	3
Any BIOM, BMEG, BMS, CCB, CCMD, CE, CHE, CHEM, CPE, CS, CTS, EDP, EE, EXPH, IENG, IH&S, MAE, MATH, MINE, OEHS, PNGE, PHYS, PT, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC **		15
BMEG 697	Research	6
CHE 786	Professional Development Seminar for Chemical and Biomedical Engineering ***	0
Plan of Study		
Final Oral or Written Examination		
Thesis		
Total Hours		30

\*

Students who do not hold a baccalaureate degree in biomedical engineering are required to take a set of undergraduate engineering courses above and beyond the minimum coursework requirements

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All elective courses must be approved by the Statler College Graduate Admissions and Curriculum Committee and student's AEC.

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Full-time students are required to take a Seminar course each semester

Further:

- The student should form a 5 member AEC and file a draft plan of study by the end of their 1st semester of enrollment in the graduate program. At least one member of the graduate faculty from outside the student's home Department is required to serve on the AEC;

- The student's research advisor, in conjunction with the student's AEC will be responsible for determining the plan of study appropriate to the student's interests/needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their future career;
- All students pursuing a graduate degree are expected to engage in research and complete and successfully defend a dissertation. The dissertation must show a high degree of originality, i.e. be an original contribution to BMEG-related areas;
- The integrity of the research conduct is the utmost importance to the institution and our department. We are committed to promoting and supporting the ethical and responsible conduct of research across all disciplines. As a result, all students are required to take an online Responsible Conduct of Research (RCR) training in their first year;
- The graduate degree signifies that the holder has the competence to function independently in the chosen field. Hence, the number of years involved in attaining or retaining competency cannot be readily specified, nor can the exact program of study be defined. However, one has a maximum of 3.5 years for to complete all the requirements for the M.S program from the date of admission respectively.

## Final Examination

At the completion of the research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC. Candidates should be demonstrating an original contribution to scientific knowledge and engineering practice in BMEG. The defense examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the M.S. degree is a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC. The rules for this defense and the timing for the manuscript submission are specified by the Office of Graduate Studies at WVU and the Statler College; neither a foreign language nor a minor is required for the PhD

## Student Learning Outcomes

### BIOMEDICAL ENGINEERING

The learning outcomes of students graduating in biomedical engineering (BMEG) will be defined and measured as follows:

1. Mastery of basic and advanced graduate level knowledge in their chosen areas of specialty as related to BMEG. This outcome will be measured through the grades that the students earn in their coursework;
2. Ability to complete on time specific research tasks. This outcome will be measured through the grade (Satisfactory, Incomplete, or Unsatisfactory) that the student receives every semester from his/her major research advisor for the appropriate research course (700 level);
3. Strong oral communication skills. This outcome will be measured through the quality and number of oral presentations and reports given by the student to his/her Advising and Examining Committee (AEC), at technical meetings or conferences, as well as meetings of his/her research team;
4. Strong communication skills in writing. This outcome will be measured through the quality and number of technical reports, articles or reviews that the student may write during his/her graduate studies. Additionally, the quality of student's communication skills in writing will be measured through the dissertation;
5. Ability to work independently in a collaborative environment – This outcome will be measured through feedback solicited from the members of student's AEC, his/her peers, as well as the length of time the student needs to complete his/her graduate studies.

## Biomedical Engineering, Ph.D.

### Curriculum in Doctor of Philosophy – Biomedical Engineering

A candidate for the Ph.D. degree with a major in biomedical engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Chemical and Biomedical Engineering Department.

### Program Requirements

The doctor of philosophy degree with a major in biomedical engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of biomedical engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

The College requires Ph.D. programs to have a minimum of 18 semester hours of course work, beyond the course credit required for a master's degree, at the 500 and higher levels with an average of 3.0 or better. The faculty of the college believes that the experience gained in performing and reporting a research endeavor should be over a prolonged period. Therefore, a significant portion of doctoral credit is research based. Specifically, beside the accumulation of a minimum of 18 credit hours of coursework taken at WVU, there are also required 2 credit hours of seminar and a minimum of 24 credit hours of research, also taken at WVU. The remaining requirements for this graduate degree are as follows: (1) passing the qualifying examination, (2)

admission to candidacy, (3) completion of dissertation research, and (4) defense of a research dissertation; these requirements are well detailed below. Briefly:

- The student should form a 5 member AEC and file a draft plan of study by the end of their 1st semester of enrollment in the graduate program. At least one member of the graduate faculty from outside the student's home Department is required to serve on the AEC;
- The student's research advisor, in conjunction with the student's AEC will be responsible for determining the plan of study appropriate to the student's interests/needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their future career in BMEG-related areas;
- All students pursuing a Ph.D. degree are expected to engage in research and complete and successfully defend a Ph.D. dissertation. The doctoral dissertation must show a high degree of originality, i.e. be an original contribution to BMEG-related areas;
- The integrity of the research conduct is the utmost importance to the institution and our department. We are committed to promoting and supporting the ethical and responsible conduct of research across all disciplines. As a result, all students are required to take an online RCR training in their first year;
- The Ph.D. degree signifies that the holder has the competence to function independently at the highest level in the chosen field. Hence, the number of years involved in attaining or retaining competency cannot be readily specified, nor can the exact program of study be defined. However, one has a maximum of 5 years to complete all the requirements for Ph.D. from the date of admission to candidacy.

## Curriculum Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
A grade of C- or higher must be earned in all required courses		
BMEG 501	Principles and Applications of Biomedical Engineering	3
BMEG 601	Numerical and Statistical Methods for Biomedical Engineering	3
BMEG 602	Interfacial Phenomena in Living and Non-Living Systems	3
Any BIOM, BMEG, BMS, CCB, CCMD, CE, CHE, CHEM, CPE, CS, CTS, EDP, EE, EXPH, IENG, IH&S, MAE, MATH, MINE, OEHS, PNGE, PHYS, PT, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC		18
Graduate Seminar		2
CHE 796	Graduate Seminar	
Research		24
BMEG 797	Research	
<b>Examinations</b>		
Plan of Study		
Qualifying Examination		
Candidacy Examination		
Final Examination		
Dissertation		
Total Hours		53

\*

All elective courses must be approved by the Statler College Graduate Admissions and Curriculum Committee and student's AEC.

## Examinations

### QUALIFYING EXAMINATION

All Ph.D. students must pass a Ph.D. qualifying examination. This examination is designed to assess the basic competency in BMEG-related fields and determine whether or not students have sufficient knowledge to undertake independent research. Students are required to pass such qualifying examination by the end of their 2<sup>nd</sup> semester of enrollment in the program; however, it is normally required that full-time students pass the qualifying examination no later than the end of the 3<sup>rd</sup> semester of enrollment.

The structure of the Ph.D. qualifying examination for all students pursuing the Ph.D. degree in BMEG will be comprised of two components: a written examination that will test on the student's knowledge in the 3 core areas studied in BMEG 501, Principles and Applications of Biomedical Engineering, BMEG 601 Numerical and Statistical Methods for Biomedical Engineering and BMEG 602 Interfacial phenomena in living and non-living systems respectively, or their equivalent. Students who do not pass this examination on their initial attempt will be allowed a 2<sup>nd</sup> attempt which should be scheduled in the follow up semester. If they are not successful on their 2<sup>nd</sup> attempt, then they will be dismissed from the program.

## CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate student's overall ability to engage in high-level research. Admission to candidacy can be assessed by a dissertation proposal and/or additional examination. Within a maximum of one semester after passing the PhD qualifying examination or entering the Ph.D. program, whichever is later, a student must successfully defend his/her dissertation research proposal. This proposal is a written document which must be reviewed and accepted by their AEC and subsequently defended in an oral presentation; the proposed research work should show a high degree of originality in the field. A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree in BMEG at WVU.

Doctoral candidates are allowed no more than 5 years to complete the remaining degree requirements after formal admission to candidacy. An extension of time can be obtained only by repeating the qualifying and candidacy examinations and meeting any other requirements specified by the student's advisory and examining committee.

## FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC. Candidates should be demonstrating an original contribution to scientific knowledge and engineering practice in BMEG. The defense examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC. The rules for this defense and the timing for the manuscript submission are specified by the Office of Graduate Studies at WVU and the Statler College; neither a foreign language nor a minor is required for the Ph.D.

## Student Learning Outcomes

### BIOMEDICAL ENGINEERING

The learning outcomes of students graduating in biomedical engineering (BMEG) will be defined and measured as follows:

1. Mastery of basic and advanced graduate level knowledge in their chosen areas of specialty as related to BMEG. This outcome will be measured through the grades that the students earn in their coursework;
2. Ability to complete on time specific research tasks. This outcome will be measured through the grade (Satisfactory, Incomplete, or Unsatisfactory) that the student receives every semester from his/her major research advisor for the appropriate research course (700 level);
3. Strong oral communication skills. This outcome will be measured through the quality and number of oral presentations and reports given by the student to his/her Advising and Examining Committee (AEC), at technical meetings or conferences, as well as meetings of his/her research team;
4. Strong communication skills in writing. This outcome will be measured through the quality and number of technical reports, articles or reviews that the student may write during his/her graduate studies. Additionally, the quality of student's communication skills in writing will be measured through the dissertation;
5. Ability to work independently in a collaborative environment – This outcome will be measured through feedback solicited from the members of student's AEC, his/her peers, as well as the length of time the student needs to complete his/her graduate studies.

## Chemical Engineering, M.S.Ch.E., Ph.D.

### Degrees Offered

- Masters of Science, Chemical Engineering (M.S.Ch.E.)
- Doctor of Philosophy, Chemical Engineering (Ph.D.)

### Nature of the Program

The department is authorized to admit students to the following degree programs: master's of science in chemical engineering (M.S. Ch.E.), and doctor of philosophy (Ph.D.). A problem report option is also available as an alternative to the traditional research based master's degree. Students in these programs must comply with the rules and regulations as presented in the general requirements for graduate work in the college and in the Department of Chemical and Biomedical Engineering. Students interested in pursuing work for a master's or doctoral degree in chemical engineering should contact the department for copies of the required guidelines and application information.

### Master Requirements

Students applying for admission to the graduate program in chemical engineering (CHE) must meet the general requirements of admission of the WVU graduate school. Admission is expected to be competitive and students will be selected on the basis of their scholastic preparation and intellectual capacity as demonstrated in the application.

To be eligible for admission into the Master of Science in Chemical Engineering degree program, a candidate must fulfill the following requirements:



- Applicant has a bachelor's degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall, and 3.0/4.0 grade point average overall in the last 2 years of undergraduate study;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of reference;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of Purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely CHE faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- Applicant has a bachelor's degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall, and 3.0/4.0 grade point average overall in the last 2 years of undergraduate study;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of reference;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of Purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely CHE faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Direct-Track PhD Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements::

- Applicant has a bachelor's degree from a recognized 4-year university, in engineering, or engineering-related disciplines including life science, physical science, computer science, biological science, physics, chemistry, mathematics, or applied mathematics;
- Applicants have a minimum 3.0/4.0 grade point average overall, and 3.0/4.0 grade point average overall in the last 2 years of undergraduate study;
- Transcripts from all the universities attended. Applicants are required to upload the academic records from each academic institution (undergraduate and/or graduate) attended. Official, original academic credentials that are issued in a language other than English must be accompanied by a certified English translation;
- Three letters of reference;
- Student CV;
- Statement of purpose, as part of the online application; this should not be more than two pages. The Statement of Purpose should describe the motivation for graduate study and how it relates to their professional goals, area of research interest, as well as the potential supervising professor (if identified). The student should also identify the primary areas of research interests and the most likely CHE faculty member the applicant would like to work with. The applicant could also indicate up to 3 areas of research interests as appropriate from the research directions in CBE and at WVU respectively. Students are encouraged to directly contact faculty about research opportunities and their willingness to serve as their supervising professor.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSChE Major Code: 3010

PhD Major Code: 3011

For specific information on the following programs, please see the links to the right:

- Chemical Engineering, M.S.Ch.E.

For specific information on the following programs, please see the links to the right:

- Chemical Engineering, Ph.D.

## Chemical Engineering, M.S.Ch.E.

### Curriculum in Master of Science in Chemical Engineering

A candidate for the M.S. degree in chemical engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Chemical and Biomedical Engineering Department.

### Program Requirements

All M.S. degree candidates are required to establish an Advising and Examining Committee (AEC). The student’s advisor, in conjunction with the student’s AEC will be responsible for determining the plan of study appropriate to the student’s needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
<b>Course Requirements *</b>		
A maximum of 6 credit hours can be taken at the 400 level		
A grade of C- or higher must be earned in all required courses		
Plan of Study		
CHE 531	Mathematical Methods in Chemical Engineering	3
CHE 615	Transport Phenomena	3
CHE 620	Thermodynamics	3
CHE 625	Chemical Reaction Engineering	3
Graduate Seminar **		
CHE 786	Professional Development Seminar for Chemical and Biomedical Engineering	0
Electives (Select courses from the following based on degree path):		9
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, EMGT, FIN, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 400-795, as approved by the student's AEC		
Complete 1 of the following options:		9
<b>Thesis Option - 9 hours</b>		
CHE 697	Research (6 hours)	
Complete 3 additional hours of coursework in CHE (any CHE course 400-795 as approved by the student's AEC)		
Final Oral or Written Examination		
Thesis		
<b>Problem Report Option - 9 hours</b>		
CHE 697	Research (3 hours)	
Complete 6 additional hours of coursework in CHE (any CHE course 400-795 as approved by the student's AEC)		
Formal written report or professional report/paper		
Final Oral or Written Examination		
<b>Coursework Options - 9 hours</b>		



Complete 9 additional hours of coursework in CHE (any CHE course 400-795 as approved by the student's AEC)

Total Hours

30

\*

Students who do not hold a baccalaureate degree in chemical engineering may be required to take a set of undergraduate chemical engineering courses above and beyond the minimum coursework requirements.

\*\*

Full-time Students are required to take a Seminar course each semester

## EXAMINATION

M.S. students following the thesis or problem report option must prepare a written research proposal and oral presentation. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination. This oral defense is administered by the student's AEC and must be completed by the end of the second semester after the student begins his/her research.

All students completing a thesis or problem report are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

## Major Learning Outcomes

### CHEMICAL ENGINEERING

Upon graduation, Chemical Engineering students will have:

- Understanding of advanced principles of chemical engineering, which include reaction engineering, transport phenomena, and thermodynamics
- Expert-level understanding of the background and theory/principles of their research topics.
- Ability to plan research projects, to perform the tasks, and to draw conclusions based on sound scientific and engineering principles.
- Ability to write technical articles for publication in refereed journals and to make oral and poster presentations at technical meetings.
- Demonstrated initiative in research planning and management, including safety and environmental issues.
- Been technically prepared for a lifetime of continuing education.
- Understanding of professional and ethical responsibilities.

## Chemical Engineering, Ph.D.

### Curriculum in Doctor of Philosophy – Chemical Engineering

A candidate for the Ph.D. degree with a major in chemical engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Chemical and Biomedical Engineering Department.

### Program Requirements

The doctor of philosophy degree with a major in chemical engineering is administered through the college's interdisciplinary Ph.D. program. Research performed for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of chemical engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses exclusive of research credits.		
A minimum GPA of 3.0 is required in all CHE courses exclusive of research credits.		
A grade of C- or higher must be earned in all required courses		
<b>Course Requirements *</b>		
CHE 531	Mathematical Methods in Chemical Engineering	3
CHE 615	Transport Phenomena	3
CHE 620	Thermodynamics	3
CHE 625	Chemical Reaction Engineering	3

Electives (Select from the following based on degree path): \*\*

9

Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC (excluding courses numbered 785, 786, 796, or 797)

Seminar

CHE 786 Professional Development Seminar for Chemical and Biomedical Engineering \*\*\*

Research

24

CHE 797 Research

**Examinations**

Plan of Study

Qualifying Exam

Candidacy Exam

Final Exam

Dissertation

Total Hours

45

\*

Students who do not hold a baccalaureate degree in chemical engineering may be required to take a set of undergraduate chemical engineering courses above and beyond the minimum coursework requirements.

A minimum of twenty-seven hours of coursework and twenty-four hours of independent research beyond a bachelor's degree, or eighteen hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required.

\*\*

Students must complete a minimum of nine semester hours of a coherent set of courses in an area related to the major research area. Non-technical courses are considered only under exceptional circumstances. All courses must be approved by the AEC and the academic advisor.

\*\*\*

Full-time Students are required to take one Seminar course each semester

## Examinations

### QUALIFYING EXAM

All Ph.D. students must pass a Ph.D. qualifying examination given in their first year at WVU. This examination is designed to assess the basic competency of students in the chemical engineering field to determine whether or not they have sufficient knowledge to undertake independent research.

### CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research.

Within a maximum of one semester after passing the PhD qualifying examination or entering the Ph.D. program, whichever is later, a student must successfully defend his/her dissertation research proposal. This proposal is a written document which must be reviewed and accepted by their AEC and subsequently defended in an oral presentation. The research work for the doctoral dissertation should show a high order of originality on the part of the student and must offer an original contribution to the field of engineering science.

A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree.

### FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

## Major Learning Outcomes

### CHEMICAL ENGINEERING

Upon graduation, Chemical Engineering students will have:

- Understanding of advanced principles of chemical engineering, which include reaction engineering, transport phenomena, and thermodynamics
- Expert-level understanding of the background and theory/principles of their research topics.
- Ability to plan research projects, to perform the tasks, and to draw conclusions based on sound scientific and engineering principles.
- Ability to write technical articles for publication in refereed journals and to make oral and poster presentations at technical meetings.
- Demonstrated initiative in research planning and management, including safety and environmental issues.
- Been technically prepared for a lifetime of continuing education.
- Understanding of professional and ethical responsibilities.

## Wadsworth Department of Civil and Environmental Engineering, M.S.C.E., Ph.D.

### Degrees Offered

- Master of Science, Civil Engineering (M.S.C.E.)
- Doctor of Philosophy, Civil Engineering (Ph.D.)

The Wadsworth Department of Civil and Environmental Engineering offers the degree of master's of science in civil engineering (M.S.C.E.). In conjunction with the Benjamin M. Statler College of Engineering and Mineral Resources, the master's of science in engineering (M.S.E.) and the doctor of philosophy degrees are available with emphases in civil engineering.

### Areas of Research

There are five major areas of interest of the faculty and graduate studies:

- Construction engineering and management, which includes construction project planning and cost control; construction operations; construction safety and health; sensing, analytics, simulation, and visualization for construction and infrastructure practices; integrated and automated construction; building information modeling; infrastructure planning; construction profitability; asset management and risk control
- Environmental and water resources, which includes wetland and natural stream restoration; water, waste water, and industrial waste treatment; site remediation; groundwater hydraulics, hydrology, sediment transport, fluid mechanics, water and health, and satellite remote sensing of hydrological processes
- Geotechnical engineering, which includes soil mechanics, foundations engineering, soil-structure interaction, geomechanics, geoenvironmental, groundwater and seepage, geosynthetics, contaminant transport, earthwork design, and waste by-product utilization
- Transportation engineering, which includes planning, design, construction, operations, and maintenance of transportation facilities/systems (roadways, railroads, airports, and public transportation) as well as related areas of infrastructure management and expert systems
- Structural engineering, which includes advanced structural mechanics, structural dynamics, bridge engineering, building design for static and dynamic loads, advanced materials for civil infrastructure, and nondestructive testing and evaluation

Faculty members in the Wadsworth Department of Civil and Environmental Engineering are active in teaching, research, and professional commitments. Many of the faculty members are licensed professional engineers registered in one or more states and are involved in state, regional, and national professional organizations, serving on numerous technical committees. They are successful researchers and have published extensively in technical journals. The Civil and Environmental Engineering faculty produces graduates who can assume the problem solving, decision-making, and technical leadership roles of a professional engineer and who have the sound educational background for the continuing professional development the field requires.

Students tailor their program of study to pursue individual topics of interests with guidance from a faculty advisor. Opportunities abound within the master's and doctoral tracks for a research experience in which the student tackles an engineering problem individually with guidance from a faculty advisor. The graduate program in civil engineering was established with the aim of developing its students' abilities to use today's contemporary methods of engineering analysis and design to solve tomorrow's engineering problems.

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## FACULTY

### CHAIR

- Vladislav Kecojec - Ph.D. (University of Belgrade)

## PROFESSORS

- Hung-Liang (Roger) Chen - Ph.D. (Northwestern University)  
Structural Dynamics, Structural Experimentation, Dynamic Soil-Structure Interaction, Damage in Reinforced Concrete Structures, Nondestructive Evaluation, Concrete
- Hota GangaRao - Ph.D., P.E. (North Carolina State University)  
Maurice A. and Jo Ann Wadsworth Distinguished Professor, Director of the Constructed Facilities Center, Director of the NSF Center for Integration of Composites into Infrastructure, Mathematical Modeling of Engineering Systems, Bridge Engineering, Composite Material Characterization and Implementation
- Lian-Shin Lin - Ph.D., P.E. (Purdue University)  
Physiochemical and Biological Treatment, Innovative Wastewater Technologies, Emerging Coaminants, Sustainable Development, Watershed Pollution
- David R. Martinelli - Ph.D. (University of Maryland)  
Transportation Engineering, Traffic Operations, Systems Analysis, Infrastructure Management
- Radhey Sharma - Ph.D. (University of Oxford)  
Sustainable Infrastructure, Geotechnical Engineering and Geoenvironmental, Energy Engineering

## ASSOCIATE PROFESSOR

- Omar I. Abdul-Aziz - Ph.D. (University of Minnesota, Twin Cities)  
Ecological-Water Resources Engineering; Scaling of Hydro-Ecological and Biochemical Variables; Modeling of Stream Water Quality and Ecosystem Carbon; Fluid Mechanics; Hydrology
- Karl Barth - Ph.D. (Purdue University)  
Steel Structures, Bridge Design and Rehabilitation, Connections, Stability Analysis, Experimental Mechanics
- Fei Dai - Ph.D. (Hong Kong Polytechnic University)  
Construction Engineering, Construction Management, Construction Information Technologies
- Leslie Clark Hopkinson - Ph.D. (Virginia Polytechnic Institute and State University)  
Surface Hydrology, Environmental Hydraulics, Ecological Engineering, River Mechanics
- John D. Quaranta - Ph.D., P.E. (West Virginia University)  
Geotechnical/Geo-Environmental Engineering, Soil Testing and Characterization, Soil and Mine Waste Dewatering, Geo-Synthetics, Soil and Groundwater Remediation
- P.V. Vijay - Ph.D. (West Virginia University)  
Concrete Structures; Composite Structures for Bridges, Buildings, and Pavements; Aging of Structures and Rehabilitation, Recycled Polymers for Infrastructure
- Yoojung Yoon - Ph.D. (Purdue University)  
Infrastructure Asset Management, Risk Management in Construction, Project Management and Control, Construction Equipment Management

## ASSISTANT PROFESSORS

- Kakan Day - Ph.D. (Clemson University)  
Intelligent Transportation Infrastructure Design and Analysis; Connected and Automated Vehicle Technology; Traffic Operations; Big Data Analytics for Transportation Data Management; Artificial Intelligence in Transportation.
- Emily Garner - Ph.D. (Virginia Polytechnic Institute and State University)  
Environmental Engineering and Microbiology, Wastewater reuse and sustainable water treatment, Microbial ecology, Application of molecular tools and next generation sequencing technologies, Drinking water
- Kevin Orner - Ph.D. (University of South Florida)  
Environmental Engineering, Wastewater Treatment, Resource Recovery, Water Quality, Engineering Education, Sustainable Development Engineering
- Dimitra Pyrialakou - Ph.D. (Purdue University)  
Transportation Engineering, Transportation Planning and Evaluation, Public and Rail Transportation, Airport Operations, Transportation Econometrics

## RESEARCH ASSISTANT PROFESSORS

- Ruifeng (Ray) Liang - Ph.D. (Institute of Chemistry, Chinese Academy of Sciences)

## PROFESSORS EMERITUS

- Ronald W. Eck - Ph.D. (Clemson University)
- W. Joseph Head - Ph.D. (Purdue University)
- Larry D. Luttrell - Ph.D. (Cornell University)
- William A. Sack - Ph.D. (Michigan State University)

- Hema J. Siriwardane - Ph.D., P.E. (Virginia Polytechnic Institute and State University)
- John P. Zaniewski - Ph.D. (University of Texas)

## ASSOCIATE PROFESSORS EMERITUS

- Robert N. Eli - Ph.D. (University of Iowa)
- Darrell R. Dean, Jr. - Ph.D. (Purdue University)

## Master Admissions

To be eligible for admission into the Master of Science in Civil Engineering degree program, a candidate must fulfill the following requirements:

- Hold or expect to receive a B.S. in Civil Engineering from either an accredited ABET curriculum or an internationally recognized program.
- Have a minimum GPA of 3.0/4.0.
- A statement of purpose.
- Three letters of recommendation.
- International applicants who do not have an ABET-accredited B.S. degree are required to submit GRE scores. All applicants are encouraged to submit GRE scores for fellowship and funding options.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

Candidates with a baccalaureate degree in another field of engineering, mathematics, or science are also eligible for admission into the M.S.E. degree (<http://catalog.wvu.edu/graduate/collegeofengineeringandmineralresources/collegewidedegrees/>). Candidates are normally required to attain a baccalaureate level of proficiency in areas of emphasis of the department. An engineering technology (non-calculus based) degree is not sufficient qualification for admission into any of the graduate programs offered by the department.

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A B.S. and/or M.S. degree in engineering from an institution which has an ABET accredited program in that discipline, or has an internationally recognized program in engineering, mathematics, or sciences (as specified by individual programs).
- Grade point average of 3.0 or better (out of a possible 4.0) in all previous college work and must meet all other requirements below.
- A statement of purpose.
- Three reference letters; at least two of the three references should be from the institution the applicant last attended.
- All applicants are encouraged to submit GRE scores for fellowship and funding options.
- International applicants who do not have an ABET-accredited B.S. degree or M.S. degree are required to submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSCE Major Code: 3015

PhD Major Code: 3016

For specific information on the following programs, please see the links to the right:

- Civil Engineering, M.S.C.E.

For specific information on the following programs, please see the links to the right:

- Civil Engineering, Ph.D.

## Civil Engineering, M.S.C.E.

### Curriculum in Masters of Science in Civil Engineering

A candidate for the M.S. degree in civil engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Wadsworth Department of Civil and Environmental Engineering.

## Program Requirements

All M.S. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements *</b>		
A minimum of 60% of courses must be from 500 level or above		
A minimum cumulative GPA of 3.0 is required in all coursework used for degree requirements		
Plan of Study		
Any CE courses 500-795		15
Select the following based on degree path:		9
Additional coursework includes any AEM, AGBI, BIOC, BIOL, BIOM, BIOS, BMEG, CE, CHE, CHEM, CPE, CS, EE, ENVP, GEOL, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, STAT, or WMAN courses 400-795, as approved by the student's AEC		
Complete 1 of the following options:		6-9
<b>Thesis Option - 6 hours</b>		
CE 697	Research (6 hours)	
Final Oral or Written Examination		
Thesis		
<b>Problem Report Option - 9 hours</b>		
Complete 6 additional hours of coursework		
CE 697	Research (3 hours)	
Final Oral or Written Examination		
Formal written report or professional report/paper		
<b>Coursework Option - 9 hours **</b>		
Complete 9 additional hours of coursework		
Final Oral or Written Examination		
Total Hours		30-33

\*

Students who do not hold a baccalaureate degree in civil engineering are required to take a set of undergraduate civil engineering courses above and beyond the minimum coursework requirements.

\*\*

Although rarely permitted, this option is open to students with practical engineering experience or those who have demonstrated an ability to organize and develop a project and write a technical report. Approval to pursue this option must be obtained from the student's AEC, the graduate program coordinator, and the department chairperson.

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

## Suggested Plan of Study

The plan below illustrates the Thesis Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S.C.E degree program that completes degree requirements in two years is as follows.

**First Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
CE Course		3 CE Course	3
CE Course		3 Additional Course	6
Additional Course		3	
		9	9

**Second Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
CE Course		3 CE Course	3
CE 697		6 CE 697	6
		9	9

Total credit hours: 36

## Major Learning Outcomes

### CIVIL ENGINEERING

#### Program Objectives

- Have the ability to work on multidisciplinary teams, have high technical competence, and have the ability to meet present and future challenges in a specialty area of civil and environmental engineering
- Have the ability to effectively plan and execute scientific research or other high-level investigations using the most current methods and techniques in the civil and environmental engineering fields
- Have the ability to effectively communicate the results of their research or investigations through writing and oral presentations
- Have the ability to contribute to the body of engineering knowledge and/or to economic growth by developing the science, the materials, and the technology necessary to deliver vital infrastructure services in the most cost effective manner while protecting the health, safety, and welfare of human society

#### Program Outcomes

- Graduates will have an ability to function on teams involving multiple civil engineering specialties.
- Graduates will have an ability to apply advanced methodologies in their specialty area.
- Graduates will have an ability to effectively communicate technical information.
- Graduates will have an ability to design and conduct experiments, analyze and interpret data, and develop recommendations.
- Graduates will have an understanding of professional and ethical responsibility.
- Graduates will have an ability to understand the impact of engineering solutions in global and societal context.
- Graduates will have a recognition of the need to engage in life-long learning.
- Graduates will have an ability to use contemporary techniques, skills, and tools necessary for engineering practice in education, industry, and/or government.

#### Student Learning Outcomes

- Graduates will meet the academic standards required by WVU for those in graduate school while completing courses pertinent to their specialty area and as specified in their plan of study.
- Graduates will conduct experimental or investigatory work necessary to satisfy the requirements of either the thesis option or report option for graduation.
- Graduates will write and orally defend a thesis, a report, or a dissertation.
- Graduates will serve in primary roles as graduate research assistants on research projects or on problem investigations sponsored by companies, associations, or government agencies looking for new methodology or science to resolve problems associated with the planning, design, construction, operation, and maintenance of the infrastructure or for related needs.

## Civil Engineering, Ph.D.

### Curriculum in Doctor of Philosophy – Civil Engineering

A candidate for the Ph.D. degree with a major in civil engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Wadsworth Department of Civil and Environmental Engineering.

## Program Requirements

The doctor of philosophy degree with a major in civil engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of civil engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
A minimum cumulative GPA of 3.0 is required in all coursework used for degree requirements		
<b>Course Requirements *</b>		
Any AEM, AGBI, BIOC, BIOL, BIOM, BIOS, BMEG, CE, CHE, CHEM, CPE, CS, EE, ENVP, GEOL, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, STAT, or WMAN courses 500-795, as approved by the student's AEC		18
Research		24
CE 797	Research	
<b>Examinations</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		
Dissertation		
Total Hours		42

\*

Students who do not hold a baccalaureate degree in civil engineering are required to take preparatory undergraduate civil engineering courses above and beyond the minimum coursework requirements.

A minimum of forty-two hours of coursework and thirty hours of independent research beyond a bachelor's degree, or eighteen hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required.

## Graduate Committee

For the Ph.D. program, the student, research advisor, academic advisor, and department chairperson appoint the student's AEC. Each committee must consist of at least five members, with at least three members from CEE, and at least one from outside the department. By the end of the Ph.D. student's first semester, the student, with the advice and consent of the academic advisor, graduate coordinator, and members of the student's AEC, submits a plan of study, initiated in CEE, to the dean.

## Examinations

### QUALIFYING EXAM

All students must take and pass a written qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the civil engineering field to determine whether or not they have sufficient knowledge to undertake independent research.

### CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research. After passing the qualifying examination, the student must submit to the AEC a written research proposal of his/her planned dissertation work and successfully defend it in an oral examination. The research proposal must be approved by the student's AEC. A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal, and receives the college's approval becomes a candidate for a Ph.D. degree in CE. Thereafter, the student will officially be engaged in dissertation research. At the completion of the dissertation research, the candidate must prepare a dissertation and defend it orally at the final defense conducted by the AEC.

A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree.



## FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

## Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical doctoral degree program that completes degree requirements in three years beyond an M.S. degree is as follows.

### First Year

Fall	Hours	Spring	Hours
CE Course		3 Course	3
CE Course		3 Course	3
CE 797		3 CE 797	3
		9	9

### Second Year

Fall	Hours	Spring	Hours
Course		3 Course	3
CE 797		6 CE 797	6
		9	9

### Third Year

Fall	Hours	Spring	Hours
CE 797		9 CE 797	9
		9	9

Total credit hours: 54

## Major Learning Outcomes

### CIVIL ENGINEERING

#### Program Objectives

- Have the ability to work on multidisciplinary teams, have high technical competence, and have the ability to meet present and future challenges in a specialty area of civil and environmental engineering
- Have the ability to effectively plan and execute scientific research or other high-level investigations using the most current methods and techniques in the civil and environmental engineering fields
- Have the ability to effectively communicate the results of their research or investigations through writing and oral presentations
- Have the ability to contribute to the body of engineering knowledge and/or to economic growth by developing the science, the materials, and the technology necessary to deliver vital infrastructure services in the most cost effective manner while protecting the health, safety, and welfare of human society

#### Program Outcomes

- Graduates will have an ability to function on teams involving multiple civil engineering specialties.
- Graduates will have an ability to apply advanced methodologies in their specialty area.
- Graduates will have an ability to effectively communicate technical information.
- Graduates will have an ability to design and conduct experiments, analyze and interpret data, and develop recommendations.
- Graduates will have an understanding of professional and ethical responsibility.
- Graduates will have an ability to understand the impact of engineering solutions in global and societal context.
- Graduates will have a recognition of the need to engage in life-long learning.
- Graduates will have an ability to use contemporary techniques, skills, and tools necessary for engineering practice in education, industry, and/or government.

### Student Learning Outcomes

- Graduates will meet the academic standards required by WVU for those in graduate school while completing courses pertinent to their specialty area and as specified in their plan of study.
- Graduates will conduct experimental or investigatory work necessary to satisfy the requirements of either the thesis option or report option for graduation.
- Graduates will write and orally defend a thesis, a report, or a dissertation.
- Graduates will serve in primary roles as graduate research assistants on research projects or on problem investigations sponsored by companies, associations, or government agencies looking for new methodology or science to resolve problems associated with the planning, design, construction, operation, and maintenance of the infrastructure or for related needs.

## Lane Department of Computer Science and Electrical Engineering

### Degrees Offered

- Master of Science, Computer Science (M.S.C.S.)
- Master of Science, Electrical Engineering (M.S.E.E.)
- Master of Science, Software Engineering (M.S.S.E.)
- Doctor of Philosophy, Computer Engineering (Ph.D.)
- Doctor of Philosophy, Electrical Engineering (Ph.D.)
- Doctor of Philosophy, Computer Science (Ph.D.)

### Areas of Research

The department is enthusiastically and vigorously involved in research, technical publication, and graduate instruction at the forefront of the field.

Academic and research activity is organized into five areas:

- Electronics and photonics
- Systems and signals
- Computer systems
- Software and knowledge engineering
- Theory of computation

### FACILITIES AND CENTERS

The Lane Department of CSEE has its main office, instructional lab, and research lab space on the Evansdale campus occupying the Advanced Engineering Research Building along with resources in the Engineering Sciences Building and the Engineering Research Building. The department also has facilities located in Armstrong Halls on the downtown campus.

The department is home to two university research centers: the Center for Identification Technology Research (CITeR), which is designated an Industry/University Cooperative Research Center by the National Science Foundation; and the Center for Advanced Power & Energy Research (APEREC). The Department and University are designated as a Center of Academic Excellence in Cyber Defense Education and Research by the National Security Agency and Department of Homeland Security.

The department and college host a modern 4,000 square foot clean room facility for device and sensor fabrication, under the management of the university's Shared Research Facilities. The university is also home to an outstanding set of faculty-led laboratory facilities, in areas that include electronic and photonic material, biometrics, communications, digital and analog signal processing, power electronics, robotics, high reliability software, computer security, computer forensics, artificial intelligence, virtual environments, theoretical computer science, and electric vehicles.

All graduate students have access to a broad variety of computing platforms for both classwork and research. The department operates and maintains a variety of dedicated computer systems, clusters, and networks supporting both the instructional and research activities of the department. These systems include numerous Windows workstations and a cluster of Linux Servers. Students have access to a rich set of software packages and tool suites available either on department systems or the Benjamin M. Statler College of Engineering and Mineral Resources systems. All computing systems have internet access enabling worldwide connectivity and access to several additional computing services via the Pittsburgh Supercomputing Center. The university is also a member of Internet2, of which faculty in the department are active participants.

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## FACULTY

### CHAIR

- Anurag Srivastava - Ph.D. (Illinois Institute of Technology)  
Power systems

### PROFESSORS

- Donald Adjero - Ph.D. (Chinese University of Hong Kong)  
Associate Department Chair and Graduate Coordinator for Computer Science. Multimedia information systems (image, video, and audio), Distributed multimedia systems, Data analytics
- Muhammad Choudhry - Ph.D. (Purdue University)  
Associate Department Chair and Graduate Coordinator for Computer Engineering and Electrical Engineering. Power system control, DC transmission, Stability, Power electronics
- Parviz Famouri - Ph.D. (University of Kentucky)  
Associate Department Chair. Analysis and control of electrical machines, Motor drives, Power electronics, Electric vehicles
- Ali Feliachi - Ph.D. (Georgia Institute of Technology)  
Power systems, Large-scale systems, Control
- Katerina Goseva-Popstojanova - Ph.D. (Ss. Cyril and Methodius University)  
Software engineering, Cybersecurity, Empirical studies, Data analytics
- Powsiri Klinkhachorn - Ph.D. (West Virginia University)  
Microprocessor applications, Computer architecture, Binary and non-binary logic
- Dimitris Korakakis - Ph.D. (Boston University)  
Semiconductor growth, Nanotechnology, Photonic devices, Biosensors
- Xin Li - Ph.D. (Princeton University)  
Image processing, Computer vision, Pattern recognition
- Nasser Nasrabadi - Ph.D. (Imperial College, London)  
Image and video processing, Biometrics, Video analytics
- Roy Nutter Jr. - P.E., Ph.D. (West Virginia University)  
Neural networks, Microprocessor systems, Computer architecture, Computer forensics
- Y.V. Ramana Reddy - Ph.D. (West Virginia University)  
Artificial intelligence, Knowledge-based simulation, Computer graphics
- Natalia Schmid - Ph.D. (Washington University)  
Detection and estimation, Statistical signal and image processing, Biometrics, Information theory, Wireless sensor networks, Signal processing for radio astronomy
- K. Subramani - Ph.D. (University of Maryland)  
Scheduling, Computational biology, Computational complexity, Polyhedral combinatorics
- Matthew Valenti - P.E., Ph.D. (Virginia Tech)  
Communication Theory, Wireless Networks, Error Control Coding
- Brian Woerner - Ph.D. (University of Michigan)  
Wireless communications, Networking, Cybersecurity

### ASSOCIATE PROFESSORS

- Xian-An Cao - Ph.D. (University of Florida)  
Nanofabrication, Opto-electronic devices
- Jeremy Dawson - Ph.D. (WVU)  
Photonics, Nanofabrication, Biometrics data sensing and Rapid DNA analysis
- Gianfranco Doretto - Ph.D. (University of California - Los Angeles)  
Computer vision, Statistical pattern recognition, Biometrics, Image processing, Computer graphics
- Elaine Eschen - Ph.D. (Vanderbilt University)  
CCDM Program Director, Design and analysis of algorithms, Graph theory, Combinatorics
- David Graham - Ph.D. (Georgia Institute of Technology)  
Analog signal processing
- Sarika Khushalani-Solanki - Ph.D. (Mississippi State University)  
Power/energyconversion, Power systems, Controls, Signals and systems
- Yuxin Liu - Ph.D. (Louisiana Tech University)  
Biotechnology/bioengineering, BioMEMS and microfluidics, Cellular sensor, Tissue engineering
- Daryl Reynolds - Ph.D. (Texas A&M)

Statistical signal processing for communications, Iterative (turbo) processing, Transmitter pre-coding, Space-time coding and processing

- Frances VanScoy - Ph.D. (University of Virginia)  
Programming languages and compilers, Multisensory computing, High performance computing

## TEACHING ASSOCIATE PROFESSORS

- Mohamed Hefeida - Ph.D. (University of Illinois-Chicago)  
Digital design, Computer architecture, Advanced communication systems, Cross-layer design and optimization

## ASSISTANT PROFESSORS

- Amir Alipour-Fanid - Ph.D. (George Mason University)  
Cyberphysical systems, cybersecurity, internet of things
- Kevin Bandura - Ph.D. (Carnegie Mellon University)  
Radio astronomy, Digital signal processing, Antennas

## TEACHING ASSISTANT PROFESSORS

- Tom Devine - Ph.D. (West Virginia University)  
Software engineering, Operating systems, Data science, Machine learning
- Brian Powell - Ph.D. (West Virginia University)  
Software engineering, Programming, Image processing
- Jignesh Solanki - Ph.D. (Mississippi State University)  
Power engineering, Smart grids, Decentralized control of power systems, Control and automation of distribution and transmission systems

## RESEARCH ASSISTANT PROFESSORS

- Saiph Savage - Ph.D. (University of California - Santa Barbara)  
Machine learning, Human computer interaction, Data analytics for social networks

## TEACHING INSTRUCTORS

- Camille Hayhurst - M.S. (West Virginia University)
- Ron Reaser - M.S. (West Virginia University)

## RESEARCH ASSOCIATES

- Dale Dzielski - M.B.A., C.M.A., P.M.P. (Regent University)  
Director of Software Engineering Programs and Graduate Coordinator for Software Engineering. Software project management, Business process management/supply chain, Enterprise architecture, Architecture technical debt
- David Krovich - M.S. (West Virginia University)  
Cybersecurity, Networking, Operating systems, Open-source software
- Don McLaughlin - M.A. (West Virginia University)  
Artificial intelligence, High performance computing, Data science, Computer graphics

## LECTURERS

- Kenneth Costello - M.S. (West Virginia University)
- Martin Dombrowski - M.S. (West Virginia University)
- Jeffrey Edgell - M.S. (Stephens Institute of Technology)
- Lawrence Jacowitz - Ph.D. (Ohio State University)
- Gregory Mundy - M.Sc. (West Virginia University)
- Cynthia Tanner - M.S. (West Virginia University)
- Scott Warden - M.S. (West Virginia University)

## ADJUNCT PROFESSORS

- William Cawthorne - Ph.D. (West Virginia University)  
Electrified vehicles, Control systems, Software architecture, Engineering leadership
- Lawrence Hornak - Ph.D. (Rutgers University)  
Optics, Integrated Optics, Micro/Nano Structures and Devices, Biosensors, Biometrics
- Michael Yura - Ph.D. (Ohio State University)  
New and innovative biometric technology

## ADJUNCT ASSOCIATE PROFESSORS

- Thirimachos Bourlai - Ph.D. (University of Surrey)  
Biomedical image processing, Pattern recognition
- Yu Gu - Ph.D. (West Virginia University)  
Robotics, Design, Automatic controls, Mechatronics
- Guodong Guo - Ph.D. (University of Madison-Wisconsin)  
Computer vision, Biometrics, Human computer interaction
- V. Jagannathan - Ph.D. (Vanderbilt University)  
Distributed intelligent systems, Internet and security technologies, Natural language processing
- V. Kulathumani - Ph.D. (Ohio State University)  
Wireless sensor actuator networks, Scalable and fault tolerant distributed systems
- Guilherme Pereira - Ph.D. (Federal University of Minas Gerais, Brazil)  
Sensor fusion, Multi-robot systems
- Sumitra Reddy - Ph.D. (West Virginia University)  
Healthcare Informatics, Componentware, Intelligent Systems, Information Technology Evolution
- Xueyan Sherry Xu - Ph.D. (West Virginia University)  
Biomedical signal processing, Pattern recognition, Human vibration evaluation and risk assessment
- Yanfang Ye - Ph.D. (Xiamen University)  
Computer security, Malware detection, Machine learning

## ADJUNCT ASSISTANT PROFESSORS

- Omid Dehzangi - Ph.D. (Nanyang Technological University)  
Data structures, Expert and decision support systems, Big data, Data mining, Artificial intelligence
- Victor Fragoso - Ph.D. (University of California - Santa Barbara)  
Computer vision, Machine learning
- Bin Liu - Ph.D. (Rutgers University)  
Data mining, Machine learning

## PROFESSORS EMERITI

- Hany Ammar - Ph.D. (University of Notre Dame)
- John Atkins - Ph.D. (University of Pittsburgh)
- Wils Cooley - Ph.D., P.E. (Carnegie Mellon University)
- Mark Jerabek - Ph.D., P.E. (Purdue University)
- Robert McConnell - Ph.D. (University of Kentucky)
- James Mooney - Ph.D. (Ohio State University)
- George Trapp - Ph.D. (Carnegie Mellon University)

# Computer Engineering, Ph.D.

## Degree Offered

- Doctor of Philosophy, Computer Engineering (Ph.D.)

## Nature of the Program

The Doctor of Philosophy program should be considered by those with superior academic achievement and who desire to pursue a career of research or teaching. Students interested in the Ph.D. program in computer engineering should see our webpage at <http://lcsee.statler.wvu.edu> (<https://lcsee.statler.wvu.edu/>) for information.

## Program Educational Objectives

The educational objective of the Ph.D. program in Computer Engineering is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study.

Specific outcomes of the program are:

1. Achieve a depth of knowledge in core computer engineering subjects, as demonstrated by completion of core Ph.D. courses and examination on those subjects through the Qualifying Examination process.

- 2. Achieve a breadth of advanced knowledge to support research, as demonstrated by completion of doctoral level coursework and graduate seminar participation.
- 3. Achieve an ability to carry out independent research, as demonstrated by successful completion and defense of a dissertation.

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A minimum cumulative grade point average of 3.0 or equivalent, based on a 4.0 system.
- Three letters of reference.
- Statement of purpose.
- All applicants for the doctoral program must submit GRE scores. Minimum suggested score of either the 80th percentile on the quantitative part or 80th percentile total (verbal + quantitative + analytical).
- All applicants for the doctoral program require an appropriate bachelors or master's degree for entry. Students lacking some foundation courses appropriate to a particular degree program may be assigned some preparatory coursework as a condition of admission.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

Students who hold a M.S. degree in Electrical Engineering or Computer Engineering (or equivalent degree) will be considered for admission with regular status into the Ph.D. program. Students who hold a Masters degree in the sciences or engineering, excluding M.S.E.E. or M.S.E., will be considered for admission with provisional status and will likely have coursework deficiencies to remove. All other students must apply for admission into a master's program as the first stage in attaining the Ph.D.

## FOUNDATION ASSESSMENT

Upon application review and discussion with the graduate coordinator, it may be determined a student needs preparatory work in order to pursue a graduate degree. Students with deficiencies may be required to take courses as prerequisites for graduate courses. Deficiencies are usually noted as a condition for admission; however, they may also be identified after joining the program.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 3021

## Curriculum in Doctor of Philosophy –Computer Engineering

A candidate for the Ph.D. degree with a major in computer engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Lane Department of Computer Science and Electrical Engineering.

## Program Requirements

The doctor of philosophy degree with a major in computer engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of computer engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

Research work for the doctoral dissertation must represent a significant contribution to engineering or computer science. It may entail a fundamental investigation into a specialized area.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
Course Requirements *		
A minimum of six credit hours of 600 or higher level courses		
A maximum of six credit hours may be in directed study (CPE 795)		
Select from the following based on degree path:		18
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC		

Research		24
CPE 797	Research	
<b>Examinations</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		
Dissertation		
Total Hours		42

\*

Students who do not hold a baccalaureate degree in computer engineering are required to take a set of undergraduate computer engineering courses above and beyond the minimum coursework requirements.

Doctoral students who do not have an M.S.C.S. or M.S.E.E. degree must either earn this degree, or complete coursework as required for the master's degree with thesis option. It is not necessary to actually write a thesis. A minimum of twenty-four hours of coursework is required. Up to twelve hours may be transferred from work done at another institution.

A minimum of forty-two hours of coursework and thirty hours of independent research beyond a bachelor's degree, or eighteen hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required.

## Examinations

### QUALIFYING EXAM

All students must take and pass a written qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the computer engineering field to determine whether or not they have sufficient knowledge to undertake independent research.

The Lane Department of Computer Science and Electrical Engineering is organized in the following five Focus Areas. All Ph.D. degree programs use these Areas to provide organizational structure to the educational process as delineated under specific Ph.D. requirements. The significance of these Areas will be of particular importance in preparation for the Qualifying Exam as each area has designated Ph.D. Qualifier Core Courses as follows:

Code	Title	Hours
<b>1. Electronics and Photonics Focus Area</b>		
EE 550	Advanced Semiconductor Electronics	
EE 551	Linear Integrated Circuits	
EE 650	Optoelectronics	
<b>2. Signals and Systems Focus Area</b>		
EE 513	Stochastic Systems Theory	
EE 515	Linear Control Systems	
EE 533	Computer Applications in Power System Analysis	
<b>3. Computer Systems Focus Area</b>		
CPE 670	Switching Circuit Theory 1	
CS 550	Theory of Operating Systems	
<b>4. Software/Knowledge Engineering Focus Area</b>		
CPE 684	Advanced Real-Time Systems	
CS 573	Advanced Data Mining	
CS 677	Pattern Recognition	
CPE 520	Application of Neural Networks	3
<b>5. Theory of Computing Focus Area</b>		
CS 510	Formal Specification of Language	
CS 520	Advanced Analysis of Algorithms	
CS 525	Computational Complexity	

Ph.D. students must make the first attempt to pass the qualifying exam within fourteen months of their enrollment if they already have a M.S. degree from the Lane Department of CSEE or within twenty-six months otherwise. The Ph.D. qualifying process consists of completion of a research project and oral examination. The project is intended to demonstrate the student's ability to assemble and analyze the relevant literature for a given research problem and to make preliminary steps towards his/her own contribution.

The oral exam will include:

1. Presentation by the student of his/her research project
2. Questions about the work, its context, and relevant literature
3. Questions about course work, focusing specifically on the three core courses for which the student has earned credit

The possible outcomes of the first year exam are: "Pass" which means the student is qualified to begin work towards the candidacy exam; "Pass with Recommended Coursework" which means the student is qualified to begin work towards a candidacy exam but certain courses must be taken; or "Fail". Any student failing the qualifying exam on the initial attempt will have one additional attempt within six months. Failure of the exam on the second attempt will disqualify the student from further doctoral studies in the LCSEE program.

## CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research.

When all requirements are completed, the qualifying and candidacy examinations are passed, and the research proposal is successfully defended, the student is formally admitted to candidacy for the Ph.D. degree. For full-time students, admission to candidacy must normally occur within three years of entering the Ph.D. program.

## FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

## Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical doctoral degree program that completes degree requirements in three years is as follows. A typical Ph.D. program requires four to five years beyond the baccalaureate degree, although scholarly achievements are more important than length of program.

### First Year

Fall	Hours	Spring	Hours
Course		3 Course	3
Course		3 Course	3
CPE 797		3 CPE 797	3
		9	9

### Second Year

Fall	Hours	Spring	Hours
CPE 797		6 CPE 797	6
Course		3 Course	3
		9	9

### Third Year

Fall	Hours	Spring	Hours
CPE 797		9 CPE 797	9
		9	9

Total credit hours: 54

## Major Learning Outcomes

### COMPUTER ENGINEERING

It is our goal that in the first five years after graduation our students will:

1. Achieve success and proficiency in the Computer Engineering profession.
2. Be recognized as leaders.
3. Contribute to the well-being of society.



# Computer Science, M.S.C.S., Ph.D.

## Degrees Offered

- Master of Science in Computer Science (M.S.C.S.)
- Doctor of Philosophy in Computer Science (Ph.D.)

## Nature of the Program

The Masters of Science in Computer Science (M.S.C.S.) degree program qualifies a student to assume a professional role in industry or government, teach in a junior or senior college, or undertake advanced training toward a doctorate in computer science. The following sections describe the general procedures to be followed in completing the M.S.C.S. degree. Note that steps are intended to be carried out in a specific order.

## Program Educational Objectives

The objective of the Masters of Science in Computer Science (M.S.C.S.) degree program is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study.

Specific outcomes that will be achieved by graduates of the program are:

- Achieve a depth of proficiency in a specific field of Computer Science by completing major courses in one of three areas: computer systems, software and knowledge engineering, or the theory of computation.
- Achieve a breadth of understanding of Computer Science by completing minor coursework requirements in other areas, and by participation in graduate seminar requirements.
- Demonstrate professionalism and communication skills through completion of coursework, project, or thesis defense.

## Master Admissions

To be eligible for admission into the Master of Science in Computer Science degree program, a candidate must fulfill the following requirements:

- A minimum cumulative GPA of 3.0 or equivalent, based on a 4.0 system.
- A statement of purpose.
- Three letters of reference.
- All applicants for the masters program must submit GRE scores. Minimum scores are a 3.5 or better in analytical writing, and either the 80th percentile or better on the quantitative part, or a combined score of 300 or better in (verbal + quantitative).
- All applicants require an appropriate bachelors degree for entry. Students lacking some foundation courses appropriate to a particular degree program may be assigned some preparatory coursework as a condition of admission (see Foundation .
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A minimum cumulative GPA of 3.0 or equivalent, based on a 4.0 system.
- A statement of purpose.
- Three letters of reference.
- All applicants for the doctoral program must submit GRE scores. Minimum scores are a 3.5 or better in analytical writing, and either the 80th percentile or better on the quantitative part, or a combined score of 300 or better in (verbal + quantitative).
- All applicants require an appropriate bachelors or masters degree for entry. Students lacking some foundation courses appropriate to a particular degree program may be assigned some preparatory coursework as a condition of admission (see Foundation Assessment section).
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## FOUNDATION ASSESSMENT

The minimum background expected of any student entering the Masters of Science in Computer Science program is coursework equivalent to the following:

- One year of calculus (MATH 155 (<http://catalog.wvu.edu/search/?P=MATH%20155>) and MATH 156 (<http://catalog.wvu.edu/search/?P=MATH%20156>)).

- One course in probability and statistics (STAT 215 (<http://catalog.wvu.edu/search/?P=STAT%20215>)).
- Knowledge of introductory programming in a high-level programming language (CS 110 (<http://catalog.wvu.edu/search/?P=CS%20110>)).

Students not meeting these minimum requirements will be required to take the equivalent coursework before applying to the M.S.C.S. program.

Students entering without a four-year Bachelors degree in Computer Science may have additional deficiencies in their coursework which must be addressed before beginning the regular program. These students will be initially admitted with provisional status and required to remove these deficiencies during their first eighteen hours of coursework.

Possible deficiency areas for students having a Bachelors degree in other disciplines represent the following core areas required of all undergraduate CS students:

Code	Title	Hours
CS 111 & 111L	Introduction to Data Structures and Introduction to Data Structures Laboratory	4
CS 220	Discrete Mathematics	3
CS 230 & 230L	Introduction to Software Engineering and Introduction to Software Engineering Laboratory	4
CS 310	Principles of Programming Languages	3
CS 320	Analysis of Algorithms	3
CS 350	Computer System Concepts	3

As demand justifies and resources permit, the department will offer accelerated courses to assist graduate students in satisfying deficiencies.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSCS Major Code: 3022

PhD Major Code: 3023

For specific information on the following programs, please see the links to the right:

- Computer Science, M.S.C.S.

For specific information on the following programs, please see the links to the right:

- Computer Science, Ph.D.

## Computer Science, M.S.C.S.

### Curriculum in Masters of Science in Computer Science

A candidate for the M.S. degree in computer science must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Lane Department of Computer Science and Electrical Engineering.

### Program Requirements

All M.S. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
<b>Course Requirements *</b>		
No more than 9 credit hours may be at the 400 level.		
Plan of Study		
CS 796	Graduate Seminar	1
<b>Focus Area</b>		

Complete one Focus Area in any area: 9

One Core course

Two Elective courses

Complete 6 additional credit hours from core courses from the other two areas that are not the primary focus area. 6

### AOE or Elective Courses 9-12

Courses used to satisfy major and minor requirements in MSCS cannot be used to satisfy the requirements for the AOE in Data Science or Cybersecurity. Choose an AOE in Computational Data Science or Cybersecurity or 9 additional credit hours from the courses listed in any CS focus area.

Complete 1 of the following options: 6-7

#### Thesis Option - 7 hours

CS 796 Graduate Seminar (1 hour)

CS 697 Research (6 hours)

Final Oral or Written Examination

Thesis

#### Problem Report Option - 6 hours

Complete a minimum 3 additional hours of coursework, at least 3 hours of which must be from the completed focus area.

CS 697 Research (3 hours)

Final Oral or Written Examination

Formal written report or professional report/paper

#### Coursework Option - 6 hours

Complete a minimum of 6 additional hours of coursework, at least 6 hours of which must be from the completed focus area.

Total Hours 31-35

\*

Students who do not hold a baccalaureate degree in computer science are required to take a set of undergraduate computer science courses above and beyond the minimum coursework requirements.

## Focus Areas

### COMPUTER SYSTEMS

Code	Title	Hours
<b>Core Courses</b>		
CPE 553	Advanced Networking Concepts	
CPE 670	Switching Circuit Theory 1	
<b>Elective Courses</b>		
CPE 435	Computer Incident Response	
CPE 520	Application of Neural Networks	
CPE 521	Applied Fuzzy Logic	
CPE 536	Computer Data Forensics	
CPE 538	Intro Computer Security Management	
CPE 664	Sensor Actuator Networks	
CS 453	Data and Computer Communications	
CS 533	Developing Portable Software	
CS 539	Computer Forensics and the Law	
CS 555	Advanced Computer Systems Architecture	
CS 556	Distributed and Pervasive Compt	
CS 568	Computer Network Forensics	

### SOFTWARE/KNOWLEDGE ENGINEERING

Code	Title	Hours
<b>Core Courses</b>		
CPE 684	Advanced Real-Time Systems	
CS 630	Empirical Methods in Software Engineering and Computer Science	
CS 677	Pattern Recognition	

CPE 520	Application of Neural Networks	3
<b>Elective Courses</b>		
BIOM 693	Special Topics ( Advanced Biometrics)	
CS 533	Developing Portable Software	
CS 558	Multimedia Systems	
CS 572	Advanced Artificial Intelligence Techniques	
CS 674	Computational Photography	
CS 676	Machine Learning	
CS 678	Computer Vision	
CS 793	Special Topics (Search-based Software Engineering, Software Reliability)	
CPE 620	Deep Learning	3
CS 573	Advanced Data Mining	3
CS 560	Big Data Engineering	3
CS 569	Cybersecurity and Big Data Analytics	3
SENG 564	Software Engineering of Mobile Applications	3
EE 565	Advanced Image Processing	
SENG 530	Software Verification and Validation	

## THEORY OF COMPUTING

Code	Title	Hours
<b>Core Courses</b>		
CS 510	Formal Specification of Language	
CS 520	Advanced Analysis of Algorithms	
CS 525	Computational Complexity	
<b>Elective Courses</b>		
CS 410	Compiler Construction	
CS 420	Design of Algorithms	
CS 422	Automata Theory	
CS 426	Discrete Mathematics 2	
CS 593	Special Topics (Network Optimization)	
CS 623	String Algorithms	
CS 693	Special Topics (Fixed Parameter Algorithms)	
CS 677	Pattern Recognition	
CS 726	Algorithmic Graph Theory	
CS 727	Information Dissemination	
CS 793	Special Topics (Approximation Algorithms)	
CS 793	Special Topics (Randomized Algorithms)	

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students following the thesis or problem report option are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

All master's students must defend their thesis or problem report at an oral exam, attended by all members of the committee.

A student who fails the research defense may repeat the defense at most once, at a time determined by the AEC but not necessarily during the same semester.

## Suggested Plan of Study

The plan below illustrates the Thesis Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S.C.S degree program that completes degree requirements in one and half years is as follows.

Those students who lack course prerequisites may require more than three semesters of full-time study to complete the degree. Students with research assistantships may also require more than three semesters to complete the degree.

### First Year

Fall	Hours	Spring	Hours
Focus Area 1 Core Course		3 Focus Area 1 Elective Course	3
Focus Area 1 Elective Course		3 Focus Area 2 Core Course	3
AOE or Elective Course		3 AOE Elective Course	3
CS 796		1 CS 796	1
	10		10

### Second Year

Fall	Hours
Focus Area 3 Core Course	3
AOE or Elective Course	3
CS 697	6
	12

Total credit hours: 32

## Areas of Emphasis Offered

- Computational Data Science (p. 549)
- Cybersecurity (p. 550)

## AREA OF EMPHASIS IN COMPUTATIONAL DATA SCIENCE

Code	Title	Hours
<b>Data Science Core *</b>		
CS 560	Big Data Engineering	3
Select one of the following:		3
CS 573	Advanced Data Mining	
CS 676	Machine Learning	
CS 677	Pattern Recognition	
<b>Data Science Electives ** *</b>		<b>6</b>
Cyber-Security:		
CS 568	Computer Network Forensics	
CS 569	Cybersecurity and Big Data Analytics	
Theoretical Foundations:		
CS 520	Advanced Analysis of Algorithms	
CS 540	Theory of Database Systems	
CS 623	String Algorithms	
Image and Video Analytics:		
CPE 520	Application of Neural Networks	
CS 593	Special Topics (3-D Computer Vision)	
CS 678	Computer Vision	
CS 674	Computational Photography	
Software Engineering:		
CS 630	Empirical Methods in Software Engineering and Computer Science	
Total Hours		12

\*

Students pursuing this area of emphasis must successfully complete a total of 12 hours in identified data science courses. To fulfill the requirements for the Area of Emphasis in Computational Data Science graduate students must successfully complete the following set of courses: two courses from the Data Science core, one of which must be CS 560 – Big Data Engineering, plus one other course from the Data Science core; and two courses (6 credit hours) from the Data Science electives listed in the accompanying table. Students are encouraged but not required to choose Data Science elective courses from the same topic area. This is intended to foster a more concentrated focus in the student's data science expertise. Students may also, if they choose, take one of the Data Science core courses, not already taken, as a data science elective.

\*\*

Students may choose to take one optional elective course from a department other than the Lane Department of Computer Science and Electrical Engineering. Courses outside of the Lane Department to satisfy the elective requirements of this area of emphasis must be approved by the Lane Department's Computational Data Science coordinator.

## AREA OF EMPHASIS IN CYBERSECURITY

Code	Title	Hours
<b>A 3.0 GPA is required in AOE coursework.</b>		
<b>Required Courses</b>		
CPE 536	Computer Data Forensics	3
CPE 568	Computer Network Forensics	3
CS 539	Computer Forensics and the Law	3
<b>Select one of the following:</b>		<b>3</b>
CPE 538	Intro Computer Security Management	
CS 569	Cybersecurity and Big Data Analytics	
Total Hours		12

## Major Learning Outcomes

### COMPUTER SCIENCE

It is our goal that in the first five years after graduation our students will:

1. Achieve success and proficiency in the Computer Science profession.
2. Be recognized as leaders.
3. Contribute to the well-being of society.

## Computer Science, Ph.D.

### Curriculum in Doctor of Philosophy –Computer Science Requirements

A candidate for the Ph.D. degree with a major in computer science must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Lane Department of Computer Science and Electrical Engineering.

### Program Requirements

The doctor of philosophy degree with a major in computer science is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of computer science.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

Research work for the doctoral dissertation must represent a significant contribution to engineering or computer science. It may entail a fundamental investigation into a specialized area.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
<b>Course Requirements *</b>		
A minimum of six credit hours of 600 or higher level courses		
A maximum of six credit hours may be in directed study (CS 795)		
Research		24
CS 797	Research	
Select from the following based on degree path:		18
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC		
<b>Examinations</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		
Dissertation		
Total Hours		42

\*

Students who do not hold a baccalaureate degree in computer science are required to take a set of undergraduate computer science courses above and beyond the minimum coursework requirements.

Doctoral students who do not have an M.S.C.S. degree must either earn this degree or complete coursework as required for the M.S.C.S. with thesis option. It is not necessary to actually write a thesis. A minimum of twenty-four hours of coursework is required. Up to twelve hours may be transferred from work done at another institution.

A minimum of forty-two hours of coursework and thirty hours of independent research beyond a bachelor's degree, or eighteen hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required.

## Examinations

### QUALIFYING EXAM

All students must take and pass a written qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the computer science field to determine whether or not they have sufficient knowledge to undertake independent research.

The Lane Department of Computer Science and Electrical Engineering is organized in the following five Focus Areas. All Ph.D. degree programs use these Areas to provide organizational structure to the educational process as delineated under specific Ph.D. requirements. The significance of these Areas will be of particular importance in preparation for the Qualifying Exam as each area has designated Ph.D. Qualifier Core Courses as follows:

Code	Title	Hours
<b>1. Electronics and Photonics Focus Area</b>		
EE 550	Advanced Semiconductor Electronics	
EE 551	Linear Integrated Circuits	
EE 650	Optoelectronics	
<b>2. Signals and Systems Focus Area</b>		
EE 513	Stochastic Systems Theory	
EE 515	Linear Control Systems	
EE 533	Computer Applications in Power System Analysis	
<b>3. Computer Systems Focus Area</b>		
CPE 670	Switching Circuit Theory 1	
CS 550	Theory of Operating Systems	
<b>4. Software/Knowledge Engineering Focus Area</b>		
CPE 684	Advanced Real-Time Systems	
CS 677	Pattern Recognition	
CS 630	Empirical Methods in Software Engineering and Computer Science	3

CPE 520	Application of Neural Networks	3
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### 5. Theory of Computing Focus Area

CS 510	Formal Specification of Language
CS 520	Advanced Analysis of Algorithms
CS 525	Computational Complexity

Ph.D. students must make the first attempt to pass the qualifying exam within fourteen months of their enrollment if they already have a M.S. degree from the Lane Department of CSEE or within twenty-six months otherwise. The Ph.D. qualifying process consists of completion of a research project and oral examination. The project is intended to demonstrate the student's ability to assemble and analyze the relevant literature for a given research problem and to make preliminary steps towards his/her own contribution.

The oral exam will include:

1. Presentation by the student of his/her research project
2. Questions about the work, its context, and relevant literature
3. Questions about course work, focusing specifically on the three core courses for which the student has earned credit

The possible outcomes of the first year exam are: "Pass" which means the student is qualified to begin work towards the candidacy exam; "Pass with Recommended Coursework" which means the student is qualified to begin work towards a candidacy exam but certain courses must be taken; or "Fail". Any student failing the qualifying exam on the initial attempt will have one additional attempt within six months. Failure of the exam on the second attempt will disqualify the student from further doctoral studies in the LCSEE program.

## CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research.

When all requirements are completed, the qualifying and candidacy examinations are passed, and the research proposal is successfully defended, the student is formally admitted to candidacy for the Ph.D. degree. For full-time students, admission to candidacy must normally occur within three years of entering the Ph.D. program.

## FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

## Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical doctoral degree program that completes degree requirements in three years is as follows. A typical Ph.D. program requires four to five years beyond the Baccalaureate degree, although scholarly achievements are more important than length of program.

### First Year

Fall	Hours	Spring	Hours
Course		3 Course	3
Course		3 Course	3
CS 797		3 CS 797	3
		9	9

### Second Year

Fall	Hours	Spring	Hours
CS 797		6 CS 797	6
Course		3 Course	3
		9	9



**Third Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
CS 797		9 CS 797	9
		9	9

Total credit hours: 54

**Major Learning Outcomes****COMPUTER SCIENCE**

It is our goal that in the first five years after graduation our students will:

1. Achieve success and proficiency in the Computer Science profession.
2. Be recognized as leaders.
3. Contribute to the well-being of society.

**Electrical Engineering, M.S.E.E., Ph.D.****Degrees Offered**

- Masters of Science, Electrical Engineering (M.S.E.E.)
- Doctor of Philosophy, Electrical Engineering (Ph.D.)

**Nature of the Program**

The Masters of Science in Electrical Engineering (M.S.E.E.) degree program is intended for students who have an undergraduate degree in Electrical Engineering, Computer Engineering, or a closely related discipline, and wish to broaden their depth of understanding in one or more areas of the field. Program graduates will be qualified to pursue careers in industry, government, or further academic study. The Doctor of Philosophy program should be considered by those with superior academic achievement and who desire to pursue a career of research or teaching.

**Program Educational Objectives**

The objective of the Electrical Engineering graduate degree programs is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study.

Specific outcomes that will be achieved by graduates of the program are:

1. Achieve a depth of proficiency in a specific field of Electrical Engineering by completing major courses in one of four areas: electronics and photonics; systems and signals; computer systems; or software and knowledge engineering.
2. Achieve a breadth of understanding of Electrical Engineering by completing minor coursework requirements in another area, and by participation in graduate seminar requirements.
3. Demonstrate professionalism and communication skills through completion of coursework, project, thesis defense or doctoral defense.

**Master Admissions**

To be eligible for admission into the Master of Science in Electrical Engineering degree program, a candidate must fulfill the following requirements:

- A minimum cumulative GPA of 3.0 or equivalent, based on a 4.0 scale.
- A statement of purpose.
- Three letters of reference.
- All applicants for the master program must submit GRE scores. Minimum scores are the 80th percentile on the quantitative part or 80th percentile total (verbal + quantitative + analytical).
- All applicants require an appropriate bachelors for entry. Students lacking some foundation courses appropriate to a particular degree program may be assigned some preparatory coursework as a condition of admission (see Foundation Assessment section).
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>).

**Doctoral Admissions**

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A minimum cumulative GPA of 3.0 or equivalent, based on a 4.0 scale.
- A statement of purpose.
- Three letters of reference.
- All applicants for the doctoral program must submit GRE scores. Minimum scores of either the 80th percentile on the quantitative part or 80th percentile total (verbal + quantitative + analytical).
- All applicants require an appropriate masters degree for entry. Students lacking some foundation courses appropriate to a particular degree program may be assigned some preparatory coursework as a condition of admission (see Foundation Assessment section).
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>).

**FOUNDATION ASSESSMENT**

Upon application review and discussion with the graduate coordinator, it may be determined a student needs preparatory work in order to pursue a graduate degree. Students with deficiencies may be required to take courses as prerequisites for graduate courses. Deficiencies are usually noted as a condition for admission; however, they may also be identified after joining the program.

**Admission Requirements 2024-2025**

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSEE Major Code: 3025

PhD Major Code: 3026

For specific information on the following programs, please see the links to the right:

- Electrical Engineering, M.S.E.E.

For specific information on the following programs, please see the links to the right:

- Electrical Engineering, Ph.D.

**Electrical Engineering, M.S.E.E.**

**Curriculum in Master of Science in Electrical Engineering Masters**

A candidate for the M.S. degree in electrical engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Lane Department of Computer Science and Electrical Engineering.

**Program Requirements**

All M.S. degree candidates are required to perform research and follow a planned program of study. The student’s research advisor, in conjunction with the student’s Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student’s needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

**Curriculum Requirements**

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
<b>Course Requirements *</b>		
No more than 9 credit hours may be at the 400 level.		
Plan of Study		
Graduate Seminar		1
EE 796	Graduate Seminar	
Courses used to satisfy major and minor requirements in MSEE cannot be used to satisfy the requirements for the AOE in Cybersecurity. Students pursuing AOE in Cybersecurity must select Focus Area 3.		9-12
One Core course		
Two Elective courses		
Complete one additional core course from a second focus area.		3
Choose 12 additional credit hours from the courses listed in any EE focus area.		12
<b>Complete 1 of the following options:</b>		<b>6-7</b>

**Thesis Option - 7 hours**

EE 796	Graduate Seminar (1 hour)
EE 697	Research (6 hours)
Final Oral or Written Examination	
Thesis	

**Problem Report Option - 6 hours**

Complete a minimum 3 additional hours of coursework, at least 3 hours of which must be from the completed focus area.

EE 697	Research (3 hours)
Final Oral or Written Examination	
Formal written report or professional report/paper	

**Coursework Option - 6 hours**

Complete a minimum of 6 additional hours of coursework, at least 6 hours of which must be from the completed focus area.

Total Hours	31-35
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Students who do not hold a baccalaureate degree in electrical engineering are required to take a set of undergraduate electrical engineering courses above and beyond the minimum coursework requirements.

## Focus Areas

### ELECTRONIC AND PHOTONICS

Code	Title	Hours
<b>Core Courses</b>		
EE 550	Advanced Semiconductor Electronics	3
EE 551	Linear Integrated Circuits	3
<b>Elective Courses</b>		
EE 435	Introduction to Power Electronics	3
EE 437	Fiber Optics Communications	3
EE 455	Introduction to Microfabrication	3
BIOM 457	Fundamentals of Photonics	3
EE 528	Biomedical Microdevices	3
EE 650	Optoelectronics	3
PHYS 771	Advanced Solid State Physics	3
PHYS 772	Semiconductor Physics	3
PHYS 773	Collective Phenomena in Solids	3
CHE 466	Electronic Materials Processing	3

### SIGNALS AND SYSTEMS

Code	Title	Hours
<b>Core Courses</b>		
EE 513	Stochastic Systems Theory	3
EE 515	Linear Control Systems	3
<b>Elective Courses</b>		
EE 461	Introduction to Communications Systems	3
EE 465	Introduction to Digital Image Processing	3
EE 517	Optimal Control	3
EE 531	Advanced Electrical Machinery	3
EE 533	Computer Applications in Power System Analysis	3
EE 535	Power System Control and Stability	3

EE 561	Communication Theory	3
EE 562	Wireless Communication System	3
EE 565	Advanced Image Processing	3
EE 567	Coding Theory	3
EE 569	Digital Video Processing	3
EE 613	Detection and Estimation Theory	3
EE 668	Information Theory	3
EE 713	Large-Scale System Modeling	3
EE 731	Real Time Control of Power System	3
EE 733	Protection of Power Systems	3
EE 735	HVDC Transmission	3

## COMPUTER SYSTEMS

Code	Title	Hours
<b>Core Courses</b>		
CPE 553	Advanced Networking Concepts	3
CPE 670	Switching Circuit Theory 1	3
<b>Elective Courses</b>		
CPE 435	Computer Incident Response	3
CPE 520	Application of Neural Networks	3
CPE 521	Applied Fuzzy Logic	3
CPE 536	Computer Data Forensics	3
CPE 538	Intro Computer Security Management	3
CPE 664	Sensor Actuator Networks	3
CS 453	Data and Computer Communications	3
CS 539	Computer Forensics and the Law	3
CS 572	Advanced Artificial Intelligence Techniques	3
CS 665	Computer System Security	3
CS 676	Machine Learning	3
CS 677	Pattern Recognition	3
CS 678	Computer Vision	3
CS 555	Advanced Computer Systems Architecture	3
CS 556	Distributed and Pervasive Compt	3
CS 568	Computer Network Forensics	3
CPE 684	Advanced Real-Time Systems	3
EE 565	Advanced Image Processing	3
EE 569	Digital Video Processing	3

## SOFTWARE/KNOWLEDGE ENGINEERING

Code	Title	Hours
<b>Core Courses</b>		
CPE 684	Advanced Real-Time Systems	3
CS 630	Empirical Methods in Software Engineering and Computer Science	3
CPE 520	Application of Neural Networks	3
CS 677	Pattern Recognition	3
<b>Elective Courses</b>		
BIOM 693	Special Topics (Advanced Biometrics)	3
CS 533	Developing Portable Software	3
CS 558	Multimedia Systems	3
CS 572	Advanced Artificial Intelligence Techniques	3
CS 665	Computer System Security	3
CS 674	Computational Photography	3

CS 676	Machine Learning	3
CS 757	Distributed Systems and Algorithms	3
EE 565	Advanced Image Processing	3
SENG 550	Object Oriented Design	3

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students following the thesis or problem report option are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

All master's students must defend their thesis or problem report at an oral exam, attended by all members of the committee.

A student who fails the research defense may repeat the defense at most once, at a time determined by the AEC but not necessarily during the same semester.

## Suggested Plan of Study

The plan below illustrates the Thesis Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S.E.E degree program that completes degree requirements in one and half years is as follows. Those students who lack course prerequisites may require more than three semesters of full-time study to complete the degree. Students with research assistantships may also require more than three semesters to complete the degree.

### First Year

Fall	Hours	Spring	Hours
Focus Area 1 Core Course		3 Focus Area 1 Elective Course	3
Focus Area 1 Elective Course		3 Focus Area 2 Core Course	3
AOE or Elective Course		3 AOE or Elective Course	3
EE 796		1 EE 796	1
	10		10

### Second Year

Fall	Hours
Focus Area 3 Core Course	3
AOE or Elective Course	3
EE 697	6
	12

Total credit hours: 32

## AREA OF EMPHASIS IN CYBERSECURITY

Code	Title	Hours
<b>A 3.0 GPA is required in AOE coursework.</b>		
<b>Required Courses</b>		
CPE 536	Computer Data Forensics	3
CPE 568	Computer Network Forensics	3
CS 539	Computer Forensics and the Law	3
<b>Select one of the following:</b>		<b>3</b>
CPE 538	Intro Computer Security Management	
CS 569	Cybersecurity and Big Data Analytics	

Total Hours

12

## Major Learning Outcomes

### ELECTRICAL ENGINEERING

It is our goal that in the first five years after graduation our students will:

1. Achieve success and proficiency in the Electrical Engineering profession.
2. Be recognized as leaders.
3. Contribute to the well-being of society.

## Electrical Engineering, Ph.D.

### Curriculum in Doctor of Philosophy – Electrical Engineering Requirements

A candidate for the Ph.D. degree with a major in electrical engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Lane Department of Computer Science and Electrical Engineering.

### Program Requirements

The doctor of philosophy degree with a major in electrical engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of electrical engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

Research work for the doctoral dissertation must represent a significant contribution to engineering or computer science. It may entail a fundamental investigation into a specialized area. A minimum of twenty-four credit hours of research (EE 797 ([http://catalog.wvu.edu/graduate/collegeofengineeringandmineralresources/thelanedepartmentofcomputerscienceandelectricalengineering/computer\\_engineering/](http://catalog.wvu.edu/graduate/collegeofengineeringandmineralresources/thelanedepartmentofcomputerscienceandelectricalengineering/computer_engineering/))) is required.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
<b>Course Requirements *</b>		
A minimum of six credit hours of 600 or higher level courses		
A maximum of six credit hours may be in directed study (EE 795)		
Research		24
EE 797	Research	
Select from the following based on degree path:		18
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC		
<b>Examinations</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		
Dissertation		
Total Hours		42

\*

Students who do not hold a baccalaureate degree in electrical engineering are required to take a set of undergraduate electrical engineering courses above and beyond the minimum coursework requirements.

Doctoral students who do not have an M.S.E.E. degree must either earn this degree, or complete coursework as required for the Master's degree with thesis option. It is not necessary to actually write a thesis. A minimum of twenty-four hours of coursework is required. Up to twelve hours may be transferred from work done at another institution.

A minimum of forty-two hours of coursework and thirty hours of independent research beyond a bachelor's degree, or eighteen hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required.

## Examinations

### QUALIFYING EXAM

All students must take and pass a written qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the electrical engineering field to determine whether or not they have sufficient knowledge to undertake independent research.

The Lane Department of Computer Science and Electrical Engineering is organized in the following five Focus Areas. All Ph.D. degree programs use these Areas to provide organizational structure to the educational process as delineated under specific Ph.D. requirements. The significance of these Areas will be of particular importance in preparation for the Qualifying Exam as each area has designated Ph.D. Qualifier Core Courses as follows:

Code	Title	Hours
<b>1. Electronics and Photonics Focus Area</b>		
EE 550	Advanced Semiconductor Electronics	
EE 551	Linear Integrated Circuits	
EE 650	Optoelectronics	
<b>2. Signals and Systems Focus Area</b>		
EE 513	Stochastic Systems Theory	
EE 515	Linear Control Systems	
EE 533	Computer Applications in Power System Analysis	
<b>3. Computer Systems Focus Area</b>		
CPE 670	Switching Circuit Theory 1	
CS 550	Theory of Operating Systems	
<b>4. Software/Knowledge Engineering Focus Area</b>		
CPE 684	Advanced Real-Time Systems	
CS 677	Pattern Recognition	3
CS 630	Empirical Methods in Software Engineering and Computer Science	3
CPE 520	Application of Neural Networks	3
<b>5. Theory of Computing Focus Area</b>		
CS 510	Formal Specification of Language	
CS 520	Advanced Analysis of Algorithms	
CS 525	Computational Complexity	

Ph.D. students must make the first attempt to pass the qualifying exam within fourteen months of their enrollment if they already have a M.S. degree from the Lane Department of CSEE or within twenty-six months otherwise. The Ph.D. qualifying process consists of completion of a research project and oral examination. The project is intended to demonstrate the student's ability to assemble and analyze the relevant literature for a given research problem and to make preliminary steps towards his/her own contribution.

The oral exam will include:

1. Presentation by the student of his/her research project
2. Questions about the work, its context, and relevant literature
3. Questions about course work, focusing specifically on the three core courses for which the student has earned credit

The possible outcomes of the first year exam are: "Pass" which means the student is qualified to begin work towards the candidacy exam; "Pass with Recommended Coursework" which means the student is qualified to begin work towards a candidacy exam but certain courses must be taken; or "Fail". Any student failing the qualifying exam on the initial attempt will have one additional attempt within six months. Failure of the exam on the second attempt will disqualify the student from further doctoral studies in the LCSEE program.

### CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research.

When all requirements are completed, the qualifying and candidacy examinations are passed, and the research proposal is successfully defended, the student is formally admitted to candidacy for the Ph.D. degree. For full-time students, admission to candidacy must occur within three years of entering the Ph.D. program.

## FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

## Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical doctoral degree program that completes degree requirements in three years is as follows. A typical Ph.D. program requires four to five years beyond the baccalaureate degree, although scholarly achievements are more important than length of program.

### First Year

Fall	Hours	Spring	Hours
Course		3 Course	3
Course		3 Course	3
EE 797		3 EE 797	3
		9	9

### Second Year

Fall	Hours	Spring	Hours
EE 797		9 EE 797	9
		9	9

### Third Year

Fall	Hours	Spring	Hours
Course		3 Course	3
EE 797		6 EE 797	6
		9	9

Total credit hours: 54

## Major Learning Outcomes

### ELECTRICAL ENGINEERING

It is our goal that in the first five years after graduation our students will:

1. Achieve success and proficiency in the Electrical Engineering profession.
2. Be recognized as leaders.
3. Contribute to the well-being of society.

## Software Engineering, M.S.S.E.

### Degrees Offered

- Masters of Science, Software Engineering (M.S.S.E.)

### Nature of the Program

The Lane Department of Computer Science and Electrical Engineering offers the professionally oriented and applied Masters of Science in Software Engineering (M.S.S.E.) degree program. The M.S.S.E. provides graduate educational opportunities to working professionals with any accredited degree as well as recent graduates of an accredited BS CS, BS SE, or closely related bachelors degree. The M.S.S.E. degree is a unique fully-online program offered through Coursera that provides graduate level software engineering expertise to individuals who are currently working in software engineering or the information technology industry. The program aspires to serve full-time software engineering professions seeking an applied master's program and wanting the flexibility an online graduate degree program offers. Under the coursework-only option, students will complete their degree requirements with five core courses and five advanced courses that deepen their understanding of aspects of software engineering relevant to their careers.



## Program Educational Objectives

The objective of the program is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, or governmental service. After completing five core courses, students will achieve proficiency in:

- Software Project Management.
- Software Analysis and Design.
- Object-Oriented Design of Software.
- Software Verification and Validation.
- Software Evolution.

## Master Admissions

Students seeking admission to the Masters of Science in Software Engineering (MSSE) program must satisfy the following requirements to be considered. All students must fulfill all items in General Admission Requirements as well as meet either Category A or Category B Admission Requirements for entry into the program.

### GENERAL ADMISSION REQUIREMENTS

- Submit a completed application using Major Code 3081 for Software Engineering through the WVU Online Graduate Admissions (<https://online.wvu.edu/admissions/graduate-application/>) page.
- Submit a personal statement. Your personal statement should be 750 to 1,000 words and double-spaced. This is an opportunity to tell the admissions committee more about your reasons to earn an MSSE Degree and should not repeat your resume.
- Letters of reference can be received after an application is submitted. Letters must come directly from the recommender. Letters submitted by the applicant are not accepted. Both Academic and Professional References mentioned below should discuss your education and professional experience with the Software Development Life Cycle (SDLC), as applicable. Once you enter their information into the online application, your recommenders will be notified to submit a letter of reference or complete a brief online information form.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

### CATEGORY A ADMISSION REQUIREMENTS

- Submit official transcripts showing degree completion of a bachelor's degree in Computer Science, Computer Engineering, Software Engineering, or a closely related field from an accredited University, with a minimum cumulative grade point average of 3.0 (on a 4-point scale) or better.
- Submit the GRE General Test results. No GRE is required, if graduated from an ABET accredited universities with GPA above 3.5/4.0.
- Submit a resume that reflects your education and experience.
- Submit 2 required letters of academic or professional reference.

### CATEGORY B ADMISSION REQUIREMENTS

- Submit official transcripts showing degree completion of a bachelor's degree in any field of study from an accredited University with a minimum cumulative grade point average of 3.0 (on a 4-point scale) or better.
- No GRE is required.
- Submit a resume that reflects education *and* 1 year or more of full-time work experience with focus on the Software Development Life Cycle (SDLC) within any industry.
- Submit 2 required letters, both being professional reference.

It is strongly recommended that students without a bachelor's degree in Computer Science, or a closely related field complete SENG 505: Programming Applications with JAVA.

Note: the credit earned for the SENG 505 course does not apply toward the required hours for the MSSE Degree.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 3081

## Curriculum in Master of Science in Software Engineering

A candidate for the M.S. degree in software engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Lane Department of Computer Science and Electrical Engineering.

## Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student's faculty advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the student with the necessary support to complete their degree and prepare them for their career.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
<b>Course Requirements</b>		
Plan of Study		
Core Courses		15
SENG 510	Software Project Management	
SENG 520	Software Analysis and Design	
SENG 530	Software Verification and Validation	
SENG 540	Software Evolution	
SENG 550	Object Oriented Design	
Advanced Courses		15
Select from the following:		
CPE 538	Intro Computer Security Management	
SENG 564	Software Engineering of Mobile Applications	
SENG 565	Database Design and Implementation	
SENG 581	Quality Software Process Management	
SENG 582	Enterprise Architecture Framework	
SENG 585	Software Engineering Economics	
SENG 660	Engineering Secure Software	
SENG 695	Independent Study (Experiential Learning)	
Total Hours		30

SENG 505 is offered as a Preparatory Course and is recommended for those with little to no formal education in computer science or software Engineering.

### Suggested Plan of Study

The plan below illustrates the Coursework Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S.S.E degree program that completes degree requirements in two years is as follows.

#### First Year

Fall	Hours	Spring	Hours	Summer	Hours
SENG 520		3 SENG 510		3 SENG 540	3
SENG 550		3 SENG 530		3 Advanced Course	3
		6		6	6

#### Second Year

Fall	Hours	Spring	Hours
Advanced Course		3 Advanced Course	3
Advanced Course		3 Advanced Course	3
		6	6

Total credit hours: 30

## Major Learning Outcomes

### SOFTWARE ENGINEERING

It is our goal that in the first five years after graduation our students will:

1. Apply software engineering practices to solve complex problems by analyzing and assessing needs and implementing improvements.
2. Achieve success and proficiency in the Software Engineering profession by making significant contributions to technology advancements.

3. Recognize professional responsibilities and make informed decisions in Software Engineering practices.
4. Advance as a team member or lead engaged in the Software Engineering discipline.

## Department of Industrial and Management Systems Engineering

### Degrees Offered

- Masters of Science, Industrial Engineering (M.S.I.E.)
- Masters of Science, Safety Management (M.S.)
- Masters of Science, Engineering Management (M.S.)
- Doctor of Philosophy, Industrial Engineering (Ph.D.)
- Doctor of Philosophy, Occupational Safety and Health (Ph.D.)

### Department Overview

One of the defining attributes in the success of the department is the dedication and talent of its faculty and staff members. The department offers degree programs in industrial engineering, engineering management, and occupational safety and health. The industrial engineering curriculum provides training on diverse engineering topics including but not limited to manufacturing, production planning and control, supply chain and optimization, and ergonomics. Engineering management students learn to apply specialized knowledge to address contemporary professional challenges and solve complex operational problems to improve business processes. The safety management program is accredited by the Applied and Natural Sciences Accreditation Commission of ABET, <http://www.abet.org>. The mission of the safety management program is to prepare program graduates to preserve and protect the resources – people, property, and business continuity – of the organization. The combined resources and faculty talents of these programs create synergies that provide our students with outstanding academic and research experiences in the fields of engineering and occupational safety and health.

### Areas of Research

The research opportunities are available in the areas of smart manufacturing, operations research, production planning and control, data analytics and visualization, ergonomics, industrial hygiene, energy efficiency and sustainability, and safety.

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## FACULTY

### CHAIR

- Ashish Nimbarte - Ph.D. (Louisiana State University)  
Occupational Biomechanics, Human Factors Engineering, Industrial Ergonomics, Occupational safety and health, Energy Efficiency and Sustainability

### PROFESSORS

- B. Gopalakrishnan - Ph.D., P.E., CEM. (Virginia Polytechnic Institute and State University)  
Manufacturing Processes and Production Systems, Artificial Intelligence Applications, Expert Systems Development, Industrial Energy Efficiency, Building's Energy Efficiency, Industrial Energy and Waste Minimization, Productivity Improvement
- Ashish Nimbarte - Ph.D. (Louisiana State University)  
Occupational Biomechanics, Human Factors Engineering, Industrial Ergonomics, Occupational Safety and Health, Energy Efficiency and Sustainability
- David A. Wyrick - Ph.D., P.E., P.E.M. (University of Missouri-Rolla)  
Engineering Management, Engineering Education, Effective Management of Technology in SMEs

### ASSOCIATE PROFESSORS

- Alan McKendall, Jr. - Ph.D. (University of Missouri, Columbia)  
Operations Research, Meta-heuristics, Facilities Layout and Materials Handling, Project Scheduling, Integrated Production Systems
- Thorsten Wuest - Ph.D. (University of Bremen, Germany)  
Smart and Advanced Manufacturing, Intelligent Manufacturing Systems, Machine Learning / Big Data in Manufacturing Applications, Product Lifecycle Management, Smart Product Design, Information and Knowledge Management, IPPS / Servitization

### ASSISTANT PROFESSORS

- Imtiaz Ahmed - Ph.D. (Texas A&M University)  
Data science, machine learning, quality control and inventory management
- Avishek Choudhury - Ph.D. (Stevens Institute of Technology)  
Cognitive Human Factors, Public Health, Patient Safety, Digital Health Integration, User Experience

- Zeyu Liu - Ph.D. (The University of Tennessee, Knoxville)  
Stochastic Linear/Nonlinear Optimization, Machine Learning & Artificial Intelligence
- Zhichao Liu - Ph.D. (Texas Tech University)  
Manufacturing processes, Metal additive manufacturing, Sustainable manufacturing
- JuHyeong Ryu - Ph.D. (University of Waterloo)  
Safety Management, Human-Robotic Systems, Occupational Ergonomics, Wearables Technologies

## **TEACHING ASSISTANT PROFESSOR**

- Omar Al-Shebeeb - Ph.D. (West Virginia University)  
Manufacturing Systems, Design for Manufacturing, CAD/CAM Applications
- Jeremy Gouzd - Ph.D., (West Virginia University)  
Occupational safety and health, Risk assessment, Engineering safety

## **CAREER & PROFESSIONAL MENTOR**

- Philomena Krosmico - MSIE (West Virginia University)  
Engineering Statistics, Lean Process Improvement

## **RESEARCH ASSOCIATE**

- Christopher Moore - Ph.D. (West Virginia University)  
Occupational Safety and Health, Industrial Sustainability, Pollution Prevention

## **ADJUNCT INSTRUCTOR**

- Alvin Guthrie - BSIE (West Virginia University)  
Operations management, Manufacturing systems, Production planning and control
- Daniel Kniska - MSIE (West Virginia University)  
Engineering economy, Statistics, Production planning and control
- Nelson F. Rekos - BSME (University of Maryland), MBA (West Virginia University)  
Project Management, Materials Science, Advanced Energy Systems, Government Contracting

## **PROFESSORS EMERITI**

- Rashpal S. Ahluwalia - Ph.D., P.E. (Western Ontario University)  
Manufacturing systems, Quality and reliability engineering, Robotics and automation
- Jack Byrd Jr. - P.E. (West Virginia University)  
Operations research, Workforce development, Work design, Integrated product development
- Robert C. Creese - Ph.D., P.E. (Pennsylvania State University)  
Manufacturing processes/systems, Foundry engineering, Cost engineering, Engineering economics
- Daniel E. Della-Giustina - Ph.D. (Michigan State University)  
Playground and recreation safety, Sport safety, Highway and traffic management, Safety, fire, and emergency response
- Steven Guffey - Ph.D., C.I.H. (North Carolina State University)  
Ventilation systems theory and design, Noise measurement and control, Exposure assessment
- Wafik Iskander - Ph.D., P.E. (Texas Tech University)  
Operations research and optimization, Simulation modeling and analysis, Production planning and control, Applied statistics, Energy efficiency, Transportation planning
- Majid Jaridi - Ph.D. (University of Michigan)  
Statistics, Quality control, Forecasting and transportation research
- Warren Myers - Ph.D., C.I.H. (West Virginia University)  
Industrial hygiene and safety, Worker exposure assessment and modeling, Aerosol filtration, Occupational respiratory protection design and testing
- Ralph W. Plummer - Ph.D. (West Virginia University)  
Systems safety engineering, Energy conservation, Human factors, Ergonomics

## **ASSOCIATE PROFESSOR EMERITUS**

- Andrew J. Sorine - Ed.D. (West Virginia University)  
Benchmarking, Safety and Health Programs, Safety Management Information Systems

## **VISITING AND ADJUNCT PROFESSORS**

- Lorenzo G. Cena - Ph.D. (University of Iowa)  
Occupational health and safety, Aerosol generation and characterization, Exposure assessment
- Christopher Coffey - Ph.D. (West Virginia University)

Occupational Safety and Health, Assessment, Evaluation of Respiratory Protective Equipment

- Ren Dong - Ph.D. (Concordia University)  
Human Factors Engineering, Ergonomics, Safety engineering
- John R. Etherton - Ph.D. (West Virginia University)  
Safety Engineering, Human Factors
- Martin Harper - Ph.D. (London School of Hygiene and Tropical Medicine)  
Industrial Hygiene, Exposure Assessment
- James R. Harris - Ph.D., P.E. (West Virginia University)  
Safety Research, Human Factors
- Hongwei Hsiao - Ph.D. (University of Michigan)  
Safety Engineering, Human Factors
- Kevin Michael - Ph.D. (Pennsylvania State University)  
Acoustics, Hearing Protection, Industrial Hygiene
- Christopher Pan - Ph.D. (University of Cincinnati)  
Industrial Hygiene, Exposure Assessment
- Ju-Hyeong Park - Sc.D. M.P.H., C.I.H. (Harvard University)  
Industrial Hygiene, Exposure Assessment
- M. Abbas Virgi - Sc.D., C.I.H. (University of Massachusetts)  
Exposure assessment, Epidemiology, Biostatistics
- Ziqing Zhuang - Ph.D. (West Virginia University)  
Exposure Assessment, Assessment and Evaluation of Respiratory Protective Equipment

## Engineering Management, M.S.

### Degree Offered

- Master of Science, Engineering Management (M.S.)

### Nature of the Program

This is an entirely web-based course-work only asynchronous degree program. The program graduates will build upon their prior engineering education and/or professional experience, to strengthen their ability to effectively manage business operations, projects, and teams. They will apply specialized knowledge to address contemporary professional challenges and solve complex operational problems to improve the business processes, with many emerging as the leaders of tomorrow by practicing holistic learning on a continual basis to acquire skills that are necessary to promote innovation, creative solutions, and diversity.

### Masters Admissions

To be eligible for admission into the Master of Science in engineering management degree program, a candidate must fulfill the following requirements

- Earned a cumulative GPA of 3.0 or better (out of a possible 4.0). Applicants with a cumulative grade point average of less than 3.0 may be considered for admission if they have at least two years of professional experience.
- Bachelor of Science degree from engineering, physics, chemistry, computer sciences, mathematics, or a similar technical or science program. The applicant must have completed at least two years of calculus or equivalent mathematics in their degree program.
- Official transcripts of all previous college coursework.
- Statement of purpose explaining the role that the engineering management degree would play in their long-term career aspirations.
- Resume highlighting prior educational and/or professional experience.

### Admission Requirements 2024-2025

The admission requirements above will be the same for the 2024-2025 academic year.

Major Code: 3004

### Curriculum in Masters of Science in Engineering Management

A candidate for the M.S. degree in Engineering Management must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Industrial and Management Systems Engineering Department.

## PROGRAM REQUIREMENTS

This is an online coursework only M.S. degree. All M.S. degree candidates are required to follow a planned program of study. The student's advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degrees and prepare them for their careers.

## CURRICULUM REQUIREMENTS

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
A minimum of 60% of courses must be from 500 level or above		
<b>Foundation Courses</b>		<b>18</b>
Select six from the following:		
EMGT 501	Engineering and Systems Management	
EMGT 502	Quality Management Systems	
EMGT 503	Project Management	
EMGT 504	Operations and Supply Chain Management	
EMGT 511	Analytics for Decision Making	
EMGT 513	Managerial Accounting/Financial Analytics	
EMGT 521	Strategic Engineering Management	
EMGT 522	New Product and Services Development	
<b>Elective Courses</b>		<b>12</b>
Select four from the following:		
EMGT 506	Lean Six Sigma	
EMGT 512	Machine Learning for Business Analytics	
EMGT 523	Team Facilitation	
EMGT 689	Industry Project	
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, EMGT, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 400-795 as approved by the student's AEC		
Total Hours		30

## Suggested Plan of Study

The typical MSEM degree program that completes degree requirements in one and half years is as follows.

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
Foundation Course		3 Foundation Course		3 Elective Course	3
Foundation Course		3 Foundation Course		3	
Foundation Course		3 Foundation Course		3	
		9		9	3

### Second Year

Fall	Hours
Elective Course	3
Elective Course	3
Elective Course	3
<hr/>	
	9

Total credit hours: 30

## Major Learning Outcomes

### ENGINEERING MANAGEMENT

Students will

- Build upon their prior engineering education and professional experience, to strengthen their ability to effectively manage teams, projects, and business operations;

- Apply specialized knowledge to address contemporary professional challenges and solve complex operational problems to improve business operations and processes;
- Develop leadership skills that are necessary to promote innovation, creative solutions, and diversity in technology and knowledge-driven settings.

After graduation from the WVU MSEM program, students will be able to be promoted to higher levels of leadership and responsibility within their organization, pursue further higher education opportunities, or launch a new venture as an entrepreneur.

## Industrial Engineering, M.S.I.E., Ph.D.

### Degrees Offered

- Masters of Science, Industrial Engineering (M.S.I.E.)
- Doctor of Philosophy, Industrial Engineering (Ph.D.)

### Masters of Science in Industrial Engineering

A graduate of this master's program will be prepared to accomplish the following:

1. Practice industrial engineering and to initiate and develop leadership roles in business, industry and/or government
2. Continue professional development and life-long learning
3. Interact in society and business in a professional and ethical manner
4. Be proficient in written and oral communication and to utilize people-oriented skills in individual and team environments
5. Apply the skills from industrial engineering to be proficient in his/her chosen field or further advanced studies

In order to meet the educational objectives, students of this master's program must be able to meet the following educational outcomes at the time of their graduation. Students will have acquired:

1. The ability to use and master modern and classical industrial engineering methodologies in their area of concentration
2. The ability to apply knowledge of math, science, and engineering
3. The ability to do research, and to design and conduct experiments, analyze and interpret data, develop implementation strategies, and shape recommendations so that results will be achieved and findings will be communicated effectively
4. The ability to work individually, on teams, and/or on multi-disciplinary teams to identify, formulate, and solve problems using industrial engineering knowledge, skills, and tools
5. The ability to design and implement or improve integrated systems that include people, materials, information, equipment, and energy using appropriate analytical, computational, and experimental practices
6. An understanding of professional and ethical responsibility and the broad education and knowledge of contemporary issues necessary to understand the impact of solutions in a global and societal context
7. A recognition of the need for and an ability to engage in life-long learning
8. The professional characteristics expected of a successful industrial engineer

### Doctor of Philosophy with a Major in Industrial Engineering

A graduate of the Industrial Engineering doctoral program will be prepared to:

1. Practice/teach Industrial Engineering and to initiate and develop leadership roles in education, business, industry and/or government.
2. Continue professional development and life-long learning.
3. Interact in society and business in a professional and ethical manner.
4. Be proficient in written and oral communication and to utilize people-oriented skills in individual and team environments.
5. Apply the skills from Industrial Engineering to be proficient in his/her chosen field.

In order to meet the educational objectives, students of the Industrial Engineering Doctoral program must be able to meet the following educational outcomes at the time of their graduation. Students will have acquired:

1. The ability to use, master, and teach modern and classical Industrial Engineering methodologies in their area of concentration.
2. The ability to apply knowledge of math, science, and engineering.
3. The ability to do research, and to design and conduct experiments, analyze and interpret data, develop implementation strategies, and shape recommendations so that results will be achieved and findings will be communicated effectively.
4. The ability to work individually, on teams, and/or on multi-disciplinary teams to identify, formulate, and solve problems using industrial engineering knowledge, skills, and tools.
5. The ability to design and implement or improve integrated systems that include people, materials, information, equipment, and energy using appropriate analytical, computational, and experimental practices.



6. A thorough understanding of professional and ethical responsibility and the broad education and knowledge of contemporary issues necessary to fully evaluate the impact of solutions in a global and societal context.
7. A recognition of the need for and an ability to engage in life-long learning.
8. The professional characteristics expected of a successful Industrial Engineer.

## Masters Admissions

To be eligible for admission into the Master of Science in Industrial Engineering degree program, a candidate must fulfill the following requirements:

- Bachelor of science degree from an engineering, physics, chemistry, computer sciences, mathematics, or a similar technical or science program. The applicant must have completed at least two years of calculus or equivalent mathematics in their degree program.
- Earned a GPA of 3.0 or better (out of a possible 4.0). Applicants with a cumulative GPA of less than 3.00 may be considered for admission if they have professional or other relevant experience.
- A statement of purpose.
- Two letters of recommendation
- Official transcripts of all previous college course work
- While not required for admission, all applicants are encouraged to submit GRE scores for fellowship and funding options.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A bachelors and masters degree from engineering, physics, chemistry, computer sciences, mathematics, or a similar technical or science program. The applicant must have completed at least two years of calculus or equivalent mathematics in their degree program.
- Earned a GPA of 3.0 or better (out of a possible 4.0) in their undergraduate and graduate coursework. Applicants with a cumulative GPA of less than 3.0/4.0 may be considered for admission if they have professional or other relevant experience.
- A statement of purpose.
- Two letters of recommendation
- Official transcripts of all previous college course work
- While not required for admission, all applicants seeking fellowship and departmental funding must submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Direct-Track Doctoral Admissions

The Department of Industrial and Management Systems Engineering offers a direct track option from the bachelor of science (B.S.) to the doctor of philosophy (Ph.D.) degree for prospective qualified students with exceptional academic record and/or professional experience. The qualified students must hold a B.S. degree in engineering, physics, chemistry, computer sciences, mathematics, or a similar technical or science program. In general, a degree in one of the related science programs is required with at least two years of calculus or equivalent mathematics. This is an accelerated track that provides outstanding candidates the option of earning a Ph.D. degree in less than five years after graduating from an undergraduate program by engaging early in their Ph.D. dissertation research. To qualify for the direct- track degree option, all applicants must have:

- Applicants must have earned a GPA of 3.0 or better (out of a possible 4.0) in their undergraduate
- A statement of purpose
- Two letters of recommendation
- Official transcripts of all previous college course work
- While not required for admission, all applicants seeking fellowship and departmental funding must submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSIE Major Code: 3045

PhD Major Code: 3046

For specific information on the following programs, please see the links to the right:



- Industrial Engineering, M.S.I.E.

For specific information on the following programs, please see the links to the right:

- Industrial Engineering, Ph.D.

## Industrial Engineering, M.S.I.E.

### Curriculum in Masters of Science in Industrial Engineering

A candidate for the M.S. degree in industrial engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Industrial and Management Systems Engineering Department.

### Program Requirements

All M.S. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements *</b>		
A minimum of 60% of courses must be from 500 level or above		
Plan of Study		
Complete one of the following options:		31
<b>Thesis Option - 31 total credit hours</b>		
Foundation Courses (12 credit hours)		
IMSE Elective Courses (3 credit hours)		
General Elective Courses (9 credit hours)		
IENG 697	Research (6 hours)	
IENG 796	Graduate Seminar (1 credit hour)	
Final Oral or Written Examination		
Thesis		
<b>Problem Report Option - 31 total credit hours</b>		
Foundation Courses (12 credit hours)		
IMSE Elective Courses (6 credit hours)		
General Elective Courses (9 credit hours)		
IENG 697	Research (3 hours)	
IENG 796	Graduate Seminar (1 credit hour)	
Final Oral or Written Examination		
Formal written report or professional report/paper		
<b>Coursework Option - 31 total credit hours</b>		
Foundation Courses (12 credit hours)		
IMSE Elective Courses (9 credit hours)		
General Elective Courses (9 credit hours)		
IENG 796	Graduate Seminar (1 credit hour)	
Final Oral or Written Examination		
Total Hours		31

### FOUNDATION COURSES

Code	Title	Hours
IENG 455	Simulation by Digital Methods	3
IENG 503	Additive Manufacturing Technology and Materials	3
IENG 505	Computer Integrated Manufacturing	3

IENG 514	Design of Industrial Experiments	3
IENG 542	Advanced Production Control	3
IENG 551	Quality and Reliability Engineering	3
IENG 553	Applied Linear Programming	3
IENG 554	Applied Integer/Heuristic Programs	3
IENG 564	Industrial Ergonomics	3
IENG 660	Human Factors System Design	3
IENG 577	Advanced Engineering Economy	3
IH&S 460	Ergonomics	3

## IMSE ELECTIVE COURSES <sup>+</sup>

Code	Title	Hours
IENG 455	Simulation by Digital Methods	3
IENG 503	Additive Manufacturing Technology and Materials	3
IENG 505	Computer Integrated Manufacturing	3
IENG 506	Computer Aided Process Planning	3
IENG 507	Robotics and Flexible Automation	3
IENG 514	Design of Industrial Experiments	3
IENG 518	Technology Forecasting	3
IENG 542	Advanced Production Control	3
IENG 551	Quality and Reliability Engineering	3
IENG 553	Applied Linear Programming	3
IENG 554	Applied Integer/Heuristic Programs	3
IENG 556	Supply Chain Management	3
IENG 564	Industrial Ergonomics	3
IENG 577	Advanced Engineering Economy	3
IENG 660	Human Factors System Design	3
IENG 756	Applied Stochastic Processes	3
IENG 754	Inventory Theory	3
IH&S 460	Ergonomics	3

Any IENG, EMGT, IH&S, or courses 400-795 as approved by the student's AEC

## GENERAL ELECTIVES <sup>+</sup>

Code	Title	Hours
Any IMSE Elective Course		
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, EMGT, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 400-795 as approved by the student's AEC		

\*

Students who do not hold a baccalaureate degree in industrial engineering are required to take a set of undergraduate industrial engineering courses above and beyond the minimum coursework requirements.

+

A course cannot be used to fulfill more than one requirement.

## FINAL EXAMINATION

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

## Major Learning Outcomes

### INDUSTRIAL ENGINEERING

1. Practice industrial engineering and to initiate and develop leadership roles in business, industry and/or government.
2. Continue professional development and life-long learning.
3. Interact in society and business in a professional and ethical manner.
4. Be proficient in written and oral communication and to utilize people-oriented skills in individual and team environments.
5. Apply the skills from industrial engineering to be proficient in his/her chosen field or further advanced studies.

## Industrial Engineering, Ph.D.

### Curriculum in Doctor of Philosophy – Industrial Engineering

A candidate for the Ph.D. degree with a major in industrial engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Industrial and Management Systems Engineering Department.

### Program Requirements

The doctor of philosophy degree with a major in industrial engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of industrial engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

Required core courses for the Ph.D. program are determined by the student's area of emphasis. The research work for the doctoral dissertation may entail a fundamental investigation or a broad and comprehensive investigation into an area of specialization.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.4 is required in all courses		
<b>Course Requirements *</b>		
Graduate Seminar		1
IENG 796	Graduate Seminar	
Research		24
IENG 797	Research	
Select from the following based on degree path:		18
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC		
<b>Examinations</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		
Dissertation		
Total Hours		43

\*

Students who do not hold a baccalaureate degree in industrial engineering are required to take a set of undergraduate industrial engineering courses above and beyond the minimum coursework requirements.

Required core courses for the Ph.D. program are determined by the student's area of emphasis. In general, Ph.D. students take approximately fifty-four hours of coursework beyond their baccalaureate degree, with a minimum of thirty hours in industrial engineering.

## **Examinations**

### **QUALIFYING EXAM**

All students must take and pass a written qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the industrial engineering field to determine whether or not they have sufficient knowledge to undertake independent research.

### **CANDIDACY EXAMINATION**

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research.

A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree.

### **FINAL EXAMINATION**

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

## **Major Learning Outcomes**

### **INDUSTRIAL ENGINEERING**

1. Practice/teach Industrial Engineering and to initiate and develop leadership roles in education, business, industry and/or government.
2. Continue professional development and life-long learning.
3. Interact in society and business in a professional and ethical manner.
4. Be proficient in written and oral communication and to utilize people-oriented skills in individual and team environments.
5. Apply the skills from Industrial Engineering to be proficient in his/her chosen field.

## **Occupational Safety and Health, Ph.D.**

### **Degree Offered**

- Doctor of Philosophy, Occupational Safety and Health (Ph.D.)

### **Program Educational Objectives**

Drawing from the university's mission, the program mission, and the needs of our constituents, the following educational objectives were developed for the Doctor of Philosophy degree in Occupational Safety and Health:

1. Anticipate and recognize hazards and environmental cases requiring the application of safety and health methods in occupational settings.
2. Identify social and epidemiological trends in occupational safety and health issues at the national and international levels.
3. Identify methods of management in application of effective control techniques.
4. To demonstrate understanding of federal, state, and local regulatory agencies as they impact the practice of occupational safety and health.
5. Conduct, disseminate, and publish original research in occupational safety and health.
6. Be qualified to enter the profession as a professor, practitioner, or researcher in occupational safety and health.

### **Student Outcomes**

In order to meet the Program Educational Objectives, students of the Occupational Safety and Health Doctoral program must be able to meet the following educational outcomes at the time of their graduation. Students will have acquired the ability:

1. To construct, manage, and evaluate a comprehensive safety and health program for large industry or government agencies.
2. To participate in the safety and health regulatory process as an individual or part of a corporation or university.
3. To critically evaluate research conducted by other individuals or corporations in occupational safety and health.
4. To provide excellent teaching at the University or corporate levels.
5. To participate in activities such as conferences or seminars for continued professional improvement.

6. To actively participate as a leader in the professional organizations that serve the occupational safety and health fields.
7. To demonstrate the highest possible ethical standards in the field of occupational safety and health.

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A bachelors and masters degree from engineering, physics, chemistry, computer sciences, mathematics, or a similar technical or science program. The applicant must have completed at least two years of calculus or equivalent mathematics in their degree program.
- Earned a GPA of 3.0 or better (out of a possible 4.0) in their undergraduate and graduate coursework. Applicants with a cumulative GPA of less than 3.0/4.0 may be considered for admission if they have professional or other relevant experience.
- A statement of purpose.
- Two letters of recommendation
- Official transcripts of all previous college course work
- While not required for admission, all applicants seeking fellowship and departmental funding must submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Direct-Track Doctoral Admissions

The Department of Industrial and Management Systems Engineering offers a direct track option from the bachelor of science (B.S.) to the doctor of philosophy (Ph.D.) degree for prospective qualified students with exceptional academic record and/or professional experience. The qualified students must hold a B.S. degree in engineering, physics, chemistry, computer sciences, mathematics, or a similar technical or science program. In general, a degree in one of the related science programs is required with at least two years of calculus or equivalent mathematics. This is an accelerated track that provides outstanding candidates the option of earning a Ph.D. degree in less than five years after graduating from an undergraduate program by engaging early in their Ph.D. dissertation research. To qualify for the direct- track degree option, all applicants must have:

- Applicants must have earned a GPA of 3.0 or better (out of a possible 4.0) in their undergraduate
- A statement of purpose
- Two letters of recommendation
- Official transcripts of all previous college course work
- While not required for admission, all applicants seeking fellowship and departmental funding must submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 3071

## Curriculum in Doctor of Philosophy – Occupational Safety and Health

A candidate for the Ph.D. degree with a major in occupational safety and health must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Industrial and Management Systems Engineering Department.

## Program Requirements

The doctor of philosophy degree with a major in occupational safety and health is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of occupational safety and health.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

Required core courses for the Ph.D. program are determined by the student's area of emphasis. The research work for the doctoral dissertation may entail a fundamental investigation or a broad and comprehensive investigation into an area of specialization.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements</b>		
Research		24
SAFM 797	Research	
Select from the following based on degree path:		18
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PCOL, PNGE, PHYS, PUBH, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC		
<b>Examinations</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		
Dissertation		
Total Hours		42

## Examinations

### QUALIFYING EXAM

All students must take and pass a qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the occupational safety and health field to determine whether or not they have sufficient knowledge to undertake independent research.

### CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research.

A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree.

### FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

## Major Learning Outcomes

### OCCUPATIONAL SAFETY AND HEALTH

1. To construct, manage, and evaluate a comprehensive safety and health program for large industry or government agencies.
2. To participate in the safety and health regulatory process as an individual or part of a corporation or university.
3. To critically evaluate research conducted by other individuals or corporations in occupational safety and health.
4. To provide excellent teaching at the University or corporate levels.
5. To participate in activities such as conferences or seminars for continued professional improvement.
6. To actively participate as a leader in the professional organizations that serve the occupational safety and health fields.
7. To demonstrate the highest possible ethical standards in the field of occupational safety and health.

## Safety Management, M.S.

### Degree Offered

- Masters of Science, Safety Management (M.S.)

## Masters of Science, Safety Management

The mission of the safety management program is to prepare program graduates to meet the safety mission of any enterprise. This is stated simply as: The safety mission of an organization is to protect, conserve, and improve the resources—people, property, and efficacy—of the organization. The Master's of Science with a major in Safety Management is accredited by the Applied and Natural Sciences Accreditation Commission (ANSAC) of ABET, <http://www.abet.org>.

### Program Educational Objectives

Drawing from the university's mission, the program mission, the needs of our constituents, and the criteria of the Applied and Natural Sciences Accreditation Commission of ABET, the following educational objectives were developed for the Masters of Science program in Safety Management:

A graduate of the Safety Management program will be able to:

1. Communicate effectively, orally and in writing, including the transmission of safety data to management and employees.
2. Demonstrate knowledge and skills in the area of safety management.
3. Demonstrate knowledge of ethical and professional responsibilities and knowledge of applicable legislation and regulations.
4. Demonstrate the ability to apply various research activities through the decision-making process used in safety management.

### Student Outcomes

#### SAFETY MANAGEMENT

In order to meet Program Educational Objectives of the Safety Management program, students must be able to meet the following outcomes at the time of their graduation:

1. Mathematics and science and/or technical topics to areas relevant to safety management.
2. An ability to formulate or design a system, process, procedure or program to meet desired needs.
3. An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
4. An ability to communicate effectively with a range of audiences.
5. An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
6. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

### Master Admissions

To be eligible for admission into the Master of Science in Safety Management degree program, a candidate must fulfill the following requirements:

- Official transcripts of all previous college course work
- A statement of purpose.
- ABET-ANSAC prerequisite course requirements:
  - sixty-three credit hours of approved science, mathematics, and other technical courses. Of these, at least fifteen credit hours must be junior or senior level.
  - twenty-one hours of social sciences, humanities, and/or communications.
  - Based on application review, additional requirements may be required on a case by case basis
- Applicants must have earned a GPA of 3.0 or better (out of a possible 4.0). Applicants with a cumulative GPA of less than 3.0 may be considered for admission if they have professional or other relevant experience
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 3085

### Curriculum in Masters of Science – Safety Management

A candidate for the M.S. degree with a major in safety management must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Industrial and Management Systems Engineering Department.

## Program Requirements

All M.S. degree candidates are required to perform research (thesis or problem report option) and follow a planned program of study. The student's faculty advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

Students who do not hold a baccalaureate degree in safety management may be required to take a set of undergraduate courses above and beyond the minimum coursework requirements.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements *</b>		
A minimum of 60% of courses must be from 500 level or above		
Plan of Study		
SAFM 501	Safety Management Integration	3
SAFM 502	Controlling Environmental and Personnel Hazards	3
SAFM 505	Safety Legislation and Compliance	3
SAFM 528	Economic Aspects of Safety	3
SAFM 534	Fire Safety Management	3
SAFM 550	Loss Control and Recovery	3
SAFM 552	Safety and Health Training	3
SAFM 640	Instrumentation for Safety Managers	3
SAFM 689	Professional Field Experience **	3
<b>Electives</b>		
Select three from the following:		9
SAFM 470	Managing Construction Safety	
SAFM 471	Motor Fleet Safety	
SAFM 533	Disaster Preparedness	
SAFM 539	Security Management	
SAFM 580	Fundamentals of Environmental Management	
OEHS 627	Physical Hazards Measurement and Control	
OEHS 528	Industrial Ventilation Design	
OEHS 725	Industrial Hygiene Sampling and Analysis	
IENG 561	Industrial Hygiene Engineering	
IENG 564	Industrial Ergonomics	
IENG 660	Human Factors System Design	
IENG 662	Systems Safety Engineering	
ESWS 515	Hazardous Waste Training	
ESWS 515L	Hazardous Waste Training Laboratory	
ESWS 555	Environmental Sampling and Analysis	
MINE 471	Mine and Safety Management	
RESM 440	Foundations of Applied Geographic Information Systems	
RESM 440L	Foundations of Applied Geographic Information Systems Laboratory	
RESM 480	Environmental Regulation	
OEHS 601	Environmental Health	
OEHS 520	Industrial Hygiene	
OEHS 622	Public Health Toxicology	
OEHS 623	Occupational Injury Prevention	
OEHS 630	Public Health Biology	
OEHS 665	Worksite Evaluation	
SBHS 601	Social and Behavioral Theory	
FIN 455	Risk Management	



CHPR 614 Injury Prevention and Control

Any BIOS, EPID, IENG (except IENG 461), IH&amp;S, OEHS, PUBH, SAFM, SBHS course 400-795, as approved by the student's AEC

Choose 1 of the following options: \*\*\*

0-6

**Thesis Option - 6 hours**

SAFM 697 Research (6 hours)

Final Oral or Written Examination

Thesis

**Problem Report Option - 3 hours**

SAFM 697 Research (3 hours)

Final Oral or Written Examination

Formal written report or professional report/paper

**Coursework Option**

Final Oral or Written Examination

Total Hours

36-42

\*

Students who do not hold a baccalaureate degree in safety management may be required to take a set of undergraduate courses above and beyond the minimum coursework requirements.

\*\*

Students who have SHE work experience have the possibility to waive SAFM 689 and take an additional elective, please see your advisor for approval.

\*\*\*

Credit hours may vary depending on option selected. The coursework option requires 36 hours.

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

## Suggested Plan of Study

The plan below illustrates the Coursework Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S. degree program that completes degree requirements in one and half years is as follows.

**First Year**

Fall	Hours	Spring	Hours	Summer	Hours	
SAFM 501		3 SAFM 528		3 SAFM 689		3
SAFM 502		3 SAFM 640		3		
SAFM 505		3 SAFM 550		3		
Elective		3 Elective		3		
		12		12		3

**Second Year**

Fall	Hours	
SAFM 552		3
SAFM 534		3
Elective		3
		9

Total credit hours: 36

## Student Outcomes

### SAFETY MANAGEMENT

In order to meet Program Educational Objectives of the Safety Management program, students must be able to meet the following outcomes at the time of their graduation:

1. mathematics and science and/or technical topics to areas relevant to safety management.
2. An ability to formulate or design a system, process, procedure or program to meet desired needs.
3. An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
4. An ability to communicate effectively with a range of audiences.
5. An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
6. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

## Department of Mechanical and Aerospace Engineering

### Degrees Offered

- Masters of Science, Aerospace Engineering (M.S.A.E.)
- Masters of Science, Mechanical Engineering (M.S.M.E.)
- Masters of Science, Materials Science and Engineering (M.S.M.S.E.)
- Doctor of Philosophy, Aerospace Engineering (Ph.D.)
- Doctor of Philosophy, Mechanical Engineering (Ph.D.)
- Doctor of Philosophy, Materials Science and Engineering (Ph.D.)

### Departmental Overview

#### FACULTY

Faculty members in the Mechanical and Aerospace Engineering (MAE) department have extensive research, industrial, and teaching experience and have published widely. Their combined experience helps them assist students in selecting relevant courses and research topics to meet their educational goals. The Department has excellent laboratory facilities in the Engineering Sciences Building, the Engineering Research Building, and the new Advanced Engineering Research Building to provide support for both instructional and research activities. The Department has several special purpose laboratories located nearby, which include the Engine Research Center, the Advanced Combustion Laboratory, and the wind tunnel laboratory in the hangar at the Morgantown Municipal Airport (Hart Field). Funded research allows the Department to maintain up-to-date facilities that include modern instrumentation and computing and lab equipment, including simulation and computer-controlled data acquisition systems.

#### Areas of Research

Graduate courses in the MAE department are organized under six academic areas: fluids and aerodynamics, solid mechanics and structures, design and controls, thermal sciences, bioengineering, and materials science and engineering. Students who are pursuing an advanced degree in either mechanical or aerospace engineering and in materials science and engineering may perform their thesis or dissertation research and specialize in any one of these areas.

#### FLUID MECHANICS AND AERODYNAMICS

A variety of courses and facilities support graduate research in aerodynamics and fluid mechanics. Laboratories are located in college buildings and remote sites. Flow facilities include instrumented subsonic and supersonic wind tunnels, and several flow loops mainly used for research in gas-solid and density stratified flows. Available instrumentation includes eight channels of hot wire/film anemometry, two single-component and one three-component, laser Doppler velocimeter (LDV) systems, and a particle image velocimeter (PIV) system. The department owns two flight simulation facilities, one that simulates translational and rotational motion in six degrees of freedom, and the other that relies on D-six software to provide "joystick only" flight simulation. Furthermore, the department built and operates different types of Unmanned Airborne Vehicles (UAV's), as well as experimental aircraft and airborne systems that are housed in a hangar owned by the department at the Hart Field municipal airport in Morgantown. A significant portion of the current activity involves numerical solutions to flow problems and is supported by a computing facility dedicated to graduate research.

Although the faculty background and interests in the areas of aerodynamics and fluid mechanics are broad, recent research has been concentrated on applications of computational fluid dynamics (CFD) to investigate a wide variety of problems in fuel cell technology, fixed wing and rotorcraft aerodynamics, bioengineering, and combustion. The department's faculty have accumulated extensive research experience in multiphase and density-stratified flows, low-speed aerodynamics, shock phenomena in two-phase systems, flow in microgravity, boundary layer control, and high-speed aerodynamics. Previous and current research areas include topics such as fluidized bed combustion, aerosol sampling, flow metering, flow distribution systems, numerical solutions to gas-solid flows, and fluid-particle turbulence interactions, including deposition on solid surfaces. The low-speed aerodynamics work is related to the design of vertical axis wind turbines and STOL airfoils.

#### SOLID MECHANICS AND DESIGN

The solid mechanics and design area encompasses the theoretical, numerical, and experimental study of solid bodies, from concentration on local behavior of deformable bodies to the global response of structural elements. Hence, students may explore the mechanical behavior of materials in the neighborhood of micro-scale defects such as cracks, or investigate the behavior of large-scale bodies such as aerospace structures.

The faculty members specialized in this area carry out basic and applied research using state-of-the-art computational and experimental techniques. The areas of research include advanced metal alloys and composite materials, lightweight structures, safety and durability enhancements, real time monitoring and diagnosis of structural systems, aero elasticity, fracture mechanics, nonlinear dynamics and vibrations, biomechanics; and computational methods and experimental techniques, including optical and ultrasound methods. Furthermore, in cooperation with the Wadsworth Department of Civil and Environmental Engineering, MAE graduate students may pursue studies related to civil engineering. A large array of research facilities includes laboratories (materials, structures, vibrations, photo mechanics, biomechanics, fracture mechanics), computers (work stations, personal computers, computer-aided engineering), and mechanical and electronic shops.

## DYNAMICS AND CONTROLS

The dynamics and controls area offers instructional and research opportunities for students who seek to attain the expertise required to control the behavior of an engineering system in a dynamic environment. Instructional offerings equip the students with a foundation for developing prototype systems and for improving the performance of existing systems. Selected examples of research areas include flight simulation and controls, automatic controls, advanced instrumentation, microprocessor applications and non-destructive testing; elastodynamic analysis, computer-aided design (CAD); and modeling, design, and analysis of energy management systems.

## THERMAL SCIENCES AND SYSTEMS

The thermal sciences and systems area encompasses the fields of thermodynamics, combustion, heat transfer, and power and energy systems. Graduate course offerings cover a wide range of topics in this area with applications to both aerospace and mechanical engineering problems. Recent research efforts include topics such as alternative fuels testing, internal combustion engine performance and emissions, fuel cell technology, heat transfer, numerical analysis of thermal systems, the analysis of fluidized bed combustion, energy analysis of buildings, oscillating jet combustion, deposition on turbine blades, and reactor design.

Research facilities include a state-of-the-art engine research laboratory, three transportable emissions research laboratories, thermal analyzers, recording thermocouple data-acquisition systems, high-altitude simulation chamber for ablation and wear studies, a fluidized bed combustion laboratory, an electrically-heated, natural convection water facility, Schlieren systems for flows with varying density, and a water reservoir for thermal stratification studies.

## BIOENGINEERING

Areas of research specialization related to bioengineering include ultrasound technology for imaging of body tissues and organs, respiratory and diseased tissue mechanics, orthopedic mechanics, bone growth and fracture, and the application to rehabilitation of computer-aided design and microprocessor-based instrumentation. Research facilities include a state-of-the-art ultrasound imaging laboratory, an aerosol inhalation exposure system, laser-based holographic and moiré interferometric equipment, a lung acoustic impedance measurement system; and modern orthopedic, rehabilitation, and computer research laboratories.

## MATERIALS SCIENCE AND ENGINEERING

The material science and engineering area allows for the study of processing, structure, and properties of materials for structural, functional, and device applications. Areas of research emphasized within this area include advanced microscopy, composite materials, materials for fuel cells, smart materials, super alloys, facilities incorporating electron microscopy, scanning probe microscopy, electro-chemical characterization, thermal analysis, and mechanical testing facilities.

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## FACULTY

### CHAIR

- Jason Gross - Ph.D. (West Virginia University)  
Unmanned Aerial Vehicles, Avionic Systems, Flight Testing

### PROFESSORS

- Xueyan Song - Ph.D. (Zhejiang University, China)  
Materials Science, Electron Microscopy
- V'yacheslav Akkerman - Ph.D. (Umeå University, Sweden)  
Turbulent Combustion, Flame Tribalization
- Ever J. Barbero - Ph.D. (Virginia Polytechnic Institute and State University)  
Materials, Experimental and Computational Mechanics
- Wade W. Huebsch - Ph.D. (Iowa State University)  
Fluid Mechanics, CFD, Numerical Methods
- Bruce S. Kang - Ph.D. (University of Washington)  
Experimental Mechanics, Advanced Materials
- John M. Kuhlman - Ph.D. (Case Western Reserve University)

#### Fluid Mechanics

- Hailin Li - Ph.D. (University of Calgary, Canada)  
Combustion, Emissions, Fuel Efficiency of Vehicles and IC Engines
- Xingbo Liu - Ph.D. (University of Science and Technology of China, Beijing)  
Materials Science
- Pedro J. Mago - Ph.D. (University of Florida)  
Heat and power systems, building energy simulation, and waste heat recovery technologies
- Victor H. Mucino - Dr.Eng., P.E. (University of Wisconsin-Milwaukee)  
Mechanical Engineering Design, CAD, Finite Element Analysis
- Marcello R. Napolitano - Ph.D. (Oklahoma State University)  
Aircraft Stability and Control, Feedback Control, Unmanned Airborne Vehicles (UAVs)
- Mario Perhinschi - Ph. D. (University of Bucharest, Romania)  
Flight Modeling and Simulation
- Songgang Qiu - Ph. D.(University of Minnesota)  
Thermodynamics, Heat Transfer
- Edward M. Sabolsky - Ph.D. (The Pennsylvania State University)  
Materials, Ceramic Science
- Nithi T. Sivaneri - Ph.D. (Stanford University)  
Structural Mechanics, Composite Materials, FEM, Numerical Methods

### ASSOCIATE PROFESSORS

- Omid Askari - Ph.D. (Northeastern University)  
Engines, GasTurbines, Alternate Fuels
- Cosmin E. Dumitrescu - Ph.D. (University of Alabama)  
Combustion, Alternate Fuels, IC Engines
- Jason N. Gross - Ph.D. (West Virginia University)  
Unmanned Aerial Vehicles, Avionic Systems, Flight Testing
- Yu Gu - Ph.D. (West Virginia University)  
Robotic Systems, Sensor Fusion
- Derek Johnson - Ph.D. P. E. (West Virginia University)  
Alternative Fuels, Engines and Emissions
- David S. Mebane - Ph.D. (Georgia Institute of Technology)  
Fuel Cells, Mutli Scale Simulation of Chemical and Electrochemical Systems
- Osama Mukdadi - Ph.D. (University of Colorado)  
Bioengineering, Acoustics, Solid Mecanics and Materials
- Terence D. Musho - Ph.D. P.E. (Vanderbilt University)  
Nanoscale Thermal and Electrical Transport, Direct Energy Conversion
- Andrew C. Nix - Ph.D. (Virginia Polytechnic Institute and State University)  
Turbines, Engines and Emissions
- Guilherme Augusto Silva Pereira - Ph.D. (Federal University of Minas Gerais)  
Field Robotics, Autonomous Vehicles
- Loren Rieth - Ph.D. (University of Florida)  
Microelectrode Implants, Electrical & Neural Prosthesis
- Konstantinos Sierros - Ph.D. (University of Birmingham, U. K.)  
Flexible Optoelectronic Devices, Tribology, Materials for Renewable Energy
- Arvind Thiruvengadam - Ph.D. (West Virginia University)  
Emissions of Heavy-Duty Internal Combustion Engines
- Gregory J. Thompson - Ph.D. (West Virginia University)  
Thermodynamics, Machine Design
- W. Scott Wayne - Ph.D. (West Virginia University)  
Machine Design, Alternative Fuels

### ASSISTANT PROFESSORS

- Xi Yu - Ph.D. (Boston University)  
Robotics
- Piyush M. Mehta - Ph.D. (University of Kansas)  
Astrodynamics, Space Situational Awareness

- Nicholas Szczecinski - Ph.D. (Case Western Reserve University)  
Robotics

## TEACHING ASSOCIATE PROFESSOR

- Patrick H. Browning - Ph.D. (West Virginia University)  
Aerodynamics, Aircraft Design

## TEACHING ASSISTANT PROFESSORS

- Christopher Griffin - Ph.D. (West Virginia University)  
Aerodynamics, Fluid Mechanics
- Andrew P. Rhodes - Ph.D. (West Virginia University)  
Aerospace Dynamics and Propulsion
- Emily Spayde - Ph.D. (Mississippi State University)  
Engineering education, energy sustainability and organic Rankine cycles

## RESEARCH ASSOCIATE PROFESSORS

- Yun Chen - Ph.D. (Universidade Tecnica de Lisboa)  
Material Science, Metal Hydrides, Cathode Material Development
- Eduardo Sosa - Ph. D. (University of Puerto Rico)  
Thin Wall Structures

## RESEARCH ASSISTANT PROFESSORS

- Ali Baheri - (University of North Carolina at Charlotte)  
Machine Learning, Autonomous Driving
- Shanshan Hu - Ph.D. (West Virginia University)  
high temperature corrosion, molten salt, anti-corrosion coating and electrophoretic deposition
- Wei Li - Ph.D. (Graduate University of Chinese Academy of Sciences)

## VISITING AND ADJUNCT PROFESSORS

- Alberto Ayala - Ph.D. (University of California, Davis)  
Energy, Engine Emissions
- Dureid Azzouz - Ph.D. (University of Southampton, U.K.)  
Fluid Mechanics
- Albert Boretti - Ph.D. (University of Florence, Italy)  
Innovative Combustion Engines
- Mark Bright - Ph.D. (West Virginia University)  
Materials Engineering, Pyrotech Inc.
- Darran Cairns - Ph.D. (University of Birmingham, U.K.)  
Materials Science
- Weigiang Ding - Ph.D. (Northwestern University)  
Nanostructures
- Renguang Dong - Ph.D. (Concordia University)  
Biomechanics, Human Vibrations, NIOSH
- Mridul Gautam - Ph.D. (West Virginia University)  
Alternate Fuels, Engine and Emissions, VP for Research UNR
- Luis A. Godoy - Ph.D. (University of London, U.K.)  
Structural Stability
- Frank E. Goodwin - Sc.D. (Massachusetts Institute of Technology)  
Materials Engineering, ILZRO
- Valeriya Gritsenko - Ph.D. (University of Alberta, Canada)  
Neuroscience
- Huang Guo - Ph.D. (West Virginia University)  
Electro-Chemistry, Materials Science, Mechanical Engineering
- Srinkath Gururajan - Ph.D. (West Virginia University)  
Small Unmanned Aerial Vehicle Systems
- Nabil S. Hakim - Ph.D. (Wayne State University)  
Alternative Fuels Engines and Emissions

- Yiqun Huang - Ph.D. (University of Texas, Austin)  
Engine Emissions Control
- Paul E. King - Ph.D. (Oregon State University)  
Materials Engineering, NETL
- George Kiriakidis - Ph.D. (Salford University, U.K.)  
Physics, Mechanics
- Stephen Kukureka - Ph.D. (University of Birmingham, U.K.)  
Materials Science
- Andrew D. Lowery - Ph.D. (West Virginia University)  
Control Systems
- Alejandro Lozano-Guzman - Ph.D. (University of New Castle Upon Tyne, U.K.)  
Dynamic Systems (CICATA-IPN Mexico)
- Ayyakkannu Manivannan - Ph.D. (The University of Tokyo, Japan)  
Materials Chemistry Characterization
- Eugene A. McKenzie - Ph.D. (West Virginia University)  
Mechanical Engineering Design, NIOSH
- Chris Menchini - Ph.D. (West Virginia University)  
Computational Fluid Dynamics, Fire Modeling
- Vincenzo Mulone - Ph.D. (University of Rome, Tor Vergata)  
Engine Emissions, Fluid Mechanics
- John Nuzkowski - Ph.D. (West Virginia University)  
Alternative Fuels and Engine Emissions, UNF
- Ming Pei - M.D., Ph.D. (Beijing Medical University, China)  
Tissue Engineering, HSC-WVU
- Alber Alfonse Sadek - Ph.D. (Osaka University, Japan)  
Alloys
- Brad Senior - Ph.D. (West Virginia University)  
Control Systems
- Benjamin Shade - Ph.D. (West Virginia University)  
Engine Emissions, IAV Automotive
- Alberto Traverso - Ph.D. (University of Genoa, Italy)  
Energy Systems and Control, DIMSET - Italy
- Nathan Weiland - Ph.D. (Georgia Institute of Technology)  
Energy Systems, Experimental, Computational, Theoretical Methods
- Jay Wilhelm - Ph.D. (West Virginia University)  
Unmanned Aerial Vehicles, Wind Turbine Modeling
- Gergis William - Ph.D. (West Virginia University)  
Structural Engineering
- Steven Woodruff - Ph.D. (University of Michigan)  
Combustion Optical Phenomena
- David Wyrick - Ph.D. (University of Missouri-Rolla)  
Engineering Management, Engineering Education, SME's
- Sergiy Yakovenko - Ph.D. (University of Alberta, Canada)  
Neuroscience
- Kirk Yerkes - Ph.D. (University of Dayton)  
Energy Optimized Aircraft

## **PROFESSORS EMERITI**

- Richard A. Bajura - Ph.D. (University of Notre Dame)
- Larry Banta - Ph.D. (Georgia Institute of Technology)
- Ismail Celik - Ph.D. (University of Iowa)
- Nigel N. Clark - Ph.D. (University of Natal, South Africa)
- Eric Johnson - Ph.D. (University of Wisconsin-Madison)
- John M. Kuhlman - Ph.D. (Case Western Reserve University)
- John Loth - Ph.D. (University of Toronto, Canada)
- Ken Means - Ph.D. (West Virginia University)

- Gary Morris - Ph.D. (West Virginia University)
- Michael G. Palmer - Ph.D. (West Virginia University)
- Samir N. Shoukry - Ph.D. (Aston University, Birmingham, U.K.)
- John E. Sneckenberger - Ph.D. (West Virginia University)
- Wallace S. Venable - Ed.D. (West Virginia University)
- Richard E. Walters - Ph.D. (West Virginia University)

## Aerospace Engineering, M.S.A.E., Ph.D.

### Degrees Offered

- Masters of Science, Aerospace Engineering (M.S.A.E.)
- Doctor of Philosophy, Aerospace Engineering (Ph.D.)

### Educational Objectives of the Departmental Graduate-Level Programs:

1. To provide high quality advanced master-level and Ph.D. level education to graduate engineering students to enable successful careers in technology development, innovation and research, with depth and breadth in one or several areas of the aerospace engineering discipline.
2. To develop the capacity of graduates to conduct independent research and/or technology development and innovation, through original contributions to the aerospace engineering discipline and to disseminate the results of their scholarly work.
3. To instill in graduates the drive for leadership in technology development, innovation and research and to contribute to the advancement of the profession in a societal and economic context.

### The outcomes of the graduate programs in Aerospace Engineering are as follows:

- Holders of graduate degrees will have an expert-level understanding of the advanced principles of aerospace engineering, which include aerospace systems design, aircraft or spacecraft dynamics, stability and control, flight mechanics and simulation, advanced materials, vehicle propulsion, aerodynamics, aeroelasticity, and computational mechanics.
- Holders of graduate degrees will hold paramount the highest standards of ethical and professional responsibility in the practice of their profession to contribute to the well-being of society and to the advancement of the aerospace engineering profession.
- Holders of Ph.D. degrees will have furthered original research contributions to the state of the art in their specific areas of expertise and will be able to develop innovative research in order to advance the frontiers of knowledge, secure sponsored research, and disseminate its findings through scholarly publications.

### Masters Admissions

To be eligible for admission into the Master of Science in Aerospace Engineering degree program, a candidate must fulfill the following requirements:

- Applicants for admission into the M.S. in Aerospace Engineering degree program must have earned a grade point average (GPA) of 3.0 or better (out of a possible 4.0) in any previous engineering degree, from an accredited or internationally recognized program.
- Three recent reference letters, at least two of which, should be from professors the institution last attended.
- A statement of purpose.
- International applicants (who have not received their undergraduate degree from an accredited USA institution) are required to submit GRE general test scores. The GRE scores required for admission as a regular graduate student is seventy-fourth percentile (74%) or higher in the Quantitative section (strictly enforced). The GRE scores for the verbal and analytical sections will be taken into consideration in the admission process.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

### Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- Applicants must hold or expect to receive (by the enrollment date) a M.S. degree in an engineering discipline from an institution which has an ABET accredited undergraduate program in engineering or an internationally recognized program in engineering (except for students qualified for the direct track to Ph.D. degree option, described below). Qualified candidates holding a M.S. degree in applied sciences can also be considered for admission into the Ph.D. program.
- Three recent reference letters, at least two of which should be from professors of the institution last attended.
- A statement of purpose.
- Applicants for admission into the Ph.D. degree program must have earned a grade point average (GPA) of 3.0 or better (out of a possible 4.0) in all previous engineering degrees (B.S. and M.S.), from an accredited or internationally recognized program.



- All applicants for the doctoral program must submit GRE scores. Applicants must score in the seventy-fourth percentile (74%) or higher in the quantitative section for consideration of admission. The GRE scores for the verbal and analytical sections will also be taken into consideration in the admission process.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Direct-Track PhD Admissions

The Department of Mechanical and Aerospace Engineering (MAE) offers a direct track option from the bachelor of science (B.S.) to the doctor of philosophy (Ph.D.) degree for prospective qualified students holding a B.S. degree in an engineering discipline, materials science, mathematics, or applied sciences from an accredited undergraduate program or an internationally recognized program. This is an accelerated track that provides outstanding candidates the option of earning a Ph.D. degree in less than five years after graduating from an undergraduate program by engaging early in their Ph.D. dissertation research without having to complete a research thesis for a master of science (M.S.) degree. To qualify for the direct track degree option, all applicants must have:

- A cumulative grade point average (GPA) of 3.5/4.0 or higher in his/her undergraduate studies
- A minimum of seventy-fourth percentile (74%) in the quantitative section of the GRE.
- Three recent reference letters, at least two of which, should be from professors of the institution last attended.
- A statement of purpose.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The above Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSAE Major Code: 3005

PhD Major Code: 3006

For specific information on the following programs, please see the links to the right:

- Aerospace Engineering, M.S.A.E.

For specific information on the following programs, please see the links to the right:

- Aerospace Engineering, Ph.D.

## Thesis Based Master's Degrees

All the requirements for thesis based master's degrees (M.S.A.E., M.S.M.E. and M.S.M.S.&E.) in the MAE Department must be completed within eight years preceding the student's graduation. All students in these programs are required to engage in research, complete and successfully defend a master's thesis. They must identify a subject for their thesis research, form a three-member advisory and examining committee (AEC), and file a plan of study by the end of their second semester of enrollment in the graduate program. A minimum of twenty-four credit hours of coursework with a minimum overall GPA of 3.0/4.0 and six credit hours of M.S. thesis research are required for the thesis based master's degrees. Students must pass a final examination administered by their advisory and examining committee before being certified for the degree. All thesis based master's degree students have to comply with core requirements by selecting a "core area" and taking two of the courses listed in that area, and in addition they have to comply with the mathematics requirements by taking two courses from an approved list. Four additional courses can be selected from a list of technical electives, or from the core and mathematics lists to complete the coursework requirements, with no more than three courses at the 400 level.

## Course Based Master's Degree

A course-only master's degree option is available (M.S.E.), in which students are required to complete thirty-three credit hours of coursework with a minimum overall GPA of 3.0/4.0 and pass a comprehensive examination administered by an advisory and examining committee. Students pursuing a course-only master's degree option are not eligible to receive financial support from the MAE Department. All the requirements for this degree option must also be completed within eight years preceding the student's graduation.

## Ph.D. Degrees

The MAE Department offers Ph.D. Programs in Aerospace Engineering, in Mechanical Engineering and in Materials Science and Engineering. These programs require a minimum of eighteen credit hours of graduate level coursework plus a minimum of twenty-four credit hours of research. Students in the Ph.D. program must take and pass the Ph.D. Qualifier examination by the second semester of the program with a second attempt no later than the third semester in the program if necessary. After the qualifier examination, students are expected to produce a dissertation proposal and defend it before a five-member advising and examining committee (AEC). Subsequent the successful proposal defense, students must comply with the journal



paper publication (or patent disclosure) requirement in order to attain Ph.D. Candidacy. Finally Ph.D. candidates must successfully defend a Ph.D. dissertation and submit it to WVU library through the ETD protocol to fulfill all the requirements for the degree.

## Aerospace Engineering, M.S.A.E.

### Curriculum in Master of Science in Aerospace Engineering

A candidate for the M.S. degree in aerospace engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Mechanical and Aerospace Engineering Department.

### Program Requirements

All M.S. degree candidates are required to perform research (except those pursuing the Coursework Option) and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
<b>A minimum cumulative GPA of 3.0 is required in all courses.</b>		
<b>A minimum of 60% of courses must be from 500 level or above.</b>		
<b>Course Requirements *</b>		
Plan of Study		
<b>Thesis Option (30 credit hours)</b>		
Core Area Courses (6 credit hours)		
Mathematics Requirements (6 credit hours)		
Additional Courses (12 credit hours) - Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, MAE, MATH, MINE, PNGE, PHYS, SENG, EXPH 583, or STAT courses 400-795, as approved by the student's AEC		
MAE 697	Research (6 credit hours)	
Final Oral or Written Examination		
Thesis		
<b>Problem Report Option (30 credit hours)</b>		
Core Area Courses (6 credit hours)		
Mathematics Requirements (6 credit hours)		
Additional Courses (15 credit hours) - Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, MAE, MATH, MINE, PNGE, PHYS, SENG, EXPH 583, or STAT courses 400-795, as approved by the student's AEC		
MAE 693	Special Topics (Problem Report, 3 credit hours)	
Final Oral or Written Examination		
Formal Written Report or Professional Report/Paper		
<b>Coursework Option (30 credit hours)</b>		
Core Area Courses (18 credit hours)		
Mathematics Requirements (6 credit hours)		
Additional Courses (6 credit hours) - Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, MAE, MATH, MINE, PNGE, PHYS, SENG, EXPH 583, or STAT courses 400-795, as approved by the student's AEC		
Final Oral or Written Examination		
<b>Total Hours</b>		<b>30</b>

### MATHEMATICS REQUIREMENTS FOR ALL OPTIONS (6 CREDIT HOURS)

Code	Title	Hours
<b>Select two of the following (at least one course with MATH prefix):</b>		
MATH 420	Numerical Analysis 1	
MATH 441	Applied Linear Algebra	
MATH 456	Complex Variables	
MATH 521	Numerical Analysis	
MATH 522	Numerical Solution of PDE	

MATH 541	Modern Algebra 1
MATH 543	Linear Algebra
MATH 545	Number Theory 1
MATH 551	Real Variables 1
MATH 555	Complex Variables 1
MATH 560	Introduction to Dynamical Systems and Applications
MATH 563	Mathematical Modeling
MATH 564	Intermediate Differential Equations
MATH 566	Intermediate Partial Differential Equations
MATH 567	Advanced Calculus 1
MATH 568	Advanced Calculus
MATH 573	Graph Theory
STAT 513	Design of Experiments
STAT 545	Applied Regression Analysis
STAT 561	Theory of Probability and Statistics 1
STAT 562	Theory of Statistics 2
MAE 515	Analytical Methods in Engineering
MAE 623	Conduction Heat Transfer
MAE 633	Computational Fluid Dynamics
MAE 640	Continuum Mechanics
MAE 645	Energy Methods in Applied Mechanics
CHE 531	Mathematical Methods in Chemical Engineering
EE 463	Digital Signal Processing Fundamentals
EE 465	Introduction to Digital Image Processing
EE 515	Linear Control Systems
EE 517	Optimal Control
IENG 518	Technology Forecasting
IENG 553	Applied Linear Programming
PHYS 461	Thermodynamics and Statistical Mechanics
PHYS 611	Introduction to Mathematical Physics

## CORE AREA COURSES FOR THESIS OR PROBLEM REPORT OPTIONS (6 CREDIT HOURS)

Code	Title	Hours
<b>Select two courses in a single core area from the following:</b>		
Area A: Fluid Mechanics and Aerodynamics (FMA)		
MAE 532	Dynamics of Viscous Fluids	
MAE 624	Convection Heat Transfer	
or MAE 636	Fundamentals of Turbulent Flow	
Area B: Thermal Sciences and Systems (TSS)		
MAE 521	Advanced Thermodynamics 1	
MAE 532	Dynamics of Viscous Fluids	
MAE 624	Convection Heat Transfer	
Area C: Dynamics and Controls (D&C)		
MAE 642	Intermediate Dynamics	
or MAE 653	Advanced Vibrations	
MAE 660	Feedback Control in Mechanical Engineering	
Area D: Solid Mechanics and Design (SMD)		
MAE 543	Advanced Mechanics of Materials	
or MAE 642	Intermediate Dynamics	
MAE 640	Continuum Mechanics	
or MAE 653	Advanced Vibrations	
Area E: Materials Science (MS)		

MAE 580	Crystallography and Crystals
MAE 583	Thermodynamics and Kinetics of Materials
MAE 649	Microscopy of Materials

## CORE AREA COURSES FOR COURSEWORK OPTION (18 CREDIT HOURS)

Code	Title	Hours
MAE 521	Advanced Thermodynamics 1	
MAE 532	Dynamics of Viscous Fluids	
MAE 543	Advanced Mechanics of Materials	
MAE 580	Crystallography and Crystals	
MAE 653	Advanced Vibrations	
MAE 660	Feedback Control in Mechanical Engineering	

\*

Students who do not hold a baccalaureate degree in aerospace engineering will be required to take a set of undergraduate aerospace engineering courses above and beyond the minimum coursework requirements in order to overcome deficiencies in the aerospace engineering area.

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

The student's request for the comprehensive exam for students in the Coursework Only degree option must be filed at least four weeks in advance of the desired date of the exam. The comprehensive exam for students in the Coursework Only degree option must be passed at least 3 weeks before graduation.

## Major Learning Outcomes

### AEROSPACE ENGINEERING

The MAE Department is committed to deliver high quality education and research experience to all graduate students in order to enable them to achieve success in their careers, though the following Learning Goals:

- Expertise, depth and breadth in a chosen field of aerospace engineering.
- Capacity to engage in original research, advanced technological discovery and innovation to advance the frontiers of knowledge in the science of the aerospace engineering discipline.
- Capacity of effective high level communication to document, disseminate and transfer knowledge of the science of the aerospace engineering discipline in educational, research or applied workplace settings.
- Appreciation and understanding of the role of the science of the aerospace engineering discipline in a global and societal context.

## Aerospace Engineering, Ph.D.

### Curriculum in Doctor of Philosophy – Aerospace Engineering

A candidate for the Ph.D. degree with a major in aerospace engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Mechanical and Aerospace Engineering Department.

### Program Requirements

The doctor of philosophy degree with a major in aerospace engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of aerospace engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

The doctoral courses of study are selected to fit the particular interests and objectives of the student, with proper attention given to broadening related areas of study. The research work for the doctoral dissertation may entail a fundamental investigation into a specialized area or a broad and comprehensive study in a related subject.

All students pursuing a Ph.D. degree in the MAE department are expected to engage in research and complete and successfully defend a Ph.D. dissertation. They should identify a subject for their Ph.D. dissertation, form a five-member advisory and examining committee, and file a plan of study by the end of their first semester of enrollment in the graduate program. At least one member of the graduate faculty from outside the department is required to serve on the advisory and examining committee.

## PUBLICATION REQUIREMENT

Prior to scheduling the dissertation defense, Ph.D. students are required to provide written documentation that they have received formal proof of submission of either:

- a.) At least one manuscript, generally co-authored with their research supervisor and about some portion of their PhD dissertation research, to an archival journal for publication, or
- b.) At least one patent disclosure, also generally about some portion of their PhD dissertation research.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses.		
<b>Course Requirements *</b>		
<b>Core Area Courses</b>		<b>3</b>
Select one course in the relevant core area from the following: **		
Area A: Fluid Mechanics and Aerodynamics (FMA)		
MAE 532	Dynamics of Viscous Fluids	
MAE 624	Convection Heat Transfer	
MAE 636	Fundamentals of Turbulent Flow	
Area B: Thermal Sciences and Systems (TSS)		
MAE 521	Advanced Thermodynamics 1	
MAE 532	Dynamics of Viscous Fluids	
MAE 624	Convection Heat Transfer	
Area C: Dynamics and Controls (D&C)		
MAE 642	Intermediate Dynamics	
MAE 653	Advanced Vibrations	
MAE 660	Feedback Control in Mechanical Engineering	
Area D: Solid Mechanics and Design (SMD)		
MAE 543	Advanced Mechanics of Materials	
MAE 640	Continuum Mechanics	
MAE 642	Intermediate Dynamics	
MAE 653	Advanced Vibrations	
Area E: Materials Science (MS)		
MAE 580	Crystallography and Crystals	
MAE 583	Thermodynamics and Kinetics of Materials	
MAE 649	Microscopy of Materials	
<b>Mathematics Requirements</b>		<b>6</b>
Select two of the following (at least one course with MATH prefix or MAE 515):		
MATH 521	Numerical Analysis	
MATH 522	Numerical Solution of PDE	
MATH 541	Modern Algebra 1	
MATH 543	Linear Algebra	
MATH 545	Number Theory 1	
MATH 551	Real Variables 1	
MATH 555	Complex Variables 1	
MATH 560	Introduction to Dynamical Systems and Applications	

MATH 563	Mathematical Modeling
MATH 564	Intermediate Differential Equations
MATH 566	Intermediate Partial Differential Equations
MATH 567	Advanced Calculus 1
MATH 568	Advanced Calculus
MATH 573	Graph Theory
STAT 513	Design of Experiments
STAT 545	Applied Regression Analysis
STAT 561	Theory of Probability and Statistics 1
STAT 562	Theory of Statistics 2
MAE 515	Analytical Methods in Engineering
MAE 623	Conduction Heat Transfer
MAE 633	Computational Fluid Dynamics
MAE 640	Continuum Mechanics
MAE 645	Energy Methods in Applied Mechanics
CHE 531	Mathematical Methods in Chemical Engineering
EE 515	Linear Control Systems
EE 517	Optimal Control
IENG 518	Technology Forecasting
IENG 553	Applied Linear Programming
PHYS 611	Introduction to Mathematical Physics

Research 24

MAE 797	Research
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Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, EXPH 583, or STAT courses 500-795, as approved by the student's AEC. 9

#### Milestones

Plan of Study
Qualifying Exam (Ph.D. qualifying examination)
Candidacy Exam (Dissertation research proposal defense)
Publication Requirement
Final Exam (Final dissertation defense)
Dissertation

Total Hours 42

\*

Students who do not hold a baccalaureate degree in aerospace engineering are required to take a set of undergraduate aerospace courses above and beyond the minimum coursework requirements.

For these students, a minimum of fifty-four hours of coursework and thirty hours of independent research beyond a bachelor's degree, or eighteen hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required.

\*\*

PhD students who also earn their MS degree in the MAE Department are expected to select the third core course in their technical area.

#### First Year

Fall	Hours	Spring	Hours
Core Area Course		3 Math Course	3
Math Course		3 Additional Course	3
MAE 797		3 MAE 797	3
		9	9

#### Second Year

Fall	Hours	Spring	Hours
Additional Course		3 Additional Course	3
MAE 797		6 MAE 797	6
		9	9

**Third Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
MAE 797		9 MAE 797	9
		9	9

Total credit hours: 54

**JOURNAL PAPER PUBLICATION REQUIREMENT FOR ALL PHD STUDENTS:**

Beginning with all PhD students admitted for the summer or fall of 2016 and thereafter, every Ph.D. student, prior to his/her dissertation defense, will be required to provide written documentation that they have received formal proof of submission of either:

- a.) At least one manuscript, generally co-authored with their research supervisor and about some portion of their PhD dissertation research, to an archival journal for publication, or
- b.) At least one patent disclosure, also generally about some portion of their PhD dissertation research.

This publication requirement will have to be satisfied prior to scheduling the defense of the Ph.D. Dissertation.

**Major Learning Outcomes****AEROSPACE ENGINEERING**

The MAE Department is committed to deliver high quality education and research experience to all graduate students in order to enable them to achieve success in their careers, though the following Learning Goals:

- Expertise, depth and breadth in a chosen field of aerospace engineering.
- Capacity to engage in original research, advanced technological discovery and innovation in order to advance the frontiers of knowledge in the science of the aerospace engineering discipline.
- Capacity of effective high level communication in order to document, disseminate and transfer knowledge of the science of the aerospace engineering discipline in educational, research or applied workplace settings.
- Appreciation and understanding of the role of the science of the aerospace engineering discipline in a global and societal context.

**Mechanical Engineering, M.S.M.E., Ph.D.****Degrees Offered**

- Masters of Science, Mechanical Engineering (M.S.M.E.)
- Doctor of Philosophy, Mechanical Engineering (Ph.D.)

**Educational Objectives of the Departmental Graduate-Level Programs:**

1. To provide high quality advanced master-level and Ph.D. level education to graduate engineering students to enable successful careers in technology development, innovation and research, with depth and breadth in one or several areas of the mechanical engineering discipline.
2. To develop the capacity of graduates to conduct independent research and/or technology development and innovation, through original contributions to the mechanical engineering discipline and to disseminate the results of their scholarly work.
3. To instill in graduates the drive for leadership in technology development, innovation and research and to contribute to the advancement of the profession in a societal and economic context.

**The outcomes of the graduate programs in Mechanical Engineering are as follows:**

- Holders of graduate degrees will have an expert-level understanding of the advanced principles of mechanical engineering, which include mechanical systems design, system dynamics, solid mechanics, energy systems, engineering materials, automatic controls, mechatronics, and computational mechanics.
- Holders of graduate degrees will hold paramount the highest standards of ethical and professional responsibility in the practice of their profession to contribute to the well being of society and to the advancement of the mechanical engineering profession.
- Holders of Ph.D. degrees will have furthered original research contributions to the state of the art in their specific areas of expertise and will be able to develop innovative research in order to advance the frontiers of knowledge, secure sponsored research, and disseminate its findings through scholarly publications.

**Thesis Based Master's Degrees**

All the requirements for thesis based master's degrees (M.S.A.E., M.S.M.E. and M.S.M.S.&E.) in the MAE Department must be completed within eight years preceding the student's graduation. All students in these programs are required to engage in research, complete and successfully defend a

master's thesis. They must identify a subject for their thesis research, form a three-member advisory and examining committee (AEC), and file a plan of study by the end of their second semester of enrollment in the graduate program. A minimum of twenty-four credit hours of coursework with a minimum overall GPA of 3.0/4.0 and six credit hours of M.S. thesis research are required for the thesis based master's degrees. Students must pass a final examination administered by their advisory and examining committee before being certified for the degree. All thesis based master's degree students have to comply with core requirements by selecting a "core area" taking two of the courses listed in that area, and in addition they have to comply with the mathematics requirements by taking two courses from an approved list. Four additional courses can be selected from a list of technical electives, or from the core and mathematics lists to complete the coursework requirements, with no more than three courses at the 400 level.

## Ph.D. Degrees

The MAE Department offers Ph.D. Programs in Aerospace Engineering, in Mechanical Engineering, and in Materials Science and Engineering. These programs require a minimum of eighteen credit hours of graduate level coursework plus a minimum of twenty-four credit hours of research. Students in the Ph.D. program must take and pass the Ph.D. Qualifier examination by the second semester of the program with a second attempt no later than the third semester in the program if necessary. After the qualifier examination, students are expected to produce a dissertation proposal and defend it before a five-member advising and examining committee (AEC). Subsequent to the successful proposal defense, students must comply with the journal paper publication (or patent disclosure) requirement in order to attain Ph.D. Candidacy. Finally, Ph.D. candidates must successfully defend a Ph.D. dissertation and submit it to WVU library through the ETD protocol to fulfill all the requirements for the degree.

## Master Admissions

To be eligible for admission into the Master of Science in Mechanical Engineering degree program, a candidate must fulfill the following requirements:

- 3.0 or better grade point average (out of a possible 4.0) in any previous engineering degree, from an accredited or internationally recognized program.
- A statement of purpose.
- Three recent reference letters, at least two of which should be from professors of the institution last attended.
- International applicants (who have not received their undergraduate degree from an accredited USA institution) are required to submit GRE general test scores. The GRE scores required for admission as a regular graduate student is seventy-fourth percentile (74%) or higher in the Quantitative section (strictly enforced). The GRE scores for the verbal and analytical sections will be taken into consideration in the admission process.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A statement of purpose.
- Three recent reference letters, at least two of which should be from professors of the institution last attended.
- Applicants must hold or expect to receive (by the enrollment date) a M.S. degree in an engineering discipline from an institution which has an ABET accredited undergraduate program in engineering or an internationally recognized program in engineering (except for students qualified for the direct track to Ph.D. degree option, described below). Qualified candidates holding a M.S. degree in applied sciences can also be considered for admission into the Ph.D. program.
- 3.0 or better grade point average (out of a possible 4.0) in all previous engineering degrees (B.S. and M.S.), from accredited or internationally recognized programs.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).
- International applicants (who have not received their degrees from an accredited USA institution) are required to submit GRE general test scores. Applicants must score in the seventy-fourth percentile (74%) or higher in the quantitative section for consideration of admission. The GRE scores for the verbal and analytical sections will also be taken into consideration in the admission process.

## Direct-Track PhD Admissions

The Department of Mechanical and Aerospace Engineering (MAE) offers a direct track option from the bachelor of science (B.S.) to the doctor of philosophy (Ph.D.) degree for prospective qualified students holding a B.S. degree in an engineering discipline, materials science, mathematics, or applied sciences from an accredited undergraduate program or an internationally recognized institution. This is an accelerated track that provides outstanding candidates the option of earning a Ph.D. degree in less than five years after graduating from an undergraduate program by engaging early in their Ph.D. dissertation research without having to complete a research thesis for a master of science (M.S.) degree. To qualify for the direct-track degree option, all applicants must have:

- A cumulative grade point average (GPA) of 3.5/4.0 or higher in his/her undergraduate studies.
- A statement of purpose
- A minimum of seventy-fourth percentile (74%) in the quantitative section of the GRE.

- Three recent reference letters, at least two of which should be from professors of the institution last attended.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSME Major Code: 3050

PhD Major Code: 3051

For specific information on the following programs, please see the link to the right:

- Mechanical Engineering, M.S.M.E.

For specific information on the following programs, please see the link to the right:

- Mechanical Engineering, Ph.D.

## Mechanical Engineering, M.S.M.E.

### Curriculum in Master of Science in Mechanical Engineering

A candidate for the M.S. degree in mechanical engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Mechanical and Aerospace Engineering Department.

### Program Requirements

All M.S. degree candidates are required to perform research (except those pursuing the Coursework Option) and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses.		
<b>Course Requirements *</b>		
A minimum of 60% of courses must be from 500 level or above.		
Plan of Study		
<b>Thesis Option (30 credit hours)</b>		
Core Area Courses (6 credit hours)		
Mathematics Requirements (6 credit hours)		
Additional Courses (12 credit hours) - Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, MAE, MATH, MINE, PNGE, PHYS, SENG, EXPH 583, or STAT courses 400-795, as approved by the student's AEC		
MAE 697	Research (6 credit hours)	
Final Oral or Written Examination		
Thesis		
<b>Problem Report Option (30 credit hours)</b>		
Core Area Courses (6 credit hours)		
Mathematics Requirements (6 credit hours)		
Additional Courses (15 credit hours) - Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, MAE, MATH, MINE, PNGE, PHYS, SENG, EXPH 583, or STAT courses 400-795, as approved by the student's AEC		
MAE 693	Special Topics (Problem Report, 3 credit hours)	
Final Oral or Written Examination		
Formal Written Report or Professional Report/Paper		
<b>Coursework Option (30 credit hours)</b>		
Core Area Courses (18 credit hours)		
Mathematics Requirements (6 credit hours)		



Additional Courses (6 credit hours) - Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, MAE, MATH, MINE, PNGE, PHYS, SENG, EXPH 583, or STAT courses 400-795, as approved by the student's AEC

Final Oral or Written Examination

**Total Hours**

**30**

## MATHEMATICS REQUIREMENTS FOR ALL OPTIONS (6 CREDIT HOURS)

Code	Title	Hours
<b>Select two of the following (at least one course with MATH prefix):</b>		
MATH 420	Numerical Analysis 1	
MATH 441	Applied Linear Algebra	
MATH 456	Complex Variables	
MATH 521	Numerical Analysis	
MATH 522	Numerical Solution of PDE	
MATH 541	Modern Algebra 1	
MATH 543	Linear Algebra	
MATH 545	Number Theory 1	
MATH 551	Real Variables 1	
MATH 555	Complex Variables 1	
MATH 560	Introduction to Dynamical Systems and Applications	
MATH 563	Mathematical Modeling	
MATH 564	Intermediate Differential Equations	
MATH 566	Intermediate Partial Differential Equations	
MATH 567	Advanced Calculus 1	
MATH 568	Advanced Calculus	
MATH 573	Graph Theory	
STAT 513	Design of Experiments	
STAT 545	Applied Regression Analysis	
STAT 561	Theory of Probability and Statistics 1	
STAT 562	Theory of Statistics 2	
MAE 515	Analytical Methods in Engineering	
MAE 623	Conduction Heat Transfer	
MAE 633	Computational Fluid Dynamics	
MAE 640	Continuum Mechanics	
MAE 645	Energy Methods in Applied Mechanics	
CHE 531	Mathematical Methods in Chemical Engineering	
EE 463	Digital Signal Processing Fundamentals	
EE 465	Introduction to Digital Image Processing	
EE 515	Linear Control Systems	
EE 517	Optimal Control	
IENG 518	Technology Forecasting	
IENG 553	Applied Linear Programming	
PHYS 461	Thermodynamics and Statistical Mechanics	
PHYS 611	Introduction to Mathematical Physics	

## CORE AREA COURSES FOR THESIS OR PROBLEM REPORT OPTIONS (6 CREDIT HOURS)

Code	Title	Hours
<b>Select two courses in a single core technical area from the following:</b>		
<b>Area A: Fluid Mechanics and Aerodynamics (FMA)</b>		
MAE 532	Dynamics of Viscous Fluids	
MAE 624	Convection Heat Transfer	
or MAE 636	Fundamentals of Turbulent Flow	
<b>Area B: Thermal Sciences and Systems (TSS)</b>		

MAE 521	Advanced Thermodynamics 1
MAE 532	Dynamics of Viscous Fluids
MAE 624	Convection Heat Transfer
Area C: Dynamics and Controls (D&C)	
MAE 642 or MAE 653	Intermediate Dynamics Advanced Vibrations
MAE 660	Feedback Control in Mechanical Engineering
Area D: Solid Mechanics and Design (SMD)	
MAE 543 or MAE 642	Advanced Mechanics of Materials Intermediate Dynamics
MAE 640 or MAE 653	Continuum Mechanics Advanced Vibrations
Area E: Materials Science (MS)	
MAE 580	Crystallography and Crystals
MAE 583	Thermodynamics and Kinetics of Materials
MAE 649	Microscopy of Materials

## CORE AREA COURSES FOR COURSEWORK OPTION (18 CREDIT HOURS)

Code	Title	Hours
MAE 521	Advanced Thermodynamics 1	
MAE 532	Dynamics of Viscous Fluids	
MAE 543	Advanced Mechanics of Materials	
MAE 580	Crystallography and Crystals	
MAE 653	Advanced Vibrations	
MAE 660	Feedback Control in Mechanical Engineering	

\*

Students who do not hold a baccalaureate degree in mechanical engineering will be required to take a set of undergraduate mechanical engineering courses above and beyond the minimum coursework requirements in order to overcome deficiencies in the mechanical engineering area.

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

The student's request for the comprehensive exam for students in the Coursework Only degree option must be filed at least four weeks in advance of the desired date of the exam. The comprehensive exam for students in the Coursework Only degree option must be passed at least 3 weeks before graduation.

## Major Learning Outcomes

### MECHANICAL ENGINEERING

The MAE Department is committed to deliver high quality education and research experience to all graduate students in order to enable them to achieve success in their careers, through the following Learning Goals:

- Expertise, depth and breadth in a chosen field of mechanical engineering.
- Capacity to engage in original research, advanced technological discovery and innovation to advance the frontiers of knowledge in the science of the mechanical engineering discipline.
- Capacity of effective high level communication to document, disseminate and transfer knowledge of the science of the mechanical engineering discipline in educational, research or applied workplace settings.
- Appreciation and understanding of the role of the science of mechanical engineering discipline in a global and societal context.

# Mechanical Engineering, Ph.D.

## Curriculum in Doctor of Philosophy – Mechanical Engineering

A candidate for the Ph.D. degree with a major in mechanical engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Mechanical and Aerospace Engineering Department.

### Program Requirements

The doctor of philosophy degree with a major in mechanical engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of mechanical engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

The doctoral courses of study are selected to fit the particular interests and objectives of the student, with proper attention given to broadening related areas of study. The research work for the doctoral dissertation may entail a fundamental investigation into a specialized area or a broad and comprehensive study in a related subject.

All students pursuing a Ph.D. degree in the MAE department are expected to engage in research and complete and successfully defend a Ph.D. dissertation. They should identify a subject for their Ph.D. dissertation, form a five-member advisory and examining committee, and file a plan of study by the end of their first semester of enrollment in the graduate program. At least one member of the graduate faculty from outside the department is required to serve on the advisory and examining committee.

### PUBLICATION REQUIREMENT

Prior to scheduling the dissertation defense, Ph.D. students are required to provide written documentation that they have received formal proof of submission of either:

- a.) At least one manuscript, generally co-authored with their research supervisor and about some portion of their PhD dissertation research, to an archival journal for publication, or
- b.) At least one patent disclosure, also generally about some portion of their PhD dissertation research.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses.		
<b>Course Requirements *</b>		
<b>Core Area Courses</b>		<b>3</b>
Select one course in the relevant core area from the following: **		
Area A: Fluid Mechanics and Aerodynamics (FMA)		
MAE 532	Dynamics of Viscous Fluids	
MAE 624	Convection Heat Transfer	
MAE 636	Fundamentals of Turbulent Flow	
Area B: Thermal Sciences and Systems (TSS)		
MAE 521	Advanced Thermodynamics 1	
MAE 532	Dynamics of Viscous Fluids	
MAE 624	Convection Heat Transfer	
Area C: Dynamics and Controls (D&C)		
MAE 642	Intermediate Dynamics	
MAE 653	Advanced Vibrations	
MAE 660	Feedback Control in Mechanical Engineering	
Area D: Solid Mechanics and Design (SMD)		
MAE 543	Advanced Mechanics of Materials	
MAE 640	Continuum Mechanics	
MAE 642	Intermediate Dynamics	

MAE 653	Advanced Vibrations	
Area E: Materials Science (MS)		
MAE 580	Crystallography and Crystals	
MAE 583	Thermodynamics and Kinetics of Materials	
MAE 649	Microscopy of Materials	
<b>Mathematics Requirements</b>		<b>6</b>
Select two of the following (at least one course with MATH prefix or MAE 515):		
MATH 521	Numerical Analysis	
MATH 522	Numerical Solution of PDE	
MATH 541	Modern Algebra 1	
MATH 543	Linear Algebra	
MATH 545	Number Theory 1	
MATH 551	Real Variables 1	
MATH 555	Complex Variables 1	
MATH 560	Introduction to Dynamical Systems and Applications	
MATH 563	Mathematical Modeling	
MATH 564	Intermediate Differential Equations	
MATH 566	Intermediate Partial Differential Equations	
MATH 567	Advanced Calculus 1	
MATH 568	Advanced Calculus	
MATH 573	Graph Theory	
STAT 513	Design of Experiments	
STAT 545	Applied Regression Analysis	
STAT 561	Theory of Probability and Statistics 1	
STAT 562	Theory of Statistics 2	
MAE 515	Analytical Methods in Engineering	
MAE 623	Conduction Heat Transfer	
MAE 633	Computational Fluid Dynamics	
MAE 640	Continuum Mechanics	
MAE 645	Energy Methods in Applied Mechanics	
CHE 531	Mathematical Methods in Chemical Engineering	
EE 515	Linear Control Systems	
EE 517	Optimal Control	
IENG 518	Technology Forecasting	
IENG 553	Applied Linear Programming	
PHYS 611	Introduction to Mathematical Physics	
Research		24
MAE 797	Research	
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, EXPH 583, or STAT courses 500-795, as approved by the student's AEC.		9
<b>Milestones</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam (Dissertation research proposal defense)		
Publication Requirement		
Final Exam		
Dissertation		
Total Hours		42

\*

Students who do not hold a baccalaureate degree in mechanical engineering are required to take a set of undergraduate mechanical engineering courses above and beyond the minimum coursework requirements in order to overcome deficiencies in the area.

For these students, a minimum of fifty-four hours of coursework and thirty hours of independent research beyond a bachelor's degree, or eighteen hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required.

\*\*

PhD students who also earn their MS degree in the MAE Department are expected to select the third core course in their technical area.

## Examinations

### QUALIFYING EXAM

All students must take and pass a written qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the mechanical engineering field to determine whether or not they have sufficient knowledge to undertake independent research.

The Ph.D. qualifying examination is the method of assessing whether the student has attained sufficient knowledge of the discipline and supporting fields in order to undertake independent research or practice. Students are required to pass a qualifying examination administered by the department which tests for a minimum level of proficiency expected of all students in a given area. It is expected that students will take the qualifying exam during their first or second semester of enrollment in the Ph.D. program; however, it is required that full-time students pass the qualifying examination no later than the end of the third semester of enrollment in their Ph.D. program. Students admitted in the direct track from B.S. to Ph.D. degree option are expected to take the qualifying exam by the end of their fourth semester of enrollment in the MAE graduate program.

### CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research.

As the student progresses, his or her advisory and examining committee is charged with evaluating the student's competency in the specific area of study through the assessment of a dissertation proposal for the research to be completed and the evaluation of the student's plan of study and associated coursework. After these requirements are completed, the student is formally admitted to candidacy for the Ph.D. degree. Only at this point can a student be called a doctoral candidate; admission to the graduate program for the purpose of pursuing the Ph.D. degree is not equivalent to becoming a Ph.D. candidate. Doctoral candidates are allowed no more than five years to complete the remaining degree requirements after admission to candidacy. An extension of time can be obtained only by repeating the qualifying and candidacy examinations and meeting any other requirements specified by the student's advisory and examining committee.

A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree.

### FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

## Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical doctoral degree program that completes degree requirements in three years is as follows. The Ph.D. degree signifies that the holder has the competence to function independently at the highest level in the chosen field. Hence, the number of years involved in attaining or retaining competency cannot be readily specified, nor can an exact program of study be defined.

#### First Year

Fall	Hours	Spring	Hours
Core Area Course		3 Math Course	3
Math Course		3 Additional Course	3
MAE 797		3 MAE 797	3
	9		9

**Second Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
Additional Course		3 Additional Course	3
MAE 797		6 MAE 797	6
		9	9

**Third Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
MAE 797		9 MAE 797	9
		9	9

Total credit hours: 54

**JOURNAL PAPER PUBLICATION REQUIREMENT FOR ALL PHD STUDENTS:**

Beginning with all PhD students admitted for the summer or fall of 2016 and thereafter, every Ph.D. student, prior to his/her dissertation defense, will be required to provide written documentation that they have received formal proof of submission of either:

- a.) At least one manuscript, generally co-authored with their research supervisor and about some portion of their PhD dissertation research, to an archival journal for publication, or
- b.) At least one patent disclosure, also generally about some portion of their PhD dissertation research.

This publication requirement will have to be satisfied prior to scheduling the defense of the Ph.D. Dissertation.

**Major Learning Outcomes****MECHANICAL ENGINEERING**

The MAE Department is committed to deliver high quality education and research experience to all graduate students in order to enable them to achieve success in their careers, through the following Learning Goals:

- Expertise, depth and breadth in a chosen field of mechanical engineering.
- Capacity to engage in original research, advanced technological discovery and innovation in order to advance the frontiers of knowledge in the science of the mechanical engineering discipline.
- Capacity of effective high level communication in order to document, disseminate and transfer knowledge of the science of the mechanical engineering discipline in educational, research or applied workplace settings.
- Appreciation and understanding of the role of the science of mechanical engineering discipline in a global and societal context.

**Materials Science and Engineering, M.S.M.S.E., Ph.D.****Degrees Offered**

- Master of Science, Materials Science and Engineering (M.S.M.S.E)
- Doctor of Philosophy, Materials Science and Engineering (Ph.D.)

**Nature of the Program**

Materials science and engineering is designed for students with undergraduate degrees in engineering or a closely related STEM discipline. MS&E research focuses on the study of metals, ceramics, glass, polymers, semiconductors, composites, nanomaterials and biomaterials to be implemented in a variety of applications including energy, civil, industrial and environmental. The area of study is diverse and multidisciplinary, since it incorporates aspects of chemistry, physics, electronics, mechanics, biology and medicine. The program will provide students with opportunities to investigate various aspects of materials science and engineering, which includes the processing, structure and properties of materials through computational modeling and/or experimental studies.

Students will be trained in core discipline areas using the most advanced materials processing, physical property testing and chemical/structure characterization equipment available. In addition to coursework in the core areas of materials science, students will choose a specialty area of focus to further his or her expertise. Specialty areas may be in either the chemical, mechanical or electrical engineering departments. The student's home department will be determined by the student's particular background, interests and research advisor.

The program is designed to be flexible, permitting students to acquire the knowledge and skills required to participate in cutting-edge technological areas, such as nanomaterials, ultra-high performance materials, smart materials, bio-inspired materials, environmental materials and energy materials. Students that complete the program will be prepared to perform at the highest levels within industry or within any research environment.

## FACULTY

### CHEMICAL AND BIOMEDICAL ENGINEERING

- Brian Anderson
- Cerasela Zoica Dinu
- Rakesh K. Gupta
- Robin Hissam

### LANE DEPARTMENT OF COMPUTER SCIENCE AND ELECTRICAL ENGINEERING

- Xian-An Cao
- Jeremy Dawson
- Parviz Famouri
- Dimitris Korakakis
- Yuxin Liu

### MECHANICAL AND AEROSPACE ENGINEERING

- Ever Barbero
- Bruce Kang
- Xingbo Liu
- David Mebane
- Terence Musho
- Ming Pei
- Edward M. Sabolsky
- Kostas Sierros
- Xueyan Song
- Nianqiang Wu

## Masters Admissions

To be eligible for admission into the Master of Science in Materials Science and Engineering degree program, a candidate must fulfill the following requirements:

- A statement of purpose.
- Three recent reference letters, at least two of which should be from professors of the institution last attended.
- 3.0 or better grade point average (out of a possible 4.0) in any previous engineering degree, from an accredited or internationally recognized program.
- International applicants (who have not received their undergraduate degree from an accredited USA institution) are required to submit GRE general test scores. Applicants must score in the seventy-fourth percentile (74%) or higher in the quantitative section for consideration of admission. The GRE scores for the verbal and analytical sections will also be taken into consideration in the admission process.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A statement of purpose.
- Three recent reference letters, at least two of which should be from professors of the institution last attended.
- Applicants must hold, or expect to receive (by the enrollment date) a M.S. degree in an engineering discipline from an institution which has an ABET accredited undergraduate program in engineering or an internationally recognized program in engineering (except for students qualified for the direct track to Ph.D. degree option, described below). Qualified candidates holding a M.S. degree in applied sciences can also be considered for admission into the Ph.D. program.
- 3.0 or better grade point average (out of a possible 4.0) in all previous engineering degrees (B.S. and M.S.), from accredited or internationally recognized programs.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

- All applicants for the doctoral program must submit GRE scores. Applicants must score in the seventy-fourth percentile (74%) or higher in the quantitative section for consideration of admission. The GRE scores for the verbal and analytical sections will also be taken into consideration in the admission process.

## Direct-Track PhD Admissions

The Department of Mechanical and Aerospace Engineering (MAE) offers a direct-track option from the bachelor of science (B.S.) to the doctor of philosophy (Ph.D.) degree for prospective qualified students holding a B.S. degree in an engineering discipline, materials science, mathematics or applied sciences from an accredited undergraduate program or an internationally recognized institution. This is an accelerated track that provides outstanding candidates the option of earning a Ph.D. degree in less than five years after graduating from an undergraduate program by engaging early in their Ph.D. dissertation research without having to complete a research thesis for a master of science (M.S.) degree. To qualify for the direct-track degree option, all applicants must have:

- A cumulative grade point average (GPA) of 3.5/4.0 or higher in his/her undergraduate studies.
- A statement of purpose.
- Three recent reference letters, at least two of which should be from professors of the institution last attended.
- A minimum of seventy-fourth percentile (74%) in the quantitative section of the GRE.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSMSE Major Code: 3062

PhD Major Code: 3063

For specific information on the following program, please see the links to the right:

- Materials Science and Engineering, M.S.M.S.E.

For specific information on the following program, please see the links to the right:

Materials Science and Engineering, Ph.D.

## Materials Science and Engineering, M.S.M.S.E.

### Curriculum in Master of Science in Materials Science and Engineering

A candidate for the M.S. degree in Materials Science and Engineering must comply with the rules and regulations outlined in the WVU Graduate catalog as well as the specific requirements of the Statler College and the department of Mechanical and Aerospace Engineering.

### Program Requirements

All M.S. degree candidates are required to follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements</b>		
A maximum of three 3-credit courses at the 400 level will be accepted towards the coursework requirements.		
Plan of Study		
<b>Core Courses</b>		
MAE 583	Thermodynamics and Kinetics of Materials	3
MAE 580	Crystallography and Crystals	3
MAE 649	Microscopy of Materials	3
MAE 686	Materials Science and Engineering Seminar	1



Complete 1 of the following options: 21

#### Thesis Option

Technical Electives or Mathematics Technical Electives(15 hours)

MAE 697 Research (6 hours)

Final Oral or Written Examination

Thesis

#### Problem Report Option

Technical Electives or Mathematics Technical Electives (18 hours)

MAE 697 Research (3 hours)

Final Oral or Written Examination

Formal written report or professional report/paper

Total Hours 31

## Technical Electives

Code	Title	Hours
MAE 446	Mechanics of Composite Materials	3
MAE 528	Introduction to Fuel Cell Technology	3
MAE 543	Advanced Mechanics of Materials	3
MAE 593	Special Topics (Requires AEC approval)	1-6
MAE 640	Continuum Mechanics	3
MAE 641	Theory of Elasticity 1	3
MAE 643	Inelastic Behavior of Engineering Materials	3
MAE 645	Energy Methods in Applied Mechanics	3
MAE 646	Advanced Mechanics of Composite Materials	3
MAE 648 & 648L	Experimental Stress Analysis and Experimental Stress Analysis Laboratory	3
MAE 687	Materials Engineering	3
CHE 461	Polymer Science and Engineering	3
CHE 462	Polymer Processing	3
CHE 463	Polymer Composites Processing	3
CHE 466	Electronic Materials Processing	3
CHE 471	Biochemical Engineering	3
CHE 565	Corrosion Engineering	3
CHE 720	Applied Statistical and Molecular Thermodynamics	3
CHE 726	Catalysis	3
CHEM 422	Inorganic Chemistry 2	3
CHEM 422L	Inorganic Chemistry 2 Laboratory	2
CHEM 444	Colloid and Surface Chemistry	3
CHEM 514	Mass Spectrometry Principles and Practices	3
CHEM 521	Organometallic Chemistry	3
CHEM 547	Chemical Crystallography	3
CHEM 713	Electrochemistry and Instrumentation	3
CHEM 723	Physical Methods in Inorganic Chemistry	3
EE 528	Biomedical Microdevices	3
EE 550	Advanced Semiconductor Electronics	3
EE 650	Optoelectronics	3
PHYS 471	Solid State Physics	3
PHYS 771	Advanced Solid State Physics	3
PHYS 772	Semiconductor Physics	3
PHYS 773	Collective Phenomena in Solids	3
PHYS 774	Optical Properties of Solids	3

## Mathematics Technical Electives

Code	Title	Hours
CHE 531	Mathematical Methods in Chemical Engineering	3
EE 463	Digital Signal Processing Fundamentals	3
EE 465	Introduction to Digital Image Processing	3
EE 515	Linear Control Systems	3
EE 517	Optimal Control	3
IENG 518	Technology Forecasting	3
IENG 553	Applied Linear Programming	3
MAE 515	Analytical Methods in Engineering	3
MAE 623	Conduction Heat Transfer	3
MAE 633	Computational Fluid Dynamics	3
MAE 640	Continuum Mechanics	3
MAE 645	Energy Methods in Applied Mechanics	3
MATH 420	Numerical Analysis 1	3
MATH 441	Applied Linear Algebra	3
MATH 456	Complex Variables	3
MATH 521	Numerical Analysis	3
MATH 522	Numerical Solution of PDE	3
MATH 541	Modern Algebra 1	3
MATH 543	Linear Algebra	3
MATH 545	Number Theory 1	3
MATH 551	Real Variables 1	3
MATH 555	Complex Variables 1	3
MATH 560	Introduction to Dynamical Systems and Applications	3
MATH 563	Mathematical Modeling	3
MATH 564	Intermediate Differential Equations	3
MATH 566	Intermediate Partial Differential Equations	3
MATH 567	Advanced Calculus 1	3
MATH 568	Advanced Calculus	3
MATH 573	Graph Theory	3
STAT 513	Design of Experiments	3
STAT 545	Applied Regression Analysis	3
STAT 561	Theory of Probability and Statistics 1	3
STAT 562	Theory of Statistics 2	3
PHYS 461	Thermodynamics and Statistical Mechanics	3
PHYS 611	Introduction to Mathematical Physics	3

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

## SUGGESTED PLAN OF STUDY

The plan below illustrates the Thesis Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S.M.S.E. degree program that completes degree requirements in one and a half years is as follows.

**First Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
MAE 580		3 Technical Elective 1	3
MAE 583		3 Technical Elective 2	3
MAE 649		3 Technical Elective 3	3
MAE 686		1 MAE 697	3
		10	12

**Second Year**

<b>Fall</b>	<b>Hours</b>
Technical Elective 4	3
Technical Elective 5	3
MAE 697	3
	9

Total credit hours: 31

## Major Learning Outcomes

### MASTER OF SCIENCE IN MATERIALS SCIENCE AND ENGINEERING (MSMSE)

Upon graduation, with a Masters of Science degree in Materials Science and Engineering, students will have:

- An expert level understanding of the advanced principles of their engineering specialty
- Ability to apply advanced methodologies in their specialty area
- Ability to design and conduct original experiments, analyze and interpret data, and develop recommendations with a high degree of independence
- Advanced ability to use contemporary techniques, skills, and tools necessary for engineering practice in education, industry, and/or government
- Ability to effectively communicate technical information in the form of a thesis, scientific publication or presentation
- Understanding of professional and ethical responsibility
- Ability to understand the impact of engineering solutions in global and societal context
- Recognition of the need to engage in life-long learning
- Foundational preparation to pursue doctoral studies

## Materials Science and Engineering, Ph.D.

### Curriculum in Doctor of Philosophy – Materials Science and Engineering

A candidate for the Ph.D. degree with a major in materials science and engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Mechanical and Aerospace Engineering Department.

### Program Requirements

The doctor of philosophy degree with a major in materials science and engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of materials science and engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### PUBLICATION REQUIREMENT FOR PHD STUDENTS

Prior to scheduling the dissertation defense, Ph.D. students are required to provide written documentation that they have received formal proof of submission of either:

- At least one manuscript, generally co-authored with their research supervisor and about some portion of their PhD dissertation research, to an archival journal for publication, or
  - At least one patent disclosure, also generally about some portion of their PhD dissertation research.
- This publication requirement will have to be satisfied prior to scheduling the defense of the Ph.D. Dissertation.

## Curriculum Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses.		
<b>Course Requirements</b>		
Select six courses from the following * **		18
BIOL 593	Special Topics (Select six courses from the following:) * **	
BMEG 482	Introduction to Tissue Engineering	
BMEG 593	Special Topics <small>Requires AEC approval</small>	
CHE 531	Mathematical Methods in Chemical Engineering	
CHE 565	Corrosion Engineering	
CHE 625	Chemical Reaction Engineering	
CHE 615	Transport Phenomena	
CHE 720	Applied Statistical and Molecular Thermodynamics	
CHE 726	Catalysis	
CHEM 514	Mass Spectrometry Principles and Practices	
CHEM 521	Organometallic Chemistry	
CHEM 547	Chemical Crystallography	
CHEM 713	Electrochemistry and Instrumentation	
CHEM 723	Physical Methods in Inorganic Chemistry	
PHYS 774	Optical Properties of Solids	
EE 528	Biomedical Microdevices	
EE 550	Advanced Semiconductor Electronics	
EE 551	Linear Integrated Circuits	
EE 591	Advanced Topics <small>Requires AEC approval</small>	
EE 593	Special Topics <small>Requires AEC approval</small>	
EE 650	Optoelectronics	
PHYS 771	Advanced Solid State Physics	
PHYS 772	Semiconductor Physics	
PHYS 773	Collective Phenomena in Solids	
MAE 528	Introduction to Fuel Cell Technology	
MAE 543	Advanced Mechanics of Materials	
MAE 593	Special Topics <small>Requires AEC approval</small>	
MAE 640	Continuum Mechanics	
MAE 643	Inelastic Behavior of Engineering Materials	
MAE 644	Fracture Mechanics	
MAE 645	Energy Methods in Applied Mechanics	
MAE 646	Advanced Mechanics of Composite Materials	
MAE 648 & 648L	Experimental Stress Analysis and Experimental Stress Analysis Laboratory	
MAE 687	Materials Engineering	
MAE 693	Special Topics <small>Requires AEC approval</small>	
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, EXPH 583, or STAT courses 500-795, as approved by the student's AEC.		
Materials Science and Engineering Seminar		2
MAE 686	Materials Science and Engineering Seminar	
Research		24
MAE 797	Research	
<b>Milestones</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Publication Requirement		

Final Exam	
Dissertation	
Total Hours	44

\*

Students who do not hold a baccalaureate degree in materials science and engineering are required to take a set of undergraduate engineering course above and beyond the minimum coursework requirements

\*\*

Students admitted to the Ph.D. program must have previously completed the following set of core courses: MAE 580, MAE 583, and MAE 649 or equivalent. Otherwise, they will need to complete the missing courses as part of their 18-hours of course requirement.

## Examinations

### QUALIFYING EXAM

All Ph.D. students must take and pass a written qualifying examination. The qualifying examination is given no later than the end of the third semester of enrollment in their Ph.D. program. This examination is designed to assess the basic competency of students to determine whether or not they have sufficient knowledge of the discipline to undertake independent research. The qualifying examination is administered by the department of Mechanical and Aerospace Engineering following the format specifically set forth for the MS&E Ph.D. degree program.

### CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research. After passing the qualifying examination, the student must submit to the AEC a written research proposal of his/her planned dissertation work and successfully defend it in an oral examination. The research proposal must be approved by the student's AEC. A student who has successfully completed all coursework, passed the qualifying examination, successfully defended the research proposal, and receives the college's approval becomes a candidate for a Ph.D. degree. Thereafter, the student will officially be engaged in dissertation research.

### FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC.

## Major Learning Outcomes

### DOCTOR OF PHILOSOPHY (PHD)

Upon graduation with a Ph.D. degree from the Statler College of Engineering and Mineral Resources students will have:

- Ability to initiate research ideas in order to solve specific problems and to write research proposals on these ideas
- Have an expert-level understanding of the advanced principles of their fields of study
- Furthered a novel research idea which has contributed to the state of the art in their specific areas of expertise
- Ability to plan original research projects, to perform laboratory or field based experimental tasks, generate data from those tasks, and draw conclusions based on sound scientific and engineering principles
- Ability to develop innovative research in order to advance the frontiers of knowledge and secure sponsored research
- Ability to write technical articles for dissemination through peer-reviewed, refereed journals or other venues
- Ability to make oral and poster presentations at technical meetings
- Understanding of professional and ethical responsibilities in the practice of their profession to contribute to the well-being of society and to the advancement of their profession
- Demonstrated initiative in research planning and management, including safety and environmental issues
- Technical preparation for and an awareness of the need for life-long learning and continuing education

## Department of Mining Engineering, M.S.Min.E., Ph.D.

### Degrees Offered

- Masters of Science, Mining Engineering (M.S.Min.E.)
- Masters of Science, Engineering (M.S.E.)
- Doctor of Philosophy, Mining Engineering (Ph.D.)

## Departmental Overview

The objective of the master's of science in mining engineering (M.S.Min.E.) program is to equip students to investigate and develop solutions to advanced mining engineering problems. This program provides students the technical knowledge and research experience needed to address the most challenging contemporary issues within a specialized area of study.

Moreover, the objective of the Ph.D. program in mining engineering is to educate students to the highest level of technical and research performance within the minerals profession. Graduates of this program not only possess the requisite technical skills, but they also have the capability to actively contribute to the scholarly body of knowledge through independent research. These graduates pursue careers in industry, government agencies, and academia.

## Areas of Research

The expertise of the current faculty members broadly spans many traditional mining sub-disciplines. Active research areas include surface and underground mining, rock mechanics and ground control, mine health and safety, mineral/coal processing, mine pollution control, and mine ventilation.

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## FACULTY

### CHAIR

- Vladislav Kecojec - Ph.D. (University of Belgrade)  
Surface mining, Surface mine health and safety, Environmental impact of surface mining

### ASSISTANT PROFESSOR

- Deniz Talan - Ph.D. (West Virginia University)  
Mineral and metallurgical processing, critical mineral extraction, and environmental aspect of processing technologies
- Qingqing Huang - Ph.D. (University of Kentucky)  
Mineral Processing, Coal Preparation, Explosion Mitigation, Extractive Metallurgy
- Tulu, I. Berk - Ph.D. (West Virginia University)  
Coal/stone/hard rock pillar stability, Coal bump/burst, Rock drilling and fragmentation
- Deniz Tuncay - Ph.D. (West Virginia University)  
Rock mechanics, Mine ground control, Mine ventilation

### LECTURER

- Dan Alexander - Ph.D. (West Virginia University)  
Mineral economics evaluation

## Masters Admissions

To be eligible for admission into the Master of Science in Mining Engineering degree program, a candidate must fulfill the following requirements:

- A grade point average (GPA) of 3.0/4.0 or above from an ABET-accredited B.S. in Mining Engineering program or its equivalent.
- A statement of purpose.
- At least three letters of recommendation, one of which must be from the applicant's previous thesis advisor or an academic equivalent. All letters of recommendation should evaluate the student's potential for performing independent, masters or doctoral-level research.
- International applicants who do not have an ABET-accredited B.S. degree are required to submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>).

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- A grade point average (GPA) of 3.0/4.0 or above from an ABET-accredited B.S. in Mining Engineering program or its equivalent. Additionally, all Ph.D. applicants must have earned an M.S. degree in Mining Engineering with a GPA of 3.0 or higher.
- A statement of purpose.
- At least three letters of recommendation, one of which must be from the applicant's previous thesis advisor or an academic equivalent. All letters of recommendation should evaluate the student's potential for performing independent, masters or doctoral-level research.
- International applicants who do not have an ABET-accredited B.S. degree are required to submit GRE scores.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSMINE Major Code: 3035

PhD Major Code: 3061

For specific information on the following program, please see the links to the right:

- Mining Engineering, M.S.Min.E.

For specific information on the following program, please see the links to the right:

- Mining Engineering, Ph.D.

## Mining Engineering, M.S.Min.E.

### Curriculum in Masters of Science in Mining Engineering

A candidate for the M.S. degree in mining engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Mining Engineering Department.

### Program Requirements

All M.S. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements *</b>		
A minimum of 60% of course credits must be from 500 level or above		
Plan of Study		
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 400-795, as approved by the student's AEC		24
<b>Select from the following based on degree path</b>		<b>6</b>
<b>Thesis Option - 6 hours</b>		
MINE 697	Research (6 hours)	
Final Oral or Written Examination		
Thesis		
<b>Problem Report Option - 6 hours</b>		
MINE 697	Research (3 hours)	
Complete 3 additional hours of coursework from the Course Requirements listed above		
Final Oral or Written Examination		
Formal written report or professional report/paper		
Total Hours		30

\*

Students who do not hold a baccalaureate degree in mining engineering are required to take a set of undergraduate mining engineering courses above and beyond the minimum coursework requirements.

### Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

## Major Learning Outcomes

### MASTER OF SCIENCE IN MINING ENGINEERING (MSMINE)

Upon graduation, with a Masters of Science degree in Mining Engineering, students will have:

- Ability to investigate and develop solutions to advanced mining engineering problems
- Advanced technical knowledge and research experience needed to address the most challenging contemporary issues within a specialized area of study

## Mining Engineering, Ph.D.

### Curriculum in Doctor of Philosophy – Mining Engineering

A candidate for the Ph.D. degree with a major in mining engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Mining Engineering Department.

### Program Requirements

The doctor of philosophy degree with a major in mining engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of mining engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements *</b>		
Research		24
MINE 797	Research	
Select from the following based on degree path:		18
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 500-795, as approved by the student's AEC		
<b>Examinations</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		
Dissertation		
Total Hours		42

\*

Students who do not hold a baccalaureate degree in mining engineering are required to take a set of undergraduate mining engineering courses above and beyond the minimum coursework requirements.

A minimum of eighteen hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required.

## Examinations

### QUALIFYING EXAM

All students must take and pass a written qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. . All mining engineering students must pass the written qualifying examination within three semesters since registered in Mining Engineering graduate program. This examination is designed to assess the basic competency of students in the mining engineering field to determine whether or not they have sufficient knowledge to undertake independent research.



## CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research. The candidacy exam consists of a written qualifying examination and dissertation proposal defense. The proposal must be approved by the student's AEC at least one semester prior to/ the final oral examination. The written qualifying exam includes material from the eight areas of specialization.

A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree.

## FINAL EXAMINATION

At the completion of the dissertation research, candidates must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

## Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical doctoral degree program that completes degree requirements in four years is as follows.

### First Year

Fall	Hours	Spring	Hours
Course		3 Course	3
Course		3 Course	3
MINE 797		3 MINE 797	3
		9	9

### Second Year

Fall	Hours	Spring	Hours
Course		3 Course	3
MINE 797		6 MINE 797	6
		9	9

### Third Year

Fall	Hours	Spring	Hours
MINE 797		9 MINE 797	9
		9	9

### Fourth Year

Fall	Hours	Spring	Hours
MINE 797		9 MINE 797	9
		9	9

Total credit hours: 72

## Major Learning Outcomes

### DOCTOR OF PHILOSOPHY (PHD)

Upon graduation with a Ph.D. degree from the Statler College of Engineering and Mineral Resources, students will have:

- Ability to initiate research ideas in order to solve specific problems and to write research proposals on these ideas
- Have an expert-level understanding of the advanced principles of their fields of study
- Furthered a novel research idea which has contributed to the state of the art in their specific areas of expertise
- Ability to plan original research projects, to perform laboratory or field based experimental tasks, generate data from those tasks, and draw conclusions based on sound scientific and engineering principles
- Ability to develop innovative research in order to advance the frontiers of knowledge and secure sponsored research
- Ability to write technical articles for dissemination through peer-reviewed, refereed journals or other venues
- Ability to make oral and poster presentations at technical meetings

- Understanding of professional and ethical responsibilities in the practice of their profession to contribute to the well-being of society and to the advancement of their profession
- Demonstrated initiative in research planning and management, including safety and environmental issues
- Technical preparation for and an awareness of the need for life-long learning and continuing education

## Department of Petroleum and Natural Gas Engineering, M.S.P.N.G.E, Ph.D.

### Degrees Offered

- Masters of Science, Petroleum and Natural Gas Engineering (M.S.P.N.G.E.)
- Masters of Science, Engineering (M.S.E.)
- Doctor of Philosophy, Petroleum and Natural Gas Engineering (Ph.D.)

### Departmental Overview

The Petroleum and Natural Gas Engineering (PNGE) graduate programs are designed for students who have already completed a basic petroleum engineering curriculum. The objective of the PNGE graduate programs is to educate students who will be capable of performing at the highest levels of the petroleum and natural gas engineering profession. The programs provide students with the advanced technical knowledge and engineering skills needed by the oil and gas industry in the state, the nation, and the world. Moreover, the programs will make students competent to perform independent research and will prepare them to be the future providers of high quality education in petroleum and natural gas engineering. Graduates have the opportunity to enter all phases of the oil and natural gas industry, government agencies, and academia in meaningful and important jobs.

### Areas of Research

- Development of the Unconventional Oil and Gas Resources
- Drilling and Well Completion
- Stimulation
- Reservoir Characterization and Formation Evaluation
- CO<sub>2</sub> Sequestration and Enhanced Oil Recovery
- Reservoir Modeling and Simulation
- Application of Artificial Intelligence and Data Analytics

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## FACULTY

### CHAIR

- Samuel Ameri - M.S.Pet.E., P.E. (West Virginia University)  
Formation Evaluation

### PROFESSORS

- Samuel Ameri - M.S.Pet.E., P.E. (West Virginia University)  
Formation Evaluation
- Kashy Aminian - Ph.D. (University of Michigan)  
Natural Gas Engineering, Unconventional Reservoirs
- Shahab Mohaghegh - Ph.D. (Pennsylvania State University)  
Intelligent Systems, Shale Analytics

### ASSOCIATE PROFESSORS

- H. Ilkin Bilgesu - Ph.D., P.E. (Pennsylvania State University)  
Drilling and Production Engineering
- Ebrahim Fathi - Ph.D. (University of Oklahoma)  
Phase Behavior

### TEACHING ASSOCIATE PROFESSOR

- Mehrdad Zamirian - Ph.D. (West Virginia University)  
Property Evaluation

## ASSISTANT PROFESSORS

- Ming Gu - Ph.D. (University of Texas)  
Rock Mechanics
- Mohamed El Sgher - Ph.D. (West Virginia University)  
Production, Unconventional Gas

## ADJUNCT PROFESSORS

- Alan Brannon - Ph.D. (West Virginia University)  
Petroleum Engineering Fundamentals
- Josh Dalton - MSPNGE (West Virginia University)  
Drilling and Stimualtion
- Pramod Thakur - Ph.D. (Pennsylvania State University)  
Coalbed Methane Development

## Master Admissions

To be eligible for admission into the Master of Science in Petroleum and Natural Gas Engineering degree program, a candidate must fulfill the following requirements:

- B.S. degree in engineering from an ABET-accredited or internationally-recognized engineering program or equivalent with a minimum GPA of 3.0 (on a 4.0 scale).
- A statement of purpose.
- At least three recommendation letters (one letter must be from the applicant's academic advisor or equivalent.)
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Doctoral Admissions

To be eligible for admission into the doctoral program, a candidate must fulfill the following requirements:

- Degree in petroleum engineering from an ABET-accredited or an internationally-recognized petroleum engineering program, with a minimum GPA in a B.S. program of 3.0/4.0 or an M.S. program of 3.2/4.0.
- A statement of purpose.
- At least three recommendation letters (one letter must be from the applicant's previous thesis advisor or an academic equivalent.)
- All applicants for the doctoral program must submit GRE scores, and score in at least the seventy-fifth percentile (75%) on the quantitative section.
- International applicants must meet the WVU requirement of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MSPNGE Major Code: 3075

PhD Major Code: 3076

For specific information on the following program, please see the links to the right:

- Petroleum and Natural Gas Engineering, M.S.P.N.G.E.

For specific information on the following program, please see the links to the right:

- Petroleum and Natural Gas Engineering, Ph.D.

## Petroleum and Natural Gas Engineering, M.S.P.N.G.E.

### Curriculum in Master of Science in Petroleum and Natural Gas Engineering

A candidate for the M.S. degree in petroleum and natural gas engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Petroleum and Natural Gas Engineering Department.

## Program Requirements

All M.S. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements *</b>		
A minimum of 60% of courses must be from 500 level or above		
A maximum of three credit hours each of Graduate Seminar (PNGE 796) and Independent Study (PNGE 695) can be counted towards meeting the coursework requirements.		
Plan of Study		
Graduate Seminar **		
PNGE 796	Graduate Seminar	3
Any PNGE course 400-795		15
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, GEOL, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 400-795, as approved by the student's AEC.		6
Complete 1 of the following options:		6
<b>Thesis Option - 6 hours</b>		
PNGE 697	Research (6 hours)	
Thesis		
Final Oral or Written Examination		
<b>Problem Report Option - 6 hours</b>		
Complete 3 additional hours of coursework		
PNGE 697	Research (3 hours)	
Formal written report or professional report/paper		
Final Oral or Written Examination		
Total Hours		30

\*

Students who do not hold a baccalaureate degree in petroleum and natural gas engineering are required to take a set of undergraduate engineering courses above and beyond the minimum coursework requirements

\*\*

All students are required to take Graduate Seminar (PNGE 796) for each semester enrolled.

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

## Suggested Plan of Study

The plan below illustrates the Thesis Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S.P.N.G.E degree program that completes degree requirements in one and half years is as follows.

First Year			
Fall	Hours	Spring	Hours
PNGE 796		1 PNGE 796	1
Course		3 PNGE 697	3
Course		3 Course	3

Course	3 Course	3
	10	10
<b>Second Year</b>		
<b>Fall</b>	<b>Hours</b>	
PNGE 796	1	
PNGE 697	3	
Course	3	
Course	3	
	10	

Total credit hours: 30

## Major Learning Outcomes

### PETROLEUM AND NATURAL GAS ENGINEERING

- Graduates will have in-depth knowledge of petroleum and natural gas engineering principles and applications to function effectively in their profession or continue their education.
- Graduates will have the ability to perform independent research to solve engineering and scientific problems encountered in their profession.
- Graduates will have in-depth petroleum and natural gas scientific and engineering knowledge to provide high quality education in petroleum and natural gas engineering.

## Petroleum and Natural Gas Engineering, Ph.D.

### Curriculum in Doctor of Philosophy - Petroleum and Natural Gas Engineering

A candidate for the Ph.D. degree with a major in petroleum and natural gas engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the Petroleum and Natural Gas Engineering Department.

### Program Requirements

The Doctor of Philosophy degree with a major in petroleum and natural gas engineering is administered through the college's interdisciplinary Ph.D. program. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of petroleum and natural gas engineering.

All Ph.D. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

### Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
A maximum of three credit hours each of Graduate Seminar (PNGE 796) and Independent Study (PNGE 795) can be counted towards meeting the coursework requirements.		
<b>Course Requirements</b>		
Research		24
PNGE 797	Research	
Select the following based on degree path:		
Any BIOM, BMGE, CE, CHE, CHEM, CPE, CS, EE, GEOL, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses		18
500-795, as approved by the student's AEC		
Graduate Seminar **		3
PNGE 796	Graduate Seminar	
<b>Examinations</b>		
Plan of Study		
Qualifying Exam		
Candidacy Exam		
Final Exam		

\*\*

All students are required to take Graduate Seminar (PNGE 796) for each semester enrolled.

## Examinations

### QUALIFYING EXAM

All students must take and pass a written qualifying examination. Normally, the qualifying examination is given no later than one semester after completion of eighteen credit hours toward the doctoral degree. This examination is designed to assess the basic competency of students in the petroleum and natural gas engineering field to determine whether or not they have sufficient knowledge to undertake independent research.

### CANDIDACY EXAMINATION

In order to be admitted to candidacy, the student must pass a candidacy exam, which is designed to evaluate the student's overall ability to engage in high-level research. A student must pass the qualifying examination prior to taking Candidacy Exam. The Candidacy Exam is administered by the student's AEC and requires preparation and defense of the dissertation research proposal. The Candidacy Exam may also include testing on material in related fields, as deemed necessary by the AEC.

A student who has successfully completed all coursework, passed the qualifying and candidacy exam and successfully defended the research proposal is defined as one who is a candidate for the Ph.D. degree.

### FINAL EXAMINATION

At the completion of the dissertation research, candidate must prepare a dissertation and pass the final oral examination (defense) administered by his/her AEC.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student's competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research work and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

## Major Learning Outcomes

### PETROLEUM AND NATURAL GAS ENGINEERING

- Graduates will have in-depth knowledge of petroleum and natural gas engineering principles and applications to function effectively in their profession or continue their education.
- Graduates will have the ability to perform independent research to solve engineering and scientific problems encountered in their profession.
- Graduates will have in-depth petroleum and natural gas scientific and engineering knowledge to provide high quality education in petroleum and natural gas engineering.

## College Wide Degrees

### Degrees Offered

- Master of Science, Engineering (M.S.E.)

## Engineering, M.S.E.

### Degree Offered

- Master of Science, Engineering (M.S.E.)

### Nature of the Program

The M.S.E. is a college-wide undesignated program that compliments the designated master's program in each of the individual engineering discipline majors, namely, aerospace engineering, chemical engineering, civil engineering, electrical engineering, industrial engineering, materials science and engineering, mechanical engineering, mining engineering or petroleum and natural gas engineering. Students may structure a unique masters degree that crosses disciplines; for example, a program that addresses one of the Grand Challenges of Engineering may be effectively addressed with an M.S.E.

The master of science in engineering (M.S.E) program may be advised for students who have a baccalaureate degree in a field of engineering different from the M.S. major they are seeking. It is also open to students holding a baccalaureate degree in the physical sciences who wish to pursue an M.S. degree in an engineering program (for example, a student with a B.S. in chemistry could pursue an M.S.E. with a concentration in chemical engineering). For these students, additional preparatory undergraduate coursework may be required.

The M.S.E. can provide students with the background and experience to pursue doctoral work in engineering.

Due to the interdisciplinary nature of the degree program, the M.S.E. can also serve as an avenue to explore and develop potential future M.S. programs in a new engineering discipline on an experimental basis.

## Curriculum in Master of Science in Engineering

A candidate for the M.S. degree in engineering must comply with the rules and regulations as outlined in the WVU Graduate Catalog and the specific requirements of the Statler College and the specific department in which the student's concentration is in.

## Program Requirements

All M.S. degree candidates are required to perform research and follow a planned program of study. The student's research advisor, in conjunction with the student's Advising and Examining Committee (AEC) will be responsible for determining the plan of study appropriate to the student's needs. The underlying principle of the planned program is to provide the students with the necessary support to complete their degree and prepare them for their career.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
<b>Course Requirements *</b>		
A minimum of 60% of courses must be from 500 level or above		
Plan of Study		
Select from the following based on degree path:		24
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 400-795, as approved by the student's AEC		
Complete 1 of the following options:		6
<b>Thesis Option - 6 hours</b>		
Research - any 697 (6 hours)		
Final Oral or Written Examination		
Thesis		
<b>Problem Report Option - 6 hours</b>		
Complete 3 additional hours of coursework		
Research - any 697 (3 hours)		
Final Oral or Written Examination		
Formal written report or professional report/paper		
<b>Coursework Option - 6 hours</b>		
Complete 6 additional hours of coursework		
Total Hours		30

\*

Students who do not hold a baccalaureate degree in engineering may be required to take a set of undergraduate engineering courses above and beyond the minimum coursework requirements.

## Final Examination

M.S. students following the thesis or problem report option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis or problem report and/or related course material.

## Suggested Plan of Study

The plan below illustrates the Thesis Option. It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical M.S.E. degree program that completes degree requirements in three semesters is as follows.

### First Year

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
Course		3 Course	3
Course		3 Course	3
Course		3 Course	3
Course		3	
		12	9

### Second Year

Fall	Hours
Course	3
Course	3
Research	3
<hr/>	
	9

Total credit hours: 30

## Major Learning Outcomes

Upon graduation, with a masters of science degree in engineering, students will have:

- An expert level understanding of the advanced principles of their engineering specialty
- Ability to apply advanced methodologies in their specialty area
- Ability to design and conduct original experiments, analyze and interpret data, and develop recommendations with a high degree of independence
- Advanced ability to use contemporary techniques, skills, and tools necessary for engineering practice in education, industry, and/or government
- Ability to effectively communicate technical information in the form of a thesis, scientific publication or presentation
- Understanding of professional and ethical responsibility
- Ability to understand the impact of engineering solutions in global and societal context
- Recognition of the need to engage in life-long learning
- Foundational preparation to pursue doctoral studies



# Law

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College Website: <https://www.law.wvu.edu/>

West Virginia University College of Law students have a passion for justice, an interest in how our legal system contributes to society, and a desire to learn a discipline that is both structured and creative.

The College of Law provides students a unique opportunity to attend a small public law school within a nationally recognized research university. Here you can join diverse students from around the globe who come together in the beautiful mountains of West Virginia to experience public legal education with the intimacy of a fine private law school. Small class sizes and an excellent faculty-student ratio tell part of the story, but not all.

What makes the College of Law experience exceptional is its culture of excellence. Our faculty, staff, and students are committed to creating a rigorous, inclusive, exciting, and supportive educational community in which individuals can pursue their personal vision of success in the legal profession.

Our faculty members are outstanding teachers, scholars, and leaders in legal education. What distinguishes our faculty from others, however, is the remarkable commitment they have in mentoring students to help them achieve individual goals. The faculty supervise student articles for publication, assist in obtaining prestigious federal judicial clerkships, and provide guidance for student-led symposia exploring cutting-edge topics. In addition, whether our faculty members teach corporate securities or civil disobedience, each one exemplifies the duty of a lawyer to serve the public interest.

To fulfill its commitments to individual student success and to improving the profession by producing the leaders of the future, the College of Law has a rapidly developing curriculum that combines the best of traditional legal education with new courses and opportunities necessary to practice law in the global society in the 21st century.

## Mission Statement of the College of Law

The College of Law's mission statement is, "Preparing 21st century lawyers and leaders to serve the public, government, and business — both locally and globally — while focusing on justice, ethics, professionalism, and service in a diverse, vibrant, and respectful community."

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## ADMINISTRATION

### DEAN

- Amelia Smith Rinehart - J.D. (University of Chicago); M.S. (Tulane)  
William J. Maier, Jr. Dean and Professor of Law

### ASSOCIATE DEANS

- Jessica Haught - J.D. (West Virginia University)  
Interim Associate Dean for Administration, Teaching Professor of Law
- Elaine Waterhouse Wilson - J.D. (Boston University)  
Associate Dean for Academic Affairs, Professor of Law

### ASSISTANT DEANS

- Jennie James - M.B.A (University of Charleston); M.A. (Marshall University)  
Assistant Dean for Development
- Jennifer Powell - J.D. (West Virginia University); M.S.W. (West Virginia University)  
Assistant Dean for Student Services and Engagement
- Maggie Tague Slater - B.B.A (University of Miami); J.D. (Notre Dame Law School)  
Assistant Dean for Enrollment Management

### DIRECTORS

- Dan Kimble - J.D. (West Virginia University)  
Center for Law and Public Service
- Jonathan Marshall - J.D. (West Virginia University)  
Center for Consumer Law and Education
- Lauren McCartney - J.D. (West Virginia University)  
Career Services and Professional Development
- Caroline Osborne - J.D. (University of Richmond); LL.M. (Emory University)  
Law Library
- Melanie Stimeling - M.A. (West Virginia University); B.A. (West Virginia Wesleyan College)  
Writing Center

- Keith Walton - B.S. (West Virginia University)  
Law School Technology

## **ASSOCIATE AND ASSISTANT DIRECTORS**

- Brad Grimes - J.D. (West Virginia University)  
Program Director
- Elissa Momen - M.A. (West Virginia University)  
Associate Director, Enrollment Management and Scholarships

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## **FACULTY**

### **PROFESSORS OF LAW**

- Robert M. Bastress - J.D. (Vanderbilt University); LL.M. (Temple University)  
John W. Fisher, II Professor of Law
- Valarie Blake - J.D. (University of Pittsburgh)
- Vincent P. Cardi - J.D. (Ohio State University); LL.M. (Harvard University)  
Bowles Rice Professor of Law
- Cody Corliss - J.D. (Cornell University)
- Charles R. DiSalvo - J.D. (University of Southern California); M.A. (Claremont Graduate University)  
Woodrow A. Potesta Professor of Law
- David L. Krech - J.D. (Cornell University)  
Director of Appellate Advocacy
- Anne M. Lofaso - J.D. (University of Pennsylvania); Ph.D. (University of Oxford)  
Arthur B. Hodges Professor of Law
- Jena Martin - J.D. (Howard University); LL. M. (University of Texas)
- Majorie A. McDiarmid - J.D. (Columbia University); LL.M. (Harvard University)  
Steptoe and Johnson Professor of Law and Technology
- Patrick C. McGinley - J.D. (Duke University)  
Charles H. Haden II Professor of Law
- Dale P. Olson - J.D. (University of Minnesota); LL.M. (Yale University)
- Alison Peck - J.D. (Yale Law School); LL.M. (University of Arkansas)
- William Rhee - J.D. (Northwestern University)
- Jesse Richardson - J.D. (University of Virginia)
- John E. Taylor - J.D. (University of North Carolina); Ph.D. (Stanford University)  
Jackson Kelly Professor of Law
- Hollee S. Temple - J.D. (Duke University)
- Matthew Titolo - J.D. (University of California); Ph.D. (University of California)
- James Van Nostrand - J.D. (University of Iowa); LL.M. (Pace University)
- Shine (Sean) Tu - J.D. (University of Chicago); Ph.D. (Cornell University)
- Kirsha Trychta - J.D. (Duquesne University School of Law)  
Teaching Professor; Director of the Academic Excellence Center
- Suzanne M. Weise - J.D. (West Virginia University)  
Teaching Professor, Director of the Child and Family Law Clinic
- Joshua Weishart - J.D. (University of California, Berkeley School of Law)

### **ASSOCIATE PROFESSOR**

- Nicole McConlogue - B.A. (Towson University); J.D. (University of Maryland Francis King Carey School of Law)

### **LAND USE AND SUSTAINABLE DEVELOPMENT CLINICIANS**

- Jared Anderson - J.D. (Catholic University of America)  
Land Use Attorney
- Christy Burnside DeMuth - M.S. (Indiana University of Pennsylvania)  
Land Use Planner
- Katherine Garvey - J.D. (University of Missouri-Kansas City); LL.M. (Vermont Law School)  
Director of the Land Use and Sustainable Development Clinic
- Staci Thornsby - J.D. (West Virginia University)

Staff Attorney

- Jason Walls - J.D. (West Virginia University)  
Managing Attorney

## VISITING FACULTY

- Barton Z. Cowan - J.D. (Harvard University)
- Amy Cyphert - J.D. (Harvard University)

## PROFESSORS EMERITI

- David Hardesty, Jr. - J.D. (Harvard University)  
President Emeritus, West Virginia University (1995-2007)
- Gerald G. Ashdown - J.D. (University of Iowa)  
James. H. Buck and June M. Harless Emeritus
- Forest J. Bowman - J.D. (West Virginia University)  
Jackson and Kelly Professor of Law Emeritus
- Arthur Dayton  
Professor of Law Emeritus
- James Elkins - J.D. (Kentucky)
- John Fisher - J.D. (West Virginia University)  
William J. Maier, Jr. Dean Emeritus; Robert M. Steptoe and James D. Steptoe Professor of Law Emeritus
- Robert Lathrop - LL.M. (New York University)  
Professor Emeritus
- Joyce McConnell - J.D. (Georgetown University)  
Thomas R. Goodwin Professor of Law Emeritus
- James A. McLaughlin - J.D. (Ohio State University)
- Thomas O. Patrick - J.D. (West Virginia University)  
Professor Emeritus
- Camille M. Riley - J.D. (St. Louis University)  
Associate Professor of Law Emeritus
- Robert L. Shuman  
Professor of Law Emeritus
- Grace Wigal - M.A. Marshall University; J.D. (West Virginia University)  
Teaching Professor Emeritus

## Degree Designation

### DOCTOR OF JURISPRUDENCE (J.D.)

The J.D. program forms students' professional identities as lawyers and provides students with the core legal knowledge and practical skills to pass the bar exam and to serve their clients competently and ethically.

In developing professional identity and values, the College of Law seeks to produce students committed to professional excellence, justice, leadership, public service, global engagement, and lifelong learning. College of Law graduates are trained to be legal problem solvers who possess a solid grasp of the substantive and procedural law of their chosen fields, understand their professional responsibilities and ethical obligations, and have the varied skills needed for successful practice, including: legal analysis, legal writing, legal research, factual investigation, client counseling, negotiation, drafting, and advocacy.

### MASTER OF LAWS (LL.M.)

Our LL.M. programs offer post-J.D. students an opportunity to deepen their subject-matter expertise and skills in particular areas of the law.

### ENERGY & SUSTAINABLE DEVELOPMENT LAW

The LL.M. in Energy & Sustainable Development Law provides lawyers with a deep and broad knowledge of law and policy in the critical areas of energy, environmental protection, and sustainable development. Students will master these areas through course work, writing projects, and a variety of experiential learning opportunities. LL.M. graduates will have the skills necessary to work as lawyers serving energy companies, investors, utilities, manufacturing companies, lawmakers, policymakers, regulators, land use professionals, and environmental organizations.

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## Admissions - Doctor of Jurisprudence

### FIRST-TIME ADMISSIONS

The following are the essential requirements to apply to law school:

- A bachelor's degree from an accredited four-year institution,
- Completion of the Law School Admissions Test (LSAT), and
- Application for admission / Credential Assembly Service (CAS) report.

For additional information, please visit the College of Law Admissions (<https://admissions.law.wvu.edu/>) homepage.

### TRANSFER ADMISSIONS

A transfer student is a student who has taken some or all of his or her first-year curriculum at another law school and is admitted to earn a J.D. degree at the College of Law. As described more fully below, the College of Law accepts transfer students only from other law schools accredited by the American Bar Association. The College will not accept transfer applicants from law schools that do not award letter grades (or their numerical equivalent) during the first academic year or its equivalent. All candidates who transfer to the College of Law from another ABA-accredited law school must satisfactorily complete courses aggregating at least forty-five credit hours at the College of Law. In addition, a transfer student must earn the last thirty credit hours at the College of Law.

The College of Law will accept transfer credits only for courses where the student earned a grade of C or better. In exceptional circumstances, the Associate Dean for Academic Affairs may approve the transfer of a small number of pass/fail credits. The Associate Dean will determine the total number of credit hours that will transfer; however, only in exceptional cases will the Associate Dean give credit for more than thirty-two credit hours. The Associate Dean will also determine whether particular courses taken at another law school satisfy specific course requirements at the College of Law. Graded credits at other law schools that transfer to the College of Law will be entered on the student's College of Law record as pass/fail credits, and hence will not affect the student's College of Law grade point average.

In order to graduate, all transfer students must obtain a cumulative grade point average of 2.30 or better on courses taken at the College of Law. Transfer students are not eligible for election to Order of the Coif at the College of Law.

The deadline for transfer applications is **July 1**. The College of Law has established the following guidelines for the Enrollment Management Committee to use in reviewing transfer applications:

- In reviewing applications for advanced standing, the Enrollment Management Committee will give preference to West Virginia residents.
- Applicants must have completed at least one academic year of study or its equivalent at the institution from which transfer is being sought. For admission purposes, one year of study or its equivalent is equal to a minimum of twenty-eight credit hours of coursework. The twenty-eight credit hours should ideally include the following coursework, but the College of Law will consider transfer applicants who have a substantial number of the listed courses:
  1. Civil Procedure
  2. Contracts I
  3. Torts I
  4. Constitutional Law
  5. Criminal Law
  6. Property I
  7. Legal Writing/Research/Analysis courses
  8. Introduction to the Profession
- Applications from students seeking to transfer from schools that are not accredited by the ABA will not be accepted under any circumstances. (The applicant may apply as a first-year student.)
- Applications for transfer to the College of Law for the second year will be considered by the Committee on the basis of the following:
  1. The size of the returning second-year class.
  2. The applicant's grades and/or class rank at her/his law school. Applicants from law schools who do not provide either a GPA or class rank for 1L students will not be considered for transfer.
  3. Whether the applicant would have been admitted to the College of Law in the first year had the applicant applied.
  4. The academic strength of the law school attended by the applying student, including whether it is accredited by the AALS. (ABA accreditation is required.)
  5. Recommendation(s) from a law professor in whose class the applicant was enrolled. (At least one is required.)
  6. Residency of the applicant.

7. All of those facts, performance records, recommendations, and other matters that the Committee normally considers for applicants to the first-year class, including everything that might implicate the student's fitness for the practice of law.
  8. Any other activities and experiences of the applicant occurring since the student began law school.
  9. Any other information regarding the applicant that may be considered relevant to success in law school.
- In addition to the aforementioned criteria, applicants must meet the requirements set forth below.
    1. Applicants must conform to all other relevant criteria relating to first-year entering students as found in the admission policy of the West Virginia University College of Law.
    2. Applicants must submit a certified official transcript of their first-year law school grades and class ranking. If class ranking from the law school is unavailable, the applicant must submit sufficient information about grades from the law school attended to make a reasonable estimation of class ranking. No one will be admitted for transfer without class rank (or its reasonable equivalent) based on a full year of law school attendance, as defined above.
    3. Applicants must provide a letter of good standing from the Dean of the law school (or his or her designee) from which the student is transferring.
    4. Applicants must submit a copy of their most recent LSAC Credential Assembly Service (CAS) report including a certified transcript of undergraduate school grades and the LSAT writing sample.
    5. Applicants must fully explain any ethical or other problems with admission that may appear in the file.
    6. Applicants must submit the completed file to the Admission Office by July 1 in order to be considered for transfer.
  - In considering applications for admission from individuals with credits or degrees from foreign institutions, the Enrollment Management Committee shall have the authority to make any of the below stated decisions with regard to the applicant:
    1. The Committee may admit the applicant as a first-year entering student.
    2. The Committee may admit the applicant with advanced standing by granting credit for specific course work completed at another institution. (AALS Executive Committee Regulations 2.8 and 2.9 prescribe limitations on the award of advanced standing.)
    3. The Committee may admit the applicant as a special student for the purposes of auditing courses or transferring course work to another institution.
    4. The Committee may deny admission to the applicant.

## TRANSIENT ADMISSIONS

The West Virginia University College of Law accepts transient students only from other law schools accredited by the American Bar Association. A transient student is one who has taken or will take most of his or her work toward a J.D. at another ABA-approved law school and will earn a degree from that institution. Transient students are permitted to earn some credits toward that J.D. while in temporary residence at the West Virginia University College of Law, provided that they obtain permission from their school and from the Associate Dean for Academic Affairs.

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## Admissions - LL.M. (Master of Laws)

### ENERGY & SUSTAINABLE DEVELOPMENT

The College of Law's LL.M. in Energy & Sustainable Development Law is a source for a high-quality professional legal education and a home for thought leaders in the areas of energy and sustainable development.

Minimum admission requirements for the program are as follows:

- A J.D. from an ABA (American Bar Association) accredited school.
- A J.D. grade point average of at least a 3.0 (on a 4.0 scale) or other demonstrated indicia of likelihood of success.
- A demonstrated interest in or commitment to the fields of energy and/or sustainable development.

For additional information, please visit the LL.M. in Energy & Sustainable Development Law (<https://www.law.wvu.edu/academics/academic-programs/energy-sustainable-development-law-concentration/>) homepage.

The College of Law also offers students an opportunity for a dual J.D./LL.M in Energy and Sustainable Development Law. For more information about participating as a dual degree student, please visit the J.D./LL.M homepage. (<http://www.law.wvu.edu/academics/academic-programs/dual-degree-programs/jd-llm/>)

Applicants may include newly graduated J.D. students, professionals (prosecutors, defense attorneys, judges) returning for study after years of practice, or qualified international students.

## Accreditation

The JD program within the College of Law has specialized accreditation through the Section of Legal Education of the American Bar Association.

The College of Law was established in 1878, accredited by the AALS in 1914, and approved by the ABA in 1923. The College of Law is fully approved by the American Bar Association Council of the Section of Legal Education and Admissions to the Bar. Since 1952, the ABA Council of the Section of Legal Education and Admissions to the Bar has been approved by the U.S. Department of Education as the recognized national agency for the accreditation of professional schools of law.

Further information as to the Standards and Rules of Procedure for the Approval of Law Schools by the American Bar Association may be obtained from the Section of Legal Education and Admissions to the Bar, 321 N. Clark Street, 21st Floor, Chicago, IL 60654. Phone: (312) 988-6738, Fax: (312) 988-5681. Email: [legaled@americanbar.org](mailto:legaled@americanbar.org). Website: [http://www.americanbar.org/groups/legal\\_education.html](http://www.americanbar.org/groups/legal_education.html)

## Student Catalog Policy

All students at West Virginia University College of Law must abide by the content of the student catalog and the Student Code of Professional Responsibility. You are responsible for knowing and understanding the rules and policies contained in those documents. You are governed by the rules and policies of the catalog for the current academic year, including any addenda to the catalog published on the College of Law's website. The student catalog is revised each academic year. Students will be notified of any significant change in school policies during the academic year. You may consult the Associate Dean for Academic Affairs or their designee at any time for advice as to any policy contained in the student catalog.

## Frequently Asked Questions

- **What academic honors can I learn while in law school?**

See 'Academic Policies & Procedure - Honors' of the College of Law catalog for additional information.

- **What does it mean to be on academic probation?**

See 'Academic Policies & Procedure - Academic Standing - Academic Probation & Dismissal' section of the College of Law catalog.

- **What student organizations can I join at the law school?**

Many College of Law organizations welcome all students who are interested, while others require students to be elected or chosen. See 'Student Organizations, Guidelines, and Services - College of Law Organizations - Recognized College of Law Student Organizations' section of the College of Law catalog or visit the 'Student Organizations (<http://studentengagement.wvu.edu/>)' homepage.

- **What is the law school's grade point average system?**

See the 'Academic Policies and Procedure - Grading Information and Procedures - Grades' section of the College of Law catalog.

- **How can I change my address with WVU so I will receive my financial aid check?**

Students may change their addresses online via the WVU Portal. Once there, click on the 'Personal Information' link.

- **What is Degree Works?**

Degree Works (<http://registrar.wvu.edu/dw/>) is an online audit for students to review and monitor their progress toward degree completion. It organizes academic coursework into blocks of requirements to help easily identify courses completed and what courses are still needed in order to complete your degree. For additional information, including how to log in to Degree Works, see the 'Academic Policies and Procedures - Graduation' section of the College of Law catalog.

- **Whom should I see if I have a question regarding academic matters at the College of Law?**

For academic matters, please see the Associate Dean for Academic Affairs.

- **Whom should I see if I have a non-academic or personal matter that pertains to my law school experience?**

For such matters, see the College of Law's Assistant Dean for Student Life.

- **What is my professor's phone number, e-mail address, etc.?**

See the 'Faculty (<http://law.wvu.edu/faculty-staff/>)' link on the College of Law (<http://www.law.wvu.edu/>) homepage. Many professors also list their contact information on their class syllabi.

- **Whom do I call if I am sick and must miss class?**

See the 'Academic Policies and Procedures - Academic Policies - Missing Class Due to Illness' section of the College of Law catalog. Also, for treatment information, see the 'Student Organizations and Services - University Services - Health Services' section of the College of Law catalog.

- **What are midterm and/or final exam numbers?**

Midterm and final exam numbers are assigned to students each semester by the Office of the University Registrar and viewable in your Degree Works. In many classes, these numbers are used on papers and exams in place of student names so that the professors can grade anonymously.

Students are routinely notified of information concerning midterm exam and final exam numbers each semester. **These anonymous numbers change every semester and are meant to be kept to yourself and not shared with classmates, professors or friends. If you are unable to view your anonymous number, please contact the College of Law's Student Services Office.**

- **If I'm traveling for competitions with the College of Law, what do I do?**

If the completion has been approved as part of the student organization's budget, then check with the Assistant Dean for Student Life. Student travel expenses must be approved in advance in order to be reimbursed.

- **How do I register for classes?**

Registration for classes occurs in STAR. Students are routinely notified of information concerning registration each semester. For additional information, please review the Student Services Guide, located on the College of Law website on the 'Course Schedule and Registration Information' link under the 'Academics' tab.

- **Where can I find guidance about choosing courses?**

The College of Law J.D. curriculum is separated into required courses and elective courses. For required courses, see 'Academic Programs - Doctor of Jurisprudence - First-Year Curriculum & Required Courses after the First-Year Curriculum.' For elective courses, the College of Law publishes a 'Curriculum Opportunities and Options (<https://www.law.wvu.edu/files/d/1d14706c-e757-4898-8810-7b0360976666/curriculum-opp-and-options-2018-2019.pdf>)' guide. This guide organizes courses into specific career tracks.

- **When are classes canceled, and how do I find out?**

It is rare that the College of Law will cancel classes or activities due to weather or other events. Decisions regarding class cancellations are made at the university level by the Provost's Office. In the event classes are canceled or delayed because of weather or other reasons, the university will issue a notice by morning. If you receive no notice, assume that there are no cancellations for that day. Sign up to receive these notices via phone by going to the 'WVU Alert' homepage (<http://emergency.wvu.edu/alert/>).

- **Where can I find the Code of Professional Responsibility (Honor Code)?**

See the 'Professional Responsibility - WVU College of Law Student Code of Professional Responsibility' section of the College of Law catalog.

- **Where can I find out about careers, jobs, and summer internships?**

See the 'Student Organizations and Services - College of Law Services - Meredith Career Services Center' section of the College of Law catalog or visit the College of Law's Meredith Career Services Center (<http://law.wvu.edu/career-services/>) homepage.

- **What do I need to do in my 3L year to apply to take the bar exam the following summer?**

No later than the beginning of the fall of your 3L year, visit the bar examiners' homepage in the state where you plan to practice. The application must be started and finished in a timely manner to be able to take the exam in the summer. Some applications are due in the fall of the 3L year. The application to practice includes a character and fitness review. Contact the Director of the Academic Excellence Center for more information.

- **What do I need to do in my 3L year to prepare to take the bar exam?**

(1) Take the Multistate Professional Responsibility Exam (MPRE) in the spring of second year or fall of 3L year (after you have taken the class in Professional Responsibility), (2) determine what is going to be on your state's July exam, (3) explore early and summer prep programming that will prepare you for that exam (e.g. classes at the law school and state-specific commercial programming for the summer) and (4) connect with the Academic Excellence Center. In short, choose a program of preparation, and realize that your program of preparation could begin as early as the 6th semester of law school if you choose to participate in the school's early-start bar preparation class. Contact the Director of the Academic Excellence Center for more information.

- **Upon graduation, how do I assure that I pass the exam the first time I take it in July?**

The College of Law strongly urges students to focus on and complete the summer bar exam preparation program of your choosing. Do not work unless it is absolutely necessary because studying for the exam is a full-time job.



# Academic Programs

## Degrees Offered

- Doctor of Jurisprudence
- Dual Degree Programs
- Energy Law and Sustainable Development LL.M.

College Website: <https://www.law.wvu.edu/>

## Law, JD

### A. DOCTOR OF JURISPRUDENCE (J.D.)

1. Curriculum Requirements
2. First-Year Curriculum
3. Required Courses after the First-Year Curriculum
4. Upper-Level Electives
5. Areas of Emphasis
6. Part-Time Program

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### A. DOCTOR OF JURISPRUDENCE

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1. Curriculum Requirements (p. 624)
2. First-Year Curriculum (p. 625)
3. Required Courses after First-Year Curriculum (p. 625)
4. Upper-Level Electives (p. 627)
5. Areas of Emphasis (p. 628)
6. Part-Time Program (p. 633)

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### A.1 Curriculum Requirements

Students at the West Virginia University College of Law must earn 91 credit hours with a cumulative grade point average (GPA) of at least 2.50 in order to graduate. Students must maintain a cumulative GPA of at least 2.50 (after the second semester and meet other requirements to remain in good academic standing. The first-year curriculum is a fixed set of courses taken by all students. Students are largely free to shape their own courses of study during the last two years of law school, subject to a small number of upper-level requirements. If a student receives a failing grade in a course required for graduation, the student must repeat the course for a passing grade. That grade will be factored into the student's overall GPA and will not replace the 'F' the student received the first time he or she took the course.

Code	Title	Hours
Minimum GPA of 2.50		
First-Year Required Courses		
LAW 641	Introduction to Legal Research	1
LAW 675	Introduction to the Profession	1
LAW 700	Legal Analysis, Research and Writing 1	3
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 725	Constitutional Law 1	4
LAW 686	Civil Procedure	4
Upper-Level Requirements		
LAW 715	Appellate Advocacy	2
LAW 742	Professional Responsibility	3



Seminar (any 688, 689, or 796 course)	2
Administrative Law Requirement	3
Perspective	2
Capstone	4
Electives (credit may vary - used to reach the minimum of 91 hours for the degree)	45
Total Hours	91

## A.2 First-Year Curriculum

The first-year curriculum is a required set of courses designed by the faculty to give new law students an introduction to the fundamentals of legal practice. You will be assigned to a section of each required course. The first-year curriculum covers three areas:

**Private Law** governs the legal relationships and the resolution of disputes among private persons and entities. The private law courses you will take are Torts (civil wrongs), Contracts, and Property.

**Public Law** concerns governmental regulation of private persons and entities. The public law courses you will take are Criminal Law, Legislation & Regulation, and Constitutional Law.

**Practice** courses teach procedural law, the skills of legal research, Analysis, and writing, and an introduction to the practice of law. The practice courses you will take are Civil Procedure, two semesters of Legal Analysis, Research, and Writing, Introduction to Legal Research, and Introduction to the Profession for students beginning in or after the Fall 2022 semester.

**Legal Analysis, Research, and Writing** (five credits). First-year students must pass both LARW I (3 credits) and LARW II (2 credits) with an average grade of C (2.0) or better over the two semesters in order to satisfy the Legal Analysis, Research, and Writing (LARW) course requirement. The vast majority of students will satisfy the requirement by making grades of C or better in both semesters of LARW. However, a student who makes a C- in one semester must make a C+ or better in the other semester to obtain a C average; a student who makes a D+ in one semester must make a B- or better in the other semester to obtain a C average; a student who makes a D in one semester must make a B or better in the other semester to obtain a C average. A student who fails a semester of LARW must at least repeat that course and shall be required to repeat both semesters if they do not obtain the required average of C over both classes.

Students who fail to obtain an average of C or better in the first-year LARW program have a second opportunity to satisfy the LARW requirement in a second taking of the two-semester, first-year sequence of LARW I and LARW II. (In some years, an LARW III class may be offered in the fall semester for such students to take in lieu of retaking LARW I and II.) Students who fail to make a C or better in their second attempt to satisfy the LARW requirement will be dismissed from the College of Law. For students who make a C or better on the second attempt, both grades will count in the student's law school GPA, but the student will receive only four total hours of credit toward law school graduation.

No student will be allowed to drop the required first-year LARW course. Students needing to decelerate during the first year of law school must drop another required course. There is one possible exception to this policy: a student receives an F in LARW I, the student shall drop LARW II if the student is already registered for it. Part-time students must take LARW during their first year of law school.

Successful completion (an average grade of C or better) of the first-year LARW program is a prerequisite for taking Appellate Advocacy, any seminar, or any clinic. This prerequisite may not be waived. Students will receive a detailed policy handbook at the beginning of the LARW course; all policies will be in effect for the duration of the course.

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### A.3 Required Courses After the First-Year Curriculum

After successfully completing their first year of law school, students are able to choose several options to complete 91 credits, including doctrinal courses, skills courses, and experiential learning courses (an externship or clinic, for example). Students have a few required courses they must take after their first year, including Professional Responsibility, which must be taken before a student's third year of law school. Other required courses that must be taken before graduation are:

**Appellate Advocacy.** Students must take Appellate Advocacy and receive a C or higher in the course to graduate.

**Administrative Law.** Students must take Administrative Law (LAW 746) or an approved alternative upper-level elective that the College of Law has determined teaches significant administrative law concepts during their second year (or as soon as possible as determined by the Associate Dean for Academic Affairs for transfer or part-time students).

**Professional Responsibility.** Students must take Professional Responsibility (LAW 742) during their second year (or as soon as possible as determined by the Associate Dean for Academic Affairs for transfer or part-time students).

**Seminar Requirement.** (two-three credits, depending on length of class meetings and paper length) from a menu of seminars. Seminars are specifically noted by the letters "Sem or Seminar" in the course title and are numbered as LAW 688, 689 or 796. Seminars have a common structure: small-class discussions geared toward the production of a substantial (*i.e.* at least 8,000 words which is approximately twenty-five pages) written product supported

by extensive research. Typically, the research seminar aims at the production of a law-review style research paper of publishable quality. Seminars may aim at other written products, such as draft legislation or jury instructions, so long as these products are accompanied by papers urging their adoption by the appropriate lawmakers. Enrollment is limited to fifteen students in each seminar. Two-hour seminar courses must meet as a group for no less than 10 weeks and no less than 110 minutes per week. Three-hour seminar courses must meet as a group for no less than 10 weeks and no less than 165 minutes per week. Students must obtain a grade of C or better to satisfy the seminar requirement. Independent studies and externships do not satisfy the seminar requirement.

**Perspective Requirement.** The perspective requirement reflects the College of Law's conviction that legal education should expand students' horizons by connecting their studies to the traditions of the liberal arts (*i.e.*, the humanities, social sciences, and natural sciences). Perspective courses, examine law and lawyers primarily from points of view that are significantly different from the doctrinal and policy analysis taught in standard upper-level courses on various areas of practice. Perspective courses look across doctrinal boundaries and engage students in conversations about the relationships between law and other disciplines; explore the nature of the American legal system by contrasting it with other legal systems; and discuss the ways in which law and lawyers both shape and are shaped by the liberal arts and wider culture.

Students must take one perspective course in order to graduate. Some seminars satisfy the perspective requirement, but students cannot count one perspective seminar as simultaneously satisfying both the perspective and seminar requirements. (In other words, there is no "double-dipping" on the perspective and seminar requirements.) This means that a student can satisfy the perspective *and* seminar requirements by

- (a) taking one perspective class and one research seminar (which may or may not be a perspective), or
- (b) taking two research seminars, at least one of which is also a perspective.

In addition, students who complete either the joint M.B.A. or joint M.P.A. program at the time of earning the J.D. are deemed to have satisfied the perspective requirement.

The following courses satisfy the perspective requirement:

Code	Title	Hours
LAW 607	Psychology for Lawyers	3
LAW 614	Jewish/Islamic Comparative Law	3
LAW 616	Cultural Property	3
LAW 621	Lawyers as Leaders	3
LAW 633	International Business Transactions	3
LAW 663	Renewable Energy & Alternative Fuels	3
LAW 688A	Seminar in American Constitutional History	2
LAW 688D	Seminar in Science and the Law	2 to 3
LAW 688I	Seminar in Sexuality and the Law	2
LAW 688K	Seminar in Schools, Race, & Money	2 to 3
LAW 689H	Seminar: Bioethics and the Law	2
LAW 689I	Seminar: Environmental Justice	2
LAW 689K	Seminar: Civil Disobedience	2
LAW 689M	Seminar: Race/Racism and American Law	2
LAW 689P	Seminar: Gender and Law	2
LAW 689S	Seminar: Law and Socioeconomic	2
LAW 689T	Seminar: Comparative and International Workplace Law	2
LAW 689Y	Seminar in Sustainable Development	2
LAW 701	International Human Rights	3
LAW 712	Analytical Methods for Lawyers	3
LAW 739	American Legal History	3
LAW 744	Law and Economics	3
LAW 746	Lawyers and Literature	3
LAW 752	Jurisprudence	3
LAW 768	International Law	3
Additional Approved Courses		
LAW 793	Special Topics (Adv Crim Law: Crime File Doc)	
LAW 793	Special Topics (Comparative Law (Common Law v Civil))	
LAW 793	Special Topics (Comparative Law: European Union)	
LAW 793	Special Topics (Dying & the Law)	

LAW 793	Special Topics (Lawyer as Storyteller)
LAW 793	Special Topics (Memoir and Legal Education)
LAW 793	Special Topics (Democratic Transitions)
LAW 793	Special Topics (Genetic Property & the Law)
LAW 793	Special Topics (Empirical Legal Methods)
LAW 793	Special Topics (Trends in the Profession)
LAW 793	Special Topics (Seminar: E-Commerce)
LAW 793	Special Topics (Lawyers at the Movies)

**Capstone Requirement.** Capstone courses provide students with opportunities to synthesize critically and apply knowledge and skills they have developed during law school. The following course(s) satisfy the capstone requirement:

Code	Title	Hours
LAW 627 & LAW 628	Land Use/Sustainable Development Clinic 1 and Land Use/Sustainable Development Clinic 2	14
LAW 650 & LAW 651	Entrepreneurship Clinic 1 and Entrepreneurship Clinic 2	14
LAW 655 & LAW 656	Law and Public Service Full-Time and Law and Public Service Externship Full-Time	13
LAW 677 & LAW 678	United States Supreme Court Clinic 1 and United States Supreme Court Clinic 2	8
LAW 756	Trial Advocacy	4
LAW 779	Business Transactions Drafting	4
LAW 780 & 780A	Federal Judicial Externship 1 and Federal Judicial Externship 2	13
LAW 782 & LAW 783	Legal Clinic 1 and Legal Clinic 2	14
LAW 730 & LAW 731	Immigration Law Clinic 1 and Immigration Law Clinic 2	14
LAW 781 & 781A	Child and Family Advocacy Clinic 1 and Child and Family Advocacy Clinic 2	14

Students fulfilling the Capstone requirement though the clinic must take both semesters of Clinic unless waived by the Academic Standards Committee and the faculty member supervising the Clinic for due cause due to a situation that occurred that was outside of the control of the student (by way of example, due to the second semester of clinic not being offered due to personnel changes).

In addition to the above-listed capstone courses, students may also fulfill the capstone requirement by completing the following:

- When available; writing a Law School faculty-supervised brief and making an oral argument before the U.S. Court of Appeals or the Supreme Court of Appeals of West Virginia as an independent study project (two credits)

- An interdisciplinary project supervised by a law faculty member and a university faculty member who is not a law faculty member, which must be approved in advance by the Academic Standards Committee

**Prerequisite Requirement for Some Capstone Courses.** The course in Evidence is a prerequisite to taking Trial Advocacy, any Clinical Law Program that requires a Rule 10 admission to practice, or a Federal Judicial Externship. (There is no requirement that the student attain a particular grade in Evidence prior to taking the other courses.)

**Requirement Waiver.** In exceptionally rare circumstances and except as otherwise noted in the catalog, the Academic Standards Committee may exempt a student from taking a required course, approve an alternate course or may permit a student to take a course out of sequence; provided, however, that the Associate Dean for Academic Affairs may make equivalency decisions regarding required classes for fall transfer students.

#### **A.4 Upper-Level Electives**

Apart from the small number of upper-level requirements already described, students choose from a wide variety of upper-level electives to create their courses of study over the final two years of law school. A list of all the permanent law school courses with their descriptions can be found elsewhere in this academic catalog. (See "Courses.") The law school also offers additional courses on a temporary basis that are not included in this catalog. Students should note that not all listed courses are offered every year.

With so many choices, students may wish for guidance about how to choose the courses best suited to their goals and interests. Toward that end, each spring the Associate Dean for Academic Affairs meets with rising 2L students and publishes on the law school website a booklet entitled *Curriculum Opportunities and Options: An Informal Guide to Planning Your Last Two Years of Law School*. For the latest version, go to the "Course Schedules and Student Resources" link on the College of Law homepage. This booklet includes, among other things, advice about curricular planning, lists of key courses for various areas of practice and when they are typically offered, and information about subjects tested on the bar exam. Students with questions about choosing courses that are not addressed in the booklet should consult faculty in their areas of interest and/or the Associate Dean for Academic Affairs.

In addition, the College of Law website contains a "Course Classifieds" page where professors may post information about courses to be offered in the next semester. Typically, "course classifieds" listings for a given semester begin to appear a few weeks before registration for that semester.

## A.5 AREAS OF EMPHASIS

An Area of Emphasis (also informally called a "Concentration") is a course of study that enables students to develop skills and competency in a particular area of the law. A student who satisfies the requirement of an Area of Emphasis will have that Area of Emphasis listed on the official transcript. The College of Law has four Areas of Emphasis: (1) Energy and Sustainable Development Law, (2) International Law, (3) Labor and Employment Law, and (4) Public Interest Law. Adding an Area of Emphasis must be requested, declared, and processed prior to the first day of classes of the student's graduating semester. A student will not be permitted to add an Area of Emphasis at any point during their graduating semester.

### ENERGY AND SUSTAINABLE DEVELOPMENT LAW AREA OF EMPHASIS

The Energy and Sustainable Development Law Area of Emphasis is intended to educate the next generation of lawyers who will work in and shape the fields of energy, environmental, and sustainable development law, by providing an opportunity to learn the applicable laws and regulations in this area, consider policy issues through written work, and obtain practical skills applicable in this area through an experiential learning requirement.

**Course Requirements.** In order to satisfy the requirements of this Area of Emphasis, a student must have (1) all required first-year courses; (2) all required core courses; and (3) seventeen (17) total credit hours from a combination of the required courses, designated elective courses, and the experiential learning course (see below). Note: No more than five credits of the 17 credits can come from clinic or an externship.

Code	Title	Hours
<b>Required Courses</b>		<b>9</b>
LAW 630	Energy Law	
LAW 764	Administrative Law	
LAW 789 or LAW 674	Law of Environmental Protection Environmental Law - Pollution	
<b>Elective Courses</b>		<b>5</b>
LAW 604	Natural Resources	
LAW 612	Agriculture & Food Law	
LAW 613	International Environmental Law	
LAW 627	Land Use/Sustainable Development Clinic 1	
LAW 634	Energy Reg, Markets and Environ	
LAW 635	Land Use and Resilience Law	
LAW 644	Energy Siting & Permitting	
LAW 645	Water Law	
LAW 647	Nuclear Law & Policy	
LAW 648	Energy Business/Law & Strategy	
LAW 658	Science & Technology of Energy	
LAW 659	Administrative Energy Law and Practice	
LAW 660	Law of Coal	
LAW 662	Mine Safety & Health Law	
LAW 663	Renewable Energy & Alternative Fuels	
LAW 688E	Seminar in Human Rights & the Environment	
LAW 688F	Seminar in Hydraulic Fracturing	
LAW 689I	Seminar: Environmental Justice	
LAW 689W	Seminar: Issues in Energy Law	
LAW 766	Coal/Oil and Gas	
LAW 793	Hazardous Waste	
LAW 793	Sem: Environmental Litigation	

LAW 793	Environmental Law Pollution	
LAW 793	Trends in Env & Energy Law	
Writing Requirement		
Experiential Learning		3
Extra/Co-Curricular Activities		
Total Hours		17

**Writing Requirement.** Students must produce a written paper or court document of no less than 25 pages on a topic related to energy, environmental, and/or sustainable development law. A student may fulfill this requirement through any of the following methods:

1. Law review note, with approval of the Area of Emphasis administrator and with a faculty member as advisor.
2. A court document, e.g. Amicus Brief or Memorandum of Law (real or moot), with the approval of the Area of Emphasis administrator and with a faculty member as advisor.
3. Independent study overseen by an Area of Emphasis faculty member.
4. Qualifying paper in any elective course listed above.

The writing requirement requires input and approval from a faculty member and the Area of Emphasis administrator, even if the writing was completed outside a formal class or independent study arrangement. A student may fulfill the writing requirement through an alternative method with the consent of the Area of Emphasis administrator.

**Experiential Learning.** Students must meet the following experiential learning requirement of no less than 3 credits (no more than 5 credits from participation in a clinic or externship count toward the 17 credit requirement). A student may fulfill this requirement through any of the following methods:

1. Land Use and Sustainable Development Clinic
2. Externship approved per catalog, with approval of the Area of Emphasis administrator
3. Other clinic or simulation course, with approval of the Area of Emphasis administrator

Note: Any externship placements for the Energy & Sustainable Development Area of Emphasis must comply with the general rules of the externship program.

A student may fulfill the experiential learning requirement through an alternative method with the consent of the Area of Emphasis administrator.

**Extra Curricular or Co-Curricular Activity Requirement.** Students must also meet the following requirement:

Ten hours of related extracurricular or co-curricular activities, such as active participation in the Energy Law Society or Environmental Law Society, attending relevant meetings, hearings or speakers, administrative or other active participation in related events (e.g., moot court, symposia).

## INTERNATIONAL LAW AREA OF EMPHASIS

The International Law Area of Emphasis educates the next generation of lawyers who will work in careers related to international law and its many sub-specialties in both public international law and private international law. The Area of Emphasis provides students with robust and varied opportunities to learn and develop skills in international law-related practice areas.

**Course Requirements.** In order to satisfy the requirements of this Area of Emphasis, a student must have (1) all mandatory first-year requirements; (2) all required core courses; and (3) seventeen (17) total credit hours from a combination of the required courses, designated elective courses, and the experiential learning course (see below). Note: No more than five (5) credits of the seventeen (17) credits can come from clinic or an externship.

Code	Title	Hours
<b>Required Courses</b>		<b>12</b>
LAW 603	Comparative Brazilian Law	
or LAW 610	Comparative Law in Mexico	
or LAW 617	Geneva Study Abroad	
or LAW 708	Uganda Study Abroad	
LAW 626	International Trade Law	
or LAW 633	International Business Transactions	
LAW 701	International Human Rights	
LAW 768	International Law	
<b>Elective Courses</b>		<b>3</b>
LAW 613	International Environmental Law	
LAW 614	Jewish/Islamic Comparative Law	
LAW 626	International Trade Law	

LAW 633	International Business Transactions	
LAW 688B	Seminar in International Trade Regulations	
LAW 689N	Seminar: Refugee and Asylum Law	
LAW 689T	Seminar: Comparative and International Workplace Law	
LAW 689X	Seminar: National Security Law	
LAW 689Y	Seminar in Sustainable Development	
LAW 723	Immigration Law	
LAW 764	Administrative Law	
LAW 793	SPTP: Intrntl Enrgy/Climate Law	
LAW 793	SPTP: Internatnl Criminal Law	
LAW 793	SPTP: Jewish/Islamic Comp Law	
Writing		
Experiential Learning		2
Extra/Co-Curricular Activities		
Total Hours		17

Additional courses may be added with the consent of the Area of Emphasis administrator.

A student may fulfill the study abroad requirement through an alternative method with the consent of the Area of Emphasis administrator. If exceptional national or global circumstances prohibit or effectively preclude international travel during the student's term of study, the Area of Emphasis administrator will have the discretion to waive the study abroad requirement.

**Writing Requirement.** Students must produce a written paper or court document of no less than 25 pages on a topic related to international law. A student may fulfill this requirement through any of the following methods:

1. Qualifying paper in any designated elective course or seminar.
2. Independent Study approved per WVU College of Law catalog and overseen by an Area of Emphasis faculty member.
3. Law Review Note, with approval of the Area of Emphasis administrator and with a faculty member as advisor.
4. A Court Document, e.g. Amicus Brief or Memorandum of Law (real or moot) with the approval of the Area of Emphasis administrator and with a faculty member as advisor.

The writing requirement requires input and approval from a faculty member and the Area of Emphasis administrator, even if the writing was completed outside a formal class or independent study arrangement. A student may fulfill the writing requirement through an alternative method with the consent of the Area of Emphasis administrator.

**Experiential Learning Requirement.** Student must meet the following experiential learning requirement of no less than two (2) credits, with no more than five (5) credits from a clinic counting towards the seventeen (17) credit requirement. A student may fulfill this requirement through any of the following methods:

1. Participation in at least one year of the College of Law's Jessup International Moot Court team (LAW 652)
2. International Organization Externship (full- or part-time)
3. Government Agency Externship (full- or part-time - must be related to an area of international, comparative, or transnational law)
4. Immigration Clinic

Note: Any externship placements for the International Law and Practice Area of Emphasis must comply with the general rules of the externship program.

A student may fulfill this Area of Emphasis requirement through an alternative method with the consent of the Area of Emphasis administrator.

#### **Extra Curricular or Co-Curricular Activity Requirement.**

Students must also engage in ten hours of related extracurricular or co-curricular activities, such as active participation in the International Law Students Association, by attending relevant meetings, hearings or speakers, administrative or other active participation in the international law-related events (e.g., symposia).

#### **Foreign Language**

Students are strongly encouraged to gain competency in a foreign language in conjunction with pursuing this Area of Emphasis.

## LABOR AND EMPLOYMENT LAW AREA OF EMPHASIS

The Labor and Employment Law Area of Emphasis educates the next generation of lawyers in West Virginia and beyond who will work in and shape the fields of labor and employment law by providing an opportunity to learn the applicable laws and regulations in the area, consider policy issues through a written work, and obtain practical skills applicable in the area through an experiential learning requirement.

**Course Requirements.** In order to satisfy the requirements of this Area of Emphasis, a student must have (1) all required first-year courses; (2) all mandatory core courses; and (3) seventeen (17) total credit hours from mandatory core courses, designated elective courses, and an experiential learning course (described below). Note: No more than five (5) credits of the seventeen (17) credits can come from clinic or an externship.

Code	Title	Hours
<b>Required Courses</b>		<b>9</b>
LAW 741	Employment Law	
LAW 763	Employment Discrimination	
LAW 771	Labor Law	
<b>Elective Courses</b>		<b>5</b>
LAW 632	Advanced Labor Law	
LAW 662	Mine Safety & Health Law	
LAW 689S	Seminar: Law and Socioeconomic	
LAW 689T	Seminar: Comparative and International Workplace Law	
LAW 701	International Human Rights	
LAW 720	Entertainment Law	
LAW 721	Sports Law	
LAW 723	Immigration Law	
LAW 726	Constitutional Law 2	
LAW 750	Alternative Dispute Resolution	
LAW 760	Workers Compensation Law	
LAW 764	Administrative Law	
LAW 793	ERISA	
Writing		
Experiential Learning		<b>3</b>
Extra/Co-Curricular Activities		
<b>Total Hours</b>		<b>17</b>

**Writing Requirement.** Students must produce a written paper or court document of no less than 25 pages on a topic related to labor law, employment law, employment discrimination law, benefits law, and/or comparative/international work law. A student may fulfill this requirement through any of the following methods:

1. Qualifying paper in any designated elective course.
2. Independent Study approved per WVU College of Law catalog and overseen by an Area of Emphasis faculty member.
3. Law Review Note, with approval of the Area of Emphasis administrator and with a faculty member as advisor.
4. A Court Document, e.g. Amicus Brief or Memorandum of Law (real or moot) with the approval of the Area of Emphasis administrator and with a faculty member as advisor. For example, a student may fulfill this requirement by participating in New York Law School's Wagner Moot Court Competition as part of the Moot Court Team.

**Experiential Learning Requirement.** Student must meet the following experiential learning requirement of no less than three (3) credits (no more than five (5) credits from participation in a clinic count toward the seventeen (17) credit requirement.) A student may fulfill this requirement through any of the following methods:

1. Externship in a labor/employment practice setting approved by the Area of Emphasis administrator and complying with the general rules and policies governing externships
2. Entrepreneurship Clinic (LAW 650 & LAW 651)
3. Other clinic or simulation course, with approval of the Area of Emphasis administrator

Area of Emphasis students in the Entrepreneurship Clinic or any other clinic approved by the Area of Emphasis administrator shall make every effort to work on labor and employment matters within these clinic placements.

A student may fulfill the experiential learning requirement through an alternative method with the consent of the Area of Emphasis administrator.



**Extra Curricular or Co-Curricular Activity Requirement.**

Student must engage in ten hours of related extracurricular or co-curricular activities, such as active participation in the Labor Law Society or ADR Society, attending relevant meetings, hearings or speakers, administrative or other active participation in the work-law related events (e.g., moot court, symposia).

**PUBLIC INTEREST LAW AREA OF EMPHASIS**

The Area of Emphasis in Public Interest Law prepares students to work to advance the common good of the general public using the legal process through the representation of individuals and organizations who might otherwise be unrepresented.

**Course Requirements.** In order to satisfy the requirements of this Area of Emphasis, a student must have (1) one required course; and (2) seventeen (17) total credit hours from one required course, designated elective courses, and the credits allowed for the experiential learning course (see below).

Code	Title	Hours	
Required Courses (choose one)		3	
LAW 750 or LAW 756 or LAW 788	Alternative Dispute Resolution Trial Advocacy Interviewing, Counseling, and Negotiation		
Elective Courses			11
LAW 604	Natural Resources		
LAW 605	Post-Conviction Remedies		
LAW 609	Child Protection and the Law		
LAW 612	Agriculture & Food Law		
LAW 615	Elder Law		
LAW 625	Nonprofit Organizations		
LAW 629	Advanced Family Law Advocacy		
LAW 640	Parent, Child, and State		
LAW 688K	Seminar in Schools, Race, & Money		
LAW 688J	Seminar in Disability and the Law		
LAW 689F	Seminar: Lawyers and Legislation		
LAW 689I	Seminar: Environmental Justice		
LAW 689K	Seminar: Civil Disobedience		
LAW 689N	Seminar: Refugee and Asylum Law		
LAW 717	Domestic Violence and The Law		
LAW 723	Immigration Law		
LAW 726	Constitutional Law 2		
LAW 759	Civil Rights		
LAW 763	Employment Discrimination		
LAW 769	Family Law		
LAW 771	Labor Law		
LAW 789	Law of Environmental Protection		
LAW 793	Intro to Consumer Law		
Writing Requirement		3	
Experiential Learning			
Pro-Bono Requirement			
Total Hours		17	

**Writing Requirement.** Students must produce a written paper document of no less than 25 pages on a topic related to public interest law. A student may fulfill this requirement through any of the following methods:

1. Law Review Note, with approval of the Area of Emphasis administrator and with a faculty member as advisor.
2. Qualifying paper in any elective course listed above.
3. Qualifying paper in a non-designated elective course if the topic involves matters of public interest, with the advance approval of the Area of Emphasis administrator.



4. Independent study approved per the catalog and with the advanced approval of the AOE administrator.
5. Qualifying alternative approved by AOE administrator.

**Experiential Learning.** Students must meet the following experiential learning requirement of no less than three (3) credits. No more than seven (7) credits from participation in a clinic shall count toward the 17 credit hour requirement for the concentration. A student may fulfill this requirement through any of the following methods:

1. Any West Virginia University College of Law clinic; provided, however, that any student in clinic shall make every effort to work on matters that further the common good using the legal process through the representation of individuals and organizations who might otherwise be unrepresented.
2. Externship approved per the catalog and approved by the Area of Emphasis administrator.

Note: Any externship placements for the Public Interest Law Area of Emphasis must comply with the general rules of the externship program.

#### **Pro-Bono Requirement.**

Students must also engage in twenty-five pro-bono hours over the student's three years at the College of Law (which may include, but is not limited to, participation in Public Interest Advocates).

## **A.6 PART-TIME PROGRAM**

Full-time students average just over fifteen (15) hours per semester in order to amass ninety-one (91) credits in six (6) semesters. Students taking significantly fewer hours per semester will take longer to finish their degrees and are considered part-time students at the College of Law. (Note, however University graduate or professional students taking nine hours or more are charged full tuition and fees. Thus, some "part-time" students will still pay the same tuition and fees each semester as their full-time colleagues.)

Part-time students are subject to the same graduation requirements in terms of total credit hours (ninety-one credits), cumulative grade point average (2.30), and specific required courses. Per ABA requirements, part-time students must complete all graduation requirements within seven years from the date of initial enrollment.

**Students Who Wish to Begin Law School as Part-Time Students.** The Enrollment Management Committee selects first-year part-time students from students already admitted to the Law School. The total size of the entering class is not increased. A student requesting for part-time status must submit a written request to the Enrollment Management Committee on objective indicators of the need to attend on a part-time basis. Students who wish to become part-time students after starting law school but before completing the first-year curriculum must consult with the Associate Dean for Academic Affairs as indicated in this catalog's section on Academic Policies and Procedures. Students who have completed the first-year curriculum (see "First-Year Curriculum (p. 625)" above) may request to become part-time students by consulting the Associate Dean for Academic Affairs of that intention at the beginning of the semester.

**First-Year Curriculum.** Part-time students must take both semesters of LRRW and Introduction to Legal Research course in their first year of law school. Typically, part-time students take two courses in addition to LRRW/Legal Research in each semester of the first year, then take the rest of the first-year curriculum in their second year of studies. As a general rule, part-time students may not enroll in upper-level courses until they have completed the entire first-year curriculum. The Associate Dean for Academic Affairs may grant exceptions to this rule for good cause.

**Scheduling of Classes.** Part-time students must consult the Associate Dean for Academic Affairs in scheduling.

**Probation and Dismissal.** Except as specifically noted to the contrary, students entering the part-time program during the first-year curriculum are subject to the probation and dismissal rules applicable to full-time students who have completed the first-year curriculum only when the part-time students have completed the entire first-year curriculum. Part-time students do not receive a class rank until they have completed the entire first-year curriculum. In all other respects, part-time students and full-time students attending more than six semesters are subject to probation and dismissal rules substantially equivalent to those applicable to full-time students.

## **Dual Degrees**

- Doctor of Jurisprudence/Master of Business Administration (p. 365)
- Doctor of Jurisprudence/Master of Public Administration (p. 634)
- Doctor of Jurisprudence/Master of Social Work (p. 635)

## **DOCTOR OF JURISPRUDENCE/MASTER OF BUSINESS ADMINISTRATION**

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the CoL's JD and Chambers' OMBA by each college's standard admission procedure.
- For additional details and requirements for each program, please visit the JD ([http://catalog.wvu.edu/graduate/law/academic\\_policies\\_and\\_procedures/academic\\_programs/jd/#majortext](http://catalog.wvu.edu/graduate/law/academic_policies_and_procedures/academic_programs/jd/#majortext)) or OMBA pages.
- Students will develop a combined plan of study with their graduate advisors in each program.
- Students must meet the academic standards of both degrees earned.

- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

## ONLINE MBA REQUIREMENTS

The Online MBA program requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
BADM 611	Management Information Systems	3
BADM 612	Managerial and Team Skills	3
BADM 618	Macroeconomics and Managerial Economics	3
BADM 621	Business Research	3
BADM 622	Financial Statements Analysis	3
BADM 630	Corporate Leadership	3
BADM 641	Decision Analysis for Executives	3
BADM 650	Global Trade and Supply Chain	3
BADM 652	Marketing Strategy	3
Total Hours		27

## DOCTOR OF JURISPRUDENCE DEGREE REQUIREMENTS

Code	Title	Hours
Minimum GPA of 2.50		
First-Year Required Courses		
LAW 641	Introduction to Legal Research	1
LAW 700	Legal Analysis, Research and Writing 1	3
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 725	Constitutional Law 1	4
LAW 793	Civil Procedure	4
LAW 793	Introduction to the Profession	1
Upper-Level Requirements		
LAW 715	Appellate Advocacy	2
LAW 742	Professional Responsibility	3
Seminar (any 688, 689, or 796 course)		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives (credit may vary - used to reach the minimum of 91 hours for the degree)		39
Total Hours		85

## DOCTOR OF JURISPRUDENCE/MASTER OF PUBLIC ADMINISTRATION

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the College of Law's JD and Eberly's MPA programs in accordance with each college's standard admission procedure.
- For additional details and requirements for each program, please visit the Law page (<http://catalog.wvu.edu/graduate/law/>) or the Public Administration page (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/publicadministration/>).

- Students will develop a combined plan of study with their graduate advisers in Public Administration and in the Law School. Only courses included in an approved plan of study will satisfy graduation requirements.
- Students must meet the academic standards of both degrees earned.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees earned.

## MASTER OF PUBLIC ADMINISTRATION

Code	Title	Hours
<b>Required Courses</b>		<b>24</b>
PUBA 600	Democratic Context of Public Administration	
PUBA 610	Public and Nonprofit Management	
PUBA 620	Public and Nonprofit Financial Management	
PUBA 630	Public Service Research	
PUBA 645	Public Policy and Administration	
PUBA 710	Public Service Leadership	
PUBA 720	Public and Nonprofit Budgeting	
PUBA 700	Capstone Seminar	
<b>Elective Courses</b>		<b>6</b>
Any PUBA courses at the 600 or 700 level		
Courses at the 400 level or above in another department as approved by faculty advisor		
<b>Internship</b>		<b>3</b>
PUBA 751	Public Service Internship	
Total Hours		33

## DOCTOR OF JURISPRUDENCE

Code	Title	Hours
Minimum GPA of 2.50		
<b>First-Year Required Courses</b>		
LAW 641	Introduction to Legal Research	1
LAW 700	Legal Analysis, Research and Writing 1	2
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 725	Constitutional Law 1	4
LAW 793	Civil Procedure	4
LAW 793	Introduction to the Profession	1
LAW 793	Legal Writing Intensive	1
<b>Upper-Level Requirements</b>		
LAW 715	Appellate Advocacy	2
LAW 742	Professional Responsibility	3
Seminar (any 688, 689, or 796 course)		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives (credit may vary - used to reach the minimum of 91 hours for the degree)		39
Total Hours		85

## DOCTOR OF JURISPRUDENCE/MASTER OF SOCIAL WORK

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to the College of Law's JD and Eberly's MSW program in accordance with each college's standard admission procedure.

- For additional details and requirements for each program, please visit the Law page (<http://catalog.wvu.edu/graduate/law/>) or the Social Work page (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/socialwork/>).
- Students will develop a combined plan of study with their graduate advisers in Social Work and in the College of Law.
- Only courses included in an approved plan of study will satisfy graduation requirements.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Students must meet the academic standards of both degree programs.

Code	Title	Hours
<b>Master of Social Work Regular Standing</b>		
SOWK Coursework		54
SOWK 513	Research Methods	
SOWK 520	Human Behavior in the Social Environment	
SOWK 530	Professional Identity and Social Justice	
SOWK 531	Social Welfare Policy and Programs	
SOWK 540	Generalist Practice 1: Individuals, Families, and Groups	
SOWK 541	Generalist Practice 2: Rural Community Macro Practice	
SOWK 581	Generalist Field Experience	
SOWK 616	Evaluation Research in Social Work	
SOWK 633	Social Policy Analysis, Advocacy, and Deliberation	
SOWK 643	Assessment and Diagnosis	
SOWK 649	Practice with Individuals	
SOWK 650	Practice with Families and Groups	
SOWK 654	Organizational Administration and Leadership	
SOWK 656	Financial Management and Grant Writing	
SOWK 682	Advanced Field Experience	
LAW Electives (share 6 credits)		
<b>Jurisprudence Doctorate</b>		
LAW Coursework		38
LAW 641	Introduction to Legal Research	
LAW 700	Legal Analysis, Research and Writing 1	
LAW 703	Contracts 1	
LAW 705	Criminal Law	
LAW 707	Property	
LAW 709	Torts 1	
LAW 711	Legal Analysis, Research and Writing 2	
LAW 725	Constitutional Law 1	
LAW 793 Civil Procedure		
LAW 793 Introduction to the Profession		
LAW 793 Legal Writing Intensive		
LAW 715	Appellate Advocacy	
LAW 742	Professional Responsibility	
Seminar		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives		39
SOWK Electives (share 6 credits)		
SOWK 626	Child Mental Health: Promotion, Prevention, and Treatment	
SOWK 627	Clinical Practice in Integrated Healthcare	
SOWK 675	Addiction and Social Work Practice	
SOWK 680	Child Welfare Continuum	
GERO 645	Fundamentals of Gerontology	

GERO 681	Rural Gerontology	
Total Hours		142
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Master of Social Work Advanced Standing</b>		
SOWK Coursework		30
SOWK 616	Evaluation Research in Social Work	
SOWK 633	Social Policy Analysis, Advocacy, and Deliberation	
SOWK 643	Assessment and Diagnosis	
SOWK 649	Practice with Individuals	
SOWK 650	Practice with Families and Groups	
SOWK 654	Organizational Administration and Leadership	
SOWK 656	Financial Management and Grant Writing	
SOWK 682	Advanced Field Experience	
LAW Electives (share 6 credits)		
<b>Jurisprudence Doctorate</b>		
LAW Coursework		38
LAW 641	Introduction to Legal Research	
LAW 700	Legal Analysis, Research and Writing 1	
LAW 703	Contracts 1	
LAW 705	Criminal Law	
LAW 707	Property	
LAW 709	Torts 1	
LAW 711	Legal Analysis, Research and Writing 2	
LAW 725	Constitutional Law 1	
LAW 793 Civil Procedure		
LAW 793 Introduction to the Profession		
LAW 793 Legal Writing Intensive		
LAW 715	Appellate Advocacy	
LAW 742	Professional Responsibility	
Seminar (any LAW 688, 689, or 796 course)		2
Administrative Law Requirement		3
Perspective		2
Capstone		4
Electives		39
SOWK Electives (share 6 credits)		
SOWK 626	Child Mental Health: Promotion, Prevention, and Treatment	
SOWK 627	Clinical Practice in Integrated Healthcare	
SOWK 675	Addiction and Social Work Practice	
SOWK 680	Child Welfare Continuum	
GERO 645	Fundamentals of Gerontology	
GERO 681	Rural Gerontology	
Total Hours		118

## Degree Requirements

To qualify for the Bachelor of Science in Economics and Doctor of Jurisprudence joint program, you must meet the following criteria:

- Have a 3.0 after your freshman year,
- Have a 3.2 after your sophomore year,
- Have a 3.4 after the first semester of your junior year,
- Take the LSAT in October of your junior year,
- Complete the first three years as outlined in the plan of study, and

- Apply to and be accepted by the Law School. Those who apply by January 15<sup>th</sup> of their junior year with LSAT scores of 158 or higher and an undergraduate GPA of 3.7 or higher will be admitted to the College of Law. Students with a GPA of 3.4-3.69 and an LSAT less than 158 will have their application considered alongside the general Law School applicant pool.

Code	Title	Hours
University Requirements		17
Program Requirements		23
Economics Major Requirements		51
Doctor of Jurisprudence Requirements		32
Total Hours		123

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives		3
Total Hours		17

## Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201	Principles of Microeconomics (GEF 4)	3
ECON 202	Principles of Macroeconomics (GEF 8)	3
Select one of the following (GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher:		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

## Economics Major Requirements

Code	Title	Hours
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication	3
ECON 301	Intermediate Micro-Economic Theory	3
ECON 302	Intermediate Macro-Economic Theory	3
ECON 425	Introductory Econometrics	3
ECON 441	Public Economics	3
ECON 443	Law and Economics	3
ECON 445	Government and Business	3

ECON 465	Health Economics	3
ECON 482	Applied Economic Research	3
Chambers Elective (300 or higher B&E elective towards a minor)		21
Total Hours		51

## Doctor of Jurisprudence Requirements

Code	Title	Hours
LAW 638	Legislation and Regulation	3
LAW 641	Introduction to Legal Research	1
LAW 700	Legal Analysis, Research and Writing 1	2
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 706	Civil Procedure: Jurisdiction	2
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 722	Civil Procedure: Rules	3
LAW 725	Constitutional Law 1	4
Total Hours		32

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
BCOR 191		1 ENGL 101 (GEF 1)	3
BCOR 199		3 ECON 202 (GEF 8)	3
BCOR 121		2 ACCT 201	3
Select one of the following (GEF 3):		3-4 Select one of the following:	3-4
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3
ECON 201 (GEF 4)		3	
GEF (Choose from F2B, F5, F6 or F7)		3	
		15	15

### Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 BCOR 299	3
ECON 225 (GEF 8)		3 ECON 302	3
ECON 301		3 ECON 425	3
ECON 443		3 ECON 445	3
GEF (Choose from F2B, F5, F6 or F7)		3 ECON 465	3
		15	15

### Third Year

Fall	Hours	Spring	Hours
ECON 441		3 ECON 482	3
Chambers Elective		3 Chambers Elective	3
Chambers Elective		3 Chambers Elective	3
Chambers Elective		3 Chambers Elective	3
GEF (Choose from F2B, F5, F6 or F7)		3 Chambers Elective	3
		15	15

**Fourth Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
LAW 641		1 LAW 638	3
LAW 700		2 to 3 LAW 706	2
LAW 703		4 LAW 707	4
LAW 705		3 LAW 711	2
LAW 709		4 LAW 725	4
LAW 722		3	
	17-18		15

Total credit hours: 122-123

## Dual-Degree Programs

### B. DUAL-DEGREE PROGRAMS

1. Master of Business Administration (p. 640)
2. Master of Social Work (M.S.W.) (p. )
3. Master of Public Administration (p. 640)
4. J.D./LL.M. in Energy and Sustainable Development Law (p. 641)

Students may enroll in an approved joint degree program with another College of the University. At present, there are three such programs: a joint J.D./Online M.B.A. (Master of Business Administration) and a joint J.D./M.P.A. (Master of Public Administration). In addition, students may enroll in a joint J.D./LL.M. (Master of Laws in Energy and Sustainable Development) within the College of Law.

#### B.1 ONLINE MASTER OF BUSINESS ADMINISTRATION (M.B.A.)

A J.D./M.B.A. student may earn law school credit pursuant to the dual degree requirements approved by the faculties of the College of Law and the College of Business & Economics (p. 365) and provided to students admitted to that program. J.D./M.B.A. students receive six credits toward the J.D. degree if the M.B.A. degree is awarded concurrently with the J.D. degree, which means that at least 85 J.D. credit hours are required. Grades earned outside the college of law do not affect the cumulative law school GPA. Professor Jena Martin is the College of Law contact person for the J.D./M.B.A. program.

\*The College of Law's perspective requirement is met by completing the dual-degree. Also, the capstone requirement is met by completing Business Transactions Drafting, which is required in the J.D./M.B.A. program.

\*\*Students may substitute up to two (2) of the courses marked with a double-asterisk with approval from the J.D./M.B.A. advisor.

\*\*\*Students are strongly encouraged (but not required) to take the Entrepreneurship Clinic as part of their J.D./M.B.A. electives. Admission into the clinic is subject to the standard admission procedures for Clinics and availability.

#### B.2 MASTER OF SOCIAL WORK (M.S.W.)

A J.D./M.S.W. student may earn law school credit pursuant to the dual degree requirements approved by the faculties of the College of Law and the Eberly College of Arts and Science's School of Social Work ([http://catalog.wvu.edu/graduate/law/academic\\_policies\\_and\\_procedures/academic\\_programs/dual\\_degree\\_programs/graduate/law/academic\\_policies\\_and\\_procedures/academic\\_programs/jd/#jd\\_msw](http://catalog.wvu.edu/graduate/law/academic_policies_and_procedures/academic_programs/dual_degree_programs/graduate/law/academic_policies_and_procedures/academic_programs/jd/#jd_msw)). J.D./M.S.W. students receive six credits toward the J.D. degree if the M.S.W. degree is awarded concurrently with the J.D. degree. As a result, a student will need at least 85 J.D. credit hours are required. With the exception of the reduced number of J.D. credit hours, students must meet all other requirements for a Doctor of Jurisprudence (p. 624) in effect at the time the student starts at the college of Law. Grades earned outside of the College of Law do not affect the cumulative law school GPA. The College of Law's perspective requirement is met by completing the dual-degree.

Students with a baccalaureate degree in Social Work accredited by the Council on Social Work Education may apply for Advanced Standing toward the joint Master of Social Work degree; students; all other students would apply for the joint Master of Social Work degree with Regular Standing

#### B.3 MASTER OF PUBLIC ADMINISTRATION (M.P.A.)

A J.D./M.P.A. student may earn law school credit pursuant to the dual degree requirements approved by the faculties of the College of Law and the Eberly College of Arts and Science's School of Public Administration (p. 634). J.D./M.P.A. students receive six credits toward the J.D. degree if



the M.P.A. degree is awarded concurrently with the J.D. degree. As a result, a student will need at least 85 J.D. credit hours are required. With the exception of the reduced number of J.D. credit hours, students must meet all other requirements for the Doctor of Jurisprudence (p. 624) in effect at the time the student starts at the College of Law. Grades earned outside of the College of Law do not affect the cumulative law school GPA. The College of Law's perspective requirement is met by completing the dual-degree.

## B.4 J.D./LL.M IN ENERGY AND SUSTAINABLE DEVELOPMENT LAW

College of Law students may earn credit toward the College of Law's Energy and Sustainable Development LL.M. while finalizing their J.D. degree. College of Law students can apply for the program at the end of their 2L year (approximately May 1).

Current J.D./LL.M. students must complete their J.D. with an Area of Emphasis on Energy and Sustainable Development Law (<http://www.law.wvu.edu/academics/academic-programs/energy-sustainable-development-law-concentration/>). Following completion and conferral of the J.D. degree and after completing the requirements for the Energy and Sustainable Development Area of Emphasis, students must complete an additional 14 credits of coursework that qualify for the LL.M. in Energy and Sustainable Development Law, including the LL.M. Seminar and LL.M. Capstone. Students seeking this J.D./LL.M. shall endeavor to obtain a clinical opportunity in an appropriate clinic or a relevant externship opportunity, and if unable to do so, shall enroll in such other experiential learning opportunity (including Business Transactions Drafting and Trial Advocacy), which is necessary to fulfill the requirements of the Energy and Sustainable Development Area of Emphasis.

Students from other law schools may apply for the program starting on February 1 each year. Applications to the J.D./LL.M program must be received by June 15.

In order to be admitted to the J.D./LL.M. program, a student must apply to attend WVU Law as a visiting student for their entire 3L year. Visiting students from other law schools should state the intent to pursue the J.D./LL.M. in Energy & Sustainable Development Law as the primary reason for seeking admission as a visiting student. A visiting student must include in his or her application to attend WVU Law a letter from the applicant's Dean (or equivalent) authorizing the student's attendance at WVU Law and stating that the home school will agree to transfer credits earned at WVU Law.

Visiting students must complete the coursework for the Energy & Sustainable Development Law Area of Emphasis in their 3L year while attending WVU Law. Some courses taken at a student's home institution may be approved to satisfy some area of emphasis requirements. Visiting students must take a minimum of nine credit hours in qualifying courses (related to the area of emphasis) while visiting at WVU Law, in addition to the required LL.M. courses. In addition to the coursework required, students will be required to complete all their LL.M. Degree requirements, including the research paper or field work requirement and the portfolio of work.

## Energy Law and Sustainable Development

### Degree Offered

- Energy Law and Sustainable Development, LL.M.

WVU College of Law is committed to playing a prominent role in shaping the energy, environmental, and sustainable development policies of the future for the state, the nation, and the world.

Energy is the foundation of our nation's future, both economically and environmentally. West Virginia is at the center of energy production for the country. There is no better place to learn about the intersecting laws and policies governing all of the country's energy resources than at WVU College of Law.

Although many law schools provide opportunities to learn energy or environmental law, WVU College of Law is committed to providing students opportunities to learn the full range of energy, environmental, and sustainable development law through its Center for Energy and Sustainable Development Law (<http://energy.law.wvu.edu/>) and through its other resources in the area.

The College of Law provides a broad and deep offering of courses, experiential learning opportunities, and practical training for every part of the energy sector. Our broad spectrum of courses allows our students to prepare to be lawyers and leaders serving energy companies, investors, utilities, manufacturing companies, lawmakers, policymakers, regulators, land use professionals, and environmental organizations.

### Program Objectives

The College of Law's objectives in establishing an LL.M. in Energy Law and Sustainable Development are as follows:

- To educate the next generation of lawyers in the state and beyond who will work in and shape the field of energy and sustainable development;
- To utilize WVU's expertise and reputation in the areas of natural resources, energy, and sustainable development and further establish the College of Law as a leader in law and public policy in those fields; and
- To build upon the WVU 2020 Strategic Plan for the Future, which emphasizes the unique role and expertise of West Virginia and the university in the areas of natural resources, energy, and sustainable development.

Admissions

WVU Law's LL.M. in Energy Law and Sustainable Development will be a source for a high-quality professional legal education and a home for thought leaders in the areas of energy and sustainable development.

Minimum admission requirements for the program are as follows:

- A J.D. from an ABA-accredited school (or foreign equivalent, as determined by the College of Law in accordance with ABA guidelines).
- A J.D. (or equivalent) grade point average of at least a 3.0 (on a 4.0 scale) or other demonstrated indicia of likelihood of success.
- A demonstrated interest in or commitment to the fields of energy and/or sustainable development.

Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 7752

Curriculum

The College of Law intends that its graduates excel academically. Our goal is for our graduates to function on a high level as professionals in the field and to add to the national conversation on energy and sustainable development policy on a thoughtful and practical level.

This goal is reflected in our rigorous curriculum for the LL.M. in Energy and Sustainable Development Law.

Code	Title	Hours
Required Courses		
LAW 630	Energy Law	3
LAW 764	Administrative Law	3
LAW 789	Law of Environmental Protection	3
LAW 670	LLM Seminar	3
LAW 671	LL.M. Capstone (*)	4
Electives		10
Total Hours		26

\*  
Minimum 1 credit required, may be combined with another course to reach 4 credits total

Code	Title	Hours
Electives		10
LAW 604	Natural Resources	3
LAW 612	Agriculture & Food Law	3
LAW 613	International Environmental Law	3
LAW 627	Land Use/Sustainable Development Clinic 1	7
LAW 628	Land Use/Sustainable Development Clinic 2	7
LAW 634	Energy Reg, Markets and Environ	3
LAW 635	Land Use and Resilience Law	3
LAW 644	Energy Siting & Permitting	3
LAW 645	Water Law	3
LAW 647	Nuclear Law & Policy	3
LAW 648	Energy Business/Law & Strategy	3
LAW 658	Science & Technology of Energy	2-3
LAW 659	Administrative Energy Law and Practice	2
LAW 660	Law of Coal	2-3
LAW 662	Mine Safety & Health Law	3
LAW 688E	Seminar in Human Rights & the Environment	2
LAW 688F	Seminar in Hydraulic Fracturing	2-3
LAW 689W	Seminar:Issues in Energy Law	2
LAW 766	Coal/Oil and Gas	3
LAW 693	Environmental Litigation	3

LAW 693	Environmental Law Nat Res & Conservation	3
LAW 793	Environmental Law Pollution	3
LAW 793	Trends in Env & Energy Law	2

Code	Title	Hours
<b>Related Courses</b>		
LAW 633	International Business Transactions	3
LAW 689X	Seminar: National Security Law	2
LAW 719	Income Taxation 1	3
LAW 729	Business Organizations	4
LAW 734	Intellectual Property	3
LAW 643	Taxation of Business Entities	4
LAW 768	International Law	3
LAW 771	Labor Law	3
LAW 774	Local Government	2
LAW 778	Antitrust	3
LAW 779	Business Transactions Drafting	4
LAW 784	Securities	3

**Class Work.** One-year course of study requiring 26 credit hours, including a final paper or fieldwork project. Students will have the added benefit of seeking approval to include up to 6 credits in their course of study from relevant WVU graduate-level programs, such as course offerings in business, ecology, engineering, public policy, economics, and natural resources.

**Energy Law Survey.** This introductory energy law course provides an overview of the law and regulatory policies that govern and affect the energy industry. The course includes a review of the various traditional and renewable energy sources, mineral rights, economic regulation of the energy industry, and climate change and environmental concerns.

**Environmental Protection Law.** This survey course introduces students to energy, environment, and sustainability law and policy issues. Students will examine the development of environmental law from its common law tort roots through the birth of the “environmental movement” and the enactment of federal environmental regulatory laws such as the Clean Water Act, the Clean Air Act, and the Surface Coal Mining and Reclamation Act. The overarching goals of the course are to expose students to “real world” environmental issues they may face in practice and the principles, doctrine, and process lawyers use while representing clients in environmental and natural resource matters.

**Administrative Law.** A basic understanding of administrative law is nearly essential for all attorneys. This is especially true for those practicing in the areas of energy, environmental, and sustainable development law. This course covers the creation and operation of administrative agencies, common procedural practices and requirements of administrative procedure acts, judicial control of administrative agencies, and constitutional issues related to the area.

**LL.M. Seminar.** The program will require a 3-credit LL.M. Seminar that covers a wide range of energy and sustainable development law and policy and explores diverse advanced topics and perspectives. The seminar will feature guest speakers who will present their scholarship and other works. Guests will include, for example, WVU Law faculty, local and national scholars and practitioners, government officials, regulators, and other leaders in the fields. Students will be required to engage in rigorous preparation for each seminar discussion and will be expected to develop a writing project that will be presented at the end of the course.

**LL.M. Capstone (Research Paper or Fieldwork Project).** The College of Law expects LL.M. graduates to bring their in-depth knowledge in the areas of energy and sustainable development into the world in a tangible way. The 4-credit Capstone (Research Paper or Fieldwork Project) requirement lays the groundwork for that expectation. For those students looking to focus on influencing energy and sustainable development policy, the option to write a research paper on a significant issue in law and energy or sustainable development policy would form the basis for further work in the field. The paper can be related to an existing course (e.g., a 3-credit course with an additional credit granted for additional required research) or a student-specific study/thesis option with the approval of the program director.

Those students intending to enter private practice or work in industry may prefer to experience real world problems with real world clients. Whether through existing experiential learning opportunities available through the College of Law or through specific projects developed through student interest or via significant industry contacts, a student will be able to see energy and sustainability law in actual practice. Each project will require approval of the program director before it is started and upon completion.

**Specializations.** Given the nature of the degree, students will earn their LL.M. in Energy and Sustainable Development Law without further formal specialization. Beyond the course requirements, however, students will have the flexibility in elective courses to focus their studies more specifically on courses in energy law, land use planning, and environmental law, among other options.

**Portfolio of Work.** All LL.M. students will be required to develop a portfolio of work, consisting of at least four written pieces that are representative of the student's experiences in the course of the program. These pieces could include, but are not limited to, scholarly papers, industry white papers, significant legal motions, briefs or memoranda, substantial transactions documents, policy analyses, or draft legislation or regulations.

## Graduation Requirements

The graduation requirements for the LL.M. in Energy and Sustainable Development Law are as follows:

- A minimum GPA of 2.5 (on a 4.0 scale).
- No less than the equivalent of a "C" (2.0) in any class counted toward the degree.
- Successful completion of the required 26 credits (including the LL.M. Seminar and the LL.M. Capstone).
- Completion of the 3-credit LL.M. Seminar, which must be completed in residence at the College of Law's Morgantown campus unless otherwise approved by the program director.
- Successful completion of the 4-credit-hour Capstone (writing or field-work project) requirement.
- Development of a portfolio of work (consisting of at least four written pieces) that is representative of the student's experiences in the course of the program.

## Academic Policies and Procedures

### A. ACADEMIC POLICIES

1. Academic Calendar
2. Scheduling
3. Maximum Credits Per Semester
4. Summer School
5. Auditing
6. Withdrawal from the Program
7. Independent Study
8. Earning Law School Credit Outside of the Law School
9. Missing Class Due to Illness
10. Study Outside the Classroom
11. Distance Education
12. ABA Requirement
13. Deficiencies after Three Years
14. Employment During Law School
15. Full-Time Status and Tuition/Fees
16. WVU Graduate and Post-Graduate Students
17. Transcripts

### B. GRADING INFORMATION AND PROCEDURES

1. Examinations
2. Grades
3. College of Law Grading Policy
4. Passing Grades and Graduation Credit
5. Grades of Incomplete in Non-Examination Courses
6. Grade Appeal
7. Grade Appeal Procedure

### C. ACADEMIC STANDING

1. Academic Difficulty
2. Academic Probation & Dismissal

### D. HONORS

1. Class Rank
2. Order of the Coif

3. Order of the Barristers
4. Patrick Duffy Koontz Award

## E. GRADUATION

1. DegreeWorks
2. Hours to Graduate
3. College of Law Graduation/Hooding Website

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## A. ACADEMIC POLICIES

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1. Academic Calendar (p. 645)
2. Scheduling (p. 645)
3. Maximum Credits Per Semester (p. 645)
4. Summer Classes (p. 645)
5. Auditing (p. 646)
6. Withdrawal from the Program (p. 646)
7. Independent Study (p. 647)
8. Earning Law School Credit Outside of the Law School (p. 647)
9. Attendance and Illness (p. 648)
10. Study Outside the Classroom (p. 648)
11. Distance Education (p. 648)
12. Calculation of Credit Hours by ABA Rule (p. 649)
13. Time to Complete Degree; Deficiencies after Three Years (p. 649)
14. Employment During Law School (p. 649)
15. Full-Time Status and Tuition/Fees (p. 650)
16. WVU Graduate and Post-Graduate Students (p. 650)
17. Transcripts (p. 650)

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### A.1 ACADEMIC CALENDAR

The College of Law has its own academic calendar, which differs from the general West Virginia University academic calendar. For example, the College of Law's examination period extends over a two-week period, instead of the standard one week. Law students should refer only to the College of Law Academic Calendar, which can be accessed from the College of Law website (<https://www.law.wvu.edu/academics/academic-calendar/>).

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### A.2 SCHEDULING

The Associate Dean for Academic Affairs completes the master course schedule. The College of Law assigns first-year students to specific sections of their required courses. The students then register for these courses on the STAR System. Second- and third-year students make their own schedules through WVU's STAR System.

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### A.3 MAXIMUM CREDITS PER SEMESTER

ABA Accreditation Standard 311(c) states that law schools may not permit a student to be enrolled at one time in courses totaling more than twenty percent of the total hours required for graduation. This means that the maximum number of law school credit hours a student may take during a semester at the WVU College of Law is eighteen (*i.e.*, 20% of ninety-one is 18.2). There is only one exception to the eighteen-hour per semester cap, students who are in joint-degree programs. Students in a joint-degree program may take no more than 18 enrolled Law credits.

### A.4 SUMMER CLASSES

Students may earn credits for summer class offered only at the West Virginia University College of Law, other ABA-accredited law schools, or their ABA-approved study abroad programs. Students who are on academic probation may earn summer class credits only with the permission of the Academic Standards Committee. The College of Law will accept transfer credits only for courses where the student earned a grade of C or better. Students may transfer credits for pass/fail courses only with the advance approval of the Associate Dean for Academic Affairs. Independent Studies are not permitted during the summer semesters.

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## A.5 AUDITING

A law student may audit a College of Law course (without receiving academic credit) with the permission of the professor teaching the course. The student and professor should reach an agreement about what the student must do to audit the course successfully. Typically, professors require class attendance, preparation, and participation, but individual professors are free to ask auditors to do more if they wish. Once a student has obtained a professor's permission to audit a course, the student should register the course in STAR and then notify the University Registrar's Office, who will update the 'Audit' status in STAR. An email from the professor giving permission to register for the course as an audit is required. An auditing student is treated as enrolled in the class. Therefore, a student may not audit a class if it has reached its enrollment capacity.

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## A.6 WITHDRAWAL FROM THE PROGRAM

There are three types of withdrawals that are governed by this rule: (1) partial withdrawal from some part of a student's course work; (2) in-semester withdrawal from all College of Law courses in which a student is registered; and (3) between-semester withdrawal after the completion of one semester and before the start of the next semester. The faculty and staff of the College of Law are available and willing to help resolve any difficulties that may be hindering a student's legal studies. Any student considering withdrawing from school must see the Associate Dean for Academic Affairs in order to withdraw according to guidelines set by the College of Law and by the University. In addition, students considering withdrawal should consider the impact the withdrawal will have on current and future financial aid awards and scholarships. Please note that the deadlines described below are for fall and spring courses. Summer courses are often shorter in length, and may have very short deadlines (*i.e.*, a couple of days) for dropping without the withdrawal being recorded on the student's official transcript.

### TYPE 1 - PARTIAL WITHDRAWAL ( *I.E.*, DROPPING SOME, BUT NOT ALL, COURSES FOR A SEMESTER):

**Reduction in the First Year.** Because a student must complete the first-year curriculum before the student may take upper-division courses, full-time students are not permitted to reduce the course load in the first year by dropping courses except with the permission of the Associate Dean for Academic Affairs, which will only be granted in extraordinary circumstances. By faculty resolution, no student shall be allowed to drop the required first-year course in Legal Reasoning, Research, and Writing.

**Dropping Courses After the First Year -- During First Week of Class.** During the first week of the semester, upper-level students may drop any course without having a W ("withdrew") placed on their transcripts. (See the College of Law Academic Calendar for the specific date each semester.) If the dropped course brings a student's course load below nine hours, the student may be eligible for a reduction in tuition and fees and should consider the impact such withdrawal may have on financial aid and scholarships.

**Courses Dropped Before the "Last Day to Drop" Deadline.** Until the "last day to drop a course" on the law school's academic calendar, upper-level students are free to drop most courses by simply logging into STAR and dropping. The exceptions to this policy are clinical courses. Slots in such courses are limited, and the student who drops them after the first week has wasted an opportunity sought by others. In addition, clinical students now have a professional obligation to their clients and their clinic partner that must be considered before allowing a student to not participate in the second semester of a clinic. Accordingly, a student must take the second semester of a clinic. Students may drop clinic courses only with the permission set forth in the "Capstone Requirement" section of the Academic Program portion of this catalog. The grade for a course dropped during this period shall be a "W." Please note that under university policy ([http://studentaccounts.wvu.edu/refunds/reduction\\_schedule/](http://studentaccounts.wvu.edu/refunds/reduction_schedule/)), students who drop some but not all of their courses during this period receive no refund of tuition and fees.

**Courses Dropped after the University Deadline.** After the University's last date for withdrawal from a course (see the Academic Calendar), no student may withdraw from a course for any reason. Students who do not complete course requirements will receive an F for the course. Specifically, students denied permission to sit for a final because of excessive absences will receive an F if the last date for withdrawal has passed. This is a university rule, and there are no exceptions.

### TYPE 2 - IN-SEMESTER WITHDRAWAL FROM ALL CLASSES:

**Withdrawal Prior to University Deadline.** During the semester, a student may withdraw totally from the College of Law by obtaining permission from the Associate Dean for Academic Affairs. Any student withdrawing from the College of Law during this period receives a grade of "W" in all courses dropped pursuant to this withdrawal. Students should consider the impact such withdrawal may have on financial aid and scholarships. See website ([http://studentaccounts.wvu.edu/refunds/reduction\\_schedule/](http://studentaccounts.wvu.edu/refunds/reduction_schedule/)).

**Withdrawal After University Deadline.** After the last date of withdrawal established by the University Registrar's Office, a student may withdraw totally from the West Virginia University College of Law by obtaining permission from the Academic Standards Committee. The Committee shall grant permission upon a showing by the student that continuation in school will create a severe hardship on the student because of some substantial physical, emotional, or family problem. If permission is granted, the student receives a grade of "W" in all courses dropped; if permission is denied, then the student remains responsible for his or her performance in all courses and will be graded accordingly. The last day to withdraw from all classes is marked on the College of Law Academic Calendar. Students should consider the impact such withdrawal may have on financial aid and scholarships.



## TYPE 3 - BETWEEN-SEMESTER WITHDRAWAL:

After the end of a semester and prior to the start of the next semester, a student may withdraw from the College of Law. In all such cases, the College of Law shall advise the student of its requirement that studies must be completed within seven years from the date on which the studies began. Students should consider the impact such withdrawal may have on financial aid and scholarships.

## RESUMPTION OF STUDIES:

**First Semester, First Year.** A student who withdraws from the College of Law before completing the first semester of the first year must, except as herein provided, be readmitted by applying for an initial admission to the College of Law. A student who withdraws during the first semester may petition the Dean at the time of such withdrawal for permission to be readmitted at the next regular fall semester of the College of Law. If the Dean determines that such withdrawal is for causes beyond the control of the student, the Dean will verify this fact in writing at the time of withdrawal and grant such permission. Permission to be readmitted to the College of Law applies only for admission for the beginning of the next academic year. A student receiving an adverse decision by the Dean on granting this privilege may appeal to the Faculty.

**Other Students.** Any student who withdraws voluntarily after the first semester of study and wishes to resume his or her studies must petition the Academic Standards Committee to be readmitted to the College of Law. The Committee may readmit the petitioning student subject to conditions of the Committee's choosing, or it may deny the petition for readmission, thus leaving the petitioner with the option of seeking admission to the College of Law through the regular admissions process. Students who withdraw from law school and then successfully reapply through the regular admissions process start their legal educations from the beginning alongside other members of their entering class; *i.e.*, they begin with no credit hours and no law school GPA. Students who are readmitted through petition to the Academic Standards Committee retain credit hours and grades earned prior to their voluntary withdrawal from the College of Law. In deciding whether to grant a petition for readmission, the Committee considers the length of the interruption of studies, the causes for the interruption of studies, the intervening activities of the student and how they relate to the intellectual activities of a law student, changes in curriculum and the teaching program of the College of Law, and any other factors deemed relevant. The Academic Standards Committee may require a readmitted student to repeat, without credit, work previously done, or may require the student to audit certain courses. Any student who is readmitted may have the student's overall academic program adjusted to meet the requirements at the time of readmission. Resumption of studies is permitted only at the beginning of a semester. A first-year student whose last complete semester was a fall semester is permitted to return only at the beginning of a spring semester.

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## A.7 INDEPENDENT STUDY

A student may earn up to two hours of credit for a suitable research project completed under the supervision of a full-time faculty member. A student in an independent study must produce an academic research paper that would be acceptable in a research seminar that involves an amount of research and writing commensurate with the credit hours awarded. For example, a student seeking two hours of independent study credit would be expected to produce a research paper at least twenty-five pages in length, *i.e.*, the same length required for a two-credit research seminar. Students wishing to pursue an independent study should draft a plan for the independent study that would specify the proposed subject for the study, a research and reading agenda, and a paper topic. A second faculty reviewer must approve the grade given for an independent study, who shall be listed in the plan. The student should obtain approval of this plan from the faculty supervisor. The student should then forward the approved plan to the Chair of the Academic Standards Committee, which must approve the project. The Associate Dean for Academic Affairs has the forms to be submitted to the Academic Standards Committee. Independent study does not satisfy the seminar or perspective requirements. Independent study courses are offered only during the fall and spring semesters and are not available during the summer.

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## A.8 EARNING LAW SCHOOL CREDIT OUTSIDE THE LAW SCHOOL

**Individual Courses in Other WVU Colleges.** Students who do not receive credit toward the J.D. for completion of a joint degree program may receive law school credit for graduate level courses in another college at the University; however, no student may receive more than a total of four credits from all classes taken under this rule. The student must obtain prior approval from the Associate Dean for Academic Affairs in order to enroll in classes outside of the College of Law. Grades earned in other colleges do not affect the student's law school GPA. These credits are excluded from class rank calculations. When possible, students should choose the pass/fail option when registering to take courses in other colleges so that grades for these courses are not included in the cumulative GPA on the student's professional school transcript. Cross-listed courses (*i.e.*, courses that have two course numbers, one from the College of Law and one from another college) will be treated as a law course only if the student registers under the Law course number.

Law students may also register for courses in other colleges at the University (*e.g.*, physical education courses) that would not qualify for law school credit. Students do not need permission to take non-law courses for personal enrichment, but should notify the Associate Dean for Academic Affairs that they are doing so.

**Study at Another School - Visiting.** A student in good academic standing may take up to thirty credits toward graduation at another ABA-accredited law school. Upon completion at that law school of all the requirements necessary for the J.D. from the College of Law, the College of Law will award the J.D. degree. Such students require advance approval of their curriculum by the Associate Dean for Academic Affairs. Only grades of C or better will be transferred to the College of Law. Students may transfer credits for pass/fail courses only with the advance approval of the Associate Dean.

Grades earned at other law schools will not be included in the calculation of the student's cumulative law school GPA. Students who take J.D.-required courses for credit at other law schools are not eligible for election to Order of the Coif at the College of Law.

**Study at a Foreign Law School - Visiting.** The College of Law, in cooperation with the WVU Office of International Programs, permits individual students to take courses toward their law degree at foreign law schools. Students wishing to study at a foreign law school must submit an application to the Associate Dean for Academic Affairs, who must review the application for compliance with the "Criteria for Student Study at a Foreign Institution" promulgated by the American Bar Association. Once approved by the Associate Dean, the application must also be approved by the Office of International Programs. Students seeking such credit must establish an educational purpose that both is consistent with the aims of the College of Law and can be met only through the proposed foreign study. Examples could include students seeking proficiency in the legal vocabulary of a foreign country, students seeking international credentials to support their practice of law, or students interested in the study of comparative legal systems. Students must have completed their first year in law school prior to application and can take only one semester under such a foreign program.

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## A.9 ATTENDANCE AND ILLNESS

ABA Standard 308(a) states "A law school shall adopt, publish, and adhere to sound academic standards, including those for regular class attendance, good standing, academic integrity, graduation, and dismissal."

If you are ill and you must miss class, call or e-mail the professor whose class you will miss, unless the professor has another specific policy about absenteeism. If the illness is extended, contact the Associate Dean for Academic Affairs.

If you are struggling with physical or stress-related problems, please see someone immediately. Students can go to the Student Health Service center for a \$10-per-visit co-payment for in-office treatments (such as flu shots, cold treatments, etc.). Student Health Services is located in the basement of the Robert C. Byrd Health Sciences Center. For more information, see the "Health Services" subsection under the University Services section in this handbook, see the Student Health Service website (<http://well.wvu.edu/>), or call 304-293-9355.

If you are experiencing family or school stress, the Assistant Dean for Student Services and Engagement is always available to help you find the best solution.

The provisions of this Section A.9 are specifically subject to the University's policies regarding administration during the COVID-19 pandemic. Contact the Associate Dean for Academic Affairs if you have questions regarding the application of these policies.

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## A.10 STUDY OUTSIDE THE CLASSROOM

The College of Law prohibits a student from taking more than a total of twenty-six course hours in the following types of classes: externships, co-curricular activities (such as Law Review, Family Law Quarterly, Moot Court, Lugar Trial Association, and Jessup International Moot Court), independent study, courses in other graduate departments, summer study abroad programs, and distance education programs. If you attended the College of Law during the COVID-19 pandemic, special rules regarding distance education credits apply to you. If you are over 26 credits due to distance education programs during the Spring, Summer or Fall of 2020, the Spring, Summer, or Fall of 2021 or the Spring or Summer of 2022, please contact the Associate Dean for Academic Affairs.

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## A.11 DISTANCE EDUCATION

ABA Standard Definition (7) defines a distance education course as "a course...in which students are separated from the faculty member or each other for more than one-third of the instruction and the instruction involves the use of technology to support regular and substantive interaction among students and between the students and the faculty member, either synchronously or asynchronously."

By ABA rule, no student may take more than one-third of their credits during his/her law school career in classes taught through distance education unless the school has an approved "Distance Education J.D. Program. The College of Law does not have an approved Distance Education J.D. Program; therefore, no student may have more than one-third of their credits online. Students should also be aware that the New York Bar ruled in 2012 that it will not count asynchronous distance education hours toward the eighty-three law school credit hours students must earn to become members of the New York Bar. (Because WVU requires ninety-one hours for graduation, students who have taken a web course during law school can still become members of the New York bar because they have, in the eyes of the New York Bar, eight "surplus hours.") Students should check the bar requirements in states where they plan to practice to determine whether similar rules have been adopted there.

If you attended the College of Law during the COVID-19 pandemic, special rules regarding distance education credits apply to you. If over one-third of your credits are distance education classes during the Spring, Summer or Fall 2020, the Spring, Summer, or Fall 2021 or the Spring or Summer 2022, please contact the Associate Dean of Academic Affairs for clarification. Similarly, students should check with the bar requirements in states where they plan to practice to determine if any state laws were changed due to the COVID-19 pandemic.

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## A.12 CALCULATION OF CREDIT HOURS BY ABA RULE

The American Bar Association accredits U.S. law schools. A J.D. degree from an ABA-accredited law school entitles the recipient to take the bar examination in any state as long as the state's other individual requirements, such as character, are met. The College of Law has been fully accredited by the ABA since 1923. The ABA Standards for Approval of Law Schools are published annually and can be accessed at [www.abanet.org](http://www.abanet.org).

ABA Standard 310 provides that a "credit hour" is an amount of work that reasonably approximates: "(1) not less than one hour of classroom time or direct faculty instruction and two hours of out-of-class student work per week for fifteen weeks, or the equivalent amount of work over a different amount of time." Interpretation 310-1 states that "[f]or the purposes of this Standard, fifty minutes suffices for one hour of classroom or direct faculty instruction. An 'hour' for out-of-class students work is sixty minutes. The fifteen-week period may include one week for a final examination."

The following policy is in place to ensure that the College of Law meets the requirements of Standard 310:

(1) for classroom and simulation (including clinic and externship) courses, classes must meet for an amount of time at least equal to fifty minutes per week times fourteen weeks per credit, including, in many cases, an in-classroom final examination of three to four hours during the regularly scheduled finals period.

(a) Faculty in doctrinal courses are required to evaluate their syllabi to ensure that assigned reading and writing exercises required in preparation for class are a reasonable approximation of the out-of-class student work standard of two hours per week per credit hour. The Associate Dean for Academic Affairs will set a schedule that ensures enough class days and minutes to meet such requirements and collect course syllabi (consistent with existing policies).

(b) For out-of-class clinical work, students must work for at least three hours (based on a sixty-minute hour) each week times fourteen weeks per credit hour. Supervising faculty will ensure this amount of work is completed and are certifying successful completion of this work when submitting grades.

(c) For externship placements, students must work three and a half hours (based on sixty-minute hour) in the placement each week times fourteen weeks per credit. Supervising faculty will ensure this amount of work is completed and are certifying successful completion of this work when submitting grades.

(2) for co-curricular activities, students must work for at least three hours (based on a sixty-minute hour) each week times fourteen weeks per credit. The advisor of a co-curricular activity will certify the awarding credit by confirming that a student has met all minimal work-related expectations associated with the competition or journal needs (e.g., engaging in research, editing scholarship, writing a brief, preparing exhibits, prepping witnesses, participating in practice rounds, participating in the competition, etc.). Faculty advisors are aware they are certifying successful completion of this work when they approve credit.

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## A.13 TIME TO COMPLETE DEGREE; DEFICIENCIES AFTER THREE YEARS

Full-time students who are deficient in semester hours at the end of their third year of study must make up their deficiencies in regular law school courses. No credit is awarded for summer independent study or summer research. However, credit is awarded for summer school courses here or elsewhere or in the following fall semester. Independent study and research courses are offered only during the regular academic year, not during the summer.

Pursuant to ABA Standard 311(b), in all circumstances the J.D. degree must be "completed no earlier than 24 months and, except in extraordinary circumstances, no later than 84 months after a student has commenced law study...."

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## A.14 EMPLOYMENT DURING LAW SCHOOL

**First Year.** Full-time first-year law students at the College of Law take a fixed curriculum consisting of 32 hours of demanding course work, and they must master materials, modes of analysis, and skills that will be unfamiliar to nearly all entering students. Succeeding in the first year is critically important in preparing students for their upper-level classes, the bar exam, and their future careers. For these reasons, the College of Law strongly discourages full-time first-year students from working during the fall and spring semesters. Law school, especially in the first year, should be treated as a demanding full-time job, and adding work on top of that job is likely to prevent students from performing to their academic potential and may also compromise students' physical and mental health. Nevertheless, the College of Law recognizes that some students' financial needs may require them to seek employment even during the first year. Full-time first-year students who intend to work for more than ten hours per week must disclose their employment plans to the Assistant Dean for Student Life and must schedule a meeting with the Assistant Dean to discuss their plans for balancing school and work. This must be done before beginning work or as soon as possible thereafter. Students who plan to retain a part-time job begun prior to law school should speak with the Assistant Dean for Student Life no later than the end of the first week of classes.

**Second and Third Years.** Many upper-level students are able to successfully combine law school with moderate levels of paid employment. Historically, ABA rules prohibited students from working more than 20 hours per week, but this limitation was repealed effective for the fall semester of 2014. Although no longer a firm prohibition, the ABA's traditional limit of 20 hours per week remains a good guideline for the amount of work most students can manage in addition to the demands of law school. While the College of Law has no formal mechanism for monitoring or limiting hours of employment during the second and third years, students who contemplate working more than this should think seriously about whether their

contemplated schedule will jeopardize their studies and/or their general well-being. The Assistant Dean for Student Life and the Faculty are happy to counsel upper-level students who plan to work more than twenty hours per week.

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## A.15 FULL-TIME STATUS AND TUITION/FEES

The University treats nine hours per semester as full-time status for graduate and professional students. A student taking nine or more credit hours will be charged full tuition and fees for taking nine hours or more in a given semester. Students taking fewer than nine hours will receive a proportionate reduction of their tuition and fees. (e.g., students taking eight hours will be charged roughly 8/9 of their full-time tuition and fees.)

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## A.16 WVU GRADUATE AND POST-GRADUATE STUDENTS

Graduate and post-graduate students from other colleges, schools, and divisions within the university may enroll in College of Law courses with the permission of the Associate Dean for Academic Affairs; the appropriate officer of the college, school, or division within the University to which they are attached; and the faculty member teaching the course. The Associate Dean shall not permit a student to enroll in a course under this provision if the student (1) would have taken more than twenty-one credit hours under this provision upon completion of the course, or (2) has been excluded from the College of Law for any reason. The student's college, school, or university division will determine to what extent courses taken under this provision will be credited toward completion of the requirements for the student's graduate degree.

A student admitted to the College of Law after completing one or more courses under this provision (1) shall not receive any credit toward the J.D. degree for those previously completed courses, (2) must retake for credit, on a pass/fail basis, any course required for law school graduation that was previously taken, and (3) may not retake any elective course that was previously taken.

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## A.17 TRANSCRIPTS

Official transcripts can be obtained only by contacting the University Registrar's office. Information on requesting transcripts can be found on the University Registrar's website (<http://registrar.wvu.edu/transcripts/>). Please note that it generally takes three to five working days for the University Registrar to produce a transcript, so it is important to plan accordingly.

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# B. GRADING INFORMATION AND PROCEDURES

1. Examinations (p. 650)
2. Grades (p. 651)
3. College of Law Grading Policy (p. 651)
4. Passing Grades and Graduation Credit (p. 653)
5. Grades of Incomplete in Non-Examination Courses (p. 653)
6. Grade Changes (p. 654)
7. Grade Appeals (p. 654)

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## B.1 EXAMINATIONS

**Attendance and Exam Eligibility.** The College of Law subscribes believes that class attendance is important and necessary to the successful study of law. Each faculty member shall set the attendance rules for his or her class. A faculty member may deny permission to sit for an examination to a student because of poor class attendance. Furthermore, a student who is absent from twenty-five percent or more of the scheduled class hours for any given course shall not be permitted to take an examination in the course except by special permission of the faculty member. Prior to the last day to drop a course (as indicated on the College of Law Academic Calendar), a student who is denied permission to sit for an examination may withdraw from the course. After the last day to drop has passed, denial of permission to sit for the final examination automatically results in a grade of F for the course.

**No Exams During Final Week of Classes.** In-class final exams shall not be scheduled during the last week of classes. Take-home final exams shall not be released prior to start of finals weeks or due prior to finals weeks. Subjects to the provisions below for deferment of exams and the rules governing Incompletes, the due date for take-home exams, final projects, and seminar papers cannot be after the end of finals weeks.

**Exam Numbers.** The Office of the University Registrar randomly selects and assigns official student examination numbers for students' anonymity in the grading process. The Associate Dean for Academic Affairs notifies students when their numbers are available. Anonymity of student examination numbers are protected throughout the examination and grading period.

**Exam Accommodation Requests.** During the final examination period, any student who has three or more finals on consecutive days may request to move the third final to the next day (excluding the student's or instructor's observed Sabbath day or other religious holiday) on which he or she does not have a final scheduled. The purpose of this rule is to prevent a student from having more than two consecutive days of law school finals. To obtain relief

under this rule, a student must notify the Associate Dean for Academic Affairs before the specified deadline so that the exam can be rescheduled and the appropriate faculty member notified.

**Deferment of Exams or Assignment Deadlines.** A student with a substantial physical, emotional, or family problem that would make it impractical or grossly unfair to take a scheduled examination or meet another class-wide or general deadline may submit in advance a written request to be excused from taking the examination as scheduled or complying with the deadline as fixed. Students must make such requests in a writing directed to the faculty member teaching the course in question, and must substantiate such request by a physician's statement or some other written evidence of the emergency. A faculty member acting alone or in consultation with the Associate Dean for Academic Affairs shall either deny the request or grant the request and require the student to take the examination at a later date or comply with a new deadline. If the examination or new deadline extends beyond the grading deadline for a semester, the faculty member must comply with the new policy regarding Incompletes.

**When Request Is Denied or Extended Deferment Sought.** If any request for deferment (as described above) is denied, or if a student requests a deferment for reasons or to a time that would not comply with the above policy, the student may obtain the requested deferment only by approval of the Academic Standards Committee. Appeal from a denied request or an original request for an extended deferment may be made by giving the Associate Dean for Academic Affairs a copy of the request as described above together with any appropriate supporting documents.

**Completion of Examinations or Other Class-Wide Assignments.** A student granted a deferment has a reasonable time after the emergency has dissipated to complete the examination or other assignment. A reasonable time is established by agreement of the Associate Dean for Academic Affairs and the faculty member.

**Failure to Take Examination or Comply with Deadline.** A student who fails to take an examination or comply with a deadline and who does not receive a deferment under this rule shall be penalized in whatever fashion the faculty member teaching the course deems appropriate. There is no responsibility on the part of any faculty member to accept or evaluate any work that is not done in a timely fashion unless relief has been granted pursuant to this rule.

**Faculty Presence During Exams.** The faculty member must either (1) be present in the law school building during his or her classroom examination, or (2) find a substitute faculty member to oversee the exam and provide such substitute with contact information in the event an issue arises.

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## B.2 GRADES

**Grading Scale.** The College of Law grading scale is as follows:

Grade	Description
A+	4.3 quality points
A	4.0 quality points
A-	3.7 quality points
B+	3.3 quality points
B	3.0 quality points
B-	2.7 quality points
C+	2.3 quality points
C	2.0 quality points
C-	1.7 quality points
D+	1.3 quality points
D	1.0 quality points
F	0.0 quality points

**Semester Grade Point Average or Semester GPA.** Semester grade point average is the average of all grades earned by a student in a given semester. All semester grade point averages are calculated using the grading scale of the College of Law.

**Cumulative Grade Point Average (GPA or Cum.).** The cumulative grade point average is the average of all grades earned by a student while enrolled in the College of Law. All cumulative grade point averages are calculated using the College of Law's grading scale. Only grades earned at the College of Law affect the law school cumulative GPA. Grades for courses taken in other University colleges or at other law schools are not included in the student's cumulative law school GPA.

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## B.3 COLLEGE OF LAW GRADING POLICY

The College of Law Faculty adopted a grading policy on May 8, 2014, which was amended to added Section F on September 24, 2014. The Grading Policy is as follows:

### I. FIRST YEAR CURVE

### **A. Curve for First-Year Doctrinal Classes**

Mandatory Mean Grade: 2.95 to 3.05

Mandatory Distribution Requirements:

- 5 – 10% of the grades must be A (including A+, which should be rare)
- 5 – 15% of the grades must be A-
- 15 – 25% of the grades must be C+ or below

### **B. Curve for LRRW I and II**

Mandatory Mean Grade: 2.95 to 3.05

Expected Distribution Requirements:

- 5 – 10% of the grades should be A (including A+, which should be rare)
- 5 – 15% of the grades should be A-
- 15 – 25% of the grades should be C+ or below

### **C. Intro to Legal Research**

The 1-credit “Intro to Legal Research” course will not be subject to any curve.

## **II. UPPER CLASS CURVE**

### **A. Curve for Classes of 30 or more students**

(This curve does not apply to clinics, Trial Advocacy and other capstone courses, seminars, or graded study abroad classes. Section II.D below governs these classes.)

Mandatory Mean Grade: 3.15 to 3.25

Expected Distribution Requirements:

- 5 – 15% of the grades should be A (including A+, which should be rare)
- 10 – 15% of the grades should be A-
- 5 – 15% of the grades should be C+ or below

### **B. Curve for Classes of 11 to 29 students**

(This curve does not apply to clinics, Trial Advocacy and other capstone courses, seminars, or graded study abroad classes. Section II.D below governs these classes.)

Mandatory Mean Grade: 3.10 to 3.30

Expected Distribution Requirements:

- 5 – 20% of the grades should be A (including A+, which should be rare)
- 10 – 20% of the grades should be A-
- 5 – 20% of the grades should be C+ or below

### **C. Curve for Classes with 10 or Fewer Students**

(This curve does not apply to clinics, Trial Advocacy and other capstone courses, seminars, or graded study abroad classes. Section II.D below governs these classes.)

For classes this small, mean and distribution requirements are recommended rather than mandatory.

Recommended Mean Grade: 3.10 to 3.30

Recommended Distribution Requirements:

- 5 – 20% of the grades should be A (including A+, which should be rare)
- 10 – 20% of the grades should be A-
- 5 – 20% of the grades should be C+ or below

### **D. Curve for Clinics, Trial Advocacy and other Capstone Courses, Seminars, and Graded Study Abroad Classes**

(This curve governs the class types listed in the heading. If a class falling into one of these categories has 10 or fewer students, the mandatory mean grade range is recommended, but not required.)

#### **Classes with 11 or More Students**

Mandatory Mean Grade: 3.10 to 3.50

Expected Distribution Requirements:

- 5 – 20% of the grades should be A (including A+, which should be rare)
- 10 – 20% of the grades should be A-

#### **Classes with 10 or Fewer Students**

Recommended Mean Grade: 3.10 to 3.50

Recommended Distribution Requirements:

- 5 – 20% of the grades should be A (including A+, which should be rare)
- 10 – 20% of the grades should be A-

#### **E. Determination of Class Enrollment for Purposes of the Upper Class Curve**

As slightly different curves apply to upper level classes depending on enrollment, there needs to be a set day on which a class's official enrollment is determined for purposes of the grading policy. The official enrollment for a class will be the enrollment at midnight on the final day of classes for the term.

#### **F. LL.M. Students**

In classes with only LL.M. students, the relevant section of the Upper-Class Curve (II.A-D) will apply. For example, grading in an LL.M. seminar will be governed by Section II.D.

For upper-level classes containing both LL.M. students and J.D. students, each set of students will be treated as a separate cohort for purposes of the grading policy. J.D. class enrollment will be determined by the number of J.D. students in the class, and the relevant section of the upper-class curve will apply to the J.D. students considered as a group. LL.M. enrollment will be determined by the number of LL.M. students in the class, and the relevant section of the upper-class curve will apply to the LL.M. students considered as a group.

#### **Example 1**

Energy Law has an enrollment of 32 J.D. students and 12 LL.M. students. The grades for J.D. students must conform to Section II.A; the grades for LL.M. students must conform to section II.B.

#### **Example 2**

Energy Law has an enrollment of 25 J.D. students and 8 LL.M. students. The grades for J.D. students must conform to Section II.B; the grades for LL.M. students must conform to section II.C.

#### **G. Default F Grades: No Effect on Curve**

This policy is intended to apply only to grades that a professor has given as the result of assessed work in the course and not to "F" grades that have been given as a result of a failure of a student to complete the requirements of the course.

## **B.4 PASSING GRADES AND GRADUATION CREDIT**

To complete most courses satisfactorily and to earn credit toward graduation, a student must receive a grade of D or better. However, a student must receive a grade of C (2.0) or better to earn credit toward graduation in the following courses: Legal Reasoning, Research, and Writing; Appellate Advocacy; the required seminar; and Trial Advocacy as a capstone.

Students must earn a grade of C or better in at least one seminar to satisfy the seminar requirement for graduation. Students may choose to take more than one seminar. As long as the student has satisfied the seminar requirement with a C or better in at least one seminar, the student will receive graduation credit for additional seminars so long as the student attains a passing grade of D or better in the additional seminars.

Students who use Trial Advocacy to satisfy the capstone requirement must obtain at least a C to do so; students who take Trial Advocacy as an elective (*i.e.*, they have taken and passed another capstone course) need only a passing grade of D or better for the Trial Advocacy credits to count toward graduation.

## **B.5 GRADES OF "INCOMPLETE"**

### **Incomplete Grades**

A grade of I (Incomplete) is a temporary grade assignment used when unforeseen, non-academic circumstances arise that prohibits students from completing the last course assignments at the end of the semester. The grade of Incomplete is typically assigned because of an excused absence from assignments that are unavoidably incomplete, as determined by the instructor. Students who are failing a course (exclusive of the incomplete work) may not request an Incomplete.

Students who want to be considered for an Incomplete must apply to their instructor prior to the end of the term. If the instructor agrees, the instructor and the student must negotiate the conditions under which the grade of I will be changed to a letter grade and sign a contract. The date to submit incomplete work cannot be set beyond the last day of class of the following semester. If the student does not fulfill the contract then the instructor should submit a grade of F. The instructor must file the contract for Incomplete grades with the Associate Dean for Academic Affairs.

To remove the grade of I, a student does not register for the course again. If the Incomplete grade is not changed no later than the end of the next term (excluding summer), the I grade will be replaced with an F, which is worth 0 quality points.

### **Shortening Time Limit**

A faculty member who assigns an "Incomplete" to a student may shorten the completion deadline to an earlier date than the last day of class of the following semester, but may not extend the deadline beyond the limit.

### **Semester Awarded**

When the student completes the course requirements, the credits are assigned to that semester in which the student originally enrolled in the course.

### **Shortened Time Limit for Students on Probation**

Students who are on academic probation and who receive an "Incomplete" on work undertaken during the student's probationary term shall complete requirements for the course and procure the faculty member's removal of the "Incomplete" within eight weeks following the last examination date in the semester in which the student was registered for the course. Except for this reduced time limitation, all other provisions in the subsection and the "Deferment of Exams or Assignment Deadlines" subsection apply in the case of such a student on probation.

## **B.6 GRADE CHANGES**

**Administrative Changes.** If the Associate Dean for Academic Affairs determines that a computer, data entry, arithmetic error, or similar administrative error has resulted in the reporting of an incorrect grade, the Associate Dean may approve a correction and correct the error so that the student's grade is the one the professor intended to award for that student's work in the course, unless the student has already graduated from the College of Law. Class rank will not be modified to reflect current semester approved grade modifications processed after grades are released.

**Grade Reviews.** A student may request an informal grade review anytime during the thirty day period following the student's receipt of the grade. An instructor may not change a grade following the last day of classes in the semester following that in which a grade was awarded. If the instructor wishes to change the grade after the informal review, the instructor must submit the proposed grade change to the Associate Dean for Academic Affairs with stated reasons for the change. Grade changes due to administrative issues, as described above, may be approved by the Associate Dean. The Faculty must approve any grade change proposed due to changes in evaluation of the student's work.

If the Associate Dean (in the case of an administrative change) or the instructor (in the case of an informal grade review), refuses to change a grade pursuant to this section, then the student may proceed with a formal grade appeal as set forth in B.7, below.

## **B.7 GRADE APPEALS**

A student may initiate a formal grade appeal prior to the end of the seventh week of classes of the semester following the one in which the grade was awarded. Students who fail to begin the grade appeal process by requesting in writing the meeting with the instructor described in Step I below prior to the end of the seventh week of classes of the succeeding regular (*i.e.*, fall or spring) term have waived all rights to a grade appeal. (*E.g.*, a student appealing a grade from a fall class would need to request, in writing, a meeting with the instructor prior to the end of the seventh week of the spring semester in order to preserve his or her right to appeal a grade.)

**Step I.** The student shall discuss the complaint with the instructor involved prior to the end of the seventh week of classes of the regular (*i.e.*, fall or spring) semester following, whether the student is enrolled or not. If the two parties are unable to resolve the matter satisfactorily, if the instructor is not available to meet, or if the nature of the complaint makes discussion with the instructor inappropriate, the student shall file a written complaint with the Associate Dean for Academic Affairs. The Associate Dean shall assume the role of an informal facilitator and assist in resolution attempts. If the problem is not resolved within fifteen calendar days after the written complaint is first lodged with the Associate Dean, the student may proceed directly to Step II. To mount a successful appeal of a grade under Steps II or III below, a student must demonstrate that the instructor's actions in assigning that grade were arbitrary and capricious.

**Step II.** The student must prepare and sign a document that states the facts constituting the basis for the appeal within thirty calendar days from when the original complaint was lodged. Copies of this document shall be given to the instructor and to the Associate Dean. If, within fifteen calendar days of



receipt of the student's signed document, the Associate Dean does not resolve the problem to the satisfaction of the student, the student may forward the written complaint to the instructor's Dean and proceed to Step III.

**Step III.** Within fifteen calendar days of receipt of the written complaint by the Dean, the Dean shall make a determination regarding the grade, making any recommendations for a grade change to the instructor involved. If the instructor involved does not act on the Dean's recommendation, or if the student is in disagreement with the decision of the Dean, the Dean will refer the case to a representative committee appointed by the Dean for final resolution. This committee shall consist of three or more faculty members, including at least one university faculty member from outside of the College of Law.

1. Upon receiving an appeal, the committee will provide the grade challenge by written notification to the faculty member involved, which shall include a statement of the facts and evidence to be presented by the student.
2. The committee shall provide the faculty member involved and the student making the appeal written notification of the student's right to appear at a hearing to be held before the department, college, or school representative committee, together with notice of the date, time, and place of the hearing.
3. The administrative procedure is not adversarial in nature; the formal rules of evidence do not apply.
4. The final decision of this committee shall be forwarded to the instructor and to the Dean involved. If the decision requires a change of grade, the instructor shall take action in accordance with the committee's decision.
5. If the instructor does not act within five days, the Dean shall make any necessary grade adjustment.
6. In the case of grade appeals, the Dean functions as the President's designee; therefore, implementation of this decision shall end the appeal procedure.

For purposes of the deadlines set forth in this paragraph, the days counted shall not include the date that begins the period in question (e.g., if a written notice is received on May 1, the first day in the fifteen day period begins on May 2) and the deadline on that day shall be at the end of the full day (i.e., 11:59:59 p.m.) Students with questions about the grade appeal policy or procedure should consult the Assistant Registrar or Associate Dean for Academic Affairs.

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## C. ACADEMIC STANDING

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1. Academic Difficulty (p. 655)
  2. Academic Probation & Dismissal (p. 656)
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### C.1 ACADEMIC DIFFICULTY

1. **Good Academic Standing Defined.** The term Good Academic Standing is defined as follows:

- a. **For Students Starting Prior to Fall 2021.** For students who started prior to Fall 2021 and continued at the College of Law until graduation without interruption, a student shall be deemed to be in Good Academic Standing if (1) the student earns a GPA of at least 2.30 in the most recent academic semester in which the student was enrolled, (2) the student earns a cumulative GPA of at least 2.30 while in law school, and (3) is not otherwise on Academic Probation.
- b. **For Students Starting or Re-Admitted in or after Fall 2021.** For students who started in or after Fall 2021 (or who started prior to Fall 2021 but had an interruption in attendance prior to graduation), a student shall be deemed to be in Good Academic Standing if (1) the student earns a GPA of at least 2.50 in the most recent academic semester in which the student was enrolled, (2) the student earns a cumulative GPA of at least 2.50 while in law school, and (3) is not otherwise on Academic Probation.

2. **Academic Probation.** A student who fails to earn the GPA required for Good Academic Standing in the most recently enrolled academic semester or fails to earn the GPA required for Good Academic Standing cumulatively while in law school shall be placed on Academic Probation.

Once placed on Academic Probation, a student must successfully raise their semester and cumulative GPAs to at least the GPA required for Good Academic Standing in order to return to Good Academic Standing.

In addition, for students who are placed on Academic Probation effective for the Fall 2021 semester or later, the student must comply with the terms of their Academic Probation in order to return to Good Academic Standing.

The Director of Academic Excellence (the "Director") shall design the conditions of each student's Academic Probation and report to the Associate Dean for Academic Affairs regarding each student's performance while on probation. The Director shall assign the conditions of probation in the Director's discretion—in consultation with the student—and shall provide them to the student in writing. Such conditions may include, for example, requiring the student to:

- attend regular one-on-one meetings or small group sessions;
- report class attendance;

- create and adhere to a time management schedule;
- adhere to interim deadlines on class projects or assignments;
- complete supplemental homework and learning exercises, as assigned by the Director;
- apply for testing accommodations;
- seek mental health treatment or drug/alcohol counseling; and/or
- comply with the federal financial aid Satisfactory Academic Progress report requirements.

The Director in consultation with the Associate Dean of Academic Affairs shall determine compliance with the terms of a student's probation for these purposes.

**3. Repeating Courses.** Receiving an F in a course does not generally require retaking the course. The F simply is added to one's GPA, and no credit hours toward graduation are given. However, if a student receives a failing grade in a course required for graduation, the student must repeat that course and receive a passing grade. The passing grade will be factored into the student's overall GPA and will not replace the F the student received prior to retaking the course. If a student does not pass a required seminar or capstone course, that student may retake that seminar or capstone or take any other. When a course is repeated, both grades appear on the student's transcript, and both grades are calculated into the student's GPA, but credit toward the graduation requirement is awarded for only one enrollment.

**4. Receiving Credit for Less Than an Entire Course.** No credit is given for less than an entire course.

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## C.2 ACADEMIC PROBATION & DISMISSAL

**1. Notification.** The Associate Dean for Academic Affairs shall notify in writing any student who is not in Good Academic Standing. The notice sets forth the student's academic situation and advises the student of actions available to the student under this section. The Associate Dean shall send the notice as soon as possible after the student's academic standing is determined. Students who do not receive notice are nevertheless responsible for knowledge of their academic situation and for taking actions necessary under this section.

**2. Probation and Dismissal Rules.** For all rules regarding Academic Probation and dismissal, the relevant GPA figures are semester and cumulative law school GPAs. Law school GPA does not include grades earned in other WVU colleges or at other law schools. A student must comply with both the semester and cumulative GPA rules simultaneously. Except as specifically noted to the contrary, fulfilling one GPA requirement but not the other will not restore a student to or maintain the student in Good Academic Standing. The following are the Academic Probation and automatic dismissal rules:

**a. Cumulative GPA.** Any student whose cumulative GPA is below 2.0 (or 1.85 for students who started prior to Fall 2021 and continued at the College of Law until graduation without interruption) at any time after his or her second semester in law school is automatically dismissed. A student whose cumulative GPA falls above 2.0 (or 1.85, as applicable) but below the GPA required for Good Academic Standing any time after his or her first semester in law school is placed on Academic Probation. A student on Academic Probation has one semester in which to raise his or her cumulative GPA to the GPA required for Good Academic Standing. For these purposes, a "semester" is Fall or Spring; Summer Term 1 and/or 2, Winter Term and/or Maymester classes are not sufficient to bring a student's cumulative GPA into Good Academic Standing. Failure to meet this requirement will result in dismissal; provided, however, that a student shall not be dismissed at the end of the semester in which that student would otherwise graduate for having a semester GPA below the GPA required for Good Academic Standing if the student's cumulative GPA is otherwise at or above the GPA required for Good Academic Standing. Under no circumstances will a student be allowed to graduate unless his or her cumulative GPA is at or above the GPA required for Good Academic Standing.

**b. Semester GPA.**

**i. General Rule- Full Time Students.** Any student who fails to attain the GPA required for Good Academic Standing in any individual semester is placed on Academic Probation, regardless of his or her cumulative GPA. This rule shall apply only to students who complete at least *eleven semester* credit hours of work for which they receive a letter grade (i.e., A, B, etc., but not P). For purposes of this rule, Summer 1 and Summer 2 count as a single semester if eleven or more graded credits are taken over both summer terms. Accordingly, a student who took eleven or more graded hours across two summer sessions and whose GPA in those courses fell below the GPA required for Good Academic Standing would be placed on Academic Probation under this rule.

**ii. General Rule- Part-Time Students.** A student who earns a semester GPA lower than the GPA required for Good Academic Standing over fewer than eleven letter-graded credit hours per semester for two consecutive semesters is placed on Academic Probation, regardless of his or her cumulative GPA. For purposes of this rule, Summer 1 and Summer 2 count as a single semester. The Associate Dean for Academic Affairs shall provide a warning letter to students with a semester GPA lower than the GPA required for Good Academic Standing over fewer than eleven letter-graded credit hours for one semester.

**iii. Additional Next Semester Rule for Full and Part Time Students.** A student placed on Academic Probation under the General Rule (whether a Full Time or Part Time Student) will be dismissed for failure to meet academic requirements, regardless of his or her cumulative GPA, if he or she fails to attain the semester GPA required for Good Academic Standing better in the next regular (i.e., Fall or Spring) semester. This rule applies regardless of the number of graded credit hours taken in the probationary Fall or Spring semester, so students who choose to take a low number of graded credit hours do so at their own risk.



c. **Dismissal for Failing a Majority of Credit Hours.** A student who at any time after his or her second semester in law school receives failing grades in courses aggregating one-half or more of the student's credit hour load for a given semester is dismissed. For the purposes of this rule, it does not matter what the student's GPA is for the semester in question, nor does it matter what the student's cumulative GPA might be. However, this rule does not apply to students taking two or fewer courses in a semester.

d. **Special Rules for Part Time and Transfer Students.** A transfer student shall not graduate from the College of Law if his or her cumulative GPA of the grades that the student earned at the College of Law is less than the GPA required for Good Academic Standing. For purposes of these rules, a student shall be treated as having completed his or her first two semesters at the College of Law if either (1) he or she was given at least 22 transfer credits towards the College of Law's first year requirements, or (2) he or she has actually completed 22 credits of the required first year curriculum.

3. **Readmission.** If a student is dismissed under the provisions of Paragraph 2, then the student may seek readmission according to the procedures set forth in this paragraph.

a. **Special Rule - Readmission After Completion of the First Year with a Semester GPA under 2.00.** If a student has a cumulative GPA of less than 2.00 (or 1.85 for students who started prior to Fall 2021 and continued at the College of Law until graduation without interruption) at any time after his or her second semester in law school and is therefore automatically dismissed, that student may be readmitted to the College of Law only by making an initial application through the admissions process. This application is made in accordance with the regular admissions cycle, so most applicants will be required to wait a year before their application is processed. If readmitted, the applicant begins law school as if she or he were a first-year student.

b. **Readmission after the Second Semester.** Except as provided above in Paragraph 3a, students seeking readmission after dismissal should file a petition for readmission with the Chair of the Academic Standards Committee. The petition should demonstrate that the reasons for the student's academic deficiencies no longer exist. The Academic Standards Committee shall review each petition based upon this standard. The Academic Standards Committee will consider a student's participation in the Academic Excellence Program favorably in deciding on any petition for readmission following an academic dismissal. The Committee will view a student's failure to participate in the Academic Excellence Program, despite an invitation or direction to do so, as a strongly negative factor in deciding on a petition for readmission following an academic dismissal. The Committee may request further information from a petitioning student. The Academic Standards Committee may re-admit such student subject to any such conditions as it determines to be appropriate. If the Committee denies or places conditions upon the readmission, the student may appeal to the Dean, who may remand, affirm, or reverse the Committee's decision. The Dean has the discretion to seek the advice and counsel of the full Faculty.

c. **Timing of a Petition for Readmission.** A student may petition for readmission for the semester following one semester after the semester for which he or she is dismissed. For purposes of this rule, summer sessions shall not count as academic semesters. By way of example, a student dismissed after the end of the Fall semester has until the ninety calendar days after the receipt of the dismissal letter to petition to be readmitted for the following Fall semester. To petition for readmission, the student must deliver the petition to the Chair of the Academic Standards Committee no later than ninety calendar days after his or her receipt of notification of dismissal from the Associate Dean of Academic Affairs; however, if the 90th calendar day is a weekend or holiday, then the student must deliver the petition on the next business day. The Committee may delay acting on a petition until no later than the end of the semester in which the petition is received in order to obtain further information from the student.

4. **Permanent Dismissal.** The College of Law shall not readmit any student who has been dismissed twice under these rules for failure to meet academic requirements. In addition, students readmitted through petition to the Academic Standards Committee have two semesters within which to bring their cumulative GPA up to the GPA required for Good Academic Standing, as follows: (1) if the readmitted student fails to earn the GPA required for Good Academic Standing or better for the first semester following readmission, the student is permanently dismissed and is not eligible for readmission, and (2) if that semester's GPA is at or above the GPA required for Good Academic Standing but the cumulative GPA remains below the GPA required for Good Academic Standing, the student has one additional semester in which to bring the cumulative GPA up to the GPA required for Good Academic Standing. If, after that second semester following readmission by petition to the Academic Standards Committee, the student has not attained the cumulative GPA required for Good Academic Standing, the student is permanently dismissed and is not eligible for readmission.

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## D. HONORS

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1. Class Rank (p. 657)
  2. Order of the Coif (p. 658)
  3. Order of the Barristers (p. 658)
  4. Patrick Duffy Koontz Award (p. 658)
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### D.1 CLASS RANK

The following rules apply to class rank:

**Class Ranks.** Class ranks are calculated at the completion of each semester, except for 1L students, whose first ranking will not be established until the completion of their first year. Approved grade modifications for the current term following when grades are released will not result in an increase or decrease in a student's class rank. Credits earned outside of West Virginia University College of Law are excluded when calculating class rank.

**Top 50%.** At the completion of each semester, students in the top 50% of the class are individually informed of their class rank in Degree Works. Students outside the top 50% of the class are not ranked. These rankings are not publicly announced. Students who graduate in the top 25% of their class have their class ranks noted on their university transcripts.

**Grade Point Averages.** The grade point averages that demarcate the top 25%, 33%, and 50% are publicly announced at the end of each semester.

## D.2 ORDER OF THE COIF

Order of the Coif is an academic honor conferred by the Faculty upon its graduates from among the top 10% of the graduating class. Coif graduates have this honor noted on their university transcripts. To be eligible for election, students must complete all of their required courses (see above "Courses Required to Graduate") at the College of Law. A student may transfer up to nine credit hours of a law school's regular curriculum taken at an Association of American Law Schools (AALS) approved law school during that school's academic year, summer terms on campus, or summer abroad programs approved by the ABA. For purposes of Coif, the grade(s) earned for these hours will not be averaged into the student's GPA but shall be treated as pass/fail credit. The effect of this rule is that the grade point average used for selection to the Order of the Coif is based solely on the grades earned at the College of Law.

## D.3 ORDER OF BARRISTERS

A national honorary organization, the Order of Barristers, encourages oral advocacy and brief writing skills through effective law school moot court programs. Members of the Marlyn E. Lugar Trial Association, the Moot Court Board, and students who have outstanding oral advocacy achievements are eligible for the award. See the Associate Dean's assistant for applications in March.

## D.4 PATRICK DUFFY KOONTZ AWARD

The Patrick Duffy Koontz Award is a monetary prize whose recipients are selected by the College of Law scholarship committee. The award is announced at graduation and is given to students from West Virginia who demonstrate excellence in scholarship, character, and leadership potential.

## E. GRADUATION

1. Degree Works (p. 658)
2. Hours to Graduate (p. 659)
3. College of Law Graduation/Hooding Website (p. 659)

### E.1 DEGREE WORKS

Degree Works is an online check sheet (audit) for students to review and monitor progress toward degree completion. It organizes academic coursework into blocks of requirements to help easily identify courses completed and what courses you still need in order to complete the degree. To access Degree Works,

- Log on to your WVU Portal account using your MyID username and password.
- Click on the STAR tab.
- Scroll down to the 'Resources' heading and click the 'Degree Works' link.

The Degree Works audit provides a review of past, current, and planned coursework as well as information about completed and outstanding requirements. The audit is organized by 'blocks.' These blocks show what requirements are needed to graduate and show what is needed to do in order to fulfill the requirements within each block. The following 'blocks' may appear on the audit:

- Degree in Doctor of Jurisprudence: This block verifies that **all** requirements, including required courses, the minimum GPA requirement, and the ninety-one-hour credit requirement, have been met.
- Major in Law - J.D.: This block verifies that all required courses (*i.e.*, first-year courses, Appellate Advocacy, Professional Responsibility, seminar, perspective course, capstone requirement) have been completed and that any applicable grade requirements for those courses (*e.g.*, a grade of C or better in Appellate Advocacy) have been satisfied.
- Law Courses: This block is a summation of all law courses that are being used to meet the ninety-one-hour course requirement.

- Law Electives: This block shows the number of electives a student may have to complete in order to meet the 91 credit requirement. This number will vary for each student depending on the courses they choose to take for the Capstone, Seminar and Perspectives requirements.
- Non-Curricular Coursework- This block includes any law course designated under the "outside the classroom" rule to ensure that students do not exceed the 26 credit hour limit.
- AOE- This block verifies that all requirements for the four optional Areas of Emphasis are completed.
- Fallthrough: The Fallthrough block is a block for courses that are not being used to satisfy any other requirements in your audit (*i.e.*, ninety-one-hour requirement, first-year requirements).
- In-Progress: This block reflects all courses currently in-progress or registered for a future semester.
- Insufficient/Withdrawn/Repeated: This block shows courses that you have withdrawn from or failed, courses that were taken more than once (but were not repeatable for credit), and audited courses.

If you are a joint-degree student (J.D./M.B.A. or J.D./M.P.A.), your Degree Works audit will reflect only work completed in the J.D. program. Because Degree Works cannot be programmed to take into account the credit hours earned for work on the other half of your joint degree, it will not accurately reflect your progress toward your J.D. If you have questions about whether you are on track, please contact the Associate Dean for Academic Affairs. When you have completed your joint-degree program, an annotation will appear on your transcript recording the credit hours you received for completing your joint degree program.

If you believe there is an error in your Degree Works audit, please contact the Office of the University Registrar and/or the Associate Dean for Academic Affairs. For additional information on Degree Works, please visit the website (<http://registrar.wvu.edu/dw/>) of the University Registrar.

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## E.2 HOURS TO GRADUATE

Every student must satisfactorily complete (see the "Passing Grades and Graduation Credit" subsection) ninety-one credit hours and must be in good academic standing to graduate. Except in circumstances described in the section "Earning Law School Credit Outside the Law School," all these credits must be earned at the College of Law. In any event, only College of Law courses will count as part of the student's grade point average. All students must have a cumulative grade point average of 2.30 or above (for students admitted as of Fall 2015) or 2.50 or above (for students admitted as of Fall 2021) in order to graduate from the College of Law.

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## E.3 COLLEGE OF LAW GRADUATION/HOODING WEBSITE

The Graduation/Hooding website for the College of Law goes live each year in the spring. This contains all forms and information for College of Law graduates.

# Externships & Pro-Bono

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## EXTERNSHIPS/PRO-BONO

1. Externship Program Guidelines (p. 659)
2. Pro-Bono (p. 662)

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## 1. EXTERNSHIP PROGRAM GUIDELINES

### I. GOALS & OVERVIEW

The Externship Program is designed to provide students with an opportunity to gain practical legal experience as part of their legal education. Two general types of externships are available at the College of Law: Public Service Externships (part-time) and Federal Judicial/Federal Agency Externships (full-time). The overarching goals of the Externship program are consistent with and are designed to serve the goals articulated in the mission statement of the College of Law: "Preparing 21st century lawyers and leaders to serve the public, [and] government, . . . —both locally and globally—while focusing on justice, ethics, professionalism, and service in a diverse, vibrant and respectful community."

To that end, the Externship Program offers the opportunity to incorporate practice experience with discussion, critical thinking, reflection, and analysis. The purpose of the program is to help students in the following ways:

1. to develop the art of lawyering, including research, writing, analysis, interviewing, and communication of facts and information;
2. to identify professional goals and reflect on individual professional development;
3. to develop sensitivity to issues of professional responsibility, ethical problem solving, sensitivity to issues of lawyer well-being, stress management and resilience, and the role of the lawyer in providing access to justice in society; and

4. to develop awareness of meaningful career opportunities in public interest and governmental settings and to establish relationships in chosen fields of law.

## II. POLICIES & REQUIREMENTS

The Public Service and Federal Judicial/Federal Agency Externships require students to perform substantive legal work to receive academic credit. All externships must be unpaid. Additionally, student externs must be supervised at their placement by a lawyer actively licensed to practice law in the state where the externship is housed. In addition to supervision at their placement, students are also supervised by a faculty member and are required to enroll in a one-hour graded course component. The course component includes class meetings, time-keeping assignments, reflective journals, and other assignments to further the experiential learning. The policies and requirements outlined below are designed to ensure a high-quality experience for students as they work toward their educational goals during their externship.

For academic planning purposes, **only one externship can be counted toward your total graduation requirement.** Further, students may receive no more than 26 total "out of classroom" credits toward graduation. This includes an externship, moot court, law review, independent study, and foreign study. This credit maximum does not include credits earned in the law school clinic. (More complete information is available in the Student Handbook.)

Students interested in any externship opportunity should meet with Prof. Jessica Haught and/or the Director of the Center for Law and Public Service to discuss the available placement options and eligibility requirements outlined below.

### A. Externship Placements

Two general types of placements are available for students. First, students can pursue part-time externship opportunities in various Public Service Externships during the summer, fall, or spring terms. Second, students can pursue full-time externship opportunities in either a Federal Judicial, Federal Agency, or West Virginia Supreme Court of Appeals Externship during the fall or spring terms. A brief summary of the placement options is outlined below.

**Part-time Public Service Externships** may be performed with government offices or agencies, the judiciary, legal aid offices, or other non-profit or public interest organizations performing legal work. Examples of approved part-time Public Service Externships have included placements with public defenders, prosecutors, judges, legal aid offices, general counsel of universities, general counsel of non-profit hospitals, state agencies, legislatures, and other non-profit or public service organizations.

**Full-time Federal Judicial Externships** may be performed with any federal judge.

**Full-time Federal Agency Externships** may be performed at any approved federal agency. A full-time judicial externship may also be performed with the West Virginia Supreme Court of Appeals. Past full-time federal agency sites have included the National Labor Relations Board, the Securities and Exchange Commission, and the Mine Safety Administration. Please see Prof. Jessica Haught or the Director of the Center for Law and Public Service for a list of approved placements.

If there is another externship opportunity that a student wants to pursue that is not on the list of approved sites, then the student should contact Prof. Jessica Haught or the Director of the Center for Law and Public Service for approval first, then apply to the office or organization. If students have questions about placements or need advice about finding a site that best fits with their educational goals, then they should contact Prof. Jessica Haught or the Director of the Center for Law and Public Service at (304) 293-8555.

The Externship Program does not include work in the private sector, and no externships in private sector settings will be approved. All placements must be approved by Prof. Jessica Haught or the Director of the Center for Law and Public Service.

### B. Field Placement Work and Credit Requirements

Work performed at the field placement for academic credit **must** be unpaid. Students must have adequate supervision, guidance, and training by a dedicated field supervisor at the site. The field supervisor **must** be a lawyer. Students may choose from three different externship types:

1. **Full-time Federal Agency Externship during the fall or spring semesters.** Externs must work full time (as defined by the site) over the course of the semester to earn 13 credits. Of those 13 credits, 3 are graded and 10 are pass/fail. The graded portion of the course is earned through enrollment in the full-time agency externship course. The pass/fail credits are earned through completing work assignments at the externship site. To qualify for this externship, students must have completed at least one year of law school, submit a letter of recommendation from a law school faculty member recommending the student for the externship, and be in the top 40% of their law school class (3Ls), or top 25% (2Ls).
2. **Full-time Federal Judicial Externship or West Virginia Supreme Court of Appeals Externship during the fall or spring semesters.** Full-time judicial externs also earn 13 credits over the course of the semester. Of those 13 credits, 3 are graded and 10 are pass/fail. The graded portion of the course is earned through enrollment in the full-time judicial externship course. The pass/fail credits are earned through completing work assignments at the judicial externship site. To qualify for this externship, students must have completed at least one year of law school, submit a letter of recommendation from a law school faculty member recommending the student for the externship, and be in the top 25% of their law school class (2Ls) or top 40% (3Ls).
3. **Part-time Public Service Externship during the summer, fall, or spring terms.** Part-time Public Service Externship opportunities are available with a federal agency or a state agency, federal or state judiciary, legal services office, or other non-profit organization. Students may earn a minimum of 3 to a maximum of 6 credits. Of those, 1 is graded and the rest are pass/fail. Students can choose to earn a variable number of pass/fail credits -- between two (2) and five (5) site placement/field work credits during the summer session or during a fall or spring semester. Students will

receive one (1) academic credit for every fifty (50) hours of placement work performed during the chosen academic term. Students are advised to consult with the field placement supervisor to create a suitable work schedule. To be eligible, students must have completed one year of law school and be in good academic standing. Sites may require a higher standard, however.

Placement/Field Work Credits	Total Hours of Work Required	Approx. Hours of Work Per Week	Total Credit Including Course Component
2	100	7	3
3	150	11	4
4	200	14	5
5	250	18	6

### C. Externship Class Requirements

Students who are selected for a full-time Federal Agency externship will enroll in Law 655 (the graded course) and in Law 656 for the field-work portion of the externship. Students who are selected for the full-time Federal Judicial or West Virginia Supreme Court of Appeals externship will enroll in Law 780 (the graded portion of the course) and in Law 780A for the field work portion of the course. Students who enroll in the part-time Public Service Externship course will register for Law 653, which is the one-hour graded course, and Law 654 for the variable number of placement/field work credits.

The externship courses will meet periodically on campus during the semester and, depending on the placement site, other course meetings will be arranged online or through distance-learning technology. During the field placement for each of the externship courses, students will be required to submit the following assignments to successfully complete the course requirements:

- reflective essays or journals related to field work;
- a class presentation on a topic that draws upon the externship experience;
- discussion topics to facilitate student communication and foster experiential learning;
- time sheets documenting hours and work performed;
- supervisor evaluations (including a mid-semester and final evaluation); and
- full-time federal judicial and federal agency externs must write a substantive law-review style paper based upon an issue related to the externship placement and field work.

These assignments are designed to enhance the students' field experiences and are more fully described in the course syllabi.

## III. STEPS FOR REGISTRATION AND ENROLLMENT

### A. Registration

Students must attend the externship information/registration session when announced. If students cannot attend this meeting, they must set up an individual meeting with Prof. Jessica Haught or the Director of the Center for Law and Public Service. Students interested in the Externship Program must submit a resume, unofficial transcript, cover letter, letter of recommendation (for full-time Federal Judicial or Federal Agency Externships), and a letter stating the name and contact information for the placement (or potential placement if awaiting confirmation.) Please submit a hard copy of these materials to the Director of the Center for Law and Public Service before the deadline announced each semester.

Upon approval, students will register for the appropriate externship course.

### B. Receiving credit

Students will submit weekly timesheets, attend any scheduled class meetings or participate in on-line discussions, and complete all course assignments.

Students must submit the signed Externship Supervisor Agreement available on the class eCampus site.

Students must complete all field placement work in a competent and professional manner in accordance with the relevant Rules of Professional Conduct.

Students must submit a Final Evaluation from their supervisors (unless you are working with the Federal Judiciary).

## IV. FIELD PLACEMENT SUPERVISION

Field placements are asked to identify one person, who must be a lawyer, who will be the student's primary supervisor and contact person for the externship. The field supervisor at the chosen placement must agree to support the student's educational goals. While a student will often perform assignments for multiple lawyers at an organization, the externship requires that one person is designated as the field supervisor and mentor for the student. The supervisor and student should meet at least once per week to review assignments and discuss questions. The supervisor will complete a midterm and final letter of evaluation to be submitted by the end of the semester.

Students are asked to coordinate with their field placement supervisors to complete the following tasks:

- meet with the field placement supervisor at the beginning of the placement to discuss the student's learning goals during the placement;
- meet with the supervisor weekly to review and evaluate assignments, overall performance, and general issues; and
- set up a final evaluation exit meeting to obtain a final evaluation form from the field supervisor and submit it to the Teaching Professor for the course.

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## 2. PRO-BONO

Student Services and Engagement promotes public service opportunities for law students, including opportunities for pro bono work. The term "pro bono" means "for the public good." In the legal profession, pro bono work refers to work that is performed voluntarily and free of charge. Pro bono service is the responsibility of all members of the legal profession. WVU's pro bono program allows law students to begin pro bono service now and encourages students to develop a lifelong commitment to pro bono work.

The WVU College of Law pro bono program partners with legal services organizations and community agencies to provide opportunities for law students to serve those in need. Pro bono projects will be designed to aid individuals or families of limited means; charitable, community and governmental organizations who provide assistance to those of limited means; and activities for improving the law, the legal system, or the legal profession. Pro bono work may not be for credit and will not include work done for a clinic or externship. All pro bono work must be approved by the Assistant Dean for Student Services and Engagement. If a student documents 25 or more approved pro bono hours during his/her law school career, he/she will be recognized with "pro bono" honors at graduation.

For more information about pro bono opportunities and guidelines, see the Pro Bono guidelines. If you have questions about or suggestions for a pro bono project, please see the Assistant Dean for Student Services and Engagement.

# Professional Responsibility and Bar Admission

## A. PROFESSIONAL RESPONSIBILITY

1. About the Student Code of Professional Responsibility
2. Dismissal for Misconduct
3. Academic Rights and Responsibilities (WVU)

## B. WVU COLLEGE OF LAW STUDENT CODE OF PROFESSIONAL RESPONSIBILITY

1. The Ethics Council
2. Academic Responsibility and Duties
3. Adjudicatory Procedures
4. Faculty Review
5. Sanctions
6. Appeal
7. Complaints Against Graduating Students
8. Miscellaneous Procedures
9. Amendment or Repeal Procedure
10. Adoption Procedure

## C. BAR ADMISSION

1. Admission to Practice
2. The Bar Exam
3. Action Checklists for Law Students
4. Bar Preparation Courses

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## A. PROFESSIONAL RESPONSIBILITY

1. About the Student Code of Professional Responsibility (p. 663)
  2. Dismissal for Misconduct (p. 663)
  3. Academic Rights and Responsibilities (WVU) (p. 663)
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## A.1 ABOUT THE STUDENT CODE OF PROFESSIONAL RESPONSIBILITY

The students and faculty of the College of Law have adopted a Code of Professional Responsibility to prevent and punish academic misconduct by students in the College. A copy of that Code is included in this Student Handbook and is binding on all students. Enforcement of the Code rests principally in the hands of the student body with oversight by the faculty and the designee of the President of the University. Infractions are investigated and adjudicated by the Student Ethics Council.

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## A.2 DISMISSAL FOR MISCONDUCT

In view of its public and professional responsibilities with respect to admission of candidates to the practice of law, the West Virginia University College of Law reserves the right to drop any student from the rolls whenever, by formal decision reduced to writing, the faculty finds that the student is unfit to meet the qualifications and responsibilities of the legal profession. Dismissal is considered whenever a student is involved in serious criminal conduct or conduct that would justify professional disciplinary action if the person were a lawyer. Students remain subject to all general rules and regulations of the University and the West Virginia Board of Governors and to the Student Code of Professional Responsibility.

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## A.3 ACADEMIC RIGHTS AND RESPONSIBILITIES (WVU)

The Office of Student Conduct, located in Boreman North, is staffed by a member of the Office of Student Life and is available to assist any student, student organization, staff member, faculty member, or administrator in understanding and applying the West Virginia University Campus Student Code (<http://studentconduct.wvu.edu/>). Should you have any questions or concerns, please contact LiDell Evans or the Office of Student Conduct at 304-293-8111. In case of conflicts, the Law Student Code of Professional Responsibility controls.

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## B. WVU COLLEGE OF LAW STUDENT CODE OF PROFESSIONAL RESPONSIBILITY

1. The Ethics Council (p. 663)
2. Academic Responsibility and Duties (p. 664)
3. Adjudicatory Procedures (p. 665)
4. Faculty Review (p. 667)
5. Sanctions (p. 668)
6. Appeal (p. 668)
7. Complaints Against Graduating Students (p. 668)
8. Miscellaneous Procedures (p. 668)
9. Amendment or Repeal Procedure (p. 668)
10. Adoption Procedure (p. 669)

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**Preamble.** The cornerstone of our legal system is the integrity of the individual lawyer. As future lawyers, our conduct is governed by the highest standards of ethics. As students enrolled in the West Virginia University College of Law, we recognize and accept the following standards, obligations, and responsibilities as governing our actions and conduct. This Student Code of Professional Responsibility (the "Student Code") is intended to supplant Article III, B.1., governing acts of academic dishonesty, of the West Virginia University Student Conduct Code for students enrolled in the College of Law.

## THE ETHICS COUNCIL

### A. COMPOSITION

1. There is hereby created an Ethics Council composed of three members from each class.
2. The members of the Council shall be elected at the end of the spring semester in conjunction with the election of class officers. Any student, full or part time, who is in good academic standing, shall be eligible to run for a seat on the Ethics Council. An elected member of the Ethics Council must relinquish the office if he/she fails to remain a student in good academic standing. First-year members shall be elected in the fall of their entering year. Such elections shall be conducted by the Student Bar Association. The terms of office for the members of the Ethics Council shall run from their election to the election of their successors, with the following qualifications:
  - a) The terms of graduating members shall expire on graduation;
  - b) The terms of members who are in the process of hearing a case when their successors are elected shall be extended to allow the members to complete the proceeding;
  - c) The elected representatives of the second- year class to the Ethics Council not reelected in the spring election and, if necessary, the elected representatives of the first year class not re-elected in the spring election, shall continue to serve until the election of the first- year

class members of the Ethics Council. Upon the election of the first-year representatives to the Ethics Council, the holdover members' term shall end.

3. A vacancy on the Ethics Council shall be filled by appointment by the remaining members of the Ethics Council. The individual selected to fill the vacancy shall be a member of the class in which the vacancy occurs. The appointee shall serve for the remainder of the unexpired term.
4. The Chairperson shall be elected from among the third-year class representatives to the Ethics Council within two weeks of the election of the first-year class representative. From the time of the election of the representatives of the Ethics Council in the spring semester until the selection of the Chairperson after the first-year election in the fall semester, the rising third-year student to receive the greatest number of votes in the most recent election shall serve as Chairperson.

## **B. INVESTIGATIVE PANEL AND HEARING PANEL**

1. Composition: Following the elections in the spring semester, after the election of the Chairperson in the fall semester and at the beginning of the second semester, the Chairperson shall appoint from the members of the Ethics Council an Investigative Panel of three persons, no more than two of whom shall be from the same class in law school. The Chairperson of the Ethics Council shall designate one member of the Investigative Panel to serve as its Chairperson.
2. Duties: The Investigative Panel shall investigate and collect evidence and information concerning any complaints involving an alleged violation of this Student Code. Upon completion of the investigation, the Investigative Panel shall take action as set forth in Section III (A)(1).
3. Hearing Panel: The remaining members of the Ethics Council will serve as the Hearing Panel for the purpose set forth in Section III (C).

## **C. QUORUM AND MARGIN OF DECISION:**

1. Two members shall constitute a quorum for the Investigative Panel, and the decision to charge a violation of the Student Code must be concurred upon by two members of the Investigative Panel.
2. Four members shall constitute a quorum of the Ethics Council Hearing Panel, and the vote of sixty percent of those in attendance shall be necessary to find a violation of the Student Code. For all other purposes, a simple majority shall decide issues which may arise, including votes on recommended sanctions.

## **D. DUTIES OF THE ETHICS COUNCIL:**

1. The Ethics Council shall promulgate, consistent with the provisions of this Student Code, such rules and regulations and prescribe such procedures as shall be necessary and proper to fairly and impartially fulfill its obligations under this Student Code. Upon the approval of the faculty, the rules and regulations shall become final unless subsequently amended as provided for in this paragraph.
2. Before each examination period, the Ethics Council shall take appropriate action to remind the student body of its obligation and responsibilities under the Student Code.
3. At the beginning of each school year, the Ethics Council will make a presentation on the Student Code as part of the orientation of incoming students.
4. The Ethics Council shall be responsible for the investigation and adjudication of alleged violations of this Student Code as set forth herein.

# **ACADEMIC RESPONSIBILITY AND DUTIES**

## **A. ACADEMIC RESPONSIBILITY**

The West Virginia University College of Law expects every member of its academic community to share the historic and traditional commitment to honesty, integrity, and the search for truth. In keeping with this spirit, it shall be a violation of this Student Code for any student or applicant for admission to commit any act of academic dishonesty, which is defined to include, but is not limited to, the following:

1. Plagiarism: Plagiarism is defined in terms of proscribed acts: Students are expected to understand that such practices constitute academic dishonesty regardless of motive. Those who deny deceitful intent, claim not to have known that the act constituted plagiarism, or maintain that what they did was inadvertent are nevertheless subject to penalties when plagiarism has been confirmed. Plagiarism includes, but is not limited to, the following:
  - a. Submitting as one's own work the product of someone else's research, writing, artistic conception, invention, or design; that is, submitting as one's own work any report, notebook, speech, outline, theme, thesis, dissertation, commercially prepared paper, musical piece or other written, visual, oral or electronic/computerized material that has been copied in whole or in part from the work of others whether such source is published or unpublished;
  - b. Incorporating in one's submission, without appropriate acknowledgment and attribution, portions of the work of others; that is, failing to use the conventional marks and symbols to acknowledge the use of verbatim and near-verbatim passages of someone else's work or failing to name the source of words, pictures, graphs, etc., other than one's own, that are incorporated into any work submitted as one's own.



- c. A student has a duty to report any other student(s) that he/she sees violating this rule against plagiarism in any way.

Every professor is allowed to establish a collaboration policy for his/her own course. Please refer to the course syllabus to learn what is permissible. However, one should always assume that collaboration is not permitted, unless the syllabus or professor specifically allows it.

2. Cheating and dishonest practice in connection with examinations, papers and projects, including but not limited to:

- a. Obtaining help from another student during examinations;
- b. Knowingly giving help to another student during examinations, taking an examination or doing academic work for another student, or providing one's own work for another student to copy and submit as his/her own;
- c. The unauthorized use of notes, books, or other sources of information during examinations;
- d. Obtaining without authorization an examination or any part thereof;
- e. Obtaining without authorization any help from another student.
- f. Forgery, misrepresentation, or fraud: Forging or altering, or causing to be altered, the record of any grade in a grade book or other educational record; Use of university documents or instruments of identification with intent to defraud; Presenting false data or intentionally misrepresenting one's records for admission, registration, or withdrawal from the university or from a university course; Knowingly presenting false data or intentionally misrepresenting one's records for personal gain; Knowingly furnishing the results of research projects or experiments for the inclusion in another's work without proper citation; Knowingly furnishing false statements in any university academic proceeding. It is a violation of the Code for any student who witnesses a Student Code violation or who has credible information that a violation was committed to fail to report the violation to the Ethics Council, a faculty member, or a dean.

It is a violation of the Student Code for any student or applicant for admission at anytime to intentionally lie, give false information, make material misrepresentations, or omit material facts to the faculty, administration, or any student organization in the course of the academic, extracurricular, co-curricular, admissions, or placement programs of the College of Law. It is a violation of the Student Code for an officer or member of a student organization to (a) discourage observing members from reporting questionable conduct to the Ethics Council, or (b) sanction an organization member for reporting possible violations of the Student Code to the Ethics Council.

It is a violation of the Student Code for any student to refuse to cooperate with the Ethics Council in its conduct of an investigation or hearing.

## B. DUTIES

1. Faculty members have a responsibility to support and enforce the Student Code and should report suspected violations to the Ethics Council.
2. If a faculty member reduces a student's grade because of a suspected violation of the Student Code, the faculty member must give the student written notice of the fact and size of the penalty. If the faculty member learns of the suspected violation after grades were submitted, the faculty member may reduce the student's grade upon notice to the student and without faculty approval.
3. If the student elects not to contest the grade reduction, that reduction shall become final and no further action, pursuant to this Code, shall be taken. If the student whose grade has been reduced because of a suspected violation elects to contest the grade, he or she may do so by invoking the procedures described in Part III, below. The faculty member's notice to the student shall then serve as a complaint to the Ethics Council, and the Council shall process the charge as it would any other. Both the Ethics Council and, if review is sought, the faculty, retain the discretion to overrule, decrease, or increase the penalty imposed by the faculty member and to assess any other sanction in addition to or instead of the original penalty. In all cases in which a student challenged a grade that was reduced because of a suspected violation of the Student Code, the procedures in Part III shall supersede the normal grade appeal procedures as to all issues relating to academic dishonesty.

## III. ADJUDICATORY PROCEDURES

### A. COMPLAINT

1. Initial Inquiry: Upon receipt of a complaint alleging a violation of the provisions of this Student Code, the Chairperson of the Investigative Panel of the Ethics Council will convene a meeting of the Investigative Panel. The Investigative Panel will convene within seven calendar days from receipt of the complaint when classes are in regular session; or within four days after classes resume if the complaint is received during a period in which classes are not scheduled to meet including examination periods. It shall be the duty of the Investigative Panel to conduct such investigations as necessary, being as discrete as possible, into the allegations. When the initial inquiry is completed, the Investigative Panel shall either (1) close the case by recording its findings of fact and conclusion that no violation occurred and providing the charged student(s) with a copy (with the name of any complaining student deleted); or (2) upon a finding concurred in by two or more of its members that there is reason to believe a violation of the Student Code exists, institute a formal investigation of the charges.
2. Formal Investigation: If the Investigative Panel determines there is reason to believe a violation of the Student Code has occurred, it shall select one or more of its members or some other student enrolled within the College of Law to serve as Presenter of the alleged violation. In deciding who should serve as Presenter, the Investigative Panel shall consider:

- a) The student's ability to perform the duties of Presenter with discretion and without prejudice;
- b) Whether personal relations with the accused or known witnesses would inhibit or unduly influence the performance of his or her duties;
- c) Whether the reported violation occurred during a course of activity in which he or she has an interest; and
- d) any other conflict.

3. When the Investigative Panel reports to the Hearing Panel that probable cause for a violation exists, the Ethics Council Hearing Panel will contact the accused in writing and inform him or her:

- a) of the alleged violation and course of conduct to be investigated as a violation of the Student Code; and
- b) that he or she is entitled to be assisted by an advisor of his or her choice, provided, however, the advisor may not be a member of the College of Law faculty. The advisor may fully represent the student in all capacities as the accused finds necessary.

## B. PROCEDURE

1. Within twenty regularly scheduled class meeting days after his or her appointment, the Presenter will complete the investigation of the charges and will prepare a written account of the relevant facts.
2. Upon completion of the investigation, the Presenter will meet with the Ethics Council Investigative Panel and present a detailed summary of the result of the investigation. If it is reaffirmed that probable cause for a violation exists, the Investigative Panel shall advise the Chairperson of the Ethics Council Hearing Panel of the formal charges and request a date for a hearing. At least twenty regularly scheduled class days before the hearing date, the Chairperson of the Hearing Panel will notify the accused, in writing:
  - a) of the date, time, and place of the hearing;
  - b) of the specific charges and course of conduct alleged to constitute a violation of the Student Code; and
  - c) that he or she is entitled to the assistance of an advisor of his or her choice provided, however, the advisor is not a member of the College of Law faculty. The advisor may fully represent the student in all capacities as the accused finds necessary or appropriate.
3. If upon hearing the report of the Presenter, the Ethics Council Investigative Panel concludes probable cause for a violation does not exist, it shall dismiss the charges.
4. If the matter is dismissed, the Ethics Council Investigative Panel will notify the accused, in writing, of the final disposition of the complaint. Once a matter is finally disposed of at this stage, it shall not be re-opened by the Ethics Council, but the decision to dismiss may be appealed to the faculty pursuant to III(C)(6).
5. Should a violation occur at the end of a semester, the Ethics Council shall delay the proceedings until the next semester unless the accused makes a written request to expedite the matter and the Ethics Council concludes that the matter may be fairly adjudicated. The accused's ability to prepare and present his or her defense shall be a persuasive factor. If the violation involves a "graduating senior," see sections V and VII.
6. Upon a showing of good cause, the time periods set forth in this section may be altered by the Ethics Council Hearing Panel.

## C. HEARING

1. The Chairperson will preside over the hearing which may be attended by all members of the Ethics Council, the accused, the accused's advisor, and testifying witnesses. Members of the Hearing Panel shall have the duty to disqualify themselves from the Hearing Panel if they believe that they cannot reach an impartial decision, if there is a conflict of interest, or if he or she has a personal involvement in the matter. Once a member has disqualified him or herself, he or she shall not participate any further in the proceedings against the accused. In addition, the student accused of a violation of the Student Code shall have the right to challenge a member of the Hearing Panel for good cause shown. Upon such a challenge, the remaining unchallenged members of the Hearing Panel shall decide the merits of the challenge. Except for witnesses, who shall be sequestered, the hearing will be open to the public unless the accused requests a closed hearing. A request for a closed hearing must be made in writing to the Chairperson at least forty-eight hours before the scheduled time of the hearing. It shall be within the discretion of the Hearing Panel to grant the accused's request for a closed hearing.
2. At the hearing, it will be the duty of the Presenter to seek the truth. The accused may rebut any testimony presented and present his or her defense or proof of such mitigating circumstances as the accused deems necessary or appropriate, or both.
3. The hearing will be conducted under the following rules of procedure:
  - a) the Ethics Council Hearing Panel may admit and give probative effect to evidence, including hearsay which possesses probative value. It may exclude incompetent, irrelevant, immaterial, and unduly repetitious evidence;
  - b) documentary evidence may be received in the form of copies, excerpts, or incorporated by reference;

c) the accused and the Presenter will have the right on every issue:

- i) to call witnesses and present evidence;
- ii) to cross-examine all witnesses called to present evidence at the hearing;
- iii) to examine and rebut all documents;
- iv) to submit rebuttal evidence; and
- v) to present summation and argument.

d) The Hearing Panel shall decide the issue of guilt solely upon the evidence presented at the hearing. The burden of proof required to sustain any violation of the Student Code lies with the Presenter. The standard of proof is by a preponderance of the evidence.

4. At the conclusion of the hearing, the Ethics Council Hearing Panel will resolve the issue of guilt of the accused.

a) Within two regularly scheduled class days, but in no event more than seven days, of the conclusion of the hearing, the Ethics Council Hearing Panel will inform the accused, in writing, of its decision, and if guilty, the sanctions it will recommend.

b) If the accused is found to be not guilty, the Ethics Council shall set forth its findings in writing and dismiss the charges with prejudice and any and all records except the academic records, examination, or seminar papers of the College of Law, will be sealed and, after the expiration of any appeal time, may be destroyed with the written consent of all parties. A decision of not guilty may be appealed to the faculty by the Presenter or by the faculty member whose course is involved, if any, or the advisor of the co-curricular or extracurricular activity, if one is involved.

c) If the accused is found guilty of a violation of the Student Code, the Ethics Council Hearing Panel will prepare a complete report of findings of fact, together with a recommendation of sanction, and submit the report, in writing, to the Associate Dean for Academic Affairs (hereinafter the Associate Dean) for faculty action. Notice of such submission and a copy of such shall be given promptly to the accused. The accused may also submit his or her written recommendations of sanctions or explain mitigating circumstances. The accused shall have the right to appeal to the faculty.

d) An appeal to the faculty of the College of Law of a decision by the Ethics Council Hearing Panel shall be made in writing, within thirty calendar days from the date of written decision of the Ethics Council Hearing Panel.

## **IV. FACULTY REVIEW**

### **A. SCOPE OF REVIEW**

It is expressly provided that all findings of guilty or not guilty, dismissal, or the recommended sanctions may be appealed to the College of Law faculty. Upon appeal, the faculty shall have the discretion (1) to review the records from the Ethics Council Hearing Panel, (2) to permit appellate argument on the record of the proceedings before the Ethics Council Hearing Panel, or (3) to hear the case de novo. The faculty may review the legal standards applied by the Ethics Council and procedures it employed.

### **B. PROCEDURE:**

1. The Associate Dean or the Associate Dean's designee shall preside at the faculty hearing.
2. For the purposes of an appeal under the Student Code, the faculty shall consist of those individuals entitled to attend executive sessions of the faculty.
3. Any faculty member who has a conflict of interest or personal involvement in the matter shall excuse himself or herself from hearing the case on appeal. The accused shall have the right to challenge a faculty member for good cause shown. Upon such challenge, the remaining unchallenged members of the faculty shall decide the merits of the challenge.
4. A majority of the faculty entitled to hear the case shall constitute a quorum.
5. A vote of sixty percent of the faculty hearing an appeal shall be necessary to find a student accused of violating the Student Code guilty. All other matters, including a recommendation of sanctions if the student is found guilty, shall be resolved by majority vote.
6. The accused shall have the right to be assisted by an advisor at all proceedings before the faculty on appeal, provided, however, the advisor shall not be a member of the College of Law faculty.
7. If the proceeding before the faculty is a de novo hearing, the rules set forth in III (C) shall apply, including the standard of proof.
8. If the proceeding before the faculty is a review of the record or a review of the record with arguments, the Ethics Council's Hearing Panel shall be affirmed if its decision is supported by substantial evidence.

9. If the appeal from the Ethics Council concerns only the recommended sanction, then all arguments to the faculty shall be submitted in writing and without oral arguments.
10. In the event of an appeal of a decision of the Ethics Council, the Associate Dean for the College of Law shall designate the Presenter, provided, however, the Presenter shall not be a member of the College of Law faculty.
11. The Associate Dean shall establish such additional procedures as necessary and as are consistent with the Student Code for conducting appeals from the Ethics Council Hearing Panel.

**C. Faculty Decision.** Consistent with the ABA Standards and its Interpretations (Standard 205), the decision of the faculty shall be final subject only to an appeal as set forth in Section VI. If the decision of the faculty is guilty, the faculty shall recommend appropriate sanctions to the Associate Dean.

## V. SANCTIONS

### A. OVERVIEW

The following sanctions are not intended to constitute the exclusive list of sanctions which may be recommended to the Associate Dean of the College of Law by the Hearing Panel or the faculty.

1. Reconsideration by the professor of the grade or credit to the violator of the specific course involved;
2. Written reprimand to be placed in a student's College of Law academic file;
3. Ineligibility to participate in any co-curricular activity, or to receive a scholarship, loan, grant in aid, or employment, any of which are administered by the College of Law;
4. Suspension for one or two semesters, the first being the semester during which the offense occurred; or
5. Dismissal from the College of Law.

### B. IMPOSED SANCTIONS

The sanctions imposed shall be commensurate with the nature of the violation. Failure to report a violation shall constitute grounds for the sanction of public censure, written reprimand placed in a student's academic file, or ineligibility to participate in any co-curricular activities.

## VI. APPEAL

An appeal of the faculty's decision or the sanctions imposed by the Associate Dean may be made to the Dean of the College of Law who, pursuant to the provision of Section 6.3.4 of the West Virginia University Board of Governors Policy 15, Student Academic Rights, has been designated by the President of West Virginia University as the President's designee to hear such appeals. Before reaching a decision on the Appeal, the Dean, as the designee of the President, shall consult with University Counsel to assure that all applicable procedural policies and rules have been followed. Following this consultation with University Counsel, the Dean shall render his or her decision within thirty calendar days after the receipt of written notice of the appeal. The decision of the Dean, as designee of the President, shall be final.

## VII. COMPLAINTS AGAINST GRADUATING STUDENTS

If a complaint is received by the Ethics Council within the fourteen calendar days preceding the date of graduation of the accused student, the Ethics Council has authority to expedite the procedure outlined so long as the Ethics Council believes that the matter may be fairly adjudicated. If the Council concludes the matter cannot be fairly adjudicated before graduation, the student's diploma will be withheld pending resolution of the charge. If the accused is found guilty of a violation of the Student Code, the Ethics Council may recommend that he or she not be allowed to graduate from the College of Law or that graduation be delayed until prescribed conditions are met.

## VIII. MISCELLANEOUS PROCEDURES

All hearings described in Section III will be documented and a record maintained. A permanent record of all documents will be kept for all findings of guilt by the Ethics Council. For findings of not guilty, all such documents, except records the College of Law maintains for all students as a normal part of the records, will be sealed, and, with the written consent of all parties, destroyed after expiration of the appeal period. An audiotape or written transcript of the hearing delineated in Section III (C) shall be made and provided for use on appeal. Thereafter, it may be destroyed.

## IX. AMENDMENT OR REPEAL PROCEDURE

### A. STUDENT-INITIATED AMENDMENT OR REPEAL

This Student Code may be amended or repealed at any time. In order to initiate such amendment or repeal, a petition which sets forth the proposed amendment or calls for the repeal of this Student Code that contains the signatures of fifteen percent of the entire student body of the College of Law shall be presented to the Ethics Council. The proposed amendment or petition to repeal shall be posted for two weeks upon the appropriate bulletin boards within the College of Law. Approval of sixty percent of the student body shall be required for adoption of the amendment or repeal of the Student Code. The election shall be by secret ballot.

## B. ETHICS COUNCIL OR FACULTY-INITIATED AMENDMENT OR REPEAL

Amendment or repeal may also be proposed by a resolution approved by either a majority of all the members of the Ethics Council or a majority vote of the faculty. An amendment or repeal of this Code shall be effective upon ratification by the College of Law faculty.

## C. INVALIDATION

Invalidation of any part of this Student Code for any reason shall not affect the validity of the rest of the Student Code.

## X. ADOPTION PROCEDURE

This Student Code must be ratified by the faculty of the College of Law followed by approval of sixty percent of the students. The students shall vote in a referendum by secret ballot. The election shall be conducted by the Student Bar Association.

Adopted: April 4, 1991

Last Revised: July 1999

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## C. BAR ADMISSION

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1. Admission to Practice (p. 669)
  2. The Bar Exam (p. 669)
  3. Action Checklists for Law Students (p. 670)
  4. Bar Preparation Courses (p. 671)
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### C.1 ADMISSION TO PRACTICE

A lawyer may not practice without a license. Because each state establishes its own licensing procedures, the process of admission to practice varies from state to state. Although the application is typically submitted to the state in the spring semester of the third year of law school, some states require early notice of an intent to practice within the state's borders. Some even permit a law student to begin the application process early in the law school career at a significantly reduced price. Obviously, every first-year law student should review the application rules in the states where the student plans to practice.

The National Conference of Bar Examiners (NCBE) maintains a website that includes state-by-state bar admission information that is regularly updated with contact addresses, phone numbers, and web sites where application procedures can be reviewed. Access the NCBE website at this address: [www.ncbex.org](http://www.ncbex.org).

Each state's admission process includes a character and fitness review that takes place after graduation. The character and fitness review is essentially a background check to assure that the applicant will practice law competently and ethically. The review is comprehensive but particularly scrutinizes the applicant's record during the three years of law school. Hence, it is particularly important that incoming law students adopt a professional persona that evolves positively during the law school career. For example, a law student who blemishes his or her reputation with substance abuse offenses may be delayed in the admission process until the state's character and fitness committee is assured that the applicant has resolved all issues that might negatively impact the applicant's ability to practice law competently and ethically. On the other hand, if an applicant has a past history of substance abuse, but has faced and solved that problem, past events are unlikely to prevent the applicant from being admitted to practice.

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### C.2 THE BAR EXAM

Because each state decides how to structure its bar exam, every first-year law student should research the specifics of the exams in the states where the student will practice. The NCBE creates a national bar admission exam that consists of four parts: the Multistate Bar Exam (MBE) (200 multiple-choice questions); the Multistate Professional Responsibility Exam (MPRE) (50 multiple-choice questions); the Multistate Essay Exam (MEE) (six essay questions); and the Multistate Performance Test (MPT) (two ninety-minute questions that focus on a practical lawyering task). Almost every state has adopted one or more of these national tests as part of the state-specific exam.

Some states also have a state-created component. Thus, a state's bar exam can consist of NCBE components and state-specific components, and a law student who wishes to be prepared for the exam must research the exam format as well as the subjects tested by the exam.

Careful planning of coursework during law school can help assure that the student is well prepared for the exam. Although a student need not take every course tested by the bar exam, the summer bar exam prep period is too short to self-teach all the subjects that are tested. Hence, a law student should plan law school coursework with an eye toward being prepared.

West Virginia's bar exam consists of all four tests created by the NCBE. Most students take the Multistate Professional Responsibility Exam after finishing the second year of law school. The post-graduation bar exam given in February for December graduates, and in July for May graduates consists of the Multistate Bar Exam, Multistate Essay Exam, and Multistate Performance Test. The following subjects are tested:

Subjects tested by the MBE:

- Constitutional Law
- Contracts/Sales
- Criminal Law
- Criminal Procedure
- Evidence
- Federal Civil Procedure
- Real Property
- Torts

Subjects tested by the MEE:

- Business Associations (Agency and Partnership; Corporations and Limited Liability Companies)
- Conflict of Laws
- Constitutional Law
- Contracts
- Criminal Law
- Criminal Procedure
- Evidence
- Family Law
- Federal Civil Procedure
- Real Property
- Torts
- Trusts and Estates (Decedents' Estates; Trusts and Future Interests)
- Uniform Commercial Code (Secured Transactions)

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## C.3 ACTION CHECKLISTS FOR LAW STUDENTS

The following checklists can help a law student stay on-track for successful completion of the bar exam and the admission to practice process.

### 1L YEAR:

- Check the state's website for licensing requirements and bar exam information.
- Make a note of the subject matter covered by the state exam and use this information in planning coursework during the three years of law school.
- If your state permits early application, consider applying now to save money.
- If you have character and fitness review concerns because of past or present events, start resolving those issues now. The same advice applies to financial issues that affect your credit history.
- Note whether your state requires the applicant to complete service hours while in law school (some states now require applicants to have completed a certain number of hours in an experiential learning environment prior to application).
- Start saving for the 3L expenses of graduation, admission to practice, and a bar exam prep course. Plan on having at least \$8,000 to cover these costs and summer expenses.

### 2L YEAR:

- Review the 1L Year checklist and update.
- Complete the Professional Responsibility course and take the MPRE during the summer.
- Revisit the state's website to note any possible changes.
- Plan your coursework strategically.

### 3L YEAR:

- Do a transcript check in the fall. Will you graduate as planned?
- Visit the website of the West Virginia Board of Law Examiners (or the website in the state where you will take the bar).

1. Print and read the bar application materials.

- A. What are the state's licensing requirements?
- B. What is the deadline for the application?
- C. What fees are applicable? Do I need financial help?
- D. Where will I complete the character review?
- E. What can I do now to start the process?
- F. Are there other deadlines?

2. Understand the Bar Exam.

- A. What are the dates/location of the bar exam?
- B. What kinds of tests are on the bar?
- C. What subjects will be tested?
- D. How are the tests scored?
- E. What is the "passing" score?

- Visit the website of the National Conference of Bar Examiners (<http://www.ncbex.org/>) at the end of the first semester and begin the application for admission no later than January 1. (The application can take weeks to complete with all the required information.)
- Learn as much as you can about the review programs for the bar exam, e.g., Kaplan, Barbri, and Themis. Choose one comprehensive program, pay for it, and get the books early for an early start!
- Assess the degree to which you are at risk for not passing the bar exam. Then make a plan to build on your strengths and minimize those risks.
- Make a realistic plan for your summer that includes at least 600 hours of on-task study time prior to the exam (the number of hours that most students say it takes to be ready for the exam).

**NOTE: If any change to your student record occurs at any point (DUI, arrests, etc.), you must notify the Associate Dean for Academic Affairs and produce the information in written form for your student file. The Board of Bar Examiners will expect the information they review regarding your record to match what the College has on record in your student file.**

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## C.4 BAR PREPARATION COURSES

The College of Law currently offers several for-credit bar exam preparation courses.

**Multistate Performance Test Workshop (Law 664):** This one-credit course, which encourages students to learn how to apply substantive law in the context of a Performance Test examination, is open to select (by invitation only) upper-level students. The class provides in-depth training in legal reasoning for law school exams, the bar exam, and legal practice. Students receive guidance and feedback on all written work from the professor about ways to improve their legal reasoning skills.

**Essay Writing Workshop I (Law 682):** This one-credit course is open to all third-year students. The course provides an overview of the bar exam, addresses how to study and spot issues in essay questions, and teaches students how to write responses to essay questions.

**Essay Writing Workshop II (Law 683):** This one-credit course is occasionally offered in conjunction with Essay Writing Workshop 1 to provide an additional hour of credit for select students who would benefit from supplemental instruction.

**MBE Skills Workshop (Law 667):** This is a two-credit, pass/fail course, typically offered in the spring semester. The course is designed to provide in-depth training in the legal reasoning needed to successfully answer multiple-choice questions on the bar exam, and assists students with completing their character and fitness applications.

## Social Justice Policies

### A. NON-DISCRIMINATION AND EQUAL OPPORTUNITY

- Non-Discrimination and Equal Opportunity Statement



## B. STUDENTS WITH DISABILITIES

- Students with Disabilities Statement

## C. SEXUAL HARASSMENT

- Sexual Harassment Statement

## A. NON-DISCRIMINATION AND EQUAL OPPORTUNITY

The West Virginia University College of Law is an affirmative action/equal opportunity institution. The College does not discriminate on the basis of age, color, disability, national origin, race, religion, sex, sexual orientation, or veteran status in the administration of any of its education programs or activities or with respect to admission and employment.

The College neither affiliates knowingly with nor grants recognition to any individual, group, or organization having policies that discriminate on the basis of age, color, disability, national origin, race, religion, sex, sexual orientation, or veteran status as defined by the applicable laws and regulations.

Implementation of this policy is spelled out in the West Virginia University Student Handbook and in other pertinent University documents.

## B. STUDENTS WITH DISABILITIES

Students with disabilities receive appropriate accommodation on a case-by-case basis. Any student seeking an accommodation must submit proof of disability to the University Office of Accessibility Services (<http://accessibilityservices.wvu.edu/>) (304-293-6700) and obtain from that office a letter setting forth recommended accommodations. That student shall present that letter to the Associate Dean for Academic Affairs at the College of Law, who shall arrange appropriate accommodation. If the disability arises from an emergency illness or injury, the student shall notify the Assistant Dean for Student Services and Engagement as soon as the emergency occurs and shall complete the process under the direction of the Assistant Dean. No student may receive retroactive accommodation for any disability.

## C. SEXUAL HARRASSMENT

The College of Law liaison for sexual harassment for faculty, staff, and students is the Assistant Dean for Student Services and Engagement. Discussions are in complete confidence, and most problems can be resolved without the involvement of anyone other than the liaison and the persons directly involved. Services are also available to students, staff, and faculty through the liaison's access to educational materials.

# Student Organizations, Guidelines, and Services

## A. COLLEGE OF LAW ORGANIZATIONS

1. Co-Curricular Organizations
2. Recognized College of Law Student Organizations
3. Directory of Administrative Personnel for Student Organizations
4. Rules and Policies for Student Organizations

## B. CONSTITUTION OF THE SBA

1. Constitution of the Student Bar Association of West Virginia University College of Law

## C. COLLEGE OF LAW SERVICES

1. Academic Excellence Program
2. Professional Writing Center
3. Meredith Career Services Center
4. College of Law Bookstore and Café
5. Financial Aid
6. Scholarships
7. Technology Services
8. Communications
9. Web Information



## D. UNIVERSITY SERVICES

1. General Information
2. Health Services
3. Student Activities and Organizations

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## A. COLLEGE OF LAW ORGANIZATIONS

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1. Co-Curricular Organizations (p. 673)
  2. Recognized College of Law Student Organizations (p. 674)
  3. Directory of Administrative Personnel for Student Organizations (p. 675)
  4. Rules and Policies for Student Organizations (p. 675)
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Student organizations are a vital part of the College of Law culture. Involvement promotes contact with other students who share your interests and provides opportunities to develop skills outside the classroom setting.

For any question regarding Student Affairs Services, please contact the Assistant Dean for Student Life or the Associate Dean for Academic Affairs.

### Assistant Dean for Student Services and Engagement

#### Jennifer Powell

Phone: 304-293-7205

Email: Jennifer.Powell@mail.wvu.edu (jennifer.powell@mail.wvu.edu)

### Associate Dean for Academic Affairs

#### Elaine Waterhouse Wilson

Phone: 304-293-7802

Email: elaine.wilson@mail.wvu.edu (elaine.wilson@mail.wvu.edu)

## A.1 CO-CURRICULAR ORGANIZATIONS

### 1. LAW REVIEW

The West Virginia Law Review is a professional, student-governed legal journal that publishes articles of interest to legal scholars, students, legislators, and members of the practicing bar. Founded in 1894, the West Virginia Law Review is the fourth oldest law review in the United States and publishes three issues each year. Student members of the Law Review write, solicit, select, and edit articles and are involved in all stages of preparing issues for publication.

Membership on the Law Review is available only to second- and third-year students. To be eligible for membership, students must obtain a minimum GPA of 2.5 in first-year courses. Law Review participants who complete membership requirements receive up to four hours of credit.

Invitations for membership are based on a summer writing competition where students must write a short student article on a predetermined issue of law. After the write-on competition, there are two ways in which students are extended membership: 1) academic performance combined with writing score or 2) writing score alone. For students ranking in the top fifteen percent of their class at the end of the first year, the student article accounts for thirty-five percent of the total score, and first-year grades account for sixty-five percent of the total score. For all other students, the student article accounts for 100 percent of the total score. The number of invitations extended in this competition is dependent upon the quality of papers submitted. The maximum Law Review membership is forty-two students.

### 2. M.E. LUGAR TRIAL ASSOCIATION

The Lugar Trial Association is a co-curricular course designed to assist students in developing litigation skills through a mock trial program. Teams of students compete in a minimum of four mock trials per year, as well as participate in various other trial competitions. Each trial is presided over by a practicing attorney or judge, and following the trial, each advocate is critiqued by the judge. Membership is available to second- and third-year students who have completed the Trial Advocacy course with a grade of B or better. If more than thirty students wish to participate, members will be selected by lottery. Students who successfully complete the requirements receive up to three hours of credit.

### 3. MOOT COURT BOARD

Moot Court Board is a co-curricular organization designed to recognize and reward students for their oral and written appellate advocacy skills, as well as strengthen and further refine those skills. Board members compete in and manage the George C. Baker Cup intramural appellate moot court competition; participate in various intercollegiate, national, and international moot court competitions; and conduct monthly meetings. Each member is required to compete in an "outside" interscholastic competition.

Early each spring semester, the Moot Court Board invites second-year students to be members of Moot Court Board based upon their work in Appellate Advocacy, a required upper-level course. To be eligible for Moot Court Board, students must have completed Appellate Advocacy during the previous fall semester or in the summer session immediately preceding fall semester. In evaluating Appellate Advocacy student work, the Moot Court Board bases its decisions on appellate brief writing scores and oral advocacy scores earned in the Appellate Advocacy course. A maximum of eighteen members are chosen at that time.

The remaining second-year justices are selected through the Baker Cup Competition, which is held annually each spring semester. The Baker Cup competition is open to all second-year students who have passed Appellate Advocacy in the fall or are currently taking Appellate Advocacy in the spring. Newly selected members must participate in the competition. The Baker Cup competition ranks all competitors, uses that ranking to determine the National Moot Court Team (top six members), awards other prizes such as Best Brief and Best Oralist, and sets priorities for other outside competitions.

Moot Court Board Justices are required to maintain a 2.0 GPA and participate in at least one interscholastic appellate advocacy competition in their third year. Part-time justices must find a competition that does not require full-time status. Justices are awarded up to three hours of credit.

Students who successfully complete all the requirements for Moot Court Board membership receive up to three hours of credit.

#### 4. JESSUP INTERNATIONAL MOOT COURT

Jessup International Moot Court is a co-curricular class in which up to five students prepare for and compete in the Jessup International Moot Court Competition. Participation in Jessup is open to second- and third-year students. Preparing for and participating in the competition begins early in the fall semester and continues until mid-spring. Students participating in Jessup sign up for an ungraded, pass fail class in the fall and spring semester of that year. (Members who participate in Jessup for two years thus can obtain a total of four hours credit.) Jessup students must have successfully completed or be currently enrolled in International Law.

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## A.2 RECOGNIZED COLLEGE OF LAW STUDENT ORGANIZATIONS

The following is a list of organizations that are currently active at the College of Law, subject to official recognition each school year as described below.

### 2023-2024

- ACLU - American Civil Liberties Union
- ADR - Alternative Dispute Resolution Society
- Animal Legal Defense Fund
- Asian-Pacific American Law Students Assoc. (APALSA)
- BLSA - Black Law Students Association
- Business Law Society
- Catholic Law Society
- Christian Legal Society
- Class of 2023
- Class of 2024
- Class of 2025
- Community Service Council
- Defense Trial Council of West Virginia
- Democratic Law Caucus
- Energy Law Association
- Environmental Law Society
- Federal Bar Association
- Federalist Society
- Health Law Society
- Hispanic Law Students Association (HLSA)
- International Law Students Association (ILSA)
- Labor Law Society
- Marilyn E. Lugar Trial Association
- Moot Court Board
- National Lawyers Guild
- Non-Traditional Law Students Association
- OUTLaw
- Public Interest Advocates (PIA)

- Republican National Lawyers Association
- Sports and Entertainment Law Society
- Student Bar Association
- Tax Law Society
- Veteran & Military Advocacy Group
- Women's Leadership Council
- WV Association for Justice
- WV Law Review
- WVU Consumer Law & Advocacy Group

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### A.3 DIRECTORY OF ADMINISTRATIVE PERSONNEL FOR STUDENT ORGANIZATIONS

#### Assistant Dean for Student Services and Engagement

##### Jennifer Powell

Phone: 304-293-7205

Email: Jennifer.Powell@mail.wvu.edu (jennifer.powell@mail.wvu.edu)

*The Assistant Dean is the administrative liaison for student organizations. See the Assistant Dean for official recognition and about elections, student organization files, budget, and other issues. The Assistant Dean is the cosigner on checking accounts.*

#### Associate Dean for Academic Affairs

##### Elaine Waterhouse Wilson

Phone: 304-293-7802

##### Samantha Stefanov

Office Administrator, Sr.

Phone: 304-293-0064

Email: samantha.stefanov@mail.wvu.edu

*Ms. Stefanov is responsible for distributing keys. Building maintenance issues may also be discussed with her.*

#### Receptionist

Phone: 304-293-5301

*The master building key sign-out log is also maintained at the front desk.*

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### A.4 RULES AND POLICIES FOR STUDENT ORGANIZATIONS

#### RESPONSIBILITIES

- 1. Approval.** All student organizations must petition the University for official recognition. All student organizations must also get annual approval from the University to be a recognized College of Law student organization. To obtain approval, the organization must submit an "Officer Update Form" online. The Petition and Officer Update Form, as well as additional information, is also available at the University Student Engagement and Leadership website.
- 2. Recordkeeping.** The College of Law's Assistant Dean for Student Services and Engagement maintains a file for each student organization. This file must contain copies of all materials pertaining to the student organization, a list of officers, the constitution, and recognition form for filing. Student organizations also may store their checkbooks and financial records in this file over the summer.
- 3. Elections.** Elections for new class officers must be held before April 1<sup>st</sup> each year. Election results must be delivered to the Assistant Dean for Student Services and Engagement within two days of the election. The third-year class president runs the selection of Professor and Staff Member of the year.
- 4. Other.** The new SBA president is responsible for recruiting students for appointment to faculty committees and working with the Assistant Dean for Student Services and Engagement to accomplish this. The SBA also is responsible for providing the Assistant Dean for Student Services and Engagement with information for the College of Law's summer newsletter.

#### ROOMS/EQUIPMENT

- 1. Room Reservations.** To reserve a room, you must contact the Assistant Dean for Student Services and Engagement or Samantha Stefanov. Additionally, if it is a major event with outside attendance, you may also request that no parking tickets be issued during the event. Do not schedule an event opposite a major event in the courtroom.
- 2. Audio-Visual.** Audio-visual equipment requests should be made at least one week in advance. Contact Ken Price by phone at 304-293-4657. You may also email him at kenneth.price@mail.wvu.edu. Any audio-visual problems should be reported to Ken. Available equipment includes TVs,

VCRs, camcorders, computers, LCD projectors for presentations, etc. Questions concerning information technology may be addressed to Keith Walton.

**3. Furniture/Equipment Needs.** Tables and chairs are normally set up in the main lobby for student use. If you need more tables and chairs, please request them from Samantha Stefanov at least one week in advance. The Law School has a limited number of tables and chairs and must request additional equipment from the University Physical Plant.

## COLLEGE OF LAW BUILDING POLICIES

**1. Building Hours.** The College of Law building hours are the same as the Law Library hours, which are available online (<http://law.wvu.edu/library/>). After hours, students may use their WVU ID to swipe into the building and Library. Custodial staff and WVU Public Safety Officers have authority to ask you to leave if you are in the building after hours. If you have planned a weekend activity and need to be in the building prior to the library opening, please see Samantha Stefanov one week in advance, and she will make arrangements to have the building unlocked.

**2. Bulletin Boards / Posting Notices.** Please post items on designated bulletin boards. Each board will have a label which indicates the appropriate posting for that board. DO NOT post materials on the doors, walls, or windows of the Law School. There are University regulations prohibiting this. NOTICES POSTED ON GLASS AND DOORS WILL BE REMOVED.

## GENERAL SUPPLIES AND OPERATING EXPENSES

Cassie Caplan is the designated budget officer for the College of Law under West Virginia University rules and regulations. Basic office supplies are available from Assistant Dean of Student Services and Engagement. If your organization has need to make long distance calls or use the mail services, see Cassie Caplan. The items mentioned above are provided to the student organizations for reasonable usage. However, if you are planning an activity that requires the use of supplies, phone, or postage services beyond a reasonable amount, you should include those costs in the expenditure section of your event proposal.

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## B. CONSTITUTION OF THE STUDENT BAR ASSOCIATION OF WEST VIRGINIA UNIVERSITY COLLEGE OF LAW

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### PREAMBLE.

In order to represent the law school student body individually and organizationally; to further organizational communication and cooperation; and to maximize student involvement in academic and administrative processes; we, the students of West Virginia University College of Law, do hereby ordain and ratify this Constitution.

### ARTICLE I: NAME OF ORGANIZATION

This organization shall be known as the Student Bar Association (hereinafter, "the S.B.A.") of the West Virginia University College of Law (hereinafter, "the Law School" or "the College of Law").

### ARTICLE II: PURPOSE, DUTIES, STRUCTURE, AND MEMBERSHIP

#### SECTION ONE: ORGANIZATION AND PURPOSE.

The S.B.A. is the student government of the Law School. The S.B.A. Executive Board (hereinafter, "the Executive Board") is comprised of the elected officers, representatives, and appointed persons. Its purpose is to:

1. Promote a community among the Members of the Law School (students, faculty, staff, and the administration);
2. Formally advocate for and represent the student body of the Law School to the faculty, staff, alumni, and administration of the Law School and West Virginia University, as well as the public;
3. Promulgate rules and exercises rulemaking authority over groups, organizations, offices, property, and effects under its jurisdiction; and
4. Sponsor and host events for the Law School community.

#### SECTION TWO: DUTIES AND RESPONSIBILITIES.

The S.B.A. has the authority and responsibility to:

1. Oversee every student organization within the Law School, including each organization's budget;
  - Specific rules and regulations governing definition, formation, conduct, and expectations of student organizations are subject to the WVU College of Law Student Handbook.
2. Allocate S.B.A. funds;
3. Execute and regulate all Law School student government elections, including (but not limited to), class officer elections and Ethics Council elections;
4. Execute and oversee the biannual Visiting Committee student round table;
5. Host the Annual Barrister's Ball; and

6. Assume all other duties not detailed by this Constitution as may be delegated to the S.B.A. by the Students, Faculty or Administration of the Law School.

### SECTION THREE: MEMBERSHIP.

All students enrolled in the Law School are Members of the S.B.A. and shall be represented by the S.B.A. Executive Board. All students enrolled in the Law School are permitted to vote in S.B.A. elections. There is to be no Membership fee.

### SECTION FOUR: COMMITTEES

1. **Standing Committees.** The S.B.A. shall maintain three standing committees; (1) The Social Committee; (2) The Fundraising Committee; and (3) The Community Service Committee. These Committees are to be chaired by elected Members of the Executive Board. The Standing Committees may only be dissolved through Constitutional Amendment.
2. **Working Committees.** The President has the authority to create working committees, with the advice and consent of the majority of the Executive Board. Once the Executive Board approves a working committee, the President may select a chairperson and Members of the working committee from the student body. Chairpersons and members of working committees serve at the pleasure of the President. A working committee may be dissolved at any time by a simple majority vote of the Executive Board.

## ARTICLE III: THE EXECUTIVE BOARD

### SECTION ONE: MEMBERSHIP

1. The Executive Board shall consist of eleven board Members:
  - President
  - Vice-President
  - Secretary
  - Treasurer
  - Social Committee Chairperson
  - Fundraising Committee Chairperson
  - Community Service Chairperson
  - 3L Class Vice President
  - 2L Class Vice President
  - 1L Class Vice President; and
  - Bar Association Liaison
    - The Executive Board may include the working committee chairpersons by a simple majority vote of the Executive Board.
2. The S.B.A. Executive Officers (herein after "Executive Officers") are:
  - President
  - Vice-President
  - Secretary
  - Treasurer

### SECTION TWO: PRESIDENT

The President is the director of the S.B.A.. The President shall convene and preside over all meetings of the S.B.A. and shall supervise and direct all S.B.A. activities. In addition, the President shall represent the concerns of the student body and S.B.A. to the Law School administration and deans.

#### Duties and Responsibilities

The President shall:

- Call and preside at all scheduled and emergency meetings of the S.B.A. and Executive Board;
- Attend all faculty meetings and representation of the S.B.A. thereto;
- Liaise to the Student Administration of West Virginia University;
- Create a budget to properly allocate all available funds for the academic year;
- Appoint student Members to law school student-faculty committees, with the advice of and consent by the majority of the Executive Board;
- Appoint officers to any vacancy on the Executive Board, with the advice of and consent by the majority of the Executive Board;
- Appoint S.B.A. committees as the need arises, with the advice of and consent by the majority of the Executive Board; and
- To call matters before the Executive Board to vote;
- To be a registered signer on the S.B.A. bank account and, when called upon by the Executive Board to do so, provide account details, statements, etc;

- When called upon to do so by the Treasurer, make deposits into the S.B.A. bank account within two business days of receiving funds; and
- Carry out all other ceremonial and administrative functions ordinarily assumed by the President

### Election

The President shall be elected by a simple majority of all ballots cast by the student body. Any student currently enrolled at the Law School shall be eligible to vote for the President.

### Term of Office

The President shall be elected to a one-year term of office. The President's term shall begin at the end of the Law School's Spring Commencement Ceremony that follows the President's election and shall end at the conclusion of the following academic year's Law School Spring Commencement Ceremony.

### Eligibility

To be eligible to hold office, the President must be a student at the Law School, enrolled fulltime and in good academic standing, as defined by WVU College of Law Student Handbook.

## SECTION THREE: VICE-PRESIDENT

The Vice-President is the deputy director of the S.B.A.. The Vice President shall support the President, convening and presiding over the S.B.A. and meetings when the President is not able or present.

1. **Duties and Responsibilities.** The Vice-President shall:
  - Ascend to the Presidency in the event of the President's death, removal, or withdrawal during the President's term of office;
  - Preside at S.B.A. meetings in the event of absence of the President; and
  - Represent the President at any ceremonial or administrative functions at the President's request.
2. **Election and Appointment.** The Vice-President shall be elected by a simple majority of all ballots cast by the student body. Any student currently enrolled at the Law School shall be eligible to vote for the Vice-President. In the case of a vacancy, the President, with the advice and consent of the majority of the Executive Board, may appoint a student to this position.
3. **Term of Office.** The Vice-President shall be elected to a one-year term of office. The Vice-President's term shall begin at the end of the Law School's Spring Commencement Ceremony that follows the Vice-President's election and shall end at the conclusion of the following academic year's Law School Spring Commencement Ceremony.
4. **Eligibility.** To be eligible to hold office, the Vice-President must be a student at the Law School, enrolled fulltime and in good academic standing, as defined by WVU College of Law Student Handbook.

## SECTION FOUR: SECRETARY

The Secretary is the chief administrative officer of the S.B.A.

1. **Duties and Responsibilities.** The Secretary shall:
  - Attend, record, and disseminate the minutes of all S.B.A. meetings;
  - Maintain copies of minutes of all S.B.A. meetings until the conclusion of his or her term, at which point copies of the minutes shall be turned over to the incoming secretary and stored in the President's office;
  - Assist the President in formulation of meeting agendas and advance notice to the Executive Board thereof;
  - Provide personal notice to all Executive Board Members of the scheduling of emergency Executive Board meetings;
  - Keep record of all S.B.A. resolutions and bylaws;
  - Conduct official correspondence of the S.B.A.; and
  - Maintain a student event calendar and S.B.A. website.
2. **Election and Appointment.** The Secretary shall be elected by a simple majority of all ballots cast by the student body. Any student currently enrolled at the Law School shall be eligible to vote for the Secretary. In the case of a vacancy, the President, with the advice and consent of the majority of the Executive Board, may appoint a student to this position.
3. **Term of Office.** The Secretary shall be elected to a one-year term of office. The Secretary's term shall begin at the end of the Law School's Spring Commencement Ceremony that follows the Secretary's election and shall end at the conclusion of the following academic year's Law School Spring Commencement Ceremony.
4. **Eligibility.** To be eligible to hold office, the Secretary must be a student at the Law School, enrolled fulltime and in good academic standing, as defined by WVU College of Law Student Handbook.

## SECTION FIVE: TREASURER

The Treasurer is the chief financial officer of the S.B.A.

1. **Duties and Responsibilities.** The Treasurer shall:
  - Maintain the S.B.A. Treasury;
  - Manage the S.B.A. bank account;
  - Record all receipts and disbursements;
  - Provide the Executive Board with a bank account summary (including detailed account statements) no less than once a month, or upon request by the President or Vice-President;
  - Deposit funds into S.B.A. bank account within two business days of receiving funds;
  - Maintain record of and provide oversight of the S.B.A.'s petty cash account; and
  - Ensure that no more than \$100 is kept in petty cash at any given time (unless otherwise approved by Executive Board resolution)
2. **Election and Appointment.** The Treasurer shall be elected by a simple majority of all ballots cast by the student body. Any student currently enrolled at the Law School shall be eligible to vote for the Treasurer. In the case of a vacancy, the President, with the advice and consent of the majority of the Executive Board, may appoint a student to this position.
3. **Term of Office.** The Treasurer shall be elected to a one-year term of office. The Treasurer's term shall begin at the end of the Law School's Spring Commencement Ceremony that follows the Treasurer's election and shall end at the conclusion of the following academic year's Law School Spring Commencement Ceremony.
4. **Eligibility.** To be eligible to hold office, the Treasurer must be a student at the Law School, enrolled fulltime and in good academic standing, as defined by WVU College of Law Student Handbook.

## SECTION SIX: SOCIAL COMMITTEE CHAIRPERSON

The Social Committee Chairperson is the Chair of the S.B.A.'s Social Committee.

1. **Duties and Responsibilities.** The Social Committee Chairperson shall:
  - Appoint Members to the S.B.A. Social Committee, with the advice and consent of the President;
  - Manage and supervise the Social Committee in planning and organizing various social events to be hosted by the S.B.A.;
  - Manage and supervise the Social Committee in planning and organizing the annual Barrister's Ball;
  - Collect, distribute and manage all money used in furtherance of or raised through social events until such a time that the money can be turned over to the President or Treasurer; and
  - Give the money raised by social events or the remainder of the money used in planning the event to the President or Treasurer for deposit within two business days of the event.
2. **Election and Appointment.** The Social Committee Chairperson shall be elected by a simple majority of all ballots cast by the student body. Any student currently enrolled at the Law School shall be eligible to vote for the Social Committee Chairperson. In the case of a vacancy, the President, with the advice and consent of the majority of the Executive Board, may appoint a student to this position.
3. **Term of Office.** The Social Committee Chairperson shall be elected to a one-year term of office. The Social Committee Chairperson's term shall begin at the end of the Law School's Spring Commencement Ceremony that follows the Social Committee Chairperson's election and shall end at the conclusion of the following academic year's Law School Spring Commencement Ceremony.
4. **Eligibility.** To be eligible to hold office, the Social Committee Chairperson must be a student at the Law School, enrolled fulltime and in good academic standing, as defined by WVU College of Law Student Handbook.

## SECTION SEVEN: FUNDRAISING COMMITTEE CHAIRPERSON

The Fundraising Committee Chairperson is the Chair of the S.B.A.'s Fundraising Committee.

1. **Duties and Responsibilities.** The Fundraising Committee Chairperson shall:
  - Appoint Members to the S.B.A. Fundraising Committee, with the advice and consent of the President;
  - Manage and supervise the Fundraising Committee in planning and organizing fundraisers for the S.B.A.;
  - Collect, distribute and manage all money used in furtherance of or raised through fundraising events until such a time that the money can be turned over to the President or Treasurer; and
  - Give the money raised by fundraisers or the remainder of the money used in planning the fundraiser to the President or Treasurer for deposit within two business days of the fundraiser.
2. **Election and Appointment.** The Fundraising Committee Chairperson shall be elected by a simple majority of all ballots cast by the student body. Any student currently enrolled at the Law School shall be eligible to vote for the Fundraising Committee Chairperson. In the case of a vacancy, the President, with the advice and consent of the majority of the Executive Board, may appoint a student to this position.
3. **Term of Office.** The Fundraising Committee Chairperson shall be elected to a one-year term of office. The Fundraising Committee Chairperson's term shall begin at the end of the Law School's Spring Commencement Ceremony that follows the Fundraising Committee Chairperson's election and shall end at the conclusion of the following academic year's Law School Spring Commencement Ceremony.
4. **Eligibility.** To be eligible to hold office, the Fundraising Committee Chairperson must be a student at the Law School, enrolled fulltime and in good academic standing, as defined by WVU College of Law Student Handbook.



## SECTION EIGHT: COMMUNITY SERVICE COMMITTEE CHAIRPERSON

The Community Service Committee Chairperson is the Chair of the S.B.A.'s Community Service Committee.

1. **Duties and Responsibilities.** The Community Service Committee Chairperson shall:
  - Appoint Members to the S.B.A. Community Service Committee, with the advice and consent of the President;
  - Manage and supervise the Community Service Committee in planning and organizing volunteer opportunities for the S.B.A. and student body;
  - Collect, distribute, and manage all money used in furtherance of or raised through community service events until such a time that the money can be turned over to the President or Treasurer;
  - Give the money raised by community service events or the remainder of the money used in planning the event to the President or Treasurer for deposit within two business days of the event;
  - Ensure that any money raised as a charitable contribution is given to the charity for which it is raised, in the form of a check or money order, by the President or Treasurer, within five business days of the fundraiser;
  - Report failures to comply with Article III, Section Eight, Subsection A(v) to the President and Assistant Dean of Student Affairs of the College of Law (hereinafter "the Assistant Dean of Student Affairs") within two business days of noticing the compliance failure;
  - Keep detailed records of all spending and earnings raised for charitable contributions including (but not limited to) ledger, carbon copies of checks and receipts; and
  - Present the aforementioned records to the Executive Board upon request of the President or Vice-President at the meeting immediately following the request.
2. **Election and Appointment.** The Community Service Committee Chairperson shall be elected by a simple majority of all ballots cast by the student body. Any student currently enrolled at the Law School shall be eligible to vote for the Community Service Committee Chairperson. In the case of a vacancy, the President, with the advice and consent of the majority of the Executive Board, may appoint a student to this position.
3. **Term of Office.** The Community Service Committee Chairperson shall be elected to a one-year term of office. The Community Service Committee Chairperson's term shall begin at the end of the Law School's Spring Commencement Ceremony that follows the Community Service Committee Chairperson's election and shall end at the conclusion of the following academic year's Law School Spring Commencement Ceremony.
4. **Eligibility.** To be eligible to hold office, the Community Service Committee Chairperson must be a student at the Law School, enrolled fulltime and in good academic standing, as defined by WVU College of Law Student Handbook.

## SECTION NINE: CLASS VICE PRESIDENTS

Class Vice Presidents are voting Members of the Executive Board who are tasked with representing their Law School class in the S.B.A..

1. **Duties and Responsibilities.** Class Vice Presidents shall:
  - Attend all S.B.A. meetings on behalf of their class;
  - Represent the interests of each individual class at S.B.A. meetings;
  - Vote on behalf of their class regarding S.B.A. matters;
  - Liaise to individual classes on behalf of the S.B.A.;
  - Liaise between the S.B.A. and their respective class officers; and
  - Serve as Vice-Chairperson of an S.B.A. Standing Committee, in this role Class Vice Presidents will assist and serve at the pleasure of the Chairperson. The President, with the advice and consent of the Chairpersons, shall make appointment of Class Vice Presidents to committees.
2. **Appointment.** At the beginning of his or her term, the President, shall appoint Class Presidents to this position.
3. **Term of Office.** The President shall appoint the Class Vice Presidents to a one-year term of office. The Class Vice Presidents' term shall begin immediately upon confirmation by the Executive Board and shall end at the conclusion of the academic year's Law School Spring Commencement Ceremony.
4. **Eligibility.** To be eligible to hold office, the Class Vice President must be students at the Law School, enrolled full-time and in good academic standing, as defined by WVU College of Law Student Handbook.

## SECTION TEN: BAR ASSOCIATION LIAISON

The Bar Association Liaison serves as a pipeline between the Law School and federal, state, and local bar associations.

1. **Duties and Responsibilities.** The Bar Association Liaison shall:
  - Serve as liaison between the S.B.A. and the A.B.A. as well as state, and local bar associations;
  - Promote and help to organize events held by bar associations at the Law School;
  - Serve as a resource for students seeking information about future recruitment into the bar;
  - Attend all S.B.A. meetings and vote on S.B.A. matters; and
  - Carry out any functions or duties assigned by the President.
2. **Appointment.** At the beginning of his or her term, the President, with the advice and consent of the majority of the Executive Board, may appoint a student to this position.



3. **Term of Office.** The President shall appoint the Bar Association Liaison to a one-year term of office. The Bar Association Liaison's term shall begin immediately upon confirmation by the Executive Board and shall end at the conclusion of the academic year's Law School Spring Commencement Ceremony.
4. **Eligibility.** To be eligible to hold office, the Senators must be students at the Law School, enrolled fulltime and in good academic standing, as defined by WVU College of Law Student Handbook.

## SECTION ELEVEN: REMOVAL OF S.B.A. OFFICERS

This section shall apply to S.B.A. Executive Board Members. Removal from office consists of two steps; impeachment and removal from office.

### Impeachment.

An Executive Board Member may be impeached through one of two methods:

#### 1. Voting Method:

- a. With cause, an Executive Officer may call for a special meeting in order to request impeachment against a Member of the Executive Board.
- b. All Executive Board Members, including the subject of impeachment, must be given notice no later than 72 hours prior to the meeting.
- c. Quorum for the impeachment meeting is 8 of 11 Executive Board Members.
- d. The President shall preside over the meeting. However, neither the accuser nor the accused shall preside. If the President is subject to impeachment or the accuser, the Vice-President shall preside. If the Vice-President is the accuser against the President or subject to impeachment and being accused by the President, the Secretary shall preside.
- e. At the meeting, the Executive Officer calling for impeachment may make his or her case to the Executive Board; the subject of the impeachment hearing may then present a rebuttal case. The presider in the interest of justice may determine methods of presenting evidence.
- f. After the cases are presented the Executive Board may sequester the accused and the accuser in order to deliberate.
- g. After deliberations, the Executive Board may vote on impeachment; the accuser and the accused do not vote.
- h. Executive Board Members must be present to vote.
- i. An Absolute majority (75%) of the voting Executive Board is required to impeach an Executive Board Member.
- j. This vote is subject to veto by the Assistant Dean of Student Affairs: this veto may be overridden by a unanimous vote of the Executive Board (excluding the vote of the person or persons subject to impeachment).
- k. Cause for which an Executive Officer may call for impeachment is
  - i. Violation of this Constitution
  - ii. Violation of the terms of the WVU College of Law Student Handbook for the Student Code of Professional Responsibility;
  - iii. Stealing or misallocating S.B.A. funds;
  - iv. Substantial nonperformance of duties which includes, but is not limited to, (i) continual failure to cooperate with matters approved by the Executive Board; (ii) dereliction of duties; or (iii) continual conduct or behavior that frustrates the purpose of the Executive Board's mission.
  - v. Failure to attend at least 75% of S.B.A. meetings without cause (i.e. death in family, exam following day, illness, etc);
  - vi. Failure to meet eligibility requirements; and/or
  - vii. Committing an offense that would be a violation of the West Virginia University Campus Student Code
    1. Such a violation need not be proven in accordance with the procedures set forth by the West Virginia University Campus Student Code, but rather in accordance with the procedures set forth by this Constitution.

#### 2. Petitioning Method

- a. With or without cause, an S.B.A. Executive Board Member may be impeached if the S.B.A. President or Vice-President is presented with a petition for impeachment including the signature of two-thirds of all Law School Students.

### Removal from Office.

Once impeached, an Executive Board Member is subject to a public hearing to determine removal from office.

1. The hearing is to be presided over by the Chairperson of the College of Law Ethics Council.
2. Quorum for the hearing is the entirety of the Executive Board.
3. The Executive Officer who initiated impeachment or the proponent of the petition for impeachment shall be permitted to make a case to the Executive Board in support of removal.
4. The accused shall be permitted to make a rebuttal case.
5. The presider shall admit evidence and testimony as is required in the interest of justice.
6. During the hearing, the proponent of removal must show cause for impeachment beyond a reasonable doubt.
7. Once cases are made, the Executive Board (excluding the accused and accuser) is to vote as to whether the proponent has proven cause beyond a reasonable doubt.
8. Cause for removal is limited to:

- a. Violation of this Constitution;
  - b. Violation of the terms of the WVU College of Law Student Handbook or the Student Code or Professional Responsibility;
  - c. Stealing or misallocating S.B.A. funds;
  - d. Substantial nonperformance of duties;
  - e. Failure to attend at least 75% of S.B.A. meetings in one semester without cause;
  - f. Three consecutive absences from regularly scheduled meetings without cause;
  - g. Failure to meet eligibility requirements as defined by this Constitution; and/or
  - h. Committing an offense that would be a violation of the West Virginia University Campus Student Code
    - i. Such a violation need not be proven in accordance with the procedures set forth by the West Virginia University Campus Student Code, but rather in accordance with the procedures set forth by this Constitution.
9. A unanimous vote is needed to remove a Board Member from office.
10. If a unanimous verdict for removal is reached, the removal is immediate and not subject to appeal and the Board Member shall be replaced subject to the provisions of this Constitution.

## ARTICLE IV: MEETINGS

### SECTION ONE: REGULARLY SCHEDULED MEETINGS

A regularly scheduled meeting of the Executive Board may be called to discuss any matters before the S.B.A.

1. **Quantity.** The Executive Board shall meet not less than once monthly for a minimum of eight meetings during the academic year. Regularly scheduled meetings of the Executive Board may occur more commonly as needed.
2. **Scheduling.** The President may call a regularly scheduled meeting by providing notice of the time and location of the meeting to members of the Executive Board at least three days in advance.
3. **Precedence.** The President shall preside over all regularly scheduled meetings. The Vice-President shall preside in the President's absence. Meetings shall not proceed without the presence of either the President or Vice-President.
4. **Structure.** The presider of the meeting may determine the structure of each meeting.
5. **Quorum.** Fifty percent plus one Member of the Executive Board shall constitute a quorum.
6. **Voting.** Matters before the Executive Board at regularly scheduled meetings may be decided through a simple majority vote pursuant to Article VI and other Articles of this Constitution.
7. **Attendance.** All Members of the Executive Board shall attend all regularly scheduled meetings unless circumstances beyond his or her control prevent attendance. Members of the Board who fail to attend 75% of the regularly scheduled meetings in a single semester or three consecutive regularly scheduled meetings, without cause, shall be subject to removal from office.

### SECTION TWO: EMERGENCY MEETINGS

Emergency meetings of the Executive Board may be called to discuss matters that require the immediate attention of the S.B.A..

1. **Scheduling.** The President or Vice-President may call an emergency meeting by providing 24 hours notice of time, location and purpose of the meeting to members of the Executive Board.
2. **Presiding Officer.** The President shall preside over emergency meetings. The Vice-President shall preside in the President's absence. Emergency meetings shall not proceed without the presence of either the President or Vice-President.
3. **Structure.** The presider of an emergency meeting may determine the structure of an emergency meeting. No more than two matters may be considered at an emergency meeting.
4. **Quorum.** Fifty percent plus one Member of the Executive Board shall constitute a quorum.
5. **Voting.** Matters before the Executive Board at any Emergency Meeting may be decided through a simple majority vote pursuant to Article VI and other Articles of this Constitution.
6. **Attendance.** There will be no sanctions for failure to attend an emergency meeting.
7. **Proxy Voting.** If a Member of the Executive Board cannot attend an emergency meeting, the Member may authorize another Member of the Executive Board to act as a proxy and vote on the absent Member's behalf. Notice of a designated proxy must be submitted to the President before the emergency meeting begins.
8. **Robert's Rules of Order.** Robert's Rules of Order shall govern any procedure not contained in this Constitution.

## ARTICLE V: RESOLUTIONS AND BYLAWS

### SECTION ONE: DEFINITIONS

1. **Resolutions.** An S.B.A. Resolution is a formal decision or determination as to an official and binding course of action of the S.B.A. or a formal statement that shall serve as S.B.A. policy.
2. **Bylaws.** S.B.A. bylaws are rules created by members of the S.B.A. that bind the Student Bar Association and its members.

## **SECTION TWO: CREATION AND ENACTMENT**

The Executive Board may create S.B.A. resolutions and bylaws that are in accordance with this Constitution through a simple majority vote. Bylaws may be proposed by any Executive Officer at a regularly scheduled meeting and shall be enacted following a majority vote of the Executive Board. Resolutions may be proposed by any executive board member at any meeting and shall be enacted following a majority vote of the Executive Board.

## **SECTION THREE: MODIFICATION, REPEAL, AND EXPIRATION**

Resolutions and bylaws may be modified or repealed by a simple majority vote of the Executive Board, following proposed modification or repeal by any Executive Officer at any meeting. Resolutions and bylaws expire at the end of each academic year but may be renewed by a majority vote of the incoming Executive Board.

## **SECTION FOUR: RECORDING RESOLUTIONS AND BYLAWS**

The S.B.A. Secretary is responsible for keeping records of all resolutions and bylaws and presenting the records to the S.B.A. President-Elect upon election.

## **SECTION FIVE: QUORUM**

Quorum for enactment, modification or repeal of a resolution or bylaw is 50 % plus one member of the Executive Board.

## **SECTION SIX: VOTING**

Voting on enactment, modification, repeal, and renewal of resolutions and bylaws, unless otherwise provided by this section, shall be conducted pursuant to Article VI of this Constitution.

## **ARTICLE VI: VOTING**

Matters before the S.B.A. are to be resolved through a democratic vote of the Executive Board.

### **SECTION ONE: VOTING RIGHTS**

All Executive Board Members shall be entitled to one vote on any matter before the S.B.A. with the exception of the President.

### **SECTION TWO: QUORUM**

Unless otherwise provided by this Constitution or an S.B.A. bylaw, quorum for voting on all matters shall be 50 % plus one member of the Executive Board.

### **SECTION THREE: INITIATING VOTING**

A vote on a matter before the S.B.A. may be added to the agenda of any regular scheduled meeting or emergency meeting by the President or Vice-President.

### **SECTION FOUR: DEBATE AND DISCUSSION**

The presider of the meeting may allocate time for debate and discussion of the matter prior to a vote.

### **SECTION FIVE: VOTING PROCESS**

When a vote is initiated the presider of the meeting shall call roll in the following order:

1. Vice-President
2. Secretary
3. Treasurer
4. Social Committee Chairperson
5. Fundraising Committee Chairperson
6. Community Service Committee Chairperson
7. 3L Class Vice President
8. 2L Class Vice President
9. 1L Class Vice President
10. Bar Association Liaison

Upon being called, each Member shall cast a spoken public vote. The Secretary shall record each member's vote in the minutes of the proceeding. At the conclusion of voting, the Secretary shall read the results of the vote.

### **SECTION SIX: VOTING RESULTS**

A matter before the S.B.A. for vote shall be passed or voted down by a simple majority, unless otherwise provided by this Constitution.

## SECTION SEVEN: TIES

In the case of a tie, the President shall cast a single tie breaking vote.

## SECTION EIGHT: FINALITY

Upon the reading of the results of a vote or the casting of a tie breaking vote, the vote shall be final and the result shall go into effect immediately.

## ARTICLE VII: ELECTIONS

### SECTION ONE: JURISDICTION

The provisions of Article VII shall govern all S.B.A. and class officer elections. Class officer constitutions may not displace, supersede or modify this Article.

### SECTION TWO: TIME OF ELECTIONS

- **Upperclassmen Elections.** S.B.A. Executive Board Elections and 2L and 3L class officer elections shall be held in the second half of the spring semester of an academic year.
- **1L Elections.** 1L Class Officers shall be elected within the first month of the fall semester of an academic year.

### SECTION THREE: ELIGIBLE VOTERS

All currently enrolled Law School students may vote in S.B.A. Elections. All currently enrolled Law School students may vote in their individual class's elections for class officers and Senators. No student may vote for class officers or Senators of another class.

### SECTION FOUR: ELIGIBLE CANDIDATES

All candidates are subject to the eligibility requirements of this Constitution. In addition, class officer candidates must be members of their respective class. All candidates must be a currently enrolled, full-time student at the College of Law. All candidates must have a grade point average of 2.2 or higher at the time of his or her nomination.

### SECTION FIVE: ELECTION PROCESS:

1. **Elections Commissioner.** The President, with the advice and consent of the Executive Board, shall appoint the Election Commissioner to preside over the Election Process.
  - a. **Duties and Responsibilities.** The Election Commissioner shall oversee the Election Process, as provided in this section.
  - b. **Appointment.** At the beginning of the election process, the President, with the advice and consent of the majority of the Executive Board, may appoint a student to this position.
  - c. **Term of Office.** The President shall appoint the Election Commissioner to serve for the duration of the next election. The Election Commissioner's term shall begin immediately upon confirmation by the Executive Board and shall end once the newly elected S.B.A. Executive Board assumes their roles.
  - d. **Eligibility.** To be eligible to hold office, the Election Commissioner must be a student at the Law School, enrolled full-time and in good academic standing, as defined by WVU College of Law Student Handbook.
2. **Nominations.** Election proceedings shall begin with the opening of nominations, which shall be announced at least one week in advance through e-mail announcements and posters throughout the Law School. The email shall include dates of the; nomination period, campaigning period, forum, election, and run-off. The nomination period shall last three business days, opening at 8 A.M. and closing at 4:30 P.M. each day. During this time, a nomination book shall be put in the Law School Reception Office. A candidate may be nominated by writing his or her name in the nomination book on the page of the position for which he or she is being nominated. A candidate may only be nominated for one position.
3. **Campaigning.** At the end of nominations campaigning may begin. The campaign period shall last for one week following the close of nominations. Each candidate will be permitted to display in the Law School two posters of no greater size than 12x18 inches. Hand billing is to be encouraged through the use of the student mailboxes. Campaigning may also be conducted through face-to-face petitioning, social media, text messages, and e-mail. Neither candidates nor their surrogates may exchange money, alcohol, or sexual favors for votes. Neither candidates nor their surrogates may coerce votes or unduly pressure voters during the campaigning period or polling hours. Further campaign rules may be created through S.B.A. resolutions or bylaws. Violation of campaign rules is grounds for disqualification.
4. **Candidate Forum.** During the campaign period, at a time and place determined by the Elections Commissioner and approved by the President, all candidates must attend a candidate forum and give a speech in support of his or her candidacy. Speeches shall not exceed three minutes. Failure to give a speech during the specified time results in automatic disqualification.
5. **General Elections.** The General election will be held within one week following the close of nominations. Polling hours will be held in the Law School lobby. Suggested polling hours are 9 A.M. to 2 P.M.. Polling hours may not be fewer than four hours and may not exceed eight hours. Notice of polling hours must be given to the student body. Each currently enrolled College of Law student may fill out no more than one complete ballot. While the polls are open campaigning may continue, however candidates may not solicit votes within 30 feet of the polling table. The Elections Commissioner may impose further prohibitions on campaigning during polling hours as is needed to preserve the integrity of the election. Upon receiving notice of the prohibition, failure to abide by the Elections Commissioner's ruling shall be grounds for disqualification. Rulings of the Elections Commissioner may be appealed to the Assistant Dean of Student Life, however deference should be given to the Elections Commissioner's ruling, provided it is not arbitrary and capricious.

6. **Ballot Tallying.** Within 12 hours of the close of polling hours, votes are to be counted by the Elections Commissioner and the Assistant Dean for Student Life or the Assistant Dean's surrogate.
7. **Election Results.** The winner of the general election will be the candidate with a simple majority of the votes (50 % plus one vote) on the first ballot. In the event that no candidate obtains a simple majority on the first ballot, a run-off election will be held.
8. **Run-Off Elections.** The run-off election will be held in the Law School lobby at a time determined by the Elections Commissioner, with the advice and consent of the President and Assistant Dean of Student Life, in the interest of facilitating a fair election that affords all College of Law Students the opportunity to vote. The two candidates who received the most votes in the general election shall be placed on the run-off ballot. In the event of a tie or a percentage difference of 3 % or less, a candidate with the third highest number of votes may be placed on the run-off ballot. The Elections Commissioner, with the advice and consent of the President and Assistant Dean of Student Life, may extend the campaign period to correlate with a run-off election. The candidate with the highest number of votes is to be declared the winner of the run-off election, even if a simple majority is not reached. Unless otherwise provided by this subsection, all other rules of this Constitution and Article apply to run-off elections.
9. **Certification of Elections.** Upon completion of vote tallying, election results must be certified as accurate and true by the signature of the Assistant Dean of Student Life. The Election Commissioner shall present the results, the certification, and the ballots to the Assistant Dean of Student Life. If the election results are not challenged in a timely manner, as defined by this Constitution, the certification is finalized and the results of the election become official.
10. **Results Announcement.** It is the President's duty to announce the results to the Law School student body in a timely manner.
11. **Challenges and Recounts.** Election process or results may be challenged within two business days of certification.

a. **Challenges.**

Any student of the College of Law may make challenges in writing to the Elections Commissioner and the Assistant Dean of Student Life. A challenge can be made to the process of the election or levying that a candidate's conduct warrants disqualification (on grounds defined by Article VII, Section Five(K)(ii) of this Constitution). Once a challenge is made, certification may not occur until an investigation is completed.

Upon receiving a challenge the Elections Commissioner shall consider the merits of the challenge and make a decision within 24 hours of receiving the challenge. If meritorious, so that a reasonable panel of four could possibly find misconduct, the investigation phase shall be initiated. If no merit is found, the Elections Commissioner shall dismiss the challenge. The decision to dismiss may be appealed by the challenger to the President and Associate Dean of Academic Affairs, however deference should be given to the Elections Commissioner's ruling, provided it is not arbitrary and capricious.

Within 24 hours of the investigation phase being initiated, the challenge shall be presented to the Chairperson of the Ethics Council and a single member Ethics Council's investigative panel. The Investigative Panel member shall conduct the investigation, during which all relevant parties shall be notified and interviewed. The Investigative Panel member shall present his or her findings to the President, Associate Dean of Academic Affairs, Elections Commissioner, and Ethics Council Chairperson within one week of receiving the challenge. At this time, the President, Associate Dean of Academic Affairs, Ethics Council Chairperson, and Elections Commissioner shall discuss and vote on the merits of the challenge. All facts in question shall be viewed in the light most favorable to the nonmoving party. 3 of 4 votes shall be required to uphold a challenge and overturn the results of an election. The result of this vote shall be final and is not subject to appeal. If an election is overturned, the candidate whose misconduct resulted in the challenge shall be disqualified and a new election shall be held. The disqualified candidate may not be present on the ballot of the second election.

- b. **Recounts.** Any candidate may request that the Elections Commissioner, President, and a member of the Ethics Council conduct a recount. The recount shall be conducted in the presence of the candidate who has requested the recount. The candidate who has won the election shall be invited to observe the recount as well.

- **Disqualification.** A candidate may be disqualified from the ballot prior to the election. Any student of the College of Law may request to the President or Elections Commissioner that a candidate be disqualified. However, the President or Elections Commissioner must initiate a formal disqualification investigation at his or her discretion, based on the merits of the claim. If an objectively reasonable panel of four could possibly find in favor of disqualification, a formal investigation shall be initiated.< >

- **Disqualification Investigation.** Upon initiating a disqualification investigation, the President or Elections Commissioner must notify the candidate being challenged, the Ethics Council Chairman, the Assistant Dean of Student Life and a single member of the Ethics Council Investigative Panel. The Investigative Panel Member shall investigate the claim and present the evidence to a panel consisting of the President, the Ethics Council Chairman, the Assistant Dean of Student Life and the Elections Commissioner. This panel shall consider the evidence in the light most favorable to the accused. Following discussion the panel shall vote. 3 of 4 votes are required to disqualify a candidate from the ballot. This vote shall be final and is not subject to appeal.

- **Grounds for Disqualification.** The following shall be grounds for disqualification from the ballot, as well as grounds for post-election disqualification through the challenge process laid out by Article VII, Section Five(J)(i);

- Violation of this Constitution;
- Lack of eligibility as defined by this Constitution;
- Violation of campaign rules;
- Violation of the terms of the WVU College of Law Student Handbook or the Student Code of Professional Responsibility; and/or
- Committing an offense that would be a violation of the West Virginia University Campus Student Code

- Such a violation need not be proven in accordance with the procedures set forth by the West Virginia University Campus Student Code, but rather in accordance with the procedures set forth by this Constitution.

- **Write-In Votes.** Write-in candidates are prohibited and all write-in votes shall be discarded.

## ARTICLE VIII: AMENDMENTS

### SECTION ONE: PROPOSAL OF AMENDMENTS

Amendments may be proposed through one of two methods:

1. Petitioning. Any student currently enrolled at the College of Law may present the S.B.A. a petition bearing the proposed amendment and the signature of at least fifty percent of the student body; or
2. Resolution. The Executive Board may pass an amendment resolution. Such a resolution must receive approval of at least two-thirds of the Executive Board.

### SECTION TWO: RATIFICATION

This Constitution shall be amended upon the approval of the proposed amendment described in the preceding paragraph and the support of a simple majority (50 % plus one vote) of currently enrolled students who vote in an election to be held at least one week after its approval in Section One. The vote must be open to all currently enrolled students at the College of Law. However, a majority of all students is not required for the Amendment to pass, rather only a majority of those who vote.

## ARTICLE IX: AUTONOMY

All student organizations shall enjoy political, physical, and administrative autonomy. The S.B.A. is not empowered to control the member organizations' internal affairs in any way, aside from those specifically defined by this Constitution.

## ARTICLE X: STUDENT CODE OF PROFESSIONAL RESPONSIBILITY

The S.B.A., as an organization, its officers, and members agree to abide by the Student Code of Professional Responsibility.

## ARTICLE XI: NON-DISCRIMINATION

The S.B.A. shall not discriminate against any person on any basis prohibited by the United States Constitution or the Constitution of the State of West Virginia.

## ARTICLE XII: UNIVERSITY AFFILIATION

S.B.A is not a separate entity from West Virginia University (WVU) and its component-parts, and, therefore, S.B.A. is subject to WVU's and its component-parts' rules, policies, and regulations.

Ratified: April 1, 2019

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## C. COLLEGE OF LAW SERVICES

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1. Academic Excellence Program (p. 686)
  2. Writing Center (p. 687)
  3. Meredith Career Services Center (p. 687)
  4. College of Law Bookstore and Cafe (p. 688)
  5. Financial Aid and Scholarships (p. 688)
  6. Technology Services (p. 689)
  7. Communications (p. 689)
  8. Web Information (p. 690)
- 

### C.1 ACADEMIC EXCELLENCE PROGRAM

**Kirsha Trychta, Director of Academic Excellence**  
**Academic Excellence Center**

Phone: 304-293-3882

Email: kirsha.trychta@mail.wvu.edu

The Academic Excellence Program (AEP) seeks to enhance the academic performance of all students in their first year of law school. Because new law students must rapidly adjust to the heightened expectations of a professional school, the Academic Excellence Center provides an array of services



designed to empower first-year students to quickly integrate “how to learn” with “what to learn.” The Center’s ultimate goal is to help students thrive in their first year of law school, not merely survive. To this end, the Center provides (1) weekly workshops on critical skills such as notetaking, outlining, time management, and test taking; (2) helpful handouts with tips for success and other important information about resources available to law students; and (3) individual counseling to address the needs of students who could benefit from personalized assistance.

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## C.2 WRITING CENTER

### Director of the Writing Center

Melanie Stimeling

Phone: 304-293-2008

Email: [vvulawwriting@mail.wvu.edu](mailto:vvulawwriting@mail.wvu.edu)

Website: [law.wvu.edu/writingcenter](https://www.law.wvu.edu/writingcenter/) (<https://www.law.wvu.edu/writingcenter/>)

Part of the College of Law Academic Excellence Center, the Writing Center helps students become better writers and offers an encouraging environment to discuss, develop, and experiment with writing techniques. The Writing Center is staffed by a full-time director as well as upper-level students who serve as Peer Writing Consultants. Individual writing consultations and group workshops are available to assist students in developing stronger writing skills or to improve a specific piece of writing. Students can seek assistance at any point in the writing process on all legal writing assignments and projects, unless an instructor explicitly prohibits it. Writing Center staff members are also available to help students with other kinds of professional writing, such as scholarship and job application materials.

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## C.3 MEREDITH CAREER SERVICES CENTER

Meredith Career Services Center's website (<http://law.wvu.edu/career-services/>)

### Interim Assistant Dean

TBD

Phone: 304-293-7750

Email: TBD

The Meredith Career Services Center is open year round. Office hours are Monday through Friday from 8:15 a.m. until 4:45 p.m (appointments are recommended).

Students must register with the Career Services Center to use its services and participate in on-campus interviews. As part of the registration process, students must provide Career Services with current contact information and give permission to release resume and other employment information to prospective employers.

Students should schedule an appointment with the staff member of their choice, either via email or Symplicity, the Center's online career management system. The Assistant Dean and Assistant Director will work individually with each student to assist with career development, to write or revise a resume or cover letter, to discuss interviewing skills, or to implement job search strategies.

**1. Career Center Workshops.** There are a series of workshops held for students each semester. Frequently offered topics include

- \*Resume writing and cover letter writing
- \*Interview preparation and interview skills workshops; mock interview program
- \*Job search strategies beyond on-campus interviews
- \*Using Web-based resources in the job search
- \*Working in public interest law
- \*Alternative careers for lawyers
- \*Working as a judicial clerk
- \*How to have a successful summer work experience
- \*Career exploration presentations

Many of these workshops are co-sponsored and given by the hiring partners of local law firms, public interest organizations, and corporations. Additionally, Career Services is responsible for conducting the Professional Development Institute (PDI), a series of targeted programs to help students hone their "soft" professional skills. Presently, the PDI is sponsored by the law firm of Steptoe and Johnson, PLLC.

A mandatory "Orientation to Career Services" workshop is held in mid-October, and all first-year students are required to attend. First-year students will register to use the Career Services Center at this time. The Assistant Dean for Career Services and the Assistant Director conduct this workshop each year.

**2. On-Campus Interviewing.** The Career Services Center invites law firms, public interest organizations, government agencies, businesses, and corporations to interview WVU law students for summer and permanent positions. On-campus interview season occurs in the fall semester for second- and third-year students, and generally begins in mid-August. The spring on-campus interview season is for all students and begins in February. Many employers come to campus to interview students; others ask to review student credentials through a resume collection service.

A master schedule of interviews is posted on the WVU Career Services Symplicity website (<https://law-wvu-csm.symplicity.com/students/>). The schedule is updated frequently each semester. Students should register for the Symplicity site and check it often.

Students should participate in on-campus interviewing but should also consider alternative methods of finding a job. Between 20-25% of students find their permanent jobs through on-campus interviewing each year; most students find work through a self-directed job search. Career Services is here to help with either.

Additionally, dozens of jobs are posted on Symplicity, and students are encouraged to apply directly with these employers.

**3. Job Research.** The Career Services Center has many Web-based and print resources for student use. Handouts and books are available for students both in career services and the library. Students may use Martindale Hubbell, the National Association for Law Placement Directory of Employers, and many other job-related texts and websites to find a job. See Career Services for updated passwords.

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## C.4 COLLEGE OF LAW BOOKSTORE AND CAFÉ

### Manager

Mary Jo Fugera

Phone: 304-293-2492

Email: [bkswwulaw@bncollege.com](mailto:bkswwulaw@bncollege.com)

The WVU Law Center Bookstore and Café is located off the main lobby of the Law Center. Regular operating hours are 8:00 a.m. to 4:00 p.m., Monday through Friday. Summer hours are 8:00 a.m.- 2:00 p.m. Monday through Thursday and 8:00 a.m.- 1:00 p.m. on Friday.

The Bookstore is open additional hours for the first week of each semester. The WVU Law Center Bookstore offers new and used textbooks, reference books, school supplies, and imprinted clothing and giftware. Software can be ordered online (<http://thinkedu.com/bn/>). Special order service is available at no extra charge. To order textbooks online, visit the Bookstore homepage (<http://wvulaw.bncollege.com/webapp/wcs/stores/servlet/BNCBHomePage?storeId=15066&catalogId=10001&langId=-1>). Textbook Rentals and price matching are also available, offering great savings on selected titles. Contact the Store Manager for details.

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## C.5 FINANCIAL AID AND SCHOLARSHIPS

### Financial Aid Contacts

Elissa Momen

Phone: 304-293-0456

Email: [elissa.momen@mail.wvu.edu](mailto:elissa.momen@mail.wvu.edu) ([elissa.momen@mail.wvu.edu](mailto:elissa.momen@mail.wvu.edu))

To be eligible for all types of financial aid, a student must complete the Free Application for Federal Student Aid (FAFSA). This form can be completed online (<https://studentaid.gov/h/apply-for-aid/fafsa/>) each year. Because West Virginia University is a direct lending institution, no loan applications will be accepted from lenders or banks. After all necessary forms have been completed by the student, the Financial Aid Office will determine a student's eligibility for student loans. Financial aid awards are to be viewed, accepted, declined, or reduced online through the WVU STAR System. Each student will receive a letter or email when his or her financial aid award has been processed. First-time loan borrowers are required to complete a master promissory note and entrance counseling. Both are to be completed online at <https://studentloans.gov/>.

Deadlines for financial aid are as follows:

#### 1. Scholarships: March 1

FAFSA results must be received by WVU by March 1 for first-round scholarship consideration.

#### 2. Student Loans: No deadline

The necessary documentation must be completed in a timely manner in order for the funds to be available for disbursement in August and January. WVU must receive your FAFSA results by June 1 to insure timely processing. Information regarding additional loans, such as private



loans, is available on the Financial Aid website at <http://financialaid.wvu.edu/loans/private>. Graduating students must complete Loan Exit Counseling if they borrowed from the William D. Ford Federal Direct Loan program.

Financial Aid Processing is a detail-oriented process. Please keep the following seven steps in mind when applying for and receiving financial aid:

1. Make sure all applications are complete, correct, and submitted on time.
2. Read completely and respond quickly to all financial aid requests.
3. The following steps must be taken to have financial aid completely processed:
  - a. Submit all required documents so that your file is complete, which consists of a current FAFSA. If you are selected by the Department of Education for verification, you also must submit the WVU Verification Form and a signed copy of your most recent Federal Income Tax Return. The WVU financial aid office will post a verification form in STAR if you are selected.
  - b. View, accept, decline, or reduce your financial aid award online through the WVU STAR system. There is a separate application for the GraduatePlus Loan, which is completed online (<https://studentloans.gov>).
  - c. If you are a first-time borrower, you must sign your master promissory note and complete entrance counseling prior to disbursement of funds. Both can be done online at <https://studentloans.gov/>.
4. The Financial Aid Office may be contacted by calling 304-293-1988 or by submitting an online assistance request.
5. Be sure to notify the Registrar's Office of all address changes. Students can make address changes through their MIX account and the WVU Star System. Refund checks are sent to the local address on file with the Registrar's Office. Make sure the office has the correct address so your check will get to you in a timely manner. You can sign up for direct deposit using Tuition Management Systems (TMS) at <https://studentaccounts.wvu.edu/refunds> (<https://studentaccounts.wvu.edu/refunds/>). Call 888-425-1138 with questions.
6. Keep records of your loans. You are responsible for knowing how much you borrowed, and you will need that information if you decide to consolidate your loans once you have graduated. This information is available at the National Student Loan Data System (<https://nsldsfa.ed.gov>).
7. Notify the financial aid office if you are awarded a late scholarship, tuition waiver, or some other benefit, such as VA benefits. This could affect your financial aid package, and you may have to repay some of the money you received.

Scholarship information offered at the College of Law is available online (<https://admissions.law.wvu.edu/tuition-and-aid/>). Scholarships available from outside sources can be found at [www.fastweb.com](http://www.fastweb.com) and other helpful sites.

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## C.6 TECHNOLOGY SERVICES

### Director, Law School Technology

Keith Walton

Phone: 304-293-8556

Email: [keith.walton@mail.wvu.edu](mailto:keith.walton@mail.wvu.edu)

### Professional Technologist I

Kenneth Price

Phone: 304-293-4657

Email: [kenneth.price@mail.wvu.edu](mailto:kenneth.price@mail.wvu.edu)

The College of Law's Director of Technology Services manages all computer and networking operations for the law school and law library. Duties include maintaining the law school network, wireless access, office computers, library computers, and printers. The College of Law's Professional Technologist manages all audio-visual equipment and classroom technology at the College of Law. The consultant's duties include maintaining the law school distance learning classroom, AV equipment scheduling, event taping, and AV equipment maintenance.

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## C.7 COMMUNICATIONS

### Director of Marketing and Communications

TBD

Phone: 304-293-7439

Email: TBD

### Communication Specialist

TBD

Phone: TBD

Email: TBD

The Director of Communications for the College of Law works with the administration, faculty, staff, and students in strategic communication activities using the internet, publication and the media to increase enrollment, institutional reputation, fundraising, and internal communication.

## C.8 WEB INFORMATION

The College of Law website (<http://www.law.wvu.edu>) offers a wide range of current information on the law school, its curriculum, programs, news, events, and people. Helpful content is organized primarily in the following categories: Academics, Admission, Career Services, Clinical Law, Faculty and Staff, Student Life and the Law Library.

## D. UNIVERSITY SERVICES

1. General Information (p. 690)
2. Health Services (p. 690)
3. Student Activities and Organizations (p. 690)

### D.1 GENERAL INFORMATION

Information regarding University services such as ID cards (Mountaineer Card), parking, Health Services, and Disability Services, as well as University student life and affairs, can be found at the WVU Division of Student Life website (<https://studentlife.wvu.edu/>).

### D.2 HEALTH SERVICES

**Illness.** WVU Student Health Services are located at the WVU Health and Education Building on the Evansdale Campus. WVU Student Health Services are available for registered students for wellness visits, vaccinations, on-site X-rays, lab services, telemedicine, referrals, and more. The Student Health Building includes urgent care, travel medicine services, behavioral medicine, and a pharmacy. For more information, see the Student Health Service website (<https://health.wvu.edu/student-health/>).

**Mental Health and Counseling Services.** The College of Law has an embedded mental health counselor on site who is available Monday-Friday during business hours. For more information and/or to schedule an appointment, see the Counseling portion of our website (<https://www.law.wvu.edu/counseling/services/>). Students who prefer personal personal counseling services outside of the College of Law may contact the embedded mental health counselor at the law school for a referral to a community provider or call the Carruth Center (<https://carruth.wvu.edu/>) on the main campus at 304-293-4431.

**Insurance.** For information on University insurance programs, call 304-293-2315 or visit the web (<http://studentinsurance.wvu.edu/>).

**Rape, Abuse and Incest National Network.** Call 1-800-656-4673

Additional 24/7 support options include:

**WVU Crisis Text Line:** Text **WVU** to 741741.

**WVU Carruth Center:** Call 304-293-4431.

**National Crisis Text Line:** Text **HOME** to 741741.

**National Suicide Prevention Lifeline:** Dial 988.

**Trevor Project (LGBTQ+):** Text START to 678678 or Call 1-866-488-7386.

### D.3 STUDENT ACTIVITIES AND ORGANIZATIONS

A complete list of all student activities and organizations sponsored by the University is available at the WVU website ([http://studentengagement.wvu.edu/?utm\\_source=admissions-website&utm\\_medium=web&utm\\_content=/life&utm\\_campaign=Admissions%2520Website%2520Site%2520Links](http://studentengagement.wvu.edu/?utm_source=admissions-website&utm_medium=web&utm_content=/life&utm_campaign=Admissions%2520Website%2520Site%2520Links)). Information regarding student organizations at the College of Law is available online (<http://law.wvu.edu/student-life/student-organizations/>).

## Library Guide

## A. LAW LIBRARY GUIDE

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1. Schedule (p. 691)
  2. Location of Materials (p. 691)
  3. Law Library Policy/Regulations (p. 691)
  4. Borrowing Law Library Materials (p. 691)
  5. Services (p. 692)
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### A.1 SCHEDULE

#### FALL AND SPRING SEMESTER HOURS

Monday – Thursday, 8:00 a.m. – 8:00 p.m.

Friday, 8:00 a.m.-5:00 p.m.

Saturday/Sunday, 12:00 p.m. – 5:00 p.m.

\*Twenty-four hour swipe access is available to law students with limited exceptions

\*The Law Library will be closed on all home football game Saturdays. Due to parking restrictions at the College of Law on these weekends, the Law Library will be closed from 8:00 p.m. on Friday evenings until 9:00 a.m. on Sunday morning.

#### SUMMER HOURS

Monday — Friday 8:00 a.m. – 4:00 p.m.

Saturday — Sunday: CLOSED

#### HOLIDAY AND INTERSESSION HOURS

Generally, 9:00 a.m. to 4:00 p.m.

\*The Law Library is closed on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. It also may be closed additional days throughout the year in accordance with the University holiday schedule.

### A.2 LOCATION OF MATERIALS

**First Floor.** Core Legal Collection, Legal Leisure, Career Services Collection, Bar Reserve, Study Aids Collection, Racial Justice Collection, Hardesty Leadership Collection, Media, West Virginia Collection and the Rare Book Room.

**Second Floor.** General Books on American Law and Other Subjects: Legal Loose Leaf Collection, Legal Forms Collection, Anglo-American Collection, Foreign and International Collection

### A.3 LAW LIBRARY POLICY/REGULATIONS

Food, tobacco and vaping products are not allowed in the Library. Drinks are permitted in containers with lids.

### A.4 BORROWING LAW LIBRARY MATERIALS

**Circulation Policy.** Many items in the Law Library collection, including bound journals, do not circulate. Please inquire at the Circulation Desk for circulation information regarding the particular materials you wish to use.

Law students may check out circulating books for the full semester. Books may be renewed three times. Renewals should be made online using WorldCat.

It is the responsibility of the borrower to know when Library materials are due and to return or renew them on or before the due date. If material is lost or damaged, the amount of the fine will be equal to the replacement price plus a processing fee.

**Law Library Student ID Number.** To borrow Library materials, all students must have a current WVU student ID card (Mountaineer Card). The Mountaineer Card allows students to check out materials at all of the Libraries on campus and to print off materials at Library Pharos stations.

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## A.5 SERVICES

**Contact Information.** Visit the Circulation Desk on the first floor of the Library, call the Circulation Desk at 304-293-5300, or email the Library at [vvulawlibrary@mail.wvu.edu](mailto:vvulawlibrary@mail.wvu.edu) ([vvulawbooks@mail.wvu.edu](mailto:vvulawbooks@mail.wvu.edu)).

**Reserve.** The Reserve Collection contains course reserve materials and selected frequently used titles.

**Study Aids.** The Law Library has copies of popular study aids available as ebooks in the Aspen Learning Library and the West Academic Study Aids Collections. Additionally, print study aids are available on the first floor of the Library. Audio and video study aids are also available.

**WVU College of Law Examinations.** Copies of some exams that are administered in the College of Law courses are compiled and available in the exam repository available from the Law Library homepage. Access to the exam repository is limited to currently enrolled students.

**WorldCat.** WorldCat is the WVU Library's online catalog and information network. The holdings of all WVU campus Libraries and worldwide libraries are included in WorldCat. Library materials are accessible by author, title, keyword, and Library of Congress subject heading. WorldCat is available anywhere you have Internet access.

**InterLibrary Loan.** You may borrow materials not found in our collection from other Libraries through EZBorrow, and ILLiad. These requests should be made online via WorldCat. Books normally arrive within two weeks and articles within several days. Inquiries concerning this service can be made at the Circulation Desk .

**Computers.** The Law Library provides 15 networked computers. Each computer is connected to the Internet, networked to a printer, and contains the latest versions of commonly used software. Wireless access is also available throughout the College of Law.

**Printing and Photocopies.** Two printer/copiers are available on the floor of the Library and one printer/copier is available on the second floor of the Library. A Mountaineer Card is required to use the printer/copiers.

**Online Legal Databases.** Bloomberg Law, Lexis+, and Westlaw Precision are available to all law students. Documents accessed on Lexis Advance may be printed free of charge on the Lexis printer available on the first floor of the Library.

**For Children.** If it is necessary to bring children to the Law School, there are a number of books and toys available for quiet play that can be requested at the Circulation Desk.

# Media - Reed College of

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## Degrees Offered

- Master of Science in Journalism
- Master of Science

## Majors

- Data Marketing Communications (M.S.)
- Digital Marketing Communications (M.S.)
- Integrated Marketing Communications (M.S.)
- Journalism (M.S.J.)
- Media Solutions and Innovation (M.S.J.)

The College of Media has two prime locations on campus: its "home" is located on the downtown campus in Martin Hall, WVU's oldest building (constructed in 1870), and its new 10,000 square-foot Media Innovation Center is located on the nearby Evansdale campus, close to programs focusing on the arts, engineering and health care.

Established in 1939, the College of Media is among the oldest journalism programs in the United States. The college has approximately 5,000 graduates, the majority of whom have careers in newspaper journalism, broadcasting, advertising, public relations, or related fields. With its first graduate in 1962, the master of science in journalism program has had a significant number of graduates go on to earn Ph.D.s and teach at the college level.

The college's three online marketing communications master's degree programs, including the master of science in integrated marketing communications program (launched in 2003), the master of science in data marketing communications, (launched in 2017), and the master of science in digital marketing communications (launched in 2020) are all among the first of their kind. These practitioner-focused programs offer leading edge course work reflective of today's industry and are taught by highly experienced and engaged "scholar-practitioner" instructors.

Finally, the college's online program in media solutions and innovation, launched in 2020, is an intensive, cohorted online degree program that can be completed in one year. This master's program is designed to fill an identified need in the market by offering a distinct innovation program that focuses on individual entrepreneurship as an alternative to existing skills-focused "new media" programs, and as a unique graduate-level program that challenges/extends existing "teaching hospital" models in schools of journalism.

## Master of Science in Data Marketing Communications Program

The Data Marketing Communications graduate program (<http://dmc.wvu.edu/>) is offered exclusively online with no on-campus classroom attendance required. The curriculum consists of 10 courses and is always evolving to remain current with the industry. Students move through the program in approximately 16 months as a cohort, taking the prerequisite course and the related quantitative assessment exam, followed by eight core courses and one capstone course. Students may choose an area of emphasis (AOE) in Integrated Marketing Communications as well.

## Master of Science in Digital Marketing Communications Program

The Digital Marketing Communications graduate program (<https://marketingcommunications.wvu.edu/academics/ms-digital-marketing-communications/>) is offered exclusively online with no on-campus classroom attendance required. The curriculum consists of 10 courses that can be completed in an accelerated one-year schedule, in a full time schedule taking approximately 16 months or in a part-time schedule taking 2 calendar years. Students can earn numerous recognized industry certifications concurrently while completing their coursework.

## Master of Science in Integrated Marketing Communications Program

The Integrated Marketing Communications (IMC) graduate program (<https://marketingcommunications.wvu.edu/academics/ms-integrated-marketing-communications/>) was the first online graduate program in integrated marketing communications in the world and continues to be offered exclusively online with no on-campus classroom attendance required. Established in 2003 by the Reed College of Media, the program's curriculum today requires an introductory course, three core courses, two specialty courses (selected from four options), three electives (chosen from around 30 options) and a capstone experience. There are numerous options available for students who wish to complete the program in a little over one year, most commonly in a full-time schedule taking approximately 16 months or in a part time schedule taking 2 calendar years or longer. Students may also specialize by choosing a professional area of emphasis (AOE) as well, including creative strategy, data marketing communications, digital and social media, healthcare communication, higher education marketing, management, and public relations leadership.

## Master of Science in Journalism Program

The Master of Science in Journalism (MSJ) program (<https://mediacollege.wvu.edu/academics/graduate-programs/ms-journalism/>) is a traditional, on-campus graduate experience. The MSJ program offers students the choice of two tracks: the teaching research track for persons who may

want to pursue a doctoral degree and the professional track for those who wish to enhance their professional opportunities in some area of mass communications. This program, designed to help individual students reach their potential as practitioners, teachers, or scholars in mass communications, prepares a graduate not only for a first job but also for long-term productive career development. Curricular areas of emphasis (AOEs) and applied skills courses allow students to excel in their chosen professions.

## Master of Science in Media Solutions and Innovation

The Master of Science in Media Solutions and Innovation program (<https://mediacollege.wvu.edu/academics/graduate-programs/ms-media-solutions-and-innovation/>) is a one-year, fully-online master's degree with no on-campus classroom attendance required. The curriculum explores disruptions in today's media industry and how to build industry partners to assist in research and development, discovery, and creating targeted solution pathways to address some of the most challenging media problems.

## Assistantships

A small number of competitive assistantships may be available through the college each year. These positions pay stipends, cover health insurance, and provide remission of a portion of tuition. College of Media graduate assistants help professors with teaching courses, complete service learning projects or research, manage equipment, and supervise broadcast and computer laboratories. Marketing communications-related assistantships may also be available in other departments across WVU's campus.

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## ADMINISTRATION

### PROVOST

- Maryanne Reed - M.S. (Northwestern University)  
Professor

### DEAN

- Diana Martinelli - Ph.D. (University of North Carolina at Chapel Hill)  
Professor

### ASSISTANT DEANS

- Chad Mezera - M.S. (West Virginia University)  
Online Programs

### DIRECTOR OF GRADUATE STUDIES

- Steve Urbanski - Ph.D. (Duquesne University)  
Associate Professor

## Admissions

Those interested in learning about and applying to the master of science in journalism program should contact the Director of Graduate Studies via e-mail at [steve.urbanski@mail.wvu.edu](mailto:steve.urbanski@mail.wvu.edu).

Students interested in the online marketing communications graduate programs, including the master of science in data marketing communications, master of science in digital marketing communications, and master of science in integrated marketing communications should contact the Assistant Dean of Online Programs via email at [chad.mezera@mail.wvu.edu](mailto:chad.mezera@mail.wvu.edu) or phone at 304-293-5903.

Students interested in the master of science in media solutions and innovation program should contact the Program Director, Professor Dana Coester, via e-mail at [dana.coester@mail.wvu.edu](mailto:dana.coester@mail.wvu.edu).

The WVU Admissions online catalog is available at <https://graduateadmissions.wvu.edu/>. Written requests for answers may also go to WVU, Reed College of Media, 112 Martin Hall, P.O. Box 6010, Morgantown, WV 26506-6010.

The Reed College of Media's main office telephone number is (304) 293-3505.

Students interested in the online marketing communications graduate certificate programs should contact Assistant Dean of Online Programs, Chad Mezera, via email at [chad.mezera@mail.wvu.edu](mailto:chad.mezera@mail.wvu.edu) or phone at 304-293-5903.

## Certificate Programs

- Creative Strategy (p. 50)
- Data Marketing Communications (p. 51)
- Digital and Social Media (p. 52)
- Healthcare Communication (p. 55)

- Higher Education Marketing (p. 57)
- Integrated Marketing Communications (p. 58)
- Public Relations Leadership (p. 65)

## Data Marketing Communications, M.S.

Department website: <https://marketingcommunications.wvu.edu/academics/ms-data-marketing-communications> (<https://marketingcommunications.wvu.edu/academics/ms-data-marketing-communications/>)

### Degree Offered

- Master of Science

### Nature of the Program

As more organizations recognize the need for data-driven marketing campaigns, marketers are working alongside data specialists who collect data at all stages of the marketing process. Marketing communications professionals then use that data to predict future behaviors, make data-driven decisions to attract and retain consumers, and measure outcomes to determine what's successful — and what isn't.

The WVU Reed College of Media's Data Marketing Communications graduate program (<http://dmc.wvu.edu>) is designed for professionals who are passionate about the marketing communications profession — we bring together those who aspire to be leaders in the field of using data to achieve marketing communications results. In this program, students earn a practical, in-demand degree focused on bridging the gap between data scientists and communicators to reach key audiences. They understand how technology and users are changing and are dedicated to learning the skills needed to make data-driven decisions in order to measure productivity and increase ROI. Many academic programs that address this emerging industry need focus on statistics professionals or computer programmers. The Data Marketing Communications program is neither; it is completely designed to support today's marketer.

The Data Marketing Communications program is completely online with no on-campus classroom attendance required. Curriculum consists of 10 courses and can be completed in 16 months. Requirements include the prerequisite course and quantitative assessment exam, followed by eight core courses, and finally a capstone course.

The program offers a specialization with an Area of Emphasis in Integrated Marketing Communications (<https://marketingcommunications.wvu.edu/academics/ms-data-marketing-communications/>).

Data Marketing Communications instructors are recognized leaders in their fields. These scholar-practitioners provide a carefully balanced blend of academic theory and the practical skills today's marketers need. They teach our "learn-it-today, use-it-tomorrow" curriculum, which provides valuable, practical knowledge that can be immediately applied to a student's current career. Most students continue to work full-time while earning their degree.

All courses are asynchronous, allowing students to participate at any time, from anywhere in the world. While no on-campus residency is required to complete the degree, the program hosts an annual Integrate conference to provide students and faculty an opportunity to network in-person and explore the latest innovations in the ever-changing marketing communications landscape. Learn more about the program's Integrate Conference (<http://integrate.wvu.edu>).

### Graduate Assistantships

Students in the Data Marketing Communications program who secure a graduate assistant position at any academic or non-academic unit on campus will be eligible to receive a waiver equivalent to the University tuition portion of their total tuition for coursework, as well as any stipend/compensation offered by the unit hosting the position. Payment of the remaining Program Tuition and Online Learning Fee is the student's responsibility. For complete information on graduate assistant options at WVU, please visit the Graduate Education Assistantships webpage (<https://graduateeducation.wvu.edu/grad-life/graduate-assistantships/>).

### Program Format

The program's academic year consists of five accelerated terms: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

### Admissions

Admission to the Data Marketing Communications online graduate program at West Virginia University is competitive and the total number of available seats for each entry term is limited. Admission is based on a holistic review of each applicant's academic history, years of relevant professional experience, writing ability and intent (personal statement).

Students are currently admitted twice per year, in Early Fall (August) and Early Spring (January).

The Data Marketing Communications program utilizes university GPA admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>).

Visit the program website (<http://dmc.wvu.edu>) for comprehensive information, including faculty bios, curriculum and course information, details on the application and admissions process, and to register for a free online information session (<https://marketingcommunications.wvu.edu/admission/information-sessions/>).

Completion of DMC 660 and related quantitative assessment exam is required before students can proceed to the core courses.

Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025  
Major Code: 4935

Degree Requirements

Code	Title	Hours
Minimum cumulative GPA of 2.75 required.		
Minimum grade of C- required in all courses provided that a cumulative 2.75 GPA is maintained.		
Introductory Course		
DMC 460	Introduction to Data Marketing Communications	3
Core Courses		
DMC 561	Audience Segmentation	3
DMC 562	Message Customization	3
DMC 563	Brand Data Collection & Visualization	3
DMC 564	Social Media Optimization	3
DMC 571	Data Management Platforms	3
DMC 572	Campaign Planning & Programmatic Media Buying	3
DMC 573	Campaign Metrics and Assessment	3
DMC 574	Messaging for Customer Relationship Management	3
Capstone Course		
DMC 580	Data Marketing Communications Campaigns	3
Total Hours		30

\* Students complete the DMC 460 course and quantitative assessment test in their first term in the program. Following successful completion of DMC 460, students will proceed through the eight core courses. Campaigns course is taken in the final semester. Upon successful completion of DMC 580 in the student's final term, the student will graduate from the program.

It should be noted that the plan of study listed below relies on condensed parts of term where two parts of term can be completed within the traditional fall and spring semesters.

First Year					
Fall	Hours	Spring	Hours	Summer	Hours
Early Fall Part of Term		Early Spring Part of Term		DMC 571	3
DMC 460		3 DMC 563		3 DMC 572	3
Late Fall Part of Term		DMC 564		3	
DMC 561		3			
DMC 562		3			
		9		6	6
Second Year					
Fall	Hours				
Early Fall Part of Term					
DMC 573		3			
DMC 574		3			
Late Fall Part of Term					



DMC 580	3
	9

Total credit hours: 30

## Integrated Marketing Communications Area of Emphasis Requirements

The Integrated Marketing Communications AOE is intended to prepare non-IMC students for careers utilizing an integrated marketing communications strategy. Students will be exposed to course work focused in IMC, audience insight and behavior, brand management and emerging media.

Course Requirements. To satisfy the requirements of the Integrated Marketing Communications Area of Emphasis, a student must complete the four required courses below.

- For MBA students, two of the courses required for an AOE in IMC may also be applied to a student's elective requirement, with the other two taken in addition to their MBA degree requirements. Note that a cumulative GPA of 3.0 is required for graduation from the Online Hybrid MBA program. The courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 3.0) in the MBA program.
- For DMC students, one of the courses required for an AOE may also be applied to an DMC student's elective requirement, with the other three taken in addition to the general IMC master's degree requirements. Note that a cumulative GPA of 2.75 is required for graduation from the DMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
IMC 519	Emerging Media and the Market	3
Total Hours		12

EMBA students who elect to enroll in this Area of Emphasis will be required to complete IMC 410 before moving on to the other courses in the Area of Emphasis.

## Major Learning Outcomes

### DATA MARKETING COMMUNICATIONS

Marketing communications professionals have been relying on data in various forms since the early days of media. However, new technologies are having a dramatic effect on how marketing communications campaigns are planned and assessed. With unprecedented access to individual transaction-level data, marketing communicators can now use available information to customize a target consumer's exposure to advertisements and other promotional communications. While much of the data processing is automated, marketing communicators increasingly must be adept at managing vast amounts of information to glean key insights and give their organizations a competitive advantage.

Upon completion of this program students will be able to:

- Understand the basic principles of data marketing communications, media and web analytics.
- Understand the differences between reporting and analysis.
- Recognize how metrics and analysis inform marketing communications decision making.
- Explain how marketing communicators use current analytic methods such as segmentation, profiling, and recency, frequency and monetary (RFM) analysis to deliver return on investment (ROI) for their clients.
- Communicate key insights gleaned from data to marketing communications decision makers.
- Make marketing communications decisions informed by data.

## Digital Marketing Communications, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The Digital Marketing Communications (<https://marketingcommunications.wvu.edu/academics/ms-digital-marketing-communications/>) graduate program is offered exclusively online with no on-campus classroom attendance required. Students may select between an intense, one-year completion plan, as

well as a more flexible schedule that allows them to balance between other personal and professional responsibilities while completing the program over 18 months to two years.

In the Digital Marketing Communications master's program, students will gain the knowledge and skills to communicate and create dialogue with today's modern audience. Program topics also include building trust, selling, and maximizing customer long-term value/creating customer advocates who bring you more customers.

The program is taught by a diverse instructors who are recognized leaders in their fields. These scholar-practitioners provide a carefully balanced blend of academic theory and practical skills. They teach our "learn-it-today, use-it-tomorrow" curriculum, which provides valuable, practical knowledge that can be immediately applied to a student's current career. Many Digital Marketing Communications students continue to work full-time while earning their degree.

All Digital Marketing Communications program courses are asynchronous, enabling students to participate at any time, from anywhere in the world. While no on-campus residency is required to complete the degree, the Reed College of Media hosts an annual conference to provide students and faculty an opportunity to network in-person and explore the latest innovations in the ever-changing marketing communications landscape. Learn more about the Integrate Conference (<https://integrate.wvu.edu/>).

## Graduate Assistantships

Students in the Digital Marketing Communications major who secure a graduate assistant position in any academic or non-academic unit on campus will be eligible to receive a waiver equivalent to the University tuition portion of their total tuition for Digital Marketing Communications coursework, as well as any stipend/compensation offered by the unit hosting the position. Payment of the remaining Program Tuition and Online Learning Fee is the student's responsibility.

## Double Majors

Due to overlapping curricula and an accelerated course load students are not permitted to double-major in Digital Marketing Communications and Integrated Marketing Communications or Data Marketing Communications.

## Program Format

The program's academic year consists of five accelerated terms corresponding to the University's existing parts of term: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

## Admissions

Admission to the Digital Marketing Communications online graduate program at West Virginia University is competitive and the total number of available seats for each entry term is limited. Admission to the program is based on a holistic review of each applicant's academic history, years of relevant professional experience, and writing ability and intent (personal statement).

Students are admitted to the Digital Marketing Communications program three times per year, in the Early Fall (August), Early Spring (January) and Summer (May) admission terms. The Digital Marketing Communications program utilizes a rolling admissions process and qualified applicants will be reviewed and admitted as their applications are received.

The Digital Marketing Communications program utilizes university GPA admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>).

Visit the Digital Marketing Communications website (<https://marketingcommunications.wvu.edu/academics/ms-digital-marketing-communications/>) for comprehensive information, including faculty biographies, curriculum and course information, details on the application and admissions process, and to register for a free online information session (<https://marketingcommunications.wvu.edu/admission/information-sessions/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 4938

## Degree Requirements

Code	Title	Hours
A minimum cumulative GPA of 2.75 is required.		
A minimum grade of C- is required in all courses provided that a cumulative GPA of 2.75 is maintained.		
<b>Prerequisite Coursework</b>		
IMC 440	Introduction to Digital Marketing Communication	3
<b>Core Coursework</b>		

DMC 561	Audience Segmentation	3
DMC 565	Customer Engagement Ethics & Strategies	3
DMC 573	Campaign Metrics and Assessment	3
IMC 534	Digital Storytelling	3
<b>Elective Coursework</b>		<b>9</b>
Select three of the following:		
IMC 519	Emerging Media and the Market	
IMC 529	Mobile Marketing	
IMC 541	Social Media and Marketing	
IMC 542	Web Metrics and Search Engine Optimization	
IMC 546	Augmented Reality & Virtual Reality in IMC	
<b>Production Coursework</b>		<b>3</b>
Select one of the following:		
IMC 543	Digital Video Production	
IMC 693	Special Topics	
<b>Capstone Requirement</b>		
IMC 544	Digital Marketing Communication Campaigns	3
Total Hours		30

\*  
Completion of IMC 440 students can proceed to the rest of the curriculum.

\*\*  
Upon successful completion of IMC 544 in the student's final term, the student will graduate from the program.

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
DMC 561		3 DMC 565		3 Production Course		3
IMC 440		3 DMC 573		3 IMC 544		3
Elective		3 IMC 534		3		
Elective		3 Elective		3		
		12		12		6

Total credit hours: 30

**Note:** Spring Admits will take the same courses in the same order but will start in a Spring semester and graduate at the conclusion of the following Fall semester.

It should be noted the plan of study above relies on accelerated semesters where two accelerated semesters can be completed within the "traditional" fall and spring semesters.

## Major Learning Outcomes

### DIGITAL MARKETING COMMUNICATIONS

Graduate of the Digital Marketing Communications program will:

1. Evaluate the importance of digital media, how they are reshaping the world in which we communicate, and how marketing communications practitioners can reach and cultivate an audience through digital channels.
2. Define and segment target markets based on Establish marketing communications objectives and define target markets that can be reached through digital media and brand storytelling.
3. Utilize key performance indicators that define a digital campaign's goals and determine ROI.
4. Recognize the roles and implications of law and ethics in digital media and marketing communications through digital channels.
5. Design and organize digital marketing communications plans in a professional manner consistent with contemporary industry-specific standards.

# Integrated Marketing Communications, M.S.

## Degree Offered

- Master of Science

## Nature of the Program

Rooted in the tradition of academic excellence of WVU, the Reed College of Media's Integrated Marketing Communications (IMC) graduate program (<http://imc.wvu.edu/>) has developed a national reputation for hands-on, industry relevant education. The program was named the "Outstanding Online Program" for 2015 by the Online Learning Consortium, the leading professional organization devoted to advancing the quality of online learning worldwide. The program was also named a finalist in the PRWeek US Awards 2016 "Education Program of the Year" category and was named a "Program of Excellence" by the WVU Board of Governors in 2020.

The IMC program is offered exclusively online with no on-campus classroom attendance required. The program is constantly evolving to reflect our changing industry and ensure a relevant, highly-customizable graduate experience for students. At the center of the curriculum are an introductory course and three core courses, which provide all students with a solid marketing communications foundation. The degree is enhanced by selecting two of four "specialty" course options and three of nearly 30 elective course options. Through the extensive specialty and elective courses, students are able to focus their graduate studies on their individual areas of interest or to position them for a specific career path. The capstone course is taken in the student's final term. In this final course, students apply their knowledge to create an IMC campaign for a real-world client. They can choose to work on a client of their preference or on a national client provided by the instructor.

The program offers specializations in the following Areas of Emphasis (<https://marketingcommunications.wvu.edu/academics/ms-integrated-marketing-communications/#specializationscontainer>):

- Creative Strategy
- Data Marketing Communications
- Digital and Social Media
- Healthcare
- Higher Education Marketing
- Management
- Public Relations Leadership

IMC instructors are recognized leaders in their fields. These scholar-practitioners provide a carefully balanced blend of academic theory and practical skills. They teach our "learn-it-today, use-it-tomorrow" curriculum, which provides valuable, practical knowledge that can be immediately applied to a student's current career. Most WVU IMC students continue to work full-time while earning their degree.

All IMC courses are asynchronous, allowing students to participate at any time, from anywhere in the world. While no on-campus residency is required to complete the degree, the program hosts an annual Integrate conference to provide students and faculty an opportunity to network in-person and explore the latest innovations in the ever-changing IMC landscape. Learn more about the program's Integrate Conference (<http://integrate.wvu.edu>).

## Graduate Assistantships

Students in the IMC program who secure a graduate assistant position at any academic or non-academic unit on campus will be eligible to receive a waiver equivalent to the University tuition portion of their total tuition for IMC coursework, as well as any stipend/compensation offered by the unit hosting the position. Payment of the remaining Program Tuition and Online Learning Fee is the student's responsibility.

## Program Format

The program's academic year consists of five accelerated terms: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

Due to the rigor of IMC program courses, students should register for no more than two courses in any IMC term. Most students who work full-time indicate that one to two course(s) per term is manageable. Students are encouraged to work with their advisor to create a customized course schedule that fits their life and supports their professional aspirations. Most students complete the IMC master's degree in approximately two years. However, University policy allows students up to eight years to complete a master's degree; the IMC program model supports students in taking terms off as needed to balance their graduate studies with personal and professional obligations.

Those who wish to complete IMC coursework but either already have a master's degree or are not planning to pursue a full master's degree are invited to apply to one of the college's online certificate programs in integrated marketing communications, creative strategy, data marketing communications, digital & social media, healthcare, higher education marketing or public relations leadership.

## Admissions

Admission to the Integrated Marketing Communications online graduate program at West Virginia University is competitive and the total number of available seats for each entry term is limited. Admission to the program is based on a holistic review of each applicant's academic history, years of relevant professional experience, writing ability and intent (personal statement).

Students may be admitted to the IMC program three times per year, in Early Fall (August), Early Spring (January) and Summer (May). Please contact the program for more information on upcoming admission terms. The IMC program utilizes a rolling admissions process and qualified applicants will be reviewed and admitted as their applications are received.

The Integrated Marketing Communications program utilizes university GPA admission requirements (<http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationtext>).

Visit the IMC website (<http://imc.wvu.edu/>) for comprehensive information about the online graduate program, including faculty bios, curriculum and course information, details on the application and admissions process, and to register for a free online information session (<http://imc.wvu.edu/admissions/info-sessions/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 4932

## Degree Requirements

Code	Title	Hours
Minimum GPA of 2.75 required.		
Minimum grade of C- required in all courses.		
<b>Core Courses</b>		
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 511	Marketing Research and Analysis	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
Complete a minimum of two of the following **		6
IMC 515	Creative Strategy and Execution	
IMC 516	Direct & Digital Marketing	
IMC 518	Public Relations Concepts and Strategy	
IMC 519	Emerging Media and the Market	
<b>IMC Elective Courses</b>		
Select at least three IMC courses 500-level and above.		9
IMC 536	Integrated Marketing Communication Campaigns	3
Total Hours		30

\*

Students complete the IMC 410 course in their first term in the program. Following successful completion of IMC 410, students are able to take courses in virtually any order, ensuring a fully customized path of study.

\*\*

IMC students are often admitted to the program with substantial work experience and are able to opt out of the core course that is most reflective of their professional experience. Specifically, PR practitioners are encouraged to opt out of IMC 518, direct marketers are encouraged to opt out of IMC 516, and creative/graphic designers are encouraged to opt out of IMC 515. All students must complete at least two of these courses.

\*\*\*

IMC students are able to take more than 30 credit hours if their personal and/or professional interests require (including additional elective courses or opting to complete all the core courses to ensure a comprehensive graduate experience). However, all additional courses taken must be completed before the student registers for the capstone course (IMC 536).

Upon successful completion of IMC 536 in the student's final term, the student will graduate from the program.

First Semester	Hours
IMC 410	3
	3

<b>Second Semester</b>	<b>Hours</b>
IMC 511	3
IMC 512	3
	6
<b>Third Semester</b>	<b>Hours</b>
IMC 513	3
Select one of the following:	3
IMC 515	
IMC 516	
IMC 518	
	6
<b>Fourth Semester</b>	<b>Hours</b>
Select one of the following:	3
IMC 515	
IMC 516	
IMC 518	
IMC 519	
	3
<b>Fifth Semester</b>	<b>Hours</b>
Select two 500-level or higher IMC courses	6
	6
<b>Sixth Semester</b>	<b>Hours</b>
IMC 536	3
Select one 500-level or higher IMC course	3
	6
Total credit hours: 30	

## Areas of Emphasis Offered:

West Virginia University's Integrated Marketing Communications graduate program allows students to specialize with an Area of Emphasis (AOE). These seven specializations broaden a student's knowledge base, making them more competitive in the job market. Included on their academic transcript, an AOE demonstrates expertise in that specific area of specialization.

The IMC program currently offers the following AOE's:

- Creative Strategy (p. 702)
- Data Marketing Communications (p. 703)
- Digital and Social Media (p. 703)
- Healthcare (p. 703)
- Higher Education Marketing (p. 704)
- Management (p. 704)
- Public Relations Leadership (p. 704)

## CREATIVE STRATEGY AREA OF EMPHASIS REQUIREMENTS

The Creative Strategy Area of Emphasis is intended to prepare Reed College of Media IMC graduate students for careers focusing on the creative aspects of integrated marketing communications planning and execution. Students will engage in course work focused on advanced creative concepts, digital storytelling, visual information design and content creation.

**Course Requirements.** To satisfy the requirements of the Creativity Area of Emphasis, a student must complete the four required courses below. Three of the courses required for an AOE may also be applied to an IMC student's elective requirement, with the fourth taken in addition to the general IMC master's degree requirements. Note that a cumulative GPA of 2.75 is required for graduation from the IMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
IMC 525	Advanced Creative Concepts	3
IMC 534	Digital Storytelling	3
IMC 535	Visual Information Design	3
IMC 539	Content Marketing	3
Total Hours		12

## DATA MARKETING COMMUNICATIONS AREA OF EMPHASIS REQUIREMENTS

The Data Marketing Communications AOE is intended to provide access to data-driven coursework for IMC students whose career aspirations include utilizing available data as part of a greater integrated marketing communications strategy. Students will be exposed to course work focused in overarching data marketing communications strategy, audience segmentation, campaign planning and programmatic media buying, and campaign metrics and assessment.

**Course Requirements.** To satisfy the requirements of the Data Marketing Communications Area of Emphasis, a student must complete the four required courses below. Three of the courses required for an AOE may also be applied to an IMC student's elective requirement, with the fourth taken in addition to the general IMC master's degree requirements. Note, that a cumulative GPA of 2.75 is required for graduation from the IMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
DMC 460	Introduction to Data Marketing Communications	3
DMC 561	Audience Segmentation	3
DMC 572	Campaign Planning & Programmatic Media Buying	3
DMC 573	Campaign Metrics and Assessment	3
Total Hours		12

\* DMC 460 includes a quantitative assessment and is a prerequisite of all remaining DMC coursework.

## DIGITAL AND SOCIAL MEDIA AREA OF EMPHASIS REQUIREMENTS

The Digital and Social Media AOE is intended to prepare IMC students for careers utilizing digital and social media as part of a greater integrated marketing communications strategy. Students will be exposed to course work focused in social media, web metrics and search engine optimization, digital storytelling and video production.

**Course Requirements.** To satisfy the requirements of the Digital and Social Media Area of Emphasis, a student must complete the four required courses below. Three of the courses required for an AOE may also be applied to an IMC student's elective requirement, with the fourth taken in addition to the general IMC master's degree requirements. Note, that a cumulative GPA of 2.75 is required for graduation from the IMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
IMC 534	Digital Storytelling	3
IMC 541	Social Media and Marketing	3
IMC 542	Web Metrics and Search Engine Optimization	3
IMC 543	Digital Video Production	3
Total Hours		12

## HEALTHCARE AREA OF EMPHASIS REQUIREMENTS

The Healthcare AOE is intended to prepare IMC students for careers utilizing digital and social media as part of a greater integrated marketing communications strategy. Students will be exposed to course work focused in social media, web metrics and search engine optimization, digital storytelling and video production.

**Course Requirements.** To satisfy the requirements of the Healthcare Area of Emphasis, a student must complete the four required courses below. Three of the courses required for an AOE may also be applied to an IMC student's elective requirement, with the fourth taken in addition to the general IMC master's degree requirements. Note, that a cumulative GPA of 2.75 is required for graduation from the IMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
IMC 524	Cause Marketing	3
IMC 527	Healthcare Marketing	3
IMC 539	Content Marketing	3
IMC 546	Augmented Reality & Virtual Reality in IMC	3
Total Hours		12

## HIGHER EDUCATION MARKETING AREA OF EMPHASIS REQUIREMENTS

The Higher Education Marketing AOE is intended to prepare IMC students for careers utilizing integrated marketing communications strategies for student recruitment and institutional branding initiatives. Students will be exposed to course work focused in higher education marketing, multicultural marketing or diversity and inclusion, content marketing and social media.

**Course Requirements.** To satisfy the requirements of the Higher Education Area of Emphasis, a student must complete the four required courses below. Three of the courses required for an AOE may also be applied to an IMC student's elective requirement, with the fourth taken in addition to the general IMC master's degree requirements. Note, that a cumulative GPA of 2.75 is required for graduation from the IMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
IMC 539	Content Marketing	3
IMC 541	Social Media and Marketing	3
IMC 547	Higher Education Marketing	3
Select one of the following:		3
IMC 522	Multicultural Marketing	
IMC 545	Diversity & Inclusion in IMC	
Total Hours		12

## MANAGEMENT AREA OF EMPHASIS REQUIREMENTS

The Area of Emphasis in Management is intended to prepare IMC students to apply their skills in a traditional business administrative setting. Students will be exposed to course work in leadership, ethic, negotiations and management information systems.

**Course Requirements.** In order to satisfy the requirements of the Area of Emphasis, a student must complete the required courses below. Note, that a cumulative GPA of 2.75 is required for graduation from the IMC program. The courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
Minimum grade of C- is required.		
BADM 622	Financial Statements Analysis	3
BADM 623	Strategy	3
BADM 644	Legal Environment and Ethics	3
Advisor approved business elective		3
Total Hours		12

## PUBLIC RELATIONS LEADERSHIP AREA OF EMPHASIS REQUIREMENTS

The Public Relations Leadership Area of Emphasis in is intended to prepare Reed College of Media IMC graduate students for careers leading the public relations department for a company or running their own PR firm. Students will be exposed to course work focused in applied public relations, crisis communication, internal communications and C-suite leadership.

**Course Requirements.** To satisfy the requirements of the Public Relations Leadership Area of Emphasis, a student must complete the four required courses below. Three of the courses required for an AOE may also be applied to an IMC student's elective requirement, with the fourth taken in addition to the general IMC master's degree requirements. Note, that a cumulative GPA of 2.75 is required for graduation from the IMC program. Courses and grades from the Area of Emphasis will be counted towards a student's cumulative GPA (a C- or better is required in courses, with an overall cumulative GPA of 2.75) in the IMC program.

Code	Title	Hours
IMC 528	Applied Public Relations	3
IMC 531	Crisis Communication	3



IMC 537	Internal Brand Communication	3
IMC 648	Executive Communication & Leadership	3
Total Hours		12

## Accelerated Bachelor's/Master's Programs

- B.S.J. in Advertising and Public Relations/M.S. in Integrated Marketing Communications (p. 705)
- B.S. in Integrated Marketing Communications/M.S. in Integrated Marketing Communications (p. 708)
- B.S.J. in Journalism/M.S. in Integrated Marketing Communications (p. 710)
- BA in Multidisciplinary Media Studies/M.S. in Integrated Marketing Communications (p. 714)

## B.S.J. in Advertising and Public Relations/M.S. in Integrated Marketing Communications

### Degree Requirements

Code	Title	Hours
University Requirements		33
Non-Journalism/Media Requirements		27
Media College Core Requirements		12
Advertising and Public Relations Major Requirements		48
M.S. Integrated Marketing Communications Major Requirements		18
Total Hours		138

### University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 6, and 7		16
MDIA 191	First-Year Seminar	2
<b>General Electives **</b>		<b>15</b>
Total Hours		33

### Non-Journalism/Media Requirements

Code	Title	Hours
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics	3
HIST 153	Making of Modern America: 1865 to the Present	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
ANTH 105	Introduction to Anthropology	
Total Hours		27

### College of Media Core Requirements

Code	Title	Hours
A minimum grade of C- is required in College of Media Core Requirements.		
MDIA 101	Media and Society (may fulfill GEF 4)	3
MDIA 215S	Media Writing (fulfills Writing and Communication Skills Requirement)	3
MDIA 225S	Media Tools & Applications	3

MDIA 328	Media Ethics and Law	3
Total Hours		12

## Advertising and Public Relations Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Advertising and Public Relations Major Requirements.		
ADPR 215	Introduction to Advertising and Public Relations	3
ADPR 421S	Advertising & PR Audience Insights & Analysis	3
Select one of the following capstone courses:		3
ADPR 457S	Martin Hall Agency Experience	
ADPR 459S	Strategic Communication Campaigns for Public Relations and Advertising	
<b>Required Area of Emphasis (12 credits)</b>		<b>12</b>
Select one of the following Areas of Emphasis (details below):		
Advertising (ADV)		
Public Relations (PR)		
<b>Required Minor *</b>		<b>15</b>
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 511	Marketing Research and Analysis	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
Total Hours		48

Code	Title	Hours
<b>English Literature or Creative Writing Courses</b>		
English Literature		
ENGL 131	Poetry and Drama	3
ENGL 132	Short Story and Novel	3
ENGL 139	Contemporary African Literature	3
ENGL 154	African American Literature	3
ENGL 156	Literature of Native America	3
ENGL 226	World Literature	3
ENGL 232	Poetry	3
ENGL 233	The Short Story	3
ENGL 234	Drama	3
ENGL 235	Novel	3
ENGL 236	The Bible as Literature	3
ENGL 241	American Literature 1	3
ENGL 242	American Literature 2	3
ENGL 251	American Folklore and Culture	3
ENGL 252	Appalachian Fiction	3
ENGL 254	African American Literature	3
ENGL 257	Science Fiction and Fantasy	3
ENGL 258	Popular American Culture	3
ENGL 261	British Literature before 1800	3
ENGL 262	British Literature 2	3
ENGL 263	Shakespeare 1	3
ENGL 272	Modern Literature	3
ENGL 273	Contemporary Literature	3
ENGL 285	Images of Women in Literature	3
Creative Writing		
ENGL 111	Introduction to Creative Writing	3
ENGL 212	Creative Writing: Fiction	3

ENGL 213	Creative Writing: Poetry	3
ENGL 214	Creative Writing: Non-Fiction	3

\*

Minors must have 9 hours of unique coursework. Note that some minors require online coursework for which additional fees apply. Students must complete an officially sanctioned minor outside the College of Media. However, students may pursue the Sport Communication minor, which is offered jointly by the College of Media and the College of Physical Activity and Sport Sciences, or the Interactive Media and Design minor, which is offered jointly by the College of Media and the College of Creative Arts. Students completing a dual-degree are exempt from the requirement to complete a minor. Students should consult their advisor before starting a minor. Some minors require 18 hours of coursework instead of 15 hours.

\*\*

General Education and Elective Credits can vary - students must have a minimum of 120 credit hours total to complete the degree.

\*\*\*

College of Media students must take a minimum of 72 credit hours outside of the College of Media in non journalism/mass communications courses.

## M.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
Complete a minimum of two of the following:		6
IMC 515	Creative Strategy and Execution	
IMC 516	Direct & Digital Marketing	
IMC 518	Public Relations Concepts and Strategy	
IMC 519	Emerging Media and the Market	
IMC Elective Courses		
Select at least three IMC courses 500-level and above		9
IMC 536	Integrated Marketing Communication Campaigns	3
Total Hours		18

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)		3 MDIA 215S	3
MDIA 101 (GEF 4)		3 MDIA 225S	3
MDIA 191		2 Language Course	3
ADPR 215		3 GEF 2B	4
Language Course		3 Select one of the following:	3
		PSYC 101	
		SOC 101	
		ANTH 105	
		14	16

### Second Year

Fall	Hours	Spring	Hours
Select one of the following according to AOE:		3 JRL 328	3
ADV 315S		ENGL 102	3
PR 324S		STAT 111 (GEF 3)	3
ECON 200		3 Minor Course	3
Elective		3 Elective	3
Minor Course		3	
Elective		3	
		15	15

### Third Year

Fall	Hours	Spring	Hours
HIST 153 (GEF 5)		3 ENGL Literature or Creative Writing Course	3
ADPR 421S		3 GEF 5	3
Select one of the following according to AOE:		3 Minor Course	3

ADV Elective	BCOR 350	3
ADPR 319S	AOE Elective	3
Minor Course	3	
AOE Elective	3	
		15

**Fourth Year**

Fall	Hours	Spring	Hours
POLS 102		3 Choose one of the following capstones:	3
Minor Course		3 ADPR 457S	
GEF 6		3 ADPR 459S	
IMC 410		3 IMC 511	3
IMC 513		3 IMC 512	3
		GEF 7	3
		Elective	3
		15	15

**Fifth Year**

Fall	Hours	Spring	Hours
IMC Electives (1 and 2 of 3)		6 IMC Specialty Course (2 of 2)	3
IMC Specialty Course (1 of 2)		3 IMC Elective Course (3 of 3)	3
		IMC 536	3
		9	9

Total credit hours: 138

Students in the ADPR BSJ + IMC MS ABM program can share a total of 12 credits, in IMC 410, IMC 511, IMC 512 and IMC 513 across both their graduate and undergraduate degrees.

## B.S. in Integrated Marketing Communications/M.S. in Integrated Marketing Communications

### Degree Requirements

Code	Title	Hours
University Requirements		36
B.S. Integrated Marketing Communications Major Requirements		84
M.S. Integrated Marketing Communications Requirements		18
Total Hours		138

### University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 4, 5, 6, and 7		24
IMC 191	First-Year Seminar	2
General Electives		10
Total Hours		36

### B.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Integrated Marketing Communication Major Requirements.		
MDIA 101	Media and Society	3
IMC 215	Principles of Integrated Marketing Communications (IMC)	3
MDIA 215S	Media Writing	3
ACCT 201	Principles of Accounting 1	3
STCM 315	Strategic Advertising and Public Relations Writing	3

or PR 324S	Public Relations Writing and Applications	
BCOR 350	Principles of Marketing	3
ADPR 439	Strategic Social Media	3
MKTG 330	Distribution Channels	3
BCOR 380	Business Ethics	3
ECON 225	Elementary Business and Economics Statistics (GEF 3)	3
ADPR 421S	Advertising & PR Audience Insights & Analysis	3
or MKTG 325	Marketing Research	
MKTG 350	Product and Brand Management	3
ADPR 450	Audience Psychology and Behavior	3
ADV 403	Media Planning/Strategy	3
ADV 491	Professional Field Experience	3
or PR 491	Professional Field Experience	
or MKTG 491	Professional Field Experience	
ADPR 438	Branded Content and Narrative	3
MKTG 400-Level Elective		3
IMC 459	IMC Capstone	3
BCOR 320	Legal Environment of Business	3
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 511	Marketing Research and Analysis	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
<b>Required Minor *</b>		<b>15</b>
Total Hours		84

\*

Wholly online minors (which must have 9 distinct hours that aren't applied toward a major requirement) include Agribusiness Management, Child Development, Communication Studies, Criminology, Entertainment Media, Event Planning, Family and Youth, Forensic and Investigative Science, General Business, Health Promotion, History, Hospitality and Tourism Management, Human Services, Infant and Toddler, Music Industry, Political Science, Professional Writing and Editing, Religious Studies, Sport Communication, Sport and Exercise Psychology, Strategic Social Media.

## M.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
Complete a minimum of two of the following:		6
IMC 515	Creative Strategy and Execution	
IMC 516	Direct & Digital Marketing	
IMC 518	Public Relations Concepts and Strategy	
IMC 519	Emerging Media and the Market	
IMC Elective Courses		
Select at least three IMC courses 500-level and above		9
IMC 536	Integrated Marketing Communication Campaigns	3
Total Hours		18

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
IMC 191		2 ACCT 201	3
ENGL 101 (GEF 1)		3 MDIA 215S	3
MDIA 101 (GEF 4)		3 GEF 2	3
IMC 215		3 Minor Course 1	3
Elective		3 Elective	3
Elective		1	
		15	15

**Second Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ENGL 102 (GEF 1)		3 ECON 225 (GEF 3)	3
BCOR 350		3 ADPR 439	3
STCM 315 or PR 324S		3 BCOR 380	3
GEF 2		3 MKTG 330	3
GEF 4		3 Minor Course 2	3
		15	15

**Third Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ADPR 421S or MKTG 325		3 ADV 403	3
MKTG 350		3 MKTG 315 or ADPR 450	3
Minor Course 3		3 Minor Course 4	3
GEF 5		3 GEF 6	3
400-level MKTG Elective		3 Elective	3
		15	15

**Fourth Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ADV 491, PR 491, or MKTG 491		3 IMC 459	3
ADPR 438		3 BCOR 320	3
Minor Course 5		3 GEF 7	3
IMC 410		3 IMC 511	3
IMC 513		3 IMC 512	3
		15	15

**Fifth Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
IMC Electives (1 and 2 of 3)		6 IMC Specialty Course (2 of 2)	3
IMC Specialty Course (1 of 2)		3 IMC Elective Course (3 of 3)	3
		IMC 536	3
		9	9

Total credit hours: 138

Students in the IMC BS+MS ABM program can share a total of 12 credits, in IMC 410, IMC 511, IMC 512 and IMC 513 across both their graduate and undergraduate degrees.

**B.S.J. in Journalism/M.S. in Integrated Marketing Communications****Degree Requirements**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
	University Requirements	30
	Non-Journalism/Media Requirements	27
	Media College Core Requirements	12
	Journalism Major Requirements	51
	M.S. Integrated Marketing Communications Major Requirements	18
	Total Hours	138

**University Requirements**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
	General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
	Outstanding GEF Requirements 1, 2, 6, and 7	16
MDIA 191	First-Year Seminar	2

<b>General Electives **</b>	<b>12</b>
Total Hours	30

## Non-Journalism/Media Requirements

Code	Title	Hours
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics (GEF 3)	3
HIST 153	Making of Modern America: 1865 to the Present (GEF 5)	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
ANTH 105	Introduction to Anthropology	
Total Hours		27

## College of Media Core Requirements

Code	Title	Hours
A minimum grade of C- is required in College of Media Core Requirements.		
MDIA 101	Media and Society (may fulfill GEF 4)	3
MDIA 215S	Media Writing (fulfills Writing and Communication Skills Requirement)	3
MDIA 225S	Media Tools & Applications	3
MDIA 328	Media Ethics and Law	3
Total Hours		12

## Journalism Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Journalism Major Requirements.		
Select three one-credit-hour JRL skills courses, which include, but are not limited to, the following options:		3
JRL 235S	Video Editing	
JRL 236S	Podcast Producing	
JRL 237S	Advanced Video Editing	
JRL 238S	Voice Performance for Broadcasting	
JRL 240S	Immersive Storytelling: AR/VR	
Take each of the following:		
JRL 318S	Beat Reporting	3
JRL 319S	Editing and Curation	3
JRL 341S	Data and Design	3
JRL 458	Interactive Media and Audience Building	3
Select one of the following capstones:		3
JRL 411	Experimental Journalism	
JRL 431S	Multimedia Storytelling	
JRL 459S	Multimedia News Publication	
JRL 487S	Advanced Video Reporting and Producing	
Select two advisor-approved "track" electives from the following or from other advisor-approved upper-level JRL electives:		6
JRL 320S	Advanced Photojournalism	
JRL 340S	Advanced Video Storytelling	
JRL 335S	Video and Audio News Writing	
JRL 426S	Investigative Reporting	

JRL 430S	Social Media and Journalism	
JRL 440S	Documentary Storytelling	
NOTE: JRL 235S must be taken concurrently with JRL 335 and counts as a required one-credit JRL skills course		
JRL 386S	Beginning Video Reporting	
JRL 448S	Digital Publication: Social Video	
JRL 493	Special Topics	
Upper-Division Journalism (JRL) Courses		
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 511	Marketing Research and Analysis	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
<b>Required Minor *</b>		<b>15</b>
Total Hours		51

Code	Title	Hours
<b>English Literature or Creative Writing Courses</b>		
English Literature		
ENGL 131	Poetry and Drama	3
ENGL 132	Short Story and Novel	3
ENGL 139	Contemporary African Literature	3
ENGL 154	African American Literature	3
ENGL 156	Literature of Native America	3
ENGL 226	World Literature	3
ENGL 232	Poetry	3
ENGL 233	The Short Story	3
ENGL 234	Drama	3
ENGL 235	Novel	3
ENGL 236	The Bible as Literature	3
ENGL 241	American Literature 1	3
ENGL 242	American Literature 2	3
ENGL 251	American Folklore and Culture	3
ENGL 252	Appalachian Fiction	3
ENGL 254	African American Literature	3
ENGL 257	Science Fiction and Fantasy	3
ENGL 258	Popular American Culture	3
ENGL 261	British Literature before 1800	3
ENGL 262	British Literature 2	3
ENGL 263	Shakespeare 1	3
ENGL 272	Modern Literature	3
ENGL 273	Contemporary Literature	3
ENGL 285	Images of Women in Literature	3
Creative Writing		
ENGL 111	Introduction to Creative Writing	3
ENGL 212	Creative Writing: Fiction	3
ENGL 213	Creative Writing: Poetry	3
ENGL 214	Creative Writing: Non-Fiction	3

\*

Students must complete an officially sanctioned minor outside the College of Media. However, students may pursue the Sport Communication minor, which is offered jointly by the College of Media and the College of Physical Activity and Sport Sciences, or the Interactive Media and Design minor, which is offered jointly by the College of Media and the College of Creative Arts. Students completing a dual-degree are exempt from the requirement to complete a minor. Students should consult their advisor before starting a minor. Some minors require 18 hours of coursework instead of 15 hours, and some minor courses are offered online primarily during summer terms.



\*\*

General Education and Elective Credits can vary - students must have a minimum of 120 credit hours total to complete the degree.

College of Media students must take a minimum of 72 credit hours outside of the College of Media in non journalism/mass communications courses.

## M.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
Complete a minimum of two of the following:		6
IMC 515	Creative Strategy and Execution	
IMC 516	Direct & Digital Marketing	
IMC 518	Public Relations Concepts and Strategy	
IMC 519	Emerging Media and the Market	
IMC Elective Courses		
Select at least three IMC courses 500-level and above:		9
IMC 536	Integrated Marketing Communication Campaigns	3
Total Hours		18

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)		3 ENGL Literature or Creative Writing Course	3
MDIA 101 (GEF 4)		3 Language Course	3
MDIA 215S		3 MDIA 225S	3
MDIA 191		2 Elective	3
Language Course		3 GEF 2B	4
		14	16

### Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 JRL 318S	3
ECON 200		3 HIST 153 (GEF 5)	3
JRL 319S		3 Minor Course	3
Minor Course		3 Elective	3
Select a one-credit-hour JRL Skills Course		1 GEF 6	3
Select one of the following:		3 Select a one-credit-hour JRL Skills Course	1
PSYC 101			
SOC 101			
ANTH 105			
		16	16

### Third Year

Fall	Hours	Spring	Hours
POLS 102		3 BCOR 350	3
JRL 328		3 STAT 111 (GEF 3)	3
Minor Course		3 JRL 458	3
JRL 341S		3 300- or 400-level JRL "track" Elective	3
GEF 7		3 Elective	3
Select a one-credit-hour JRL Skills Course		1	
		16	15

### Fourth Year

Fall	Hours	Spring	Hours
300- or 400-level JRL "track" Elective		3 JRL Capstone Course	3
Minor Course		3 Minor Course	3
IMC 410		3 IMC 511	3

IMC 513	3 IMC 512	3
Elective	3	
	15	12
<b>Fifth Year</b>		
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>
IMC Electives (1 and 2 of 3)		6 IMC Specialty Course (2 of 2)
IMC Specialty Course (1 of 2)		3 IMC Elective Course (3 of 3)
		IMC 536
	9	9
Total credit hours: 138		

Students in the IMC BS+MS ABM program can share a total of 12 credits, in IMC 410, IMC 511, IMC 512 and IMC 513 across both their graduate and undergraduate degrees.

## BA in Multidisciplinary Media Studies/M.S. in Integrated Marketing Communications Degree Requirements

Code	Title	Hours
	University Requirements	57
	Multidisciplinary Media Studies Major Requirements	63
	M.S. Integrated Marketing Communications Major Requirements	18
	Total Hours	138

## University Requirements

Code	Title	Hours
	General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
	Outstanding GEF Requirements 1, 2, 3, 5, 6, 7, and 8	31
	First-Year Seminar	1
	General Electives	25
	Total Hours	57

## Multidisciplinary Media Studies Major Requirements

Code	Title	Hours
	Cumulative GPA of 2.0 or higher required.	
MDIA 119	Reed College Multidisciplinary Orientation	3
MDIA 485S	Reed College Multidisciplinary Capstone	3
	A grade of C- or higher must be earned in all minor courses.	
	<b>Reed College of Media Minor **</b>	<b>15</b>
	<b>Reed College of Media Minor **</b>	<b>15</b>
	<b>Third Minor</b>	<b>15</b>
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 511	Marketing Research and Analysis	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
	Total Hours	63

\*

General Education and Elective Credits can vary - students must have a minimum of 120 earned credit hours total to complete the degree.

\*\*

Reed College of Media minors must be selected from the following: Advertising, Entertainment Media, Event Planning, Health Promotion, Interactive Design for Media, Journalism, Public Relations, Sport Communication, Strategic Social Media. Students must complete unique credit hours for each of their minors. Because courses can only be counted toward one minor, students may replace duplicate course requirements within their College of Media minors with College of Media core courses (i.e., MDIA 215S, MDIA 225S, JRL 328).

## M.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
Complete a minimum of two of the following:		6
IMC 515	Creative Strategy and Execution	
IMC 516	Direct & Digital Marketing	
IMC 518	Public Relations Concepts and Strategy	
IMC 519	Emerging Media and the Market	
IMC Elective Courses		
Select at least three IMC electives at the 500-level or above		9
IMC 536	Integrated Marketing Communication Campaigns	3
Total Hours		18

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
GEF 2A		4 ENGL 101 (GEF 1)	3
GEF 3		3 GEF 6	3
GEF 5		3 GEF 7	3
First-Year Seminar		1 Elective	3
Electives		4 Elective	3
		15	15

### Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 GEF2/Elective	3
MDIA 101 (Media and Society (fulfills GEF 4 and counts toward College of Media Minor I-1))		3 GEF 8	3
MDIA 119		3 Minor I-2	3
GEF 8		3 Minor II-1	3
Elective		3 Minor III-1	3
		15	15

### Third Year

Fall	Hours	Spring	Hours
GEF 8		3 Minor I-4	3
Minor I-3		3 Minor II-3	3
Minor II-2		3 Minor III-3	3
Minor III-2		3 Electives	6
Elective		3	
		15	15

### Fourth Year

Fall	Hours	Spring	Hours
MDIA 485S		3 Minor II-5	3
Minor II-4		3 Minor I- 5	3
Minor III-4		3 Minor III-5	3
IMC 410		3 IMC 511	3
IMC 513		3 IMC 512	3
		15	15

### Fifth Year

Fall	Hours	Spring	Hours
IMC Electives (1 and 2 of 3)		6 IMC Specialty Course (2 of 2)	3
IMC Specialty Course (1 of 2)		3 IMC Elective Course (3 of 3)	3

IMC 536	3
9	9
Total credit hours: 138	

**Note:** Some minors may require online course enrollment during Summer terms to complete. Students should check with their advisor about individual minor requirements and expected course availabilities. Additional online course fees apply.

This suggested plan of study assumes three minors requiring 15 unique hours each. Minors that require more than 15 hours can be completed by substituting the extra minor hours in place of elective hours.

Minor courses may not be used to fulfill both a minor requirement and a General Education Foundation requirement, except JRL 101. Minors used as part of the MDS requirements may not be used to complete GEF 8.

Minor courses may not be used to fulfill the requirements for more than one minor. All Reed College minors and shared college minors must be completed with their own unique hours.

In the event of course overlap between minors, the Reed College of Media's Writing and Communications Skills Requirement, JRL 215, may be substituted in place of the overlapped course within one of the minors. When used to fulfill both requirements, the number of credit hours associated with the course will calculate into total earned credit hours only once.

In the event of additional course overlap among minors, JRL 225 (Media Tools & Applications) and/or JRL 328 (Media Law and Ethics) may be used as replacement courses. Other minor course overlaps may be replaced with Reed College of Media's coursework at the 200-level or higher, at the approval and discretion of the College.

If completed prior to admission into the program, ADV 215, PR 215, and/or ADPR 215 may be substituted as equivalent 215 coursework within Reed College minors or shared college minors, at the discretion of the College.

Of total earned credit hours, a minimum of 30 credit hours must be at the 200-level or higher, and an additional minimum of 30 credit hours must be at the 300-level or higher.

A grade of C- or higher must be earned in all major- and minor-required courses.

Students have the option to use elective hours to pursue a fourth minor to complement their studies.

Students in the MDS BA + MS ABM program can share a total of 12 credits, in IMC 410, IMC 511, IMC 512, and IMC 513 across both their graduate and undergraduate degrees.

## Major Learning Outcomes

### INTEGRATED MARKETING COMMUNICATIONS

In the WVU IMC program, communications professionals learn to re-align their marketing activities to ensure a constant flow of information to consumers from a variety of media. Upon successful completion of the IMC curriculum, students will be able to:

1. Illustrate critical thinking, creativity and innovation in collaboration with colleagues and in the completion of written assignments.
2. Demonstrate a global and multicultural awareness in the development and implementation of marketing communications strategies.
3. Compare and contrast the benefits and limitations of various qualitative and quantitative research methods relevant to marketing communications.
4. Recognize the roles and implications of law and ethics in marketing communications.
5. Design and organize marketing communications materials in a professional manner consistent with contemporary industry-specific standards.

## Journalism, M.S.J.

### Degree Offered

- Master of Science in Journalism

### Nature of the Program

The master of science in journalism (M.S.J.) program in the Reed College of Media is designed to help persons involved in various aspects of mass communication to better understand and to cope not only with the increased complexity of their own majors but also with fields outside mass communications.

The program, created to assist each student in reaching his/her potential as a worker, teacher, or scholar in mass communications, prepares a master's candidate not only for a first job but also for long-term and productive career development through the study of mass communications and related fields. Students who obtain the M.S.J. degree should excel in professional skills.

The M.S.J. program is intended to afford liberal arts graduates an opportunity to concentrate on advanced study in mass communications; to provide intensive study for persons who have undergraduate journalism training and who wish to pool their journalistic skills with extensive knowledge in another substantive area or areas (e.g., political science, economics, science); and to give persons who have had considerable professional experience an opportunity to broaden their academic bases through carefully selected advanced studies.

## Assistantships and Tuition Waivers

A limited number of graduate assistantships are available for College of Media students across West Virginia University each academic term. Graduate assistants may assist professors with their research or create content for such University support units as the Libraries, Research Office, Student Activities or Health Sciences Center, among others. Students might also work for WVU Student Media outlets to obtain solid professional experience outside of the classroom.

Students may receive stipends for the academic term and may apply for tuition remission for the entire year. Although sometimes renewed for a second or third term, assistantships and internships are typically granted for one academic term. Graduate assistants and interns work an average of twenty hours per week during the academic year.

Persons who wish to be considered for assistantships or internships should have their applications on file with the Director of Graduate Studies before March 1 of the same year.

## Tracks

The College of Media offers two tracks—the teaching/research track and the professional track—within the M.S.J. program. In either track, the M.S.J. program offers five Areas of Emphasis (AOEs) that students may pursue, if desired, to obtain additional focus in a specific curricular area. AOEs are available in Advocacy & Public Interest Communications, Media Innovation, Digital Publishing, Visual Journalism, Reporting & Writing, and Television.

### Teaching/Research

The teaching/research track is generally a program for persons who wish to pursue a Ph.D., to teach at the college/university level, and to conduct research in areas of mass communications. Persons in this track normally take research and theory courses both inside and outside the College of Media, as well as social science courses. The program culminates in a thesis, which is a scholarly theoretical study of an important aspect of mass communications.

### Professional

The professional track is designed primarily for persons who wish to become excellent practitioners in some field of mass communications and who have less desire to teach or to become mass communications researchers. Persons in the professional track normally take communication and outside area courses that will help them to become better practitioners. The program culminates in a professional project, which helps a student to extend his/her practical and theoretical knowledge about a given aspect of mass communications and should be a non-routine project on which the student could work as a professional.

## Time Limitation

Students must complete all graduate degree requirements, including either a thesis or a professional project, within eight years of beginning the initial coursework of the program. After this period, courses must be revalidated according to the procedures set forth in the WVU Graduate Catalog.

## Maintenance of Scholarship

A journalism graduate student must maintain satisfactory progress toward the M.S.J. degree. The candidate's graduate record begins with the first course credited toward the master's and includes all subsequent courses. Every graduate student must maintain at least a 2.75 grade point average and complete all requirements within eight years. Anyone who fails to meet this standard will be subject to academic probation and possible dismissal from the program.

Each person working toward the M.S.J. should register for at least one hour during every regular (fall and spring) term. This enrollment may be in coursework or in research.

## International Students

Believing that mutual benefit is derived when scholars from other countries study in the Reed College of Media, the faculty welcomes international students. At the same time the faculty recognizes that journalism, more than any other field, requires language skills. To profit from journalism study, international students must have a ready understanding of English. International students, for whom English is not their official language, must include

TOEFL scores. The minimum TOEFL scores needed for consideration at WVU are 550 (paper test), 213 (computer test), or a 79 (internet test). The minimum score for IELTS is a 6.5; the minimum for Duolingo is 105.

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## FACULTY

### PROFESSORS

- Joel Beeson - Ph.D. (Union College)  
Visual Journalism
- Dana Coester - M.A. (University of Missouri-Columbia)  
Media Innovation
- Diana Martinelli - Ph.D. (University of North Carolina at Chapel Hill)  
Dean, Widmeyer Professor in Public Relations
- Maryanne Reed - M.S. (Northwestern University)  
Provost, Television Journalism
- John Temple - M.F.A. (University of Pittsburgh)  
Print and Narrative Journalism

### TEACHING PROFESSORS

- Emily Hughes Corio - M.S.J. (West Virginia University)  
Journalism Program Chair; Broadcasting; Podcasting
- Gina Martino Dahlia - M.S.J. (West Virginia University)  
Broadcast News, Television, Documentary Storytelling; Asst Dean for Academic Affairs
- Elizabeth Oppe - Ph.D. (Ohio University)  
Mass Communications, Service Learning, Public Relations

### ASSOCIATE PROFESSORS

- Rita Colistra - Ph.D. (University of North Carolina at Chapel Hill)  
Public Relations, Strategic Communications, Community Branding
- Geah Pressgrove - Ph.D. (University of South Carolina)  
Public Relations, Strategic Communications, Advocacy
- Lois Raimondo - M.A. (University of Missouri-Columbia)  
Visual Journalism, New Media, Media Ethics and Law
- Steve Urbanski - Ph.D. (Duquesne University)  
Graduate Director; Print Journalism, Media Ethics and Law

### TEACHING ASSOCIATE PROFESSORS

- Robert Britten - Ph.D. (University of Missouri-Columbia)  
Data, Visual and Experimental Journalism
- Mary Kay McFarland - M.S. (University of Missouri-Columbia)  
Visual, Multimedia Journalism and Storytelling
- Catherine Mezera - M.S.J. (West Virginia University)  
Advertising, Marketing Communications, Public Relations
- David Smith - M.A. (West Virginia University)  
Experimental Storytelling, Augmented and Virtual Reality Journalism

### ASSISTANT PROFESSORS

- Julia Daisy Fraustino - Ph.D. (University of Maryland)  
Strategic Communication; Advocacy and Public Interest Communication
- Joseph Jones - Ph.D.  
University of Missouri

### TEACHING ASSISTANT PROFESSORS

- Heather Cole - M.F.A.  
Goddard College
- Ashton Marra - M.S.J. (West Virginia University)  
Broadcasting, Reporting, Production

- Jesse Wright - B.S.J. (West Virginia University)  
Audio Broadcasting, Reporting

## SHOTT TEACHING ASSISTANT PROFESSOR

- Chuck Scatterday - M.S.J. (West Virginia University)  
Broadcast production; Sports and Adventure Media

## Admissions

Admission to the M.S.J. program is limited to recipients of baccalaureate or equivalent degrees from institutions of higher learning. Applicants should have combined verbal and quantitative Graduate Record Examination (GRE) Aptitude Test scores of 153 Verbal and 144 Quantitative and should have earned at least a 3.0 cumulative grade point average (GPA) on a 4.0 scale. Applicants who have two or more years of professional work experience -- or applicants with a cumulative undergraduate GPA of 3.2 or higher are exempt from submitting GRE scores. All other applicants are required to submit GRE scores (taken within the past five years). If applicants are unsure if their work/internship experience qualifies for a GRE exemption, they should contact the Director of Graduate Studies.

Applicants who do not meet the minimum GRE and/or GPA requirement(s) may be accepted only if the low GPA or GRE scores are offset by extraordinary factors. Excellent recommendations, unusual grading patterns (e.g., a steady rise of grades), an outstanding statement of purpose, or examples of professional accomplishment sometimes can offset low GRE scores or a low GPA. Applicants should submit to the College of Media Director of Graduate Studies a detailed statement of purpose explaining why the student wishes to undertake graduate study in journalism, what the student hopes to glean from the graduate journalism program, what his/her long-term goals are, and how graduate education in journalism can help achieve those goals.

Students applying for admission to the M.S.J. program are encouraged to send non-returnable supporting written/multimedia work products/samples to the College of Media Director of Graduate Studies. All other materials (e.g., transcripts, GRE scores, application forms) should be sent to the Office of Admissions.

Students may also apply online at: <https://graduateadmissions.wvu.edu/how-to-apply> (<https://graduateadmissions.wvu.edu/how-to-apply/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 4942

## Degree Requirements

Code	Title	Hours
	University Requirements	5
	Master of Science in Journalism Major Requirements	25
Total Hours		30

## University Requirements

Code	Title	Hours
	General Electives	5
Total Hours		5

## Master of Science in Journalism Major Requirements

Code	Title	Hours
<b>A minimum GPA of 3.0 is required in all courses toward the major.</b>		
JRL 600	Introduction to Graduate Studies	1
JRL 604	Mass Media and Society	3
JRL 620	Advanced Journalistic Writing and Research	3
JRL 689	Ethics of Mass Communication	3
JRL 697	Research *	6
Select one of the following: **		9
Area of Emphasis		

## College of Media Electives

Total Hours	25
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Students who choose to write either a thesis or a professional project must register for at least 6 credits of Research (JRL 697).

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Excluding the research hours, a minimum of 18 credit hours must be earned in the College of Media. Students may choose either an Area of Emphasis or College of Media electives.

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
JRL 600		1 JRL 620	3
JRL 604		3 JRL 689	3
Electives *		6 Electives *	3
		10	9

### Second Year

Fall	Hours	Spring	Hours
JRL 697 **		3 JRL 697 **	3
Electives *		6 Electives *	3
		9	6

Total credit hours: 34

\*

Various electives. In both programs, sixty percent of the graduate credits submitted for the degree (eighteen credits) must be in courses numbered 500–799

\*\*

Students who choose to write either a thesis or a professional project must register for at least 6 credits of Research (JRL 697) .

Students should note that the majority of credits submitted for the degree must be in courses numbered 500 or above.

The thesis or professional project will be graded as an S or U (satisfactory or unsatisfactory).

Except for thesis, professional project, and internship courses, no student may take a course on a P/F or S/U grade basis without prior approval of the Director of graduate studies.

## THESIS/PROFESSIONAL PROJECT

Each student must complete a thesis or a professional project involving original work in his/her area of interest. The master's candidate should have a thesis or professional project proposal written by the end of the academic term in which the first nineteen hours of coursework are completed.

Each student is responsible for developing ideas for the thesis or professional project. Through consultations with journalism faculty, the student can determine faculty interests and areas of expertise; he/she then refines a preliminary idea to a significant, feasible thesis/project topic.

Normally students will enroll for six credit hours of research courses. The Director of Graduate Studies must approve any deviations from this norm.

In addition to this six-hour limit, no graduate student will be permitted to enroll in more than six hours of research courses without approval from the director of graduate studies.

## ADVISORY COMMITTEE

The student, with approval of the director of graduate studies, selects a journalism graduate faculty member who would be best able to chair his/her Advisory Committee, subject to the agreement of the faculty member. If questions arise about a faculty member's interest or knowledge, the student should consult the director of graduate studies. With the chairperson, the student further refines the topic to a "preliminary proposal" stage, in which concepts and appropriate methodology are on paper but not necessarily in formal proposal form.

After the student has written a preliminary proposal and selected a faculty chairperson, the student should select other members of his/her committee, subject to their willingness to serve. The committee must consist of no fewer than four members (including the chair) and at least two persons must be members of the WVU faculty; others may be from other departments at WVU. Committee chairs must be members of the College of Media graduate



faculty. The fourth member of all thesis committees must be affiliated with the graduate program at an accredited university (or another department at WVU). The fourth member of professional project committees may be from the professional realm.

## PROPOSALS

At this point, students in the thesis/professional track must submit proposals to their committee, which must approve all topics (but not research methods, specific research questions, or hypotheses, etc.). After securing committee approval, students schedule a proposal defense date. Proposal defenses are required of all students.

Working under the committee's guidance, each student revises the thesis or project proposal, extended from the preliminary proposal. Guidance for designing a proposal is available from the Director of Graduate Studies.

Once the committee agrees that the proposal is ready, a proposal defense is scheduled.

## FINAL THESIS/PROJECT APPROVAL

After the thesis/project proposal defense, the committee votes to accept (often with revisions) or to reject a proposal. The student whose proposal is approved works closely with the committee chair to complete his/her final thesis or project. A master's candidate must inform his/her committee and consult its members for advice (as needed and as desired by them) as the thesis or project develops.

After each advisory committee member is satisfied with the thesis or project, a final defense is scheduled. Announcements of the defense should be posted in Martin Hall. (Interested students and faculty may attend the presentation portion.) Students also should make certain that they file their thesis/project signature form with the director of graduate studies (and the University Libraries) two weeks before their defense date.

Only committee members may vote on acceptance or rejection of a thesis. Although someone may cast a recorded dissenting vote, a majority vote is sufficient to approve a thesis/project. Furthermore, at least three signatures (two of which must belong to College of Media faculty members) must appear on the approval sheet. Often, only small changes are required prior to final submission to the committee chair and then to the Electronic Thesis and Dissertation system.

Master's candidates should follow APA (or another chair-approved stylebook) during preparation of a thesis or professional project.

Each committee chairperson will ultimately decide whether the candidate has properly made the requested corrections (after the final defense); that chairperson also will check the style and form of the final version. Every graduate student is responsible for delivering a copy of a final thesis or professional project to the director of graduate studies; he/she also must file a thesis or professional project electronically (to the University Library) before the academic term's deadline.

## Areas of Emphasis Offered:

- Advocacy and Public Interest Communication (p. 721)
- Digital Publishing (p. 722)
- Media Solutions and Innovation (p. 722)
- Reporting and Writing (p. 722)
- Television (p. 722)
- Visual Journalism (p. 723)

## ADVOCACY AND PUBLIC INTEREST COMMUNICATION AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Students are expected to maintain at least a 2.75 GPA		
Select three of the following:		9
JRL 458	Interactive Media and Audience Building	
PR 524	Crisis Communication	
PR 526	Advocacy Communication	
PR 528	Public Interest Communication	
PR 593	Special Topics (Audience Development/Engagement)	
JRL 695	Independent Study (must be approved by grad director)	
Total Hours		9

**DIGITAL PUBLISHING AREA OF EMPHASIS REQUIREMENTS**

Code	Title	Hours
Students are expected to maintain at least a 2.75 GPA		
Select three of the following:		9
ADV 451	Interactive Marketing Commctns	
JRL 411	Experimental Journalism	
JRL 431S	Multimedia Storytelling	
JRL 440S	Documentary Storytelling	
JRL 448S	Digital Publication: Social Video	
JRL 493	Special Topics (Data Journalism for a Better Story)	
JRL 593	Special Topics (Ethics in an AI Society)	
JRL 559S	Multimedia News Publication	
JRL 695	Independent Study (must be approved by grad director)	
Total Hours		9

**MEDIA SOLUTIONS AND INNOVATION AREA OF EMPHASIS REQUIREMENTS**

Code	Title	Hours
Students are expected to maintain at least a 2.75 GPA		
Select three of the following:		9
ADV 451	Interactive Marketing Commctns	
JRL 411	Experimental Journalism	
JRL 431S	Multimedia Storytelling	
JRL 440S	Documentary Storytelling	
JRL 458	Interactive Media and Audience Building	
JRL 493	Special Topics (Data Journalism for a Better Story)	
JRL 593	Special Topics (Ethics in an AI Society)	
JRL 593	Special Topics (Audience Development/Engagement)	
JRL 559S	Multimedia News Publication	
JRL 695	Independent Study (must be approved by grad director)	
Total Hours		9

**REPORTING AND WRITING AREA OF EMPHASIS REQUIREMENTS**

Code	Title	Hours
Students are expected to maintain at least a 2.75 GPA		
Select three of the following:		9
JRL 412	Sport Journalism	
JRL 424S	Adventure Travel Writing & Photography	
JRL 426S	Investigative Reporting	
JRL 493	Special Topics (e.g. Science/Health Journalism; Nonfiction Storytelling)	
JRL 695	Independent Study (must be approved by grad director)	
Total Hours		9

**TELEVISION AREA OF EMPHASIS REQUIREMENTS**

Code	Title	Hours
Students are expected to maintain at least a 2.75 GPA		
Select three of the following:		9
JRL 435S	Live Sports Video Production	
JRL 493	Special Topics (e.g. Digital Publication; Social Media Video)	
JRL 587	Advanced Video Reporting and Producing	
JRL 559S	Multimedia News Publication	
JRL 593	Special Topics (e.g. Audience Development/Engagement)	

JRL 695	Independent Study (must be approved by grad director)	
Total Hours		9

\*

WVU News requires JRL 488 as a prerequisite.

## VISUAL JOURNALISM AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Students are expected to maintain at least a 2.75 GPA.		
Select three of the following:		9
JRL 431S	Multimedia Storytelling	
JRL 440S	Documentary Storytelling	
JRL 445S	International Media 1	
JRL 458	Interactive Media and Audience Building	
JRL 493	Special Topics (e.g. Digital Publication; Social Media Video)	
JRL 587	Advanced Video Reporting and Producing *	
JRL 559S	Multimedia News Publication	
JRL 695	Independent Study (must be approved by grad director)	
Total Hours		9

\*

WVU News requires JRL 488 as a prerequisite

## Accelerated Bachelor's/Master's Programs

- B.S.J. in Advertising and Public Relations/M.S.J. in Journalism (p. 723)
- B.S.J. in Journalism/M.S.J in Journalism (p. 725)

## BSJ - Advertising and Public Relations Degree Requirements

Code	Title	Hours
MDIA 191	First-Year Seminar	2
<b>General Education Requirements</b>		
GEF 1, 2, 3, 5, 6, and 7		22
<b>Non-Journalism/Media Requirements</b>		
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
HIST 153	Making of Modern America: 1865 to the Present	3
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
ANTH 105	Introduction to Anthropology	
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
<b>Media College Core</b>		
A grade of C- or higher must be earned in all major courses.		
MDIA 101	Media and Society	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
JRL 528	Media Ethics and Law	3
<b>Advertising &amp; Public Relations Core</b>		
ADPR 215	Introduction to Advertising and Public Relations	3
ADPR 421S	Advertising & PR Audience Insights & Analysis	3

Choose a capstone:	3
ADPR 457S	Martin Hall Agency Experience
ADPR 559S	Advertising and Public Relations Campaigns
Select one of the following Areas of Emphasis (details below):	12
<b>Advertising (ADV)</b>	
ADV 315S	Advertising Copywriting
Choose three 300- or 400-level Advertising, STCM or advisor-approved electives:	
ADPR 450	Audience Psychology and Behavior
ADV 401S	Creative 1
ADV 403	Media Planning/Strategy
ADV 451	Interactive Marketing Communications
ADV 493	Special Topics
ADV 593	Special Topics
ADPR 452	Strategic Communication Strategy and Management
STCM 493	Special Topics
STCM 593	Special Topics
<b>Public Relations (PR)</b>	
PR 324S	Public Relations Writing and Applications
Choose of the following:	
ADPR 319S	Creative Design and Strategy
PR 333S	Web Development
Choose two 300- or 400-level PR, STCM or advisor-approved electives:	
PR 410	Integrated Marketing Communications for Public Relations
PR 412	IMC for Sport
PR 455S	Strategic Event Planning and Promotion
PR 493	Special Topics
PR 522	Public Relations Case Studies
PR 593	Special Topics
ADPR 438	Branded Content and Narrative
ADPR 439	Strategic Social Media
<b>Required Minor</b>	<b>15</b>
<b>General Electives</b>	<b>15</b>
Total Hours	114

## MSJ Degree Requirements

Code	Title	Hours
<b>A minimum GPA of 3.0 is required in all courses toward the major.</b>		
JRL 500	Introduction to Graduate Studies (A minimum GPA of 3.0 is required in all co)	1
JRL 504	Mass Media and Society	3
JRL 520	Advanced Journalistic Writing and Research	3
JRL 689	Ethics of Mass Communication	3
JRL 697	Research	6
Total Hours		16

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)		3 ENGL Literature or Creative Writing course	3
ADPR 215		3 GEF 3	3
MDIA 101 (GEF 4)		3 MDIA 215S	3
Language Course		3 Language Course	3
MDIA 191		2 Select one of the following:	3

ANTH 105  
PSYC 101  
SOC 101

		14	15
Second Year			
Fall	Hours	Spring	Hours
GEF 2B		4 STAT 111	3
GEF 5		3 GEF 6	3
MDIA 225S		3 HIST 153	3
ENGL 102 (GEF 1)		3 PR 324S or ADV 315S	3
ECON 200		3 Elective	2
		16	14
Third Year			
Fall	Hours	Spring	Hours
GEF 7		3 400-Level AOE Course	3
POLS 102		3 BUSA 330	3
ADPR 319S or PR 333S (or ADV AOE Elective)		3 Minor Course	3
Minor Course		3 Elective	6
Elective		3	
		15	15
Fourth Year			
Fall	Hours	Spring	Hours
ADPR 421S		3 ADPR 559S	3
300- or 400-Level AOE Course		3 JRL 528	3
Minor Course		3 Minor Course	3
Minor Course		3 Elective	3
JRL 500		1 JRL 520	3
JRL 504		3	
		16	15
Fifth Year			
Fall	Hours	Spring	Hours
Elective *		3 JRL 689	3
Elective *		3 JRL 697 or 698	3
JRL 697		3 Elective *	3
		9	9

Total credit hours: 138

\*

These electives should be at the 500- or 600-level and may come from within or external to the College of Media.

## BSJ Degree Requirements

Code	Title	Hours
MDIA 191	First-Year Seminar	2
<b>General Education Requirements</b>		
GEF 1, 2, 6, and 7		16
<b>Non-Journalism/Media Requirements</b>		
HIST 153	Making of Modern America: 1865 to the Present (GEF 5)	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics (GEF 3)	3
English literature or Creative Writing course		3

Two semesters of any foreign language/computer coding course or one language/coding course +study abroad	6
Select one of the following:	3
ANTH 105                      Introduction to Anthropology	
PSYC 101                     Introduction to Psychology	
SOC 101                      Introduction to Sociology	
<b>College of Media Core</b>	
A grade of C- or higher must be earned in all major courses.	
MDIA 101                        Media and Society (GEF 4)	3
MDIA 215S                      Media Writing	3
MDIA 225S                      Media Tools & Applications	3
JRL 528                         Media Ethics and Law	3
Choose one capstone course:	3
JRL 531                      Multimedia Reporting	
JRL 587                      Advanced Video Reporting and Producing	
JRL 559S                    Multimedia News Publication	
Take 3 one-credit-hour skills classes:	3
JRL 236S                    Podcast Producing	
JRL 237S                    Advanced Video Editing	
JRL 238S                    Voice Performance for Broadcasting	
JRL 240S                    Immersive Storytelling: AR/VR	
Take each of the following:	
JRL 318S                      Beat Reporting	3
JRL 319S                      Editing and Curation	3
JRL 341S                      Data and Design	3
JRL 458                        Interactive Media and Audience Building	3
Select two "track" electives from the following or from other advisor-approved upper-level JRL electives:	6
JRL 320S                    Advanced Photojournalism	
JRL 321S                    Media Design	
JRL 335S                    Video and Audio News Writing	
JRL 340S                    Advanced Video Storytelling	
JRL 386S                    Beginning Video Reporting	
JRL 426S                    Investigative Reporting	
JRL 430S                    Social Media and Journalism	
JRL 440S                    Documentary Storytelling	
JRL 593                     Special Topics	
<b>Required Minor</b>	<b>15</b>
<b>General Electives</b>	<b>17</b>
Total Hours	113

## MSJ Degree Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
JRL 500	Introduction to Graduate Studies	1
JRL 504	Mass Media and Society	3
JRL 520	Advanced Journalistic Writing and Research	3
JRL 689	Ethics of Mass Communication	3
JRL 697	Research	3
JRL 698	Thesis or Dissertation	3
Electives (Internal or External to College of Media)		9
Total Hours		25

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
JRL 191		2 ENGL Literature or Creative Writing course	3
MDIA 101 (GEF 4)		3 Language Course	3
MDIA 215S		3 GEF 2B	4
ENGL 101 (GEF 1)		3 Select one of the following:	3
Language Course		3 ANTH 105	
		PSYC 101	
		SOC 101	
		General Elective	3
	14		16

### Second Year

Fall	Hours	Spring	Hours
One-credit-hour JRL Skills course		1 JRL 318S	3
MDIA 225S		3 GEF 6	3
Elective		3 HIST 153	3
ENGL 102 (GEF 1)		3 General Elective	3
BCOR 350		3 Minor Course	3
One-credit-hour JRL Skills Course		1	
	14		15

### Third Year

Fall	Hours	Spring	Hours
JRL 319S		3 STAT 111	3
GEF 7		3 Minor Course	3
JRL 341S		3 Electives	3
POLS 102		3 ECON 200	3
Minor Course		3 JRL "track" elective	3
One credit-hour-hour JRL Skills Course		1	
	16		15

### Fourth Year

Fall	Hours	Spring	Hours
JRL 458		3 JRL Capstone Course	3
JRL 528		3 Minor Course	3
Minor Course		3 Elective	2
JRL 500		1 JRL 520	3
JRL 504		3 JRL "track" elective	3
Elective		3	
	16		14

### Fifth Year

Fall	Hours	Spring	Hours
Elective *		3 JRL 689	3
Elective *		3 JRL 697 or 698	3
JRL 697		3 Elective *	3
	9		9

Total credit hours: 138

\*

These electives should be at the 500- or 600-level and may come from within or external to the College of Media.

## Major Learning Outcomes

### JOURNALISM

Whether students in the M.S.J. program are interested in teaching and research or strictly professional pursuits, upon completing the program, they will be able to:

1. Understand economic, ethical, historical, legal, political, social and technological forces that shape the roles and structures of the media.
2. Employ writing, researching and editing skills to be a professional in the graduate's chosen field.
3. Articulate journalistic concepts, values and skills.
4. Understand methodology used in historical, legal, cultural and other types of qualitative and quantitative research.
5. Conduct original research that contributes to knowledge in the field.
6. Effectively communicate orally, through writing, and through various media.
7. Understand and critically evaluate public opinion polls and other types of quantitative and qualitative research.

## Media Solutions and Innovation, M.S.J.

### Degree Offered

- Master of Science in Journalism

### Nature of the Program

The Media Solutions and Innovation graduate program explicitly prepares students to become media strategists and futurists who can function as change agents and adaptive leaders within the industry. Our 15-month online master's degree program helps students learn about the disruptions in the media industry and how to build industry partners to assist in research and development, discovery, and creating targeted solution pathways to address some of the most challenging media problems.

This master's program is designed to fill an identified need in the market by offering a flexible innovation program that focuses on individual entrepreneurship as an alternative to existing skills-focused "new media" programs, and as a unique graduate-level program that challenges/extends existing "teaching hospital" models in schools of journalism. The program is taught by a diverse faculty who are recognized leaders in their fields.

#### Publisher Path

Students focus on an individually designed, hands-on immersion in addressing emerging challenges in media publishing, from how to create a start-up digital media product to enhancing skills in media leadership, news product development, audience engagement and analytics and more. After completing their core courses, students will apply course learning in a comprehensive project addressing a unique challenge for a start-up, a new media product or an existing real-world media publication.

#### Graduate Assistantships

Students in the Media Solutions program who secure a graduate assistant position at any academic or non-academic unit on campus will be eligible to receive a waiver of University tuition for Media Solutions courses, as well as any stipend/compensation offered by the unit hosting the position. For complete information on graduate assistant options at WVU, please visit the Graduate Education Assistantships webpage (<https://graduateeducation.wvu.edu/grad-life/graduate-assistantships/>).

### Program Format

The program's academic schedule consists of 6 terms completed over 15 months: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May), Summer (May–June) and Fall (August–December).

### Admissions

Admission to the Innovations and Media Solutions – Publishing Path program is based on a holistic, case-by-case analysis of the applicant's WVU Graduate Application for Admission, academic record (undergraduate transcript), years of relevant professional experience (resume), and writing ability and intent (personal statement).

Students are admitted to the program once per year in the Summer admission term. All applications received by the application priority deadline will be considered, and accepted students will be notified by the corresponding priority acceptance notification date.

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.



Major Code: 4965

## Degree Requirements

Code	Title	Hours
Minimum cumulative GPA of 3.0 is required for graduation.		
A grade of C# or better is required in all courses.		
MDIA 610	Disruptions & Trends in Media Enterprise	3
MDIA 612	Emergent Issues in Media Ethics and Law	3
MDIA 614	Audience Development	3
MDIA 618	Community Journalism	3
MDIA 619	Product Development for Newsrooms	3
MDIA 620	Next Gen News Analytics	3
Community Based Field Experience		6
MDIA 689	Community Based Field Experience	
MDIA 695	Independent Study	2
MDIA 697	Research	4
Total Hours		30

## Accelerated Bachelor's/Master's Program

- B.S.J. in Journalism/M.S.J. in Media Solutions and Innovation

## Degree Requirements

Code	Title	Hours
University Requirements		28
Non-Journalism/Media Requirements		27
Media College Core Requirements		12
Journalism Major Requirements		53
MESO Requirements		16
Total Hours		136

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 6, and 7		16
MDIA 191	First-Year Seminar	2
General Electives		10
Total Hours		28

## Non-Journalism/Media Requirements

Code	Title	Hours
HIST 153	Making of Modern America: 1865 to the Present	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
ANTH 105	Introduction to Anthropology	
PSYC 101	Introduction to Psychology	

SOC 101	Introduction to Sociology	
Total Hours		27

## Media College Core Requirements

Code	Title	Hours
MDIA 101	Media and Society	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
JRL 528	Media Ethics and Law	3
Total Hours		12

## BSJ Degree Requirements

Code	Title	Hours
A minimum grade of C- is required in Journalism Major Requirements.		
Select three one-credit-hour JRL skills courses, which include, but are not limited to, the following options:		3
JRL 236S	Podcast Producing	
JRL 236S	Podcast Producing	
JRL 237S	Advanced Video Editing	
JRL 238S	Voice Performance for Broadcasting	
JRL 240S	Immersive Storytelling: AR/VR	
Take each of the following:		
JRL 318S	Beat Reporting	3
JRL 319S	Editing and Curation	3
JRL 341S	Data and Design	3
JRL 458	Interactive Media and Audience Building	3
Select one of the following capstones:		3
JRL 531	Multimedia Reporting	
JRL 587	Advanced Video Reporting and Producing	
JRL 559S	Multimedia News Publication	
Select two advisor-approved "track" electives from the following or from other advisor-approved upper-level JRL electives:		6
JRL 320S	Advanced Photojournalism	
JRL 321S	Media Design	
JRL 426S	Investigative Reporting	
JRL 335S	Video and Audio News Writing	
JRL 340S	Advanced Video Storytelling	
JRL 386S	Beginning Video Reporting	
JRL 430S	Social Media and Journalism	
JRL 440S	Documentary Storytelling	
JRL 593	Special Topics	
<b>Required Minor</b>		<b>15</b>
<b>Shared Graduate Electives</b>		
MDIA 528	Emergent Issues in Media Ethics & Law	3
MDIA 510	Disruptions & Trends in Media Enterprise	3
MDIA 518	Community Journalism	3
MDIA 519	Product Development for Newsrooms	3
MDIA 595	Independent Study	2
Total Hours		53

## MESO Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
A grade of C# or better is required in all courses.		
MDIA 514	Audience Development	3
MDIA 520	Next Gen News Analytics	3
Community Based Field Experience		6
MDIA 689	Community Based Field Experience	
MDIA 697	Research	4
Total Hours		16

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
JRL 191		2 ENGL Literature or Creative Writing course	3
MDIA 101 (GEF 4)		3 Language Course	3
MDIA 215S		3 GEF 2B	4
ENGL 101 (GEF 1)		3 Select one of the following:	3
Language Course		3 ANTH 105	
		PSYC 101	
		SOC 101	
		General Elective	3
		14	16

### Second Year

Fall	Hours	Spring	Hours
One-credit-hour JRL Skills course		1 JRL 318S	3
MDIA 225S		3 GEF 6	3
Elective		3 HIST 153	3
ENGL 102 (GEF 1)		3 General Elective	3
BCOR 350		3 Minor Course	3
One-credit-hour JRL Skills Course		1	
		14	15

### Third Year

Fall	Hours	Spring	Hours
JRL 319S		3 STAT 111	3
GEF 7		3 Minor Course	3
JRL 341S		3 Electives	3
POLS 102		3 ECON 200	3
Minor Course		3 JRL "track" elective	3
One credit-hour-hour JRL Skills Course		1	
		16	15

### Fourth Year

Fall	Hours	Spring	Hours
JRL 458		3 JRL Capstone Course	3
JRL 528		3 Minor Course	3
Minor Course		3 MDIA 519	3
Elective		1 JRL "track" elective	3
MDIA 514		3	
		13	12

**Fifth Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
MDIA 595		1 Field Experience	6
MDIA 518		3 MDIA 689	
MDIA 510		3 MDIA 697	4
MDIA 520		3 MDIA 595	1
	10		11

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Total credit hours: 136

**Major Learning Outcomes****MEDIA SOLUTIONS AND INNOVATION**

Upon completion of this program students will be able to:

1. Understand the basic principles of innovation theories as applied to media practice.
2. Understand current and emerging technology and digital platforms and their implications for media practice.
3. Understand problems in law and ethics in media practice related to new technology.
4. Solve problems in content acquisition and creation in media production using new technology.
5. Solve problems in audience development, monetization and distribution using new technology.
6. Practice advanced project management across diverse teams in media organizations.
7. Produce innovative media products using advanced digital storytelling techniques such as Virtual Reality, Augmented Reality, Artificial Intelligence, and other interactive media.
8. Design and conduct research to solve current and emerging industry problems.
9. Communicate key insights and forecasting data regarding adoption of new technology and new digital practice to decision makers.
10. Explain how media organizations use current methods such as social media, mobile-first content, algorithms, AI and 'bots', and a range of industry-standard analytics tools to conduct audience-building.

# Medicine

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## Degrees Offered

- MD, Doctor of Medicine
- MD/PhD, Dual Doctor of Medicine and Doctor of Philosophy
- PhD in Biochemistry and Molecular Medicine
- PhD in Cancer Cell Biology
- PhD in Cellular and Integrative Physiology
- MS, PhD in Clinical and Translational Science
- PhD in Immunology and Microbial Pathogenesis
- PhD in Neuroscience
- MS in Athletic Training
- AuD in Audiology
- MS in Exercise Physiology
- MS in Medical Laboratory Science
- MOT in Occupational Therapy
- OTD in Occupational Therapy
- MHS in Pathologists' Assistant
- PhD in Pathophysiology, Rehabilitation, and Performance
- DPT in Physical Therapy
- MHS in Physician Assistant
- MS in Speech-Language Pathology
- PhD in Pharmaceutical and Pharmacological Sciences
- MS in Biomedical Sciences
- MS in Health Sciences

## Introduction

The West Virginia University School of Medicine is a part of the Robert C. Byrd Health Sciences Center, a comprehensive academic health system with three regional campuses in the state, a network of affiliated hospitals and practice plans, and a mission of education, research, clinical care, and service to the state. On the main campus in Morgantown, students have access to a full range of research and clinical facilities, including a relatively new, four-story laboratory building and a wide range of advanced research centers. West Virginia University Hospitals feature sophisticated medical technology, including magnetic resonance imagery, lithotripsy, and laser surgery; the campus includes a large and busy tertiary hospital, a Level 1 trauma center, a children's hospital, cancer center, a psychiatric hospital, primary care and specialty clinics, a rehabilitation hospital, and many other patient care facilities.

Graduate study in the biomedical sciences is in seven PhD graduate programs: biochemistry and molecular biology; cancer cell biology; cellular and integrative physiology; immunology and microbial pathogenesis; neuroscience; pathophysiology, rehabilitation, and performance; and pharmaceutical and pharmacological sciences (a collaboration with the School of Pharmacy). Biomedical sciences graduate students take a common core curriculum the first semester and match with a faculty mentor and select one of the seven PhD training programs after the first semester or by the end of year one. There is also a M.S. degree in the Biomedical Sciences. Core coursework for this M.S. degree is similar to that of the first semester of PhD training in the biomedical sciences.

There is also a combined MD/PhD dual degree option for students interested in pairing medical and basic science education at the doctoral level.

The Division of Professional and Undergraduate Programs offers graduate degrees in the clinical areas of athletic training, audiology, exercise physiology, medical laboratory science, occupational therapy, pathologists' assistant, physical therapy, physician assistant, and speech-language pathology. All graduate and professional programs in the School of Medicine complement other existing programs in health professions offered through other schools (dentistry, nursing, pharmacy and public health) that are part of the Health Sciences Center.

The MS and PhD programs in Clinical and Translational Science, housed within the West Virginia Clinical and Translational Science Institute, foster the training and career development in clinical and translational research.

The MS in Health Sciences is a 12-month, non-thesis master's program that targets students who desire to enhance their competitiveness for entry into advanced professional or graduate programs or who are interested in more in-depth study in biomedical or public health disciplines.

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## ADMINISTRATION

### DEAN

- Clay Marsh - M.D. (West Virginia University School of Medicine)

### VICE DEAN FOR MEDICAL EDUCATION & ACADEMIC AFFAIRS

- Norman D. Ferrari III - M.D. (West Virginia University School of Medicine)  
Chief Academic Officer for Physician Education

### VICE DEAN-PROFESSIONAL & UNDERGRADUATE PROGRAMS

- MaryBeth Mandich - Ph.D. (West Virginia University School of Medicine)

### VICE DEAN FOR CLINICAL SERVICES & CMO WVU HEALTHCARE

- Michael Edmond, MD, MPH - M.D. (West Virginia University School of Medicine)

### ASSOCIATE DEANS

- Scott A. Cottrell - Ed.D. (West Virginia University College of Education and Human Services)  
Student Services and Curriculum
- Julie Green  
Faculty & Practice Plan Affairs
- James P. Griffith - M.D. (West Virginia University School of Medicine)  
Charleston Campus Student Services
- Stephen Hoffmann - MD (University of Cincinnati)  
Clinical Programs
- Rosemarie Cannarella Lorenzetti - M.D. (West Virginia University School of Medicine)  
Eastern Campus Student Services
- Linda Nield - MD - (Dartmouth School of Medicine)  
MD Degree Admissions
- Becky Stauffer, CPA  
Finance & Chief Administrative Officer
- Manuel Vallejo, MD, DMD - West Virginia University School of Medicine  
Graduate Medical Education and DIO

### ASSISTANT DEANS

- Melanie Fisher - MD (Pennsylvania State University)  
Continuing Medical Education
- Azalea Hulbert - PhD (Pennsylvania State University)  
Student Services, Professional & Undergraduate Programs
- Kathy Moffett, MD - (Pennsylvania State University)  
Faculty Affairs
- Dorian Williams - M.D. (West Virginia University School of Medicine)  
Technology & Simulation

### ASSOCIATE VICE PRESIDENT FOR HEALTH SCIENCES

- John Linton - PhD. (Kent State University)  
Dean, Charleston Campus
- Richard Thomas - MD (West Virginia University School of Medicine)  
Dean, Eastern Campus

## Doctoral Degrees

Policies for the Doctor of Medicine (MD) degree may be found in the MD Degree Student Handbook. This includes but is not limited to policies for evaluation and advancement as outlined in the Policy on Academic and Professional Standards Governing the MD Degree program.

The policies for the Doctor of Philosophy degree in the School of Medicine include program specific requirements, School of Medicine specific requirements and University wide requirements. Students should become familiar with the WVU graduate catalog and the handbooks provided to them by their graduate program and upon entry into graduate school.

## Required Research Participation

Because the Doctor of Philosophy is a research degree, students will be expected to be involved in research from the beginning of their programs. Doctoral students participate in research rotations with faculty during the first, and if necessary, the second semester of enrollment. Students may choose a dissertation advisor in the first semester of study or by the end of year one. With the aid of the student's advisor a dissertation committee is chosen in the second year of enrollment. Students should work with their dissertation advisor to design appropriate pilot studies and with the data identify a dissertation project and appropriate research questions/hypothesis to be tested by the proposed research. All approved research projects must be hypothesis-based, and whenever possible, the research questions should address mechanistic questions that explain biological phenomenon relevant to the field of study.

Research is conducted throughout the doctoral program with the requirement that one manuscript, based on the student's dissertation research, is accepted for publication in a peer-reviewed scientific journal before defense of PhD dissertation research. Students should strive to present their research findings at a minimum of one national/international meeting annually beginning in the second year of enrollment in the doctoral program.

## Directed Research

All preliminary research must be collected under the supervision and approval of the dissertation chair, which is most graduate programs is the student's advisor. The student is expected to engage in directed research under the supervision of the dissertation advisor to learn techniques and collect pilot data that will be the basis of a future dissertation project. Studies to obtain pilot data should be presented to the dissertation committee to demonstrate the student's competency in research skills and that his/her research ideas and hypotheses are appropriate and justified. This process facilitates progression through the program in a timely and efficient manner. Nevertheless, the dissertation committee may require the student to obtain additional pilot data or research skills prior to approving the research proposal as a dissertation topic. The student's directed research efforts should be progressing towards approval of a dissertation topic from the members of the dissertation committee, once they have been identified (before the end of the first semester of year two). This research training will provide the student background data/information from which to base a pre-doctoral grant proposal and dissertation topic as part of the requirements for completing the defense of the Dissertation Proposal.

## Comprehensive/Qualifying Examination

The comprehensive (qualifying/candidacy) examination is usually given after most formal coursework has been completed and, in general, will test the scientific knowledge pertinent to the student's chosen Ph.D. training program. The individual graduate programs conduct these examinations at different times and use different formats. Depending on the graduate program, the qualifying exam is scheduled either at the end of year one or year two or in association with the proposal defense.

## Requirements of the Dissertation Proposal/Candidacy Examination

Graduate students are admitted to Ph.D. candidacy after successfully defending the Dissertation Proposal. The candidacy examination consists of writing a grant proposal, formatted similar to a National Institutes of Health pre-doctoral grant, and orally defending the dissertation proposal to the student's dissertation committee. Advancement to candidacy means that in the judgment of the faculty, the doctoral student has an adequate knowledge of their research area, knows how to use academic resources, and has potential to do original independent research. In other words, the student is qualified to complete the doctoral dissertation. No student with a grade point average of less than 3.0 will be eligible to take this examination.

Failure to successfully complete the Comprehensive Examination or the Dissertation Proposal by the end of the third year in graduate school is grounds for dismissal. A student has two attempts to pass the exam. Failure on the first attempt requires the student petition and receive approval from the dissertation committee to retake either exam a second time.

## General Dissertation Requirements

The student must complete a dissertation in which they have obtained original data that makes a novel and important contribution to knowledge in the field of study and submit all manuscripts containing these data to peer-reviewed journals. At least one manuscript with the student as first author must be accepted for publication prior to defense of the dissertation. The dissertation must be constructed in a format suitable to the graduate school and the advisor. Preferable formats will include writing the data chapters as if they have been submitted to peer-reviewed journals (including abstract, introduction, methods and materials, results, discussion, and literature cited in each chapter). In addition, the final one to two chapters of the dissertation should include an integrative discussion concerning the total research project and evaluation of hypotheses that were tested.

Completion of the PhD degree requires a written dissertation that is presented orally in front of a public forum and defended in private to the student's dissertation committee. To pass, the student must receive the approval of 4 of the 5 members on the dissertation committee.

## Student Evaluations

Students are formerly evaluated annually by the dissertation committee and the program faculty with respect to courses, research, teaching, professional development, and progress through the program. The student also annually completes an Individual Development Plan that is reviewed by the student's advisor.

## Professional Programs

Policies that apply to graduate programs under the purview of Professional and Undergraduate Programs (MS in Athletic Training, AuD in Audiology, MS in Exercise Physiology, MS in Medical Laboratory Science, MOT and OTD in Occupational Therapy, MHS in Pathologists' Assistant, MHS in Physician Assistant, DPT in Physical Therapy, and MS in Speech-Language Pathology) can be found in the respective program handbook.

## Certificate Program

- Clinical and Translational Science (p. 50)

### Accreditation

The MD program within the School of Medicine has specialized accreditation through the Liaison Committee on Medical Education (LCME).

**The following list are Residency specialty training programs for MD degree holders include:**

*Addiction Medicine and Addiction Psychiatry within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and the Residency Review Committee for Psychiatry.*

*Anesthesiology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Anesthesiology.*

*Adult cardiothoracic anesthesiology has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and the Residency Review Committee for Anesthesiology.*

*Allergy/Immunology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and the Residency Review Committee for Allergy/Immunology.*

*Child and Adolescent Psychiatry within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Psychiatry.*

*Dermatology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Dermatology.*

*Emergency Medicine within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Emergency Medicine.*

*Family Medicine within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Family Medicine.*

*Forensic Psychiatry within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Psychiatry.*

*Hematopathology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review for Pathology.*

*Neonatology/Perinatal Medicine Fellowship within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Pediatrics.*

*Neurology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Neurology.*

*Neuroradiology Fellowship within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Radiology.*

*Neurosurgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Neurological Surgery.*

*Obstetrics and Gynecology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Obstetrics and Gynecology.*

*Ophthalmology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Ophthalmology.*

*Ophthalmic Plastic and Reconstructive Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Ophthalmology.*



*Orthopedic Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Orthopedic Surgery.*

*Otolaryngology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Otolaryngology .*

*Pathology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review for Pathology. In addition there are accredited fellowships in Hematopathology and Cytopathology linked to this core program also accredited by the ACGME.*

*Pediatrics within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Pediatrics.*

*Plastic Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Plastic Surgery.*

*Psychiatry within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Psychiatry.*

*Radiation Oncology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Radiation Oncology.*

*Radiology Diagnostic within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Radiology.*

*Rural Family Medicine (Harper's Ferry) within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Family Medicine.*

*Regional anesthesiology and acute pain medicine within the School of Medicine has accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with the Residency Review Committee for Anesthesiology.*

*Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Surgery.*

*Sports Medicine within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Emergency Medicine.*

*Transitional Year within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Transitional Year.*

*Urology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Urology.*

*Vascular Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Surgery.*

*Thoracic Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Thoracic Surgery.*

*The following programs within the School of Medicine have specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for **Internal Medicine**: Core Internal Medicine, Cardiovascular Disease, Critical Care Medicine, Gastroenterology, Geriatrics, Endocrinology, Hematology/Oncology, Hospice/Palliative Care, Infectious Diseases, Interventional Cardiology, Nephrology, Pulmonary/Critical Care Medicine, Sleep Medicine and Rheumatology.*

### **Athletic Training (MS)**

West Virginia University's Master of Science in Athletic Training degree program was awarded accreditation by the Commission on Accreditation of Athletic Training Education (CAATE) in April 2020 and will undergo its next comprehensive review in the 2028-2029 academic year. CAATE accreditation allows students to be eligible to sit for the national Board of Certification (BOC) exam and earn the credential of certified athletic trainer.

### **Audiology (AuD) and Speech-Language Pathology (MS)**

The Master of Science (M.S.) in speech-language pathology {residential, distance education} and the Doctor of Audiology (Au.D.) {residential} at West Virginia University is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard, #310, Rockville, MD 20850, 800-498-2071 or 301-296-5700.

### **Exercise Physiology**

The Master of Science (Clinical) program in Exercise Physiology is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.caahep.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305441914%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJljoIV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C&sdata=x8ppJERRiRliCN1HkBTEN8rJw4IWOH9SRrOGoyXn6M%3D&reserved=0>)).

### Medical Laboratory Science (MS)

The Biomedical Laboratory Diagnostics programs, including the Master of Science (MS) in Medical Laboratory Science, are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 River Road, Suite 720, Rosemont, IL 60018, (773) 714-8880, [www.naacls.org](http://www.naacls.org) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.naacls.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305441914%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJljoIV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C&sdata=Nn0mHY1WH5Zft%2FwXY16DuB3LqRhBf4%2FYWrls9ZNxBfU%3D&reserved=0>). NAACLS is the premier international agency for accreditation and approval of education programs in the clinical laboratory sciences and related health care professions. (Adapted from [www.naacls.org](http://www.naacls.org) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.naacls.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305441914%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJljoIV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C&sdata=Nn0mHY1WH5Zft%2FwXY16DuB3LqRhBf4%2FYWrls9ZNxBfU%3D&reserved=0>)).

### Occupational Therapy (MOT)

WVU's Master of Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 EXECUTIVE BOULEVARD, SUITE 200, NORTH BETHESDA MARYLAND 20852-4929. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its web address is [www.acoteonline.org](http://www.acoteonline.org) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.aota.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305441914%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJljoIV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C&sdata=iY0yLPKmrWTn6ko8555H2m3vBY5nLhjMuk08Hy%2BBxp8%3D&reserved=0>). The OT Program at WVU was awarded re-accreditation in 2013. The next scheduled onsite visit for accreditation will be in 2023-2024. More information about accreditation can also be found at the AOTA website: <http://www.aota.org>. (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.aota.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305441914%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJljoIV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C&sdata=o1nrySjUHuHqqaq457ml1paXAzqrkLsM%2FWkssqZl4%3D&reserved=0>).

**Note:** A felony conviction may impact a graduate's ability to take the NBCOT (National Board for Certification in Occupational Therapy, Inc.) examination and/or obtain a state license. For further information on NBCOT's Character Review Program, interested parties can obtain information from that Board on their website at: <http://www.nbcot.org> (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.nbcot.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305598165%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJljoIV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C&sdata=qF7XW4cAeDLJ9N76efhfh1DTTJZJhLr4AaeKC1Ycu8%3D&reserved=0>).

### Occupational Therapy (OTD)

The entry-level occupational therapy doctoral degree program has applied for accreditation and has been granted Candidacy Status by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its web address is [www.acoteonline.org](http://www.acoteonline.org) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.acoteonline.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305598165%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJljoIV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C&sdata=YWsWt6uvqDbSF6%2F849YsL64%2BYuZMCp6T02K4Sw%2FpPN0%3D&reserved=0>). The program must have a preaccreditation review, complete an on-site evaluation, and be granted Accreditation Status before its graduates will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

### Pathologists' Assistant (MHS)

The West Virginia University Pathologists' Assistant Program is accredited through October 31, 2031 by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 River Road, Suite 720, Rosemont, IL 60018, (773) 714-8880, [www.nacls.org](http://www.nacls.org) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.nacls.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305598165%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=s9uV9HK2Ybv1oYd8sBXowevrHRCDXD1zOsMUlXPws%3D&reserved=0>). NAACLS is the premier international agency for accreditation and approval of education programs in the clinical laboratory sciences and related health care professions. (Adapted from [www.nacls.org](http://www.nacls.org) (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.nacls.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305598165%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=s9uV9HK2Ybv1oYd8sBXowevrHRCDXD1zOsMUlXPws%3D&reserved=0>).

### Physical Therapy (DPT)

The Doctor of Physical Therapy Program at West Virginia University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave. Suite 100, Alexandria, Virginia 22305-3085; telephone 703-706-3245; email [accreditation@apta.org](mailto:accreditation@apta.org); website: <http://capteonline.org> (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fcapteonline.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305598165%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=6OVzgvFk9D5U38eXl7TmiEf0BrpJRC%2B953C%2B4an5v4%3D&reserved=0>). If needing to contact the program/institution directly, please call 304-293-3610 or email [mmandich@hsc.wvu.edu](mailto:mmandich@hsc.wvu.edu).

### Physician Assistant (MHS)

The ARC-PA has granted Accreditation-Provisional status to the West Virginia University Physician Assistant Program sponsored by West Virginia University. Accreditation-Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program's ability to meet the ARC-PA Standards or when a program holding Accreditation-Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students. Accreditation-Provisional does not ensure any subsequent accreditation status. It is limited to no more than five years from matriculation of the first class. The program's accreditation history can be viewed on the ARC-PA website (<https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.arc-pa.org%2F&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305598165%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=V1CCdWj3CjdZloN2y8VQm1TUdNFr4x6QIxzPof9FCCE%3D&reserved=0>). The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) requires programs to define, publish and make readily available to enrolled and prospective students general program information regarding the most current annual student attrition information. Please find annual student attrition data updated as of January 17, 2023, here (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fmedicine.wvu.edu%2Fmedia%2F370878%2Fwvu-physician-assistant-program-student-attrition-data-january-17-2023.pdf&data=05%7C01%7Cazalea.hulbert%40hsc.wvu.edu%7C32da39ecf7cb435f306208db15dab4d5%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C638127801305598165%7CUnknown%7CTWFPbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQljoiv2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=YPXKETXmliUz8PzoAu65dZ4EnuVHEd7F3T1sHyGUzNQ%3D&reserved=0>).

## Athletic Training, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

The WVU Athletic Training program has a rich history of educating and preparing extraordinary Sports Medicine professionals for over 50 years. Over 500 athletic training students have graduated from the program and have gone on to pursue careers in medicine, college athletics, professional sports, Olympic training centers, military, performing arts, and other clinical settings.

The Master of Science in Athletic Training degree program is a two-year program consisting of classroom, laboratory, and clinical education rotations. Clinical rotations, spanning both years, include working with WVU Big 12 athletic teams, high school athletes, professional sports, performing arts, and in hospital emergency departments. Graduates of the MSAT program are eligible to sit for the national BOC examination to become a certified athletic trainer.

## ADMINISTRATION

### CHAIR

- Anh-Dung Nguyen - PhD, ATC (University of North Carolina at Greensboro)  
Professor

### MSAT PROGRAM DIRECTOR

- Samantha Scarneo-Miller - PhD, ATC (University of Connecticut)  
Assistant Professor

### MSAT COORDINATOR OF CLINICAL EDUCATION

- Allison Hetrick - MEd, ATC, NREMT, CSCS (University of Cincinnati)  
Clinical Instructor

### DIRECTOR OF RESEARCH

- Kate Jochimsen - PhD, ATC (University of Kentucky)  
Assistant Professor

## FACULTY

### PROFESSOR

- Anh-Dung Nguyen - PhD, ATC (University of North Carolina at Greensboro)  
Chair

### ASSISTANT PROFESSORS

- Kate Jochimsen - PhD, ATC (University of Kentucky)  
Director of Research
- Samantha Scarneo-Miller - PhD, ATC (University of Connecticut)  
MSAT Program Director

### CLINICAL INSTRUCTOR

- Allison Hetrick - MEd, ATC, NREMT, CSCS (University of Cincinnati)  
MSAT Coordinator of Clinical Education

## Admissions

Applications for the Master of Science in Athletic Training are accepted via ATCAS from August 1 - May 1 each year. The program is 24 continuous months and begins in June.

In order to be eligible for admission, students must complete the following requirements:

#### 1. Completion of a baccalaureate degree

Applicants must have earned a baccalaureate degree, or plan on completing a baccalaureate degree by May of the year entering the program. Students may apply with an undergraduate degree in any major.

#### 2. Overall cumulative GPA of 2.75 or greater (3.0 or greater preferred)

The cumulative GPA includes all previous undergraduate coursework at all institutions the student has attended.

#### 3. Required clinical observation

A minimum of 50 hours of clinical observation under the direct supervision of a certified athletic trainer is required.

#### 4. Three letters of recommendations

One letter must be from a board-certified athletic trainer with whom the applicant has worked in a clinical setting.

#### 5. Pre-requisite GPA of 3.0 or greater, earning a grade of C or higher in all pre-requisite courses:

- Biology including lab
- Human Anatomy including lab

- General Chemistry including lab
- Human Physiology
- General Physics including lab
- Biomechanics/Kinesiology
- Exercise Physiology or Physiology of Science
- Psychology
- Nutrition

#### 6. On-campus interview

Successful completion of an on-campus interview with the MSAT Admissions Committee (invitation only).

#### 7. Non-native speakers of English

Non-native speakers of English with international transcripts, regardless of U.S. citizenship, must validate proficiency in the English language.

Applicants may submit a satisfactory score on the TOEFL language proficiency test. The minimum required score depends on the form of the exam taken (internet based – 79, or paper based – 550).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8337

## Curriculum Requirements

A minimum grade of "C" is required in EACH didactic course. A minimum GPA of 3.0 cumulative will be required to progress and graduate from the program. It is possible for a semester GPA to fall below 3.0. In such a case, the student would be placed on probation and required to raise the cumulative GPA the following semester or face possible suspension or dismissal. A Committee on Academic and Professional Standards will be established to oversee academic progress of students.

Code	Title	Hours
PALM 503	AT Human Anatomy	4
AT 511	Managing Athletic Medical Trauma	2
AT 512	Foundations of Professional Practice	1
AT 513	Fundamental Skills in Athletic Training	2
AT 520	Musculoskeletal Assessment & Diagnosis 1	3
AT 521	Musculoskeletal Assessment & Diagnosis 2	3
AT 522	Clinical Decision Making 1	2
AT 523	Evidence Based Practice 1	1
AT 524	Pediatric Sports Medicine Clinical Rotation	3
AT 530	Therapeutic Interventions 1	3
AT 531	Therapeutic Interventions 2	3
AT 532	Clinical Decision Making 2	2
AT 533	Evidence Based Practice 2	1
AT 534	Collegiate Sports Medicine Clinical Rotation	3
AT 610	General Medical Conditions	2
AT 611	Pathophysiology	2
AT 613	Sports Medicine Clinical Rotation 1	2
AT 620	Leadership & Management in Athletic Training	2
AT 621	Advanced Neuromuscular Concepts	2
AT 622	Optimizing Athletic Performance	2
AT 623	Sports Medicine Clinical Rotation 2	9
AT 630	Professional Practice in Athletic Training	1
AT 631	Clinical Topics in Sports Medicine	2
AT 632	Evidence Based Practice 3	2

## Suggested Plan of Study

First Semester	Hours
AT 511	2
AT 512	1
AT 513	2
PALM 503	4
	9
Second Semester	Hours
AT 520	3
AT 521	3
AT 522	2
AT 523	1
AT 524	3
	12
Third Semester	Hours
AT 530	3
AT 531	3
AT 532	2
AT 533	1
AT 534	3
	12
Fourth Semester	Hours
AT 610	2
AT 611	2
AT 613	2
	6
Fifth Semester	Hours
AT 620	2
AT 621	2
AT 622	2
AT 623	9
	15
Sixth Semester	Hours
AT 630	1
AT 631	2
AT 632	2
AT 633	8
	13

Total credit hours: 67

## Major Learning Outcomes

### ATHLETIC TRAINING

1. Program graduates will be proficient, evidence-based and patient-centered athletic training professionals.
2. Program graduates will demonstrate effective collaboration in an inter-professional healthcare model.
3. Program graduates demonstrate the ability to engage in practice-based research to improve patient care.
4. Program graduates will have created a customized plan to formulate strategies for life-long learning to ensure contemporary expertise through ongoing professional development, engagement in professional organizations, and advocacy for the profession.
5. Program graduates will be able to critically appraise the ethical and practical aspects of patient care and research.



## Accreditation

West Virginia University's Master of Science in Athletic Training degree program was awarded accreditation in April 2020 by the Commission on Accreditation of Athletic Training Education (CAATE), 6850 Austin Center Blvd., Suite 100, Austin, TX 78731-3101.

## Audiology, Au.D.

### Degree Offered

- Doctor of Audiology

### Nature of the Program

The Doctor of Audiology (AuD) program in Communication Sciences and Disorders uses approaches to pedagogy – the “how” of teaching and learning – that are based on current scholarship in higher education. These pedagogical approaches, influenced by constructivism, vary depending on the content and purpose of individual courses and may include:

- *Team-based learning*, in which students are strategically placed in small groups that work collectively to apply course content to rigorous structured activities and assignments
- *Project-based learning*, whereby students demonstrate the acquisition of knowledge and skills by investigating, evaluating, and solving authentic problems faced by clients, the field, or society, with less direction from instructors compared to team-based learning
- *Experiential learning*, in which a clinical or research experience is an opportunity to learn while the students' analysis and reflection on the experience is where the learning occurs
- *Research-based learning*, where students use the latest knowledge and thinking, in dialogue with teaching, research, and clinical faculty, and each other, to engage in guided inquiry, knowledge seeking, and skill development

The purpose of the AuD program is to provide students with the academic and clinical preparation to diagnose and treat the full range of hearing and vestibular disorders in all age groups. It is the goal of the program to prepare audiologists who are competent to work effectively in a wide variety of clinical settings, including hospitals, clinics, special treatment centers, schools, industry, and private practice. The program consists of 98 credit hours of academic coursework and clinical practicum experiences, including a 12-month residency.

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## ADMINISTRATION

### CHAIR

- Jayne Brandel - PhD, CCC-SLP (University of Kansas)  
Associate Professor

### VICE CHAIRS

- Nancy Aarts - PhD, CCC-A (Northwestern University)  
Associate Professor and Vice Chair, Audiology
- Michelle Moore - PhD, CCC-SLP (University of Pittsburgh)  
Associate Professor and Vice Chair, Speech-Language Pathology

### UNDERGRADUATE COORDINATOR

- Kimberly Meigh - PhD, CCC-SLP (University of Pittsburgh)  
Associate Professor

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## FACULTY

### ASSOCIATE PROFESSORS

- Nancy Aarts - PhD, CCC-A (Northwestern University)  
Vice Chair, Audiology
- Jayne Brandel - PhD, CCC-SLP (University of Kansas)  
Chair
- Ashleigh Callahan - PhD, CCC-A (James Madison University)
- Alex Hollo - PhD, BCBA-D (Vanderbilt University)
- Kimberly Meigh - PhD, CCC-SLP (University of Pittsburgh)  
Undergraduate Coordinator

- Michelle Moore - PhD, CCC-SLP (University of Pittsburgh)  
Vice Chair, Speech-Language Pathology

## ASSISTANT PROFESSORS

- Molly Abitbol - MS, CCC-SLP (Nova Southeastern University)
- Christa Babjack - MA, CCC-SLP (Western Michigan University)
- Christina Dastolfo-Hromack - MS, CCC-SLP (University of Pittsburgh)
- Heather Forbes - PhD, CCC-SLP, BCBA-D (University of Kansas)
- Tori Gilbert - SLPD, CCC-SLP (Northwestern University)
- Anna Gravelin - PhD, CCC-SLP (Bowling Green State University)
- Almara Hutchinson - MA, CCC-SLP (Radford University)
- Megan Israelsen - PhD, CCC-SLP (Utah State University)
- Eric Johnson - PhD, AuD, CCC-A (Ohio State University, University of Utah)
- Kenneth Morse - PhD, AuD, CCC-A (Syracuse University)
- Tracy Toman - MS, CCC-SLP (West Virginia University)
- Leah Valensi - AuD, CCC-A (Syracuse University)

## PROFESSORS EMERITI

- Mary Ellen Tekieli Koay - PhD
- Norman J. Lass - PhD
- Dennis M. Ruscello - PhD, ASHA Honors
- Kenneth O. St. Louis - PhD
- Charles M. Woodford - PhD

## ASSOCIATE PROFESSORS EMERITI

- Leslie Graebe - MS
- Conrad Lundeen - PhD

## TEACHING ASSOCIATE PROFESSORS EMERITI

- Karen B. Haines - MS
- Gayle B. Neldon - EdD

## ASSISTANT PROFESSORS EMERITI

- Lynn R. Cartwright - EdD
- Cheryl L. Prichard - EdD

## Admissions

### GRADUATE ADMISSIONS PHILOSOPHY

We commit to the mission and vision of the Division of Communication Sciences & Disorders by adopting a holistic review process that fosters a diverse and inclusive culture. We welcome students who are reflective critical thinkers and embody curiosity, compassion, collaboration, as well as an openness to feedback.

### ADMISSION REQUIREMENTS

Applicants will be considered for our graduate programs if they have remarkable personal attributes that are predictive of academic and clinical success, high academic achievement, and English proficiency.

- **Personal attributes.** Applicants are expected to possess remarkable personal characteristics that are necessary for success in graduate study as well as in professional clinical practice:
  - a. a desire for lifelong learning,
  - b. critical thinking ability,
  - c. strong interpersonal and collaborative skills, and
  - d. an openness to receiving constructive feedback.
- **Academic achievement.** Applicants must have:



- a. Obtained a baccalaureate degree or equivalent from a properly recognized institution of higher learning prior to starting the program.
- b. Maintained an overall undergraduate grade point average of at least 2.8 (where 'A' = 4.0). However, for an overall undergraduate GPA below a 3.0, the applicant must have achieved a GPA of 3.2 or higher in one of the following: CSD major coursework, all of the CSD prerequisites, or in the most recent 60 credits taken at the undergraduate or graduate level.
- c. Completed the prerequisite coursework listed below with a grade of 'C' or better. A minimum of two courses in the CSD coursework must be completed before the application deadline. The remaining prerequisite courses must be completed prior to starting the graduate program.
  - At least one course in each of the following CSD content areas:
    - Phonetics
    - Language Acquisition/Development
    - Anatomy & Physiology of Speech and Hearing
    - Speech & Hearing Science
    - Introduction to Audiology
  - At least one course in each related content area listed below:
    - Physics or Chemistry
    - Social/Behavioral Science
    - Statistics
    - Biological Science
  - For more information on related academic courses, see the ASHA Coursework requirements (<https://www.asha.org/Certification/Course-Content-Areas-for-SLP-Standards/>) related to certification standards.
- **English proficiency.** Applicants who did not complete their bachelor's degree in the US, UK, Australia, Canada, or New Zealand must meet the minimum score requirements for English proficiency. WVU's minimum score requirements for English proficiency are: Academic IELTS score of 6.5, TOEFL iBT score of 79, PTE Academic score of 53, or Duolingo English Test score of 105.

For specific information about how to apply, including the current application timeline and tests/materials required, please visit the Communication Sciences & Disorders webpage (<https://medicine.hsc.wvu.edu/communications-sciences-and-disorders/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8363

## Doctor of Audiology

### MAJOR REQUIREMENTS

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
A minimum grade of B- or higher is required in all graduate coursework		
CSAD 710	Psychoacoustics & Anatomy and Physiology	3
CSAD 665	Diversity and Inclusion	2
CSAD 738	Approaches to Care	1
CSAD 709	Practical/Clinical Experience Enrollment 1	1
CSAD 618	Evidence-Based Practice	3
CSAD 664	Principle of Diagnostics	2
CSAD 711	Adult Behavioral Assessments	3
CSAD 715	Communication Technologies for Adults: Assessment, Candidacy and Selection	3
CSAD 729	Practical/Clinical Experience Enrollment 2	1
CSAD 714	Neurophysiological Bases of Speech and Language	4
CSAD 725	Electrophysiologic Assessments	3
CSAD 723	Developmental Audiology & Pediatric Assessment	2
CSAD 721	Communication Technologies for Adults: Fitting, Verifying & Validating	3
CSAD 717	Genetics, Pharmacology & Ototoxicity	1
CSAD 739	Practical/Clinical Experience Enrollment 3	2
CSAD 734	Auditory Processing Disorders & Non-Organic Hearing Loss: Assessment & Intervention	3
CSAD 735	Tinnitus & Hyperacusis: Assessment & Intervention	1
CSAD 749	Practical/Clinical Experience Enrollment 4	2

CSAD 736	Vestibular Disorders: Assessment	4
CSAD 731	Pediatric Audiologic Habilitation: Assessment & Intervention	3
CSAD 747	Cochlear Implant: Assessment, Candidacy & Mapping	2
CSAD 748	Communication Technologies for Children: Assessment, Selection, Fitting, Verifying & Validation	2
CSAD 759	Practical/Clinical Experience Enrollment 5	2
CSAD 737	Vestibular Disorders: Intervention	2
CSAD 713	Adult Audiologic Rehabilitation: Assessment & Intervention	2
CSAD 741	Businesses Practices & Supervision	3
CSAD 743	Noise in the Workplace: Assessment & Mitigation, Hearing Screening & Protection	2
CSAD 769	Practical/Clinical Experience Enrollment 6	3
CSAD 720	Prevention, Advocacy & Consumer Education	1
Final Year Clinical Experience Enrollment		25
CSAD 789	Final Year Clinical Experience Enrollment	
Research		7
CSAD 797	Research	
Take the Praxis Exam in Audiology		
Successful Completion of Four Competency Based Assessments		
Successful Completion of Culminating Project		
Total Hours		98

## RESIDENCY REQUIREMENTS

All students in the Au.D. program must be full-time in residence during the program of study. The minimum duration for graduate study is eleven consecutive semesters (including summer sessions). Part-time students are not eligible for admission to the Au.D. degree program.

## Suggested Plan of Study

First Semester	Hours
CSAD 710	3
CSAD 665	2
CSAD 738	1
CSAD 709	1
Orientation/Campus Immersion	
	7
Second Semester	Hours
CSAD 618	3
CSAD 664	2
CSAD 711	3
CSAD 715	3
CSAD 729	1
Competency Assessment of Professional Skills #1	
	12
Third Semester	Hours
CSAD 714	4
CSAD 725	3
CSAD 723	2
CSAD 721	3
CSAD 717	1
CSAD 739	2
	15
Fourth Semester	Hours
CSAD 734	3
CSAD 735	1
CSAD 749	2

CSAD 797	1
Competency Assessment of Professional Skills #2	
	7
<b>Fifth Semester</b>	<b>Hours</b>
CSAD 736	4
CSAD 731	3
CSAD 747	2
CSAD 748	2
CSAD 759	2
CSAD 797	1
	14
<b>Sixth Semester</b>	<b>Hours</b>
CSAD 737	2
CSAD 713	2
CSAD 741	3
CSAD 743	2
CSAD 769	3
CSAD 797	2
Competency Assessment of Professional Skills #3	
	14
<b>Seventh Semester</b>	<b>Hours</b>
CSAD 789	7
CSAD 797	1
	8
<b>Eighth Semester</b>	<b>Hours</b>
CSAD 720	1
CSAD 789	9
CSAD 797	1
	11
<b>Ninth Semester</b>	<b>Hours</b>
CSAD 789	9
CSAD 797	1
Competency Assessment of Professional Skills #4	
	10
Total credit hours: 98	

Note: Each cohort starts in the Summer Term, therefore, First Semester is a Summer Term.

## Major Learning Outcomes

### AUDIOLOGY

This intentional, relevant, and comprehensive curriculum provides future audiologists the knowledge and skills needed to independently practice the full scope of audiology as caring and competent members of the profession.

Graduates of the Au.D. Program should be able to:

- Provide audiology services using evidence-based best practices and professional skills consistent with an entry-level clinician
- Collaborate with clients and families and colleagues and interprofessional team members in order to provide evidence-based individualized services that respect and meet the needs of diverse people
- Advocate for clients and clinical populations related to issues, sites, regions, and legislation using a variety of strategies and methods based upon best professional practice.

## Accreditation

The Doctor of Audiology (Au.D.) education program in audiology at West Virginia University is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard, #310, Rockville, MD 20850, 800-498-2071 or 301-296-5700.

## Biochemistry and Molecular Medicine, Ph.D.

### Degrees Offered

- Doctor of Philosophy
- Combined Degrees, Doctor of Medicine and Doctor of Philosophy

### Nature of the Program

A major goal of the **Biochemistry and Molecular Medicine Program** is to foster ability for independent thought. To this end, our faculty cultivates an open, collegial relationship with one another and with our students. Close collaboration between scientists, the sharing of ideas, and open inquiry are critical components of our training plan.

The hallmarks of graduate training in biochemistry and molecular medicine are the emphasis placed on the use of the scientific literature in advanced coursework and on protecting time for laboratory research. In addition, students will have time for professional development through seminar presentation, attendance at national meetings, teaching opportunities, and seminar programs both within the department and throughout the Health Sciences Center.

This doctoral program focuses on the understanding of biology by exploring function of the molecular components of cells. The student's ability for independent thought is critical in preparation for a career as an independent scientist. During the second year, specialized courses in biochemistry are offered as students continue their research projects. During subsequent years, students emphasize independent dissertation research, and a few formal courses may be taken. Completion of the Ph.D. degree is realized when the student successfully presents the research results to faculty of the graduate dissertation committee and program/department. Typically, four to five years are required to realize this goal. A fast-track option is available to West Virginia University undergraduate students who have excelled in undergraduate prerequisite courses relevant to biochemistry, and began their research in a Program member's laboratory during their junior year.

Faculty research in the program can provide the student with training in multiple basic sciences areas including:

- Epigenetic regulation of chromatin structure and gene expression
- RNA processing
- Cell survival mechanisms
- Regulation of metabolism
- Proteosome function
- Cell proliferation and cell cycle regulation
- Cell adhesion
- Kinases and phosphatases in signal transduction and in cancer cell metabolism
- Oxidant-induced cellular stress
- Structural biology and structure/function relationships of macromolecules such as RNA and/or proteins
- Molecular genetics of visual and auditory development
- G protein-mediated signaling by retinal photoreceptors
- Molecular basis of age-related blindness
- Development and application of new magnetic resonance approaches to biomedicine

These research areas provide fundamental knowledge toward the normal health-state and aim toward the amelioration of important diseases: atherosclerosis, blindness, cancer, deafness, diabetes, and metabolic disorders.

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## FACULTY

### CHAIR

- Visvanathan Ramamurthy - Ph.D. (Wesleyan University)

## GRADUATE PROGRAM CO-DIRECTORS

- Roberta Leonardi - Ph.D. (University of Southampton)
- Aaron Robart - Ph.D. (University of Calgary)

## PROFESSORS

- Yehenew Agazie - Ph.D. (University of Saskatchewan)
- Steven Frisch - Ph.D. (University of California-Berkeley)
- Valery Khramtsov - Ph.D. (Institute of Chemical Kinetics and Combustion)
- Qiang Ma - Ph.D. (Rutgers University)
- Vazhaikkurichi Rajendran - Ph.D. (University of Madras)
- Visvanathan Ramamurthy - Ph.D. (Wesleyan University)
- Mike Ruppert - M.D., Ph.D. (Johns Hopkins University)
- Michael Schaller - Ph.D. (McMaster University)
- David Smith - Ph.D. (University of South Florida)
- Maxim Sokolov - Ph.D. (Weizmann Institute of Science)

## ASSOCIATE PROFESSORS

- Jianhai Du - Ph.D. (Peking University)
- Michael Gunther - Ph.D. (Colorado State University)
- Roberta Leonardi - Ph.D. (University of Southampton)
- Pete Mathers - Ph.D. (California Institute of Technology)
- Elena Pugacheva - Ph.D. (Russian Academy of Science)
- Andrew Shiemke - Ph.D. (Oregon Graduate Institute)
- Peter Stoilov - Ph.D. (Friedrich Alexander University)
- Mark Tseytlin - Ph.D. (Russian Academy of Sciences)
- Scott Weed - Ph.D. (Yale University)

## ASSISTANT PROFESSORS

- Kevin Courtney - Ph.D. (University of Ottawa)
- Wentao Deng - Ph.D. (University of Florida)
- Saravanan Kolandaivelu - Ph.D. (All India Institute of Medical Sciences)
- Rong Liu - Ph.D. (Wayne State University)
- Aaron Robart - Ph.D. (University of Calgary)
- Michael Robichaux - Ph.D. (UT Southwestern)
- Bradley Webb - Ph.D. (Queen's University)

## RESEARCH ASSISTANT PROFESSORS

- Alexey Ivanov - Ph.D. (Russian Academy of Sciences)
- Ezequiel Salido - M.D., Ph.D. (University of Buenos Aires)

## TEACHING ASSISTANT PROFESSOR

- Marieta Gencheva - Ph.D. (Bulgarian Academy of Sciences)

## SERVICE ASSISTANT PROFESSOR

- Neil Billington - Ph.D. (University of Leeds)

## Doctor of Philosophy

### MAJOR REQUIREMENTS - STANDARD TRACK

Code	Title	Hours
<b>A minimum GPA of 3.0 is required.</b>		
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 702	Biomedical Lab Experience	2

BMS 706	Biomedical Research Methods	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 715	Molecular Genetics	3
BMS 720	Scientific Writing	2
BMS 747	Foundations for Contemporary Biomedical Research I	4
BMS 777	Foundations for Contemporary Biomedical Research 2	4
Journal Club		7
BIOC 785	Biochemistry and Molecular Medicine Journal Club	
Graduate Seminar		1
BIOC 796	Graduate Seminar	
Research		52
BIOC 797	Research	
Advanced Graduate Course - select one of the following:		4
BIOC 750	Protein Chemistry/Enzymology	
BIOC 751	Advance Molecular Biology	
CCB 701	Biochemical and Oncogenic Signaling	
Advanced Graduate Course - select one of the following:		3-5
CCB 701	Biochemical and Oncogenic Signaling	
BIOC 750	Protein Chemistry/Enzymology	
PSIO 750	Graduate Physiology and Pharmacology 1	
BIOC 751	Advance Molecular Biology	
MICB 784B	Special Problems in Microbiology	
Qualifying Exam		
Candidacy Exam		
Dissertation Defense		
Total Hours		87-89

## MAJOR REQUIREMENTS - FAST TRACK

Code	Title	Hours
<b>A minimum GPA of 3.0 is required.</b>		
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 715	Molecular Genetics	3
BMS 720	Scientific Writing	2
Journal Club		7
BIOC 785	Biochemistry and Molecular Medicine Journal Club	
Graduate Seminar		1
BIOC 796	Graduate Seminar	
Research		52
BIOC 797	Research	
Advanced Graduate Course - select one of the following:		4
BIOC 750	Protein Chemistry/Enzymology	
BIOC 751	Advance Molecular Biology	
CCB 701	Biochemical and Oncogenic Signaling	
Advanced Graduate Course - select one of the following:		3-5
CCB 701	Biochemical and Oncogenic Signaling	
BIOC 750	Protein Chemistry/Enzymology	
PSIO 750	Graduate Physiology and Pharmacology 1	
BIOC 751	Advance Molecular Biology	
MICB 784B	Special Problems in Microbiology	
Qualifying Exam		

Candidacy Exam

Dissertation Defense

Total Hours

76-78

**Seminars and Research Forum**

Students will present three seminars during their graduate study. The first seminar is on a topic outside of the student's research area. The second seminar is the public presentation of the dissertation proposal, which is the background and proposed research for the dissertation project. The third seminar is the public presentation of the dissertation defense.

**Journal Club**

Students are required to enroll in Journal Club each semester. The course involves the presentation and discussion of current research papers and will help acquaint students with the variety of methods used in scientific research.

**Doctoral Research**

Students will conduct research with a dissertation mentor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation mentor.

**Qualifying and Dissertation Proposal/Ph.D. Candidacy**

The written qualifying exam is given at the end of the first year of study. The candidacy is completed in the second year of study. Admission to Ph.D. candidacy occurs following the successful defense of the dissertation proposal.

**Dissertation Defense and First-Author Paper Requirement**

Students are allowed to defend their dissertation when a minimum of one manuscript with the student as first author, based on dissertation research, is accepted in a peer-reviewed journal. The final examination for the Ph.D. degree consists of orally defending a written dissertation in a public seminar and then in private to the dissertation committee. Satisfactory performance in the oral defense will result in recommendation for granting of the PhD.

**Suggested Plan of Study\*****First Year**

Fall	Hours	Spring	Hours	Summer	Hours	
BMS 700		1 BMS 701		1 BIOC 797		3
BMS 706		1 BMS 715		3 Qualifying Exam		
BMS 702		2 BIOC 785		1		
BMS 747		4 BIOC 797		4		
BMS 777		4				
		12		9		3

**Second Year**

Fall	Hours	Spring	Hours	Summer	Hours	
BIOC 785		1 BIOC 785		1 BMS 720		2
BIOC 797		5 BIOC 797		4 BIOC 797		1
Advanced Course		3 Advanced Course		4 Candidacy Exam		
		9		9		3

**Third Year**

Fall	Hours	Spring	Hours	Summer	Hours	
BIOC 785		1 BIOC 785		1 BIOC 797		1
BIOC 797		8 BIOC 796		1 BMS 707		2
		BIOC 797		7		
		9		9		3

**Fourth Year**

Fall	Hours	Spring	Hours	Summer	Hours	
BIOC 785		1 BIOC 785		1 BIOC 797		3

BIOC 797	8 BIOC 797	8	
	9	9	3

Total credit hours: 87

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the first year. The plan of study is developed by the graduate committee in consultation with the student. The courses listed above include the required and elective coursework necessary for the student to finalize his/her plan of study. When the student enters the laboratory of his/her doctoral dissertation mentor repetitive enrollments in research, seminars, and colloquia are typical and will determine total hours necessary for degree completion.

\*This is a suggested plan of study. Course sequences and length of time in program may vary depending on student and altered total credit hours.

## Major Learning Outcomes

### BIOCHEMISTRY AND MOLECULAR MEDICINE

Students will:

- Identify and summarize the basic concepts of biochemistry and molecular medicine including: molecular genetics, protein structure and function, metabolism, cell biology and biophysics.
- Discuss, interpret and critique the research literature in biochemistry and molecular medicine.
- Demonstrate deep insight when discussing research in their specific field of study.
- Integrate broad, fundamental knowledge in the basic concepts of biochemistry and molecular medicine with detailed knowledge of the student's specific field of study.
- Identify the major questions and gaps in their specific field of study. When challenged, be able to identify significant gaps in our collective knowledge of biochemistry and molecular medicine.
- Acquire, develop and use standard biochemical laboratory techniques as well as those necessary to successfully perform state of the art experiments in the student's area of research.
- Design experimental protocols and conduct self-directed research that is well-controlled, rigorous and produces results with unequivocal interpretation.
- Conduct research to produce novel results that are presented at scientific meetings and published in peer-reviewed journals.
- Demonstrate oral, written and visual communication skills that result in clear and organized dissemination of material at a level appropriate for the audience.

## Biomedical Sciences, M.S., Ph.D.

### Degrees Offered

- Doctor of Philosophy
- Master of Science

### Nature of the Program

A Ph.D. in the **Biomedical Sciences** at West Virginia University offers the student the unique opportunity to explore multiple disciplines and areas of research in the biomedical sciences but to also fast track into a dissertation laboratory and a graduate program within one semester. Earning the Ph.D. will be through one of the 7 degree granting programs in the Biomedical Sciences: Biochemistry and Molecular Medicine, Cancer Cell Biology, Cellular and Integrative Physiology, Pathophysiology, Rehabilitation, and Performance, Immunology and Microbial Pathogenesis, Neuroscience, and Pharmaceutical and Pharmacological Sciences. These programs share a common admission's process and a common core curriculum in the first semester. Students will rotate through 3 laboratories during the fall semester with the potential to select a dissertation adviser by the end of the semester.

Doctoral study in these graduate programs allows the development of research and critical thinking skills as well as preparation in career development to prepare the student for entry into a myriad of careers in research, teaching, industry, government, and other positions that require specialized training at the graduate level.

All students will:

- start with an orientation that will prepare him/her to successfully transition into graduate studies, and to interact with an orientation adviser, faculty investigators, and current students;
- have the opportunity to match with a faculty mentor, or thesis or dissertation adviser through laboratory rotations during the first semester;
- have formal training in scientific writing;
- have the opportunity to participate in seminar series, workshops, experiential learning, and career-development sessions.



The Masters of Sciences (M.S.) in the **Biomedical Sciences** is designed to allow a pathway to graduation for students who have completed the requirements for a M.S. degree, and are not continuing their Ph.D. studies. Students in this program would have been initially admitted through the Ph.D. program.

## FACULTY

### ASSISTANT VICE PRESIDENT FOR GRADUATE EDUCATION

- Julie Lockman - Ph.D.

### DIRECTOR OF ADMISSION

- Emidio Pistilli - Ph.D.

### DIRECTOR M.D./PH.D. PROGRAM

- Albert Berrebi - Ph.D.

### ASSISTANT DIRECTOR OF ADMISSIONS AND ACADEMIC AFFAIRS

- Joseph Andria

### PROGRAM COORDINATOR

- Connor Ferguson

## Admissions

All applications are accepted electronically and must be submitted electronically via the official WVU Graduate Education application: [https://westvirginia.force.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB) ([https://westvirginia.force.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB)).

Applications are reviewed beginning in November by a Common Admissions Committee comprised of the graduate directors or faculty representatives of our seven Ph.D. graduate training programs and one or more senior graduate students. The Assistant Vice President for Graduate Education is an *ex officio* member. The deadline for receipt of applications is December 1st for admission in the Fall semester of the next academic year. Students are not admitted for the spring semester.

All students interested in one of the 7 Biomedical Ph.D. programs must apply through a common admissions portal. Choice of a specific graduate program occurs during the first year of graduate study after selection of an adviser for your dissertation research and choosing one of the degree granting programs. Applications include a Personal Statement, transcripts from all Colleges or Universities attended, and 3 letters of recommendation.

Applicants must arrange to have official copies of transcripts sent directly to the WVU Office of Graduate Admissions and Recruitment, PO Box 6510, Morgantown, WV 26506-6510.

For maximum admissions consideration and eligibility for graduate merit fellowships with enhanced benefits, we recommend that you apply as early as possible.

To review the programs and application process, please visit: <https://www.hsc.wvu.edu/resoff/graduate-education/phd-programs/biomedical-sciences/admissions/>

Major Code: 8344

## Master of Science

### MAJOR REQUIREMENTS

Code	Title	Hours
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 706	Biomedical Research Methods	1
Select one of the following:		3
BMS 715	Molecular Genetics (Recommended)	
Elective (approved by advisor and advisory committee)		
BMS 720	Scientific Writing	2
Program- specific elective		3
Journal Clubs		3
BMS 702	Biomedical Lab Experience	2

BMS 747	Foundations for Contemporary Biomedical Research I	4
BMS 777	Foundations for Contemporary Biomedical Research 2	4
Select either the thesis or non-thesis option:		18
<b>Thesis Option</b>		
Elective (3 hours)		
Research (15 hours)		
BMS 797	Research	
Thesis Proposal		
Thesis Defense		
<b>Non-Thesis Option</b>		
Electives (12 hours)		
Research (6 hours)		
BMS 797	Research	
Total Hours		42

### Seminars and Research Forum

It is recommended that students attend a weekly seminar in their chosen research area during each semester enrolled in the program.

### Journal Club

Students are required to enroll in three Journal Clubs during their M.S. studies. The course involves the presentation and discussion of current research papers and will help acquaint students with the variety of methods used in scientific research.

### Masters Research

Students will conduct research with a thesis mentor during time in the program. Students register for research credits each semester, and their performance is graded by their thesis mentor.

### Thesis Proposal

The thesis proposal is completed in the beginning of the second year of study.

### Thesis Defense

The final examination for the M.S. degree consists of orally defending a written thesis in private to the thesis committee – a prior public presentation is encouraged. Satisfactory performance in the oral defense will result in recommendation for granting of the M.S. degree.

## Suggested Plan of Study

### THESIS OPTION

#### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
BMS 700		1 BMS 701		1 BMS 797		3
BMS 706		1 BMS 715		3		
BMS 702		2 Program Specific Elective		3		
BMS 747		4 Journal Club		1		
BMS 777		4 BMS 797		1		
		12		9		3

#### Second Year

Fall	Hours	Spring	Hours	Summer	Hours	
Elective		3 Journal Club		1 BMS 720		2
Journal Club		1 BMS 797		6 BMS 797		1
BMS 797		4				
Thesis proposal						
		8		7		3

Total credit hours: 42

## NON THESIS OPTION

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
BMS 700		1 BMS 701		1 BMS 797		3
BMS 706		1 BMS 715		3		
BMS 702		2 Program-specific elective		3		
BMS 747		4 Elective		3		
BMS 777		4 Journal Club		1		
		12		11		3

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours	
Elective		3 Elective		3 BMS 720		2
Elective		3 Journal Club		1 BMS 797		1
Journal Club		1 BMS 797		1		
BMS 797		1				
		8		5		3

Total credit hours: 42

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the first year. The plan of study is developed by the graduate committee in consultation with the student. The courses listed above include the required and elective coursework necessary for the student to finalize his/her plan of study.

## Major Learning Outcomes

### BIOMEDICAL SCIENCES

This program is designed to assist in the selection of a career path, albeit industry, teaching, or a professional program, and/or for the transition to a biomedical Ph.D. program. The first-year curriculum imparts a fundamental understanding of the functional components of a cell and the basis for regulation of cellular processes and organ systems. After selecting a mentor, students take additional courses that align with their research interests.

Students will:

- Integrate molecular, cellular, and integrative systems concepts
- Critically interpret the current scientific literature
- Develop critical thinking and problem-solving skills
- Demonstrate technical skills in conducting scientific experimentation
- Design and interpret experiments to test molecular, cellular, and integrative systems mechanisms
- Articulate, verbally and in writing, their understanding of concepts during scientific discussions
- Discuss relevant scientific ethical issues presented as case studies
- Engage with fellow students and faculty and demonstrate teamwork

#### Doctor of Philosophy (Ph.D.) in one of 7 biomedical Ph.D. programs

Students in the first semester of year one in the Biomedical Sciences Graduate Programs take a common core curriculum that covers topics important to all biomedical sciences graduate programs. In addition, they begin training in the responsible conduct of research, and they conduct three short lab experiences to assist in the selection of a faculty mentor for dissertation research. The intended outcomes the first year in graduate school are to match with a faculty investigator who will guide the student to completion of dissertation research, and to successfully transfer into one of the Ph.D. degree-granting biomedical sciences programs.

By the end of the first year students will:

- Integrate molecular, cellular, and integrative systems concepts
- Identify the relevant scientific literature for their proposed area of research
- Conduct and optimize select laboratory procedures
- Develop an oral presentation on a topic that is new to them
- Discuss relevant scientific ethical issues presented as case studies

- Apply responsible research practices to the conduct of their experiments
- Engage with fellow students and faculty and demonstrate teamwork

The individual PhD programs have additional learning outcomes specific to the advanced skills required of a PhD and the specific discipline of that program and the student's research.

## Cancer Cell Biology, Ph.D.

### Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

### Nature of the Program

Students in the doctoral program in **Cancer Cell Biology** receive comprehensive in-depth training in modern areas of cancer biology, with a strong emphasis on cellular and molecular aspects of cancer origin, progression and treatment and a focus on cancer types and issues relevant to international, national and West Virginia populations. The program is designed to produce scholarly researchers with aptitude in public speaking, community service, clinical engagement, and critical thinking. Completion of the Ph.D. degree is realized when the student successfully presents the research results to faculty of the graduate dissertation committee and program, and publishes original peer-reviewed research as the primary author. Typically, five years are required to realize this goal.

Research interests include biochemical, molecular, and cellular basis of cancer origin and progression. Current research areas include the following:

- *Tumor Microenvironment*: Tumor cell resistance to anoikis, effects of microenvironment on dormancy, stem cell regulation, leukemia/stromal interactions.
- *Mechanisms of Metastasis*: Role of proteases in cell motility, signaling pathways in invasion and metastasis, imaging of metastasis in animal models.
- *Genetic Regulation of Cancer*: Tumor suppressor genes and transcriptional regulation, post-translational modifications in transcriptional regulation, miRNA regulatory pathways in progression, epigenetics, HPV-driven cancers.
- *Nanotechnology and Cancer*: Effects of nanoparticles on signal transduction pathways governing cancer growth and progression.
- *Signal Transduction in Cancer*: Receptor tyrosine kinase signaling in cancer growth and metastasis, non-receptor tyrosine kinases in cell adhesion and proliferation, ROS in tumor progression.
- *Cancer Bioinformatics*: Biomarker classification in cancer, predictive models of carcinogenesis, secondary analysis of existing databases.
- *Systems Biology in Cancer*: Modeling signaling nodes in breast cancer, oncogenic pathway analysis.
- *Cancer Disparities in Appalachia*: Biological models of Appalachian disparities, prevention and control, cancer registry analysis.
- *Cancer Therapeutics*: High-throughput screening and novel drug discovery, applications and formulations, pre-clinical evaluation in animal models, immunotherapy.

Cancer cell biology investigators working in these research areas routinely incorporate biochemical, molecular, cellular, animal, and computational-based techniques that are currently utilized at the forefront of leading basic cancer research laboratories around the world. The main tumor types that are the current focus of cancer cell biology investigators are based on cancers with disproportionate incidences in West Virginia, including breast, leukemia, ovarian, cervical, lung, colorectal and head and neck cancers.

The doctor of philosophy program in cancer cell biology is designed to expose Ph.D. and M.D./Ph.D. level graduate students to a wide spectrum of opportunities available in basic and translational cancer research. In addition to mechanistic and therapeutic approaches to studying problems in cancer at the bench, students have the opportunity for exposure to more clinical elements of cancer practice, including participation in tumor boards, shadowing clinicians, and participation in the design and approval of clinical trials. The cancer cell biology program at WVU is a member of the Cancer Biology Training Consortium (CABTRAC), a national organization of similar cancer-specific Ph.D. programs that interact through annual regional and national meetings to improve and refine Ph.D. cancer training. Graduates of the cancer cell biology program are therefore well-equipped to enter into a number of different career paths. These include postdoctoral research, biotechnology, industry, government, science writing, core facilities management, and legal counsel as examples.

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## FACULTY

### GRADUATE PROGRAM DIRECTOR

- Emidio Pistilli - Ph.D. (West Virginia University)

### PROFESSORS

- Yehenew Agazie - Ph.D. (University of Saskatchewan)
- Steven Frisch - Ph.D. (University of California, Berkeley)

- Nancy Lan Guo - Ph.D. (West Virginia University)
- Lori Hazlehurst - Ph.D. (University of Vermont)
- Valery Khramtsov - Ph.D. (Institute of Kinetics & Combustion, Novosibirsk) (Russia)
- David Klinke - Ph.D. (Northwestern University)
- Paul Lockman - Ph.D. (Texas Tech University)
- Mark McLaughlin - Ph.D. (Georgia Institute of Technology)
- William Petros - Pharm. D (Philadelphia College of Pharmacy)
- Yon Rojanasakul - Ph.D. (University of Wisconsin)
- Michael Ruppert - M.D./Ph.D. (Johns Hopkins University)
- Michael Schaller - Ph.D. (McMaster University)

## ASSOCIATE PROFESSORS

- Cristopher Cifarelli - M.D./Ph.D. (Thomas Jefferson University)
- Timothy Eubank - Ph.D. (Ohio State University)
- Werner Geldenhuys - Ph.D. (North-West University)
- Hannah Hazard - M.D. (West Virginia University)
- Brock Lindsey - M.D. (University of Cincinnati)
- Jun Liu - Ph.D. (University of Oxford)
- Ivan Martinez - Ph.D. (University of Pittsburgh)
- Ed Pistilli - Ph.D. (West Virginia University)
- Elena Pugacheva - Ph.D. (Russian Academy of Sciences)
- Mark Tsylein - Ph.D. (Russian Academy of Sciences, Kazan)
- Scott Weed - Ph.D. (Yale University)

## ASSISTANT PROFESSORS

- Sonikpreet Aulakh - MBBS (Shyam Shah Medical College, India)
- Margaret Bennewitz - Ph.D. (Yale University)
- Brian Boone - M.D. (University of South Florida)
- Jonathan Busada - Ph.D. (East Carolina University)
- Benoit Driesschaert - Ph.D. (University Catholique de Louvain, Belgium)
- Michael Hu - Ph.D. (Peking University, China)
- Tracy Liu - Ph.D. (University of Toronto)
- Bradley Webb - Ph.D. (Queen's University, Canada)

## RESEARCH ASSISTANT PROFESSOR

- Alexey Ivanov - Ph.D. (Russian Academy of Sciences)

## SERVICE PROFESSOR

- Karen Martin - Ph.D. (Duke University)

## Doctor of Philosophy

## MAJOR REQUIREMENTS

Code	Title	Hours
<b>Cancer Cell Biology Major Requirements</b>		
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 702	Biomedical Lab Experience	2
BMS 706	Biomedical Research Methods	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 720	Scientific Writing	2
BMS 747	Foundations for Contemporary Biomedical Research I	4
BMS 777	Foundations for Contemporary Biomedical Research 2	4
CCB 700	Selected Topics in Cancer Cell Biology	3

CCB 701	Biochemical and Oncogenic Signaling	3
CCB 702	Cancer Pharmacologic and Therapeutics	3
Journal Club		7
CCB 705	Journal Club	
CCB 730	Cancer Cell Biology	3
Graduate Seminar		7
CCB 796	Graduate Seminar	
Research		44
CCB 797	Research	
Elective Courses - select one of the following:		3
BIOC 751	Advance Molecular Biology	
BMS 715	Molecular Genetics	
MICB 720	Cellular Immunobiology	
Candidacy Exam		
Dissertation Defense		
Total Hours		90

### Seminars and Research Forum

Students attend seminar each semester. These seminars are either given by invited faculty or students.

### Journal Club

Students are required to enroll in Journal Club each semester. The course involves the presentation and discussion of current research papers and will help acquaint students with the variety of methods used in scientific research.

### Doctoral Research

Students will conduct research with a dissertation mentor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation mentor.

### Dissertation Proposal/Ph.D. Candidacy

The candidacy exam is completed in the third year of study. Admission to Ph.D. candidacy occurs following the successful defense of the candidacy exam.

### Dissertation Defense and First-Author Paper Requirement

Students are allowed to defend their dissertation when a minimum of one manuscript with the student as first author, based on dissertation research, is accepted in a peer-reviewed journal. The final examination for the Ph.D. degree consists of orally defending a written dissertation in a public seminar and then in private to the dissertation committee. Satisfactory performance in the oral defense will result in recommendation for granting of the Ph.D. degree.

## Suggested Plan of Study\*

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
BMS 700		1 BMS 701		1 CCB 797		3
BMS 706		1 CCB 730		3		
BMS 702		2 CCB 705		1		
BMS 747		4 CCB 796		1		
BMS 777		4 CCB 797		1		
		Electives Course		3		
		12		10		3

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours	
CCB 700		3 CCB 702		3 BMS 720		2
CCB 701		3 CCB 705		1 CCB 797		1
CCB 705		1 CCB 796		1		

CCB 796		1 CCB 797		4	
CCB 797		1			
		9	9		3
Third Year					
Fall	Hours	Spring	Hours	Summer	Hours
CCB 705		1 CCB 705		1 BMS 707	2
CCB 796		1 CCB 796		1 CCB 797	3
CCB 797		7 CCB 797		7	
		9	9		5
Fourth Year					
Fall	Hours	Spring	Hours	Summer	Hours
CCB 705		1 CCB 705		1 CCB 797	3
CCB 796		1 CCB 796		1	
CCB 797		7 CCB 797		7	
		9	9		3

Total credit hours: 90

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the first year. The plan of study is developed by the graduate committee in consultation with the student. The courses listed above include the required and elective coursework necessary for the student to finalize his/her plan of study. When the student enters the laboratory of his/her doctoral dissertation mentor repetitive enrollments in research, seminars, and colloquia are typical and will determine total hours necessary for degree completion.

\*This is a suggested plan of study. Course sequences and length of time in program may vary depending on student and altered total credit hours.

## Major Learning Outcomes

### CANCER CELL BIOLOGY

Student learning outcomes in the CCB Graduate Program have been partially adapted from the guidelines set forth by Cancer Biology Training Consortium (CABTRAC), along with recommendations from the CCB Scholarship Committee and Faculty.

Students will:

- Independently plan and implement a research project that emphasizes cancer in the context of human disease and health.
- Understand cancer biology at the population, individual, cellular and molecular levels.
- Demonstrate knowledge of subject-specific techniques and methods in self-directed bench science that incorporates scientific rigor and transparency in the application of knowledge.
- Analyze and critique experimental questions, to become proficient at technical troubleshooting, and to objectively evaluate scientific data (their own and that published in the literature) with high ethical standard.
- Evaluate the scientific literature with scholarly aptitude within their chosen discipline.
- Apply their skills in written, oral and visual communication to foster effective communication of research.
- Apply and expand their knowledge while engaged in experiential learning in areas outside of their discipline.

## Cellular and Integrative Physiology, Ph.D.

Director: smhileman@hsc.wvu.edu (shileman@hsc.wvu.edu)

### Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

### Nature of the Program

Physiology is a dynamic life science that focuses on the study of biological systems at many levels of complexity, ranging from genes and molecules to cells and organisms. Thus, training in physiology has the ultimate goal of linking molecular and cellular information to functional outcomes. Currently, groundbreaking research and discovery in the life sciences are more interdisciplinary than ever, and students studying within the realm of physiology can expect to work with a wide range of scientists, including pharmacologists who are focused in a complementary field: namely, the study of how drugs affect biological systems and how biological systems affect drugs.

The goal of the doctoral program in **Cellular and Integrative Physiology** is to engage students in creating a new approach to the life sciences, with the aim of explaining how the higher-level properties of complex systems appear from the interactions amongst their parts and environmental inputs. Our program provides a multidisciplinary approach to modern life sciences, drawing on faculty expertise from several departments and centers in the Schools of Medicine and Pharmacy.

Completion of the Ph.D. degree is realized when the student publishes at least one original, peer-reviewed manuscript in the biomedical research literature and successfully presents this original research to faculty of the graduate dissertation committee and the program/department. Typically, approximately five years are required to realize this goal.

The program's participating research faculty consists of scientists from the Department of Physiology & Pharmacology, NIOSH/CDC, and the Rockefeller Neurosciences Institute. As a result, this multidimensional program includes activities in the following:

- Inhalation Toxicology
- Integrative and Systems Physiology
- Pathophysiology
- Translational Research
- Pharmacology

It also integrates information from genetics, functional genomics, and proteomics into whole animal and human physiology.

This interactive and cross-disciplinary environment, together with an atmosphere filled with enthusiasm and passion for scientific discovery, makes our program a uniquely exciting place for doing research and the training of students. Specific topics of research emphasis include the following:

- Protein Regulators of Hormone and Neurotransmitter Signal Transduction
- Free Radical Biology in Diabetes and Obesity
- Impact of Inhaled Toxicants on Cardiovascular Function and Health
- Respiratory Function and Control in Health and Disease
- Neuroendocrine Control of Reproduction
- Regulation of Cardiac Function and Inflammation
- Influence of Small Molecules on Cardiac Function and Health

Students will leave our program better able to identify important unsolved scientific problems and with an appreciation of how to select problems for which quantitative and theoretical approaches will be most productive.

## ADMINISTRATION

### CHAIR

- Tim Nurkiewicz - Ph.D.

### ADMINISTRATOR

- Tammy McPherson -  
(Sr. Administrative Official)

### ASSOC. CHAIR FOR RESEARCH

- Eric Kelley - Ph.D.

### ASSOC. CHAIR FOR EDUCATION

- Mark Paternostro - Ph.D.

## FACULTY

### GRADUATE PROGRAM DIRECTOR

- Stan Hileman - Ph.D.  
(Director)
- Robert Brock - Ph.D.  
(Assistant Director)

### CHAIR

- Tim Nurkiewicz - Ph.D.



## REGULAR MENTORS

- Paul Chantler - Ph.D.  
(Cardiovascular)
- Robert Goodman - Ph.D.  
(Endocrine & Neuroscience)
- Stanley Hileman - Ph.D.  
(Endocrine & Neuroscience)
- Salik Hussain - Ph.D.  
(Respiratory Toxicology)
- Eric Kelley - Ph.D.  
(Redox Physiology)
- Timothy Nurkiewicz - Ph.D.  
(Cardiovascular)
- Mark Olfert - Ph.D.  
(Cardiovascular & Respiratory)
- Vazhaikurichi Rajendran - Ph.D.  
(Gastrointestinal Electrophysiology)
- David Siderovski - Ph.D.  
(G-Protein Coupled Receptors)
- James Simpkins - Ph.D.  
(Cardiovascular)

## RESEARCH ASSISTANT PROFESSOR

- Elizabeth Bowdridge - Ph.D.

## NIOSH MENTORS

- Patti Erdely - Ph.D.
- Aaron Erdely - Ph.D.
- Jeffrey Fedan - Ph.D.
- Richard Johnson - Ph.D.
- Dale Porter - Ph.D.
- Anna Shvedova - Ph.D.

## Doctor of Philosophy

### MAJOR REQUIREMENTS

Code	Title	Hours
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 706	Biomedical Research Methods	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 720	Scientific Writing	2
Graduate Seminar		4
PSIO 744	Graduate Seminar	
Journal Club		9
PSIO 745	Physiology Journal Club	
PSIO 750	Graduate Physiology and Pharmacology 1	3
PSIO 751	Graduate Physiology and Pharmacology 2	3
BMS 702	Biomedical Lab Experience	2
BMS 747	Foundations for Contemporary Biomedical Research I	4
BMS 777	Foundations for Contemporary Biomedical Research 2	4
Research		40
PSIO 797	Research	
Electives:		6
BMS 715	Molecular Genetics	

CCB 730	Cancer Cell Biology
PHAR 779	Drug Discovery
MICB 784B	Special Problems in Microbiology
MICB 784C	Special Problems in Microbiology
PSIO 790	Teaching Practicum
PSIO 793	Special Topics (Physiology Issues)
PSIO 793	Special Topics
PSIO 793	Special Topics
PSIO 795	Independent Study
Qualifying Exam	
Candidacy Exam	
Dissertation Defense	

Total Hours	82
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### Seminars and Research Forum

Students register for one credit of seminar each academic year while in residence.

### Journal Club

Students are required to enroll in Journal Club each semester. The course involves the presentation and discussion of current research papers and will help acquaint students with the variety of methods used in scientific research.

### Doctoral Research

Students will conduct research with a dissertation mentor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation mentor.

### Qualifying and Dissertation Proposal/Ph.D. Candidacy

The oral qualifying exam is given at the end of the second year of study. The candidacy exam consists of either presenting and defending a research dissertation proposal to the student's dissertation committee or the submission of a predoctoral fellowship application to a recognized funding agency. The student is admitted to candidacy when both requirements are met.

### Dissertation Defense and First-Author Paper Requirement

Students are allowed to defend their dissertation when a minimum of one manuscript with student as the first author, based on dissertation research, is accepted in a peer-reviewed journal. The final examination for the Ph.D. degree consists of orally defending a written dissertation in a public seminar and then in private to the dissertation committee. Participation of an external examiner, a distinguished scientist external to WVU, is optional at the dissertation defense. Satisfactory performance in the oral defense will result in recommendation for granting of the Ph.D. degree.

## Suggested Plan of Study\*

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
BMS 700		1 Electives		3 PSIO 797		3
BMS 706		1 BMS 701		1		
BMS 702		2 PSIO 745		1		
BMS 747		4 PSIO 751		3		
BMS 777		4 PSIO 797		1		
		12		9		3

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours	
PSIO 745		1 PSIO 744		1 BMS 720		2
PSIO 750		3 PSIO 745		1 PSIO 797		1
PSIO 797		2 PSIO 797		7		
Electives		3				
		9		9		3

**Third Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
Elective (as needed)		3 PSIO 744		1 PSIO 797	1
PSIO 745		1 PSIO 745		1 BMS 707	2
PSIO 797		5 PSIO 797		7	
		9		9	3

**Fourth Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
PSIO 745		1 PSIO 744		1 PSIO 797	3
PSIO 797		8 PSIO 745		1	
		PSIO 797		7	
		9		9	3

Total credit hours: 87

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the first year. The plan of study is developed by the graduate committee in consultation with the student. The courses listed above include the required and elective coursework necessary for the student to finalize his/her plan of study. When the student enters the laboratory of his/her doctoral dissertation mentor, repetitive enrollments in research, seminars, and journal club are typical and will determine total hours necessary for degree completion.

\*This is a suggested plan of study. Course sequences and length of time in program may vary depending on student and altered total credit hours.

## Major Learning Outcomes

### CELLULAR AND INTEGRATIVE PHYSIOLOGY

The student learning and programmatic outcomes of the Cellular and Integrative Physiology Graduate Program are similar to those put forth by the Human Anatomy & Physiology Society (HAPS) and the American Physiological Society (APS). They are as follows:

#### Fundamental Content & Process Goals

1. Recognize the anatomy and explain physiological functions of body systems.
2. Recognize and explain the principle of homeostasis and the use of feedback loops to control physiological systems.
3. Use anatomical knowledge to predict physiological consequences, and use knowledge of function to predict the features of anatomical structures.
4. Recognize and explain the interrelationships within and between anatomical and physiological systems of the body.
5. Synthesize ideas to make a connection between knowledge of anatomy and physiology and real-world situations, including healthy lifestyle decisions and homeostatic imbalances.

#### Broader Process Goals

1. Demonstrate information literacy skills to access, evaluate, and use resources to stay current in the field of physiology.
2. Examine issues related to physiology from an evidence-based perspective.
3. Communicate clearly and in a way that reflects knowledge and understanding of physiology and demonstrates the ability to adapt information to different audiences and applications.

## Clinical and Translational Science, M.S., Ph.D.

### Degrees Offered

- Master of Science
- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

### Certificate Offered

- Clinical and Translational Science

## Nature of the Program

Clinical and Translational Science is a high priority for the National Institute of Health (NIH). Clinical research encompasses the following research areas: 1) Research with human subjects that attempts to determine disease mechanisms, therapies, clinical trials and new techniques; 2) Epidemiology & Behavioral research and 3) Outcomes research. Translational research, sometimes referred to as "bench to bedside to community," is a concept beginning in the laboratory developing and testing interventions impacting human health, taking that information into trial studies on human subjects and finally, determining best practices for community health. West Virginia University has a Clinical and Translational Science Institute (WVCTSI) which is funded in part from the NIH Institutional Development Award Program for Clinical & Translational Research (IDeA-CTR). The WVCTSI, in partnership with other institutions, has a mission to focus on research that will address the health issues of individuals and communities specifically as they affect West Virginia and the Appalachian region. The mission of this institute is in alignment with the land grant mission of West Virginia University (WVU) and the strategic plan of the WVU Health Sciences Center. An overview of recent projects undertaken by the WVCTSI is available at the following web site: <http://wvctsi.org/>.

As part of the WVCTSI, educational programs at the graduate level prepare trainees to participate in clinical and translational research. WVU offers a **Doctor of Philosophy (Ph.D.)**, **Masters of Science (M.S.)**, and **Certificate in Clinical and Translational Science** which is designed to develop the next generation of clinical and translational scientists through education and mentored research training.

## PH.D. IN CLINICAL AND TRANSLATIONAL SCIENCE

The goal of the **Ph.D. program** is to develop biomedical researchers who can integrate findings, information, and observations across basic, population, and clinical sciences, to accelerate and transform how we improve the health of individuals and populations. By the completion of this degree, students will be able to:

1. Design, implement, conduct, analyze and interpret research projects using the techniques unique to basic science, clinical research, and population science research
2. Demonstrate mastery of research in a focused area as evidenced by academic and scientific presentations and publications
3. Read, understand and critique the scientific literature of the basic, clinical, and population sciences
4. Work effectively with and create collaborative, productive research partnerships with clinicians, population scientists, and basic / laboratory scientists
5. Be able to communicate with and understand the research challenges and perspectives of each of the three branches of clinical and translational science (basic, clinical, and population sciences)
6. Work with communities to translate scientific findings into programs and policies that improve the health of individuals and populations.

The **Ph.D. program** is suitable for students with:

- An undergraduate degree (preferably with some research or allied health work experience).
- Already completed graduate work (at the master or doctoral level)
- Medical students in the MD/PhD program
- Other biomedical professionals seeking expertise in and preparation for careers in clinical and translational research (e.g. including, but not limited to, Doctoral programs for Physical Therapy, Pharmacy, Speech Pathology, etc.)

Information on the **Ph.D. degree** may be found at the program web <http://wvctsi.org/programs/education-mentoring-career-development/phd-in-clinical-translational-science/>

## MASTERS OF SCIENCE IN CLINICAL AND TRANSLATIONAL SCIENCE

Typically, **M.S. trainees** have an undergraduate degree in a health care discipline or a field of study complementary to research in health. The master's degree may also be considered as part of a dual degree program, such as MD/MS. The M.S. degree expands upon Certificate coursework in biostatistics and epidemiology to provide mentored, research training with required and elective courses, the latter to complement research needs and interests. The degree emphasizes a research project(s) that can be clinical (study of medications, devices, diagnostic products, and treatments; may include clinical trials) and/or translational research (defined as research with human subjects or with populations or with direct application to human health). Completion of the M.S. degree requires a written grant proposal defended orally to three graduate faculty members. The degree can be completed in three semesters, although typically clinical trainees are part-time and complete the program in two to three years. Information on the **M.S. degree** may be found at the program website: <http://wvctsi.org/programs/education-mentoring-career-development/ms-in-clinical-translational-science/>

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## FACULTY

### MASTERS AND CERTIFICATE GRADUATE PROGRAM DIRECTOR

- Joan M. Lakoski - PhD

## PH.D. GRADUATE PROGRAM DIRECTOR

- I. Mark Olfert - PhD, FAHA
- Paul Chantler - PhD

## Admissions

### PH.D.IN CLINICAL AND TRANSLATIONAL SCIENCE

For the Ph.D. in Clinical and Translational Science, the minimum requirements for admission consideration are as follows:

- Completed undergraduate degree with a cumulative GPA of 3.0 or higher
- GRE score of 300 (total; minimum of 150 verbal and 150 quantitative) or MCAT of 28 (total). In the instances where the applicant is a clinician, successful completion of the USMLE Step 1 and Step 2 board exams may be accepted *in lieu* of the GRE or MCAT scores.
- TOEFL score where applicable (minimum score requirement depends upon the test taken; standards established by the WVU Office of Admissions, International Graduate Students)
- Significant undergraduate coursework in the physical or biological sciences is strongly recommended (1 year of biology, 1 year of math, 1 year of chemistry, and 1 year of social sciences) as is research experience

**Applicants for the Ph.D. in Clinical and Translational Science must:**

Submit WVU Graduate application for admission, found at <http://admissions.wvu.edu/how-to-apply> (<http://admissions.wvu.edu/how-to-apply/>).

Applications must be dated, completed, and received in the department by **January 15, 2024**. Make sure to **upload** all required information listed below.

- A personal statement that addresses their desire to complete a doctoral program in clinical and translational science, a career in biomedical research, and how their background, including their research experiences, have prepared them for this doctoral program
- A résumé or CV that indicates relevant experience and the years and location (institution) of completion of undergraduate degrees and any graduate or professional coursework or degrees
- Three letters of recommendation from professional and / or academic referees, in which the referees clarify how long and in what capacity they have known the applicant and their assessment of the student's likelihood of success in doctoral-level work. Letters should come from professors or supervisors who evaluate your performance in research (if you have prior research experience) and/or coursework (only if you have no prior research experience). **Letters must be signed by your recommender and should be placed on official university or company letterhead.**

Applications to this program will be reviewed by a program-specific admissions committee comprised of representatives from the WVU HSC Interdisciplinary Research Centers (Center for Cancer Cell Biology, Center for Cardiovascular and Respiratory Sciences, Center for Neuroscience, and the WV Stroke Center), the WV-CTSI, and the WVU HSC Office of Research and Graduate Education. A senior student in the program will be a representative on the committee.

It is anticipated that admission to this program will be competitive; meeting the minimum admission requirements will not assure acceptance to this program.

### MASTERS OF SCIENCE IN CLINICAL AND TRANSLATIONAL SCIENCE

The M.S. in Clinical and Translational Science is targeted to faculty, medical residents, fellows, clinicians, and scientists with health-related professional degrees, those seeking a dual degree (such as MD/MS or PhD/MS), or health professional students. Prospective students must have an earned bachelor's degree from an accredited university with an overall GPA of at least 3.0.

**Applicants for the M.S. in Clinical and Translational Science must:**

Submit WVU Graduate application for admission, found at <http://admissions.wvu.edu/how-to-apply> (<http://admissions.wvu.edu/how-to-apply/>). All applications should be dated, completed, and received by the department by the dates below.

- The application deadline for **Fall semester is July 1**
- The application deadline for **Spring semester is December 1**
- The application deadline for **Summer semester is April 1**

Make sure to **upload** all required information listed below.

- Official transcripts from all undergraduate institutions attended.
- TOEFL scores, if applicable (may be waived in some circumstances)
- A personal statement outlining past accomplishments (with an emphasis on research, future research interests, and a clear career vision of how becoming a clinical/translational researcher is part of a long-term career plan)
- Three letters of recommendation that evaluate potential as a clinician scientist

- A list of potential research mentors
- A Curriculum Vitae or resume

For faculty applicants, a support letter from the Department Chairperson is required stating how research activities integrate with other responsibilities.

For clinicians, support letters from the department Chair and fellowship or residency director (if applicable) are required.

Student applicants must be in good academic and professional standing.

Any other interested applicants should follow the WVU requirements for application to graduate programs as described below.

Prospective graduate trainees interested in one of the above programs are urged to initiate application for admission as early as possible. The first step of a student interested in a degree program should be to ask for information from the department, division, school, or college offering the program desired; the reply to such an inquiry will include instructions for applying to the particular program.

Application for admission to graduate study must be made online or on standard forms provided online at <https://graduateadmissions.wvu.edu/>. If using a paper application, the completed form may be returned to the Office of Admissions, PO Box 6009, West Virginia University, Morgantown, WV 26506, and must be accompanied by payment of a nonrefundable special service fee of \$60. Applicants who have attended another institution, other than WVU, must request that the registrar or records office of the college(s) attended send an official transcript directly to the Office of Admissions. No one is admitted to graduate study that does not hold a baccalaureate degree from an accredited college or university.

If the applicant meets the minimum admission requirements of WVU, a copy of the application is forwarded to the faculty of the program of interest. Any graduate degree program is permitted to set admission requirements which go beyond the minimum admission standards of the University. No one can pursue an advanced degree at WVU unless admitted to the appropriate degree program.

Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MS Major Code: 8368

PhD Major Code: 8369

Master of Science

MAJOR REQUIREMENTS

Code	Title	Hours
BIOS 601	Applied Biostatistics 1	4
EPID 601	Public Health Epidemiology	3
EPID 625	Principles of Clinical Trials	3
CTS 600	Foundations of Scientific Integrity	1
CTS 610	Clinical Research: Ethics and Regulatory Aspects	2
CTS 620	Scientific Manuscript Writing and Publishing	2
CTS 695	Independent Study (*Grant Proposal Prep)	1
Research		9
CTS 697	Research	
Electives		9
Grant Proposal Defense *		
Total Hours		34

\*

Grant Proposal Defense or Thesis Defense

The degree culminates with a written grant proposal or thesis defended orally to three graduate faculty members. Satisfactory performance in the oral defense will result in recommendation for granting of the M.S. degree.

Suggested Plan of Study

First Year					
Fall	Hours	Spring	Hours	Summer	Hours
BIOS 601		4 CTS 600		1 CTS 620	2
CTS 610		2 CTS 697		1 CTS 695 (*Grant Proposal Prep)	1

CTS 697	2 EPID 625	3 CTS 697	6
EPID 601	3 Elective	3	
Elective	3 Elective	3	
	14	11	9

Total credit hours: 34

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the first year. The plan of study is developed by the graduate committee in consultation with the student. The courses listed above include the required and elective coursework necessary for the student to finalize his/her plan of study.

## Doctor of Philosophy

### MAJOR REQUIREMENTS

Code	Title	Hours
<b>Core Courses</b>		<b>16</b>
BMS 700	Scientific Integrity	
BMS 720	Scientific Writing	
CTS 700	Fundamentals of Clinical and Translational Sciences	
PSIO 750	Graduate Physiology and Pharmacology 1	
BIOC 531	General Biochemistry	
500-level higher Statistical Methods Course		
<b>Elective Courses</b>		<b>12</b>
<b>Core Elective List (Select nine hours from the following): *</b>		
EPID 601	Public Health Epidemiology	
EPID 611	Concepts and Methods of Epidemiology	
EPID 625	Principles of Clinical Trials	
PHAR 757	Patient Reported Outcomes	
PHAR 758	Ethical and Regulatory Aspects of Clinical Research	
PUBH 662	Clinical Research Methods and Practices	
<b>Research Experiences **</b>		<b>12</b>
CTS 780	Clinical and Translational Science Research Experience	
<b>CTS Journal Club ***</b>		<b>6</b>
CTS 707	Seminar: CTS Journal Club	
<b>Examinations</b>		
Candidacy Examination		
Comprehensive Examination		
<b>Dissertation Research ****</b>		<b>40</b>
CTS 797	Research	
<b>Peer-Reviewed Publication</b>		
Total Hours		86

\*

Selection of Core and Additional Electives (for a total 12 hours) should be made in consultation with the Program Director and/or guidance of the Dissertation Committee. Selected Elective Courses should include 2 of three branches of clinical and translational science. These courses are intended to allow the students to develop expertise and focus in an area of interest, and to prepare students to be able to successfully complete their dissertation research. These courses may also serve as the basis for a portion of the Comprehensive Exam (discussed in additional detail below). If recommended by the Dissertation Committee, a student may replace these courses with additional research hours when appropriate.

\*\*

Complete 12 hours of research experiences in each of the T1, T2, and T3 research areas.

\*\*\*

Students must complete a minimum of 6 credit hours, 1 credit hour in 6 different semesters, in a journal club specific to their program. Participation in the CTS Research Journal Club is required for every semester the student is in residence.

\*\*\*\*

Complete minimum 40 credit hours of dissertation research.

## PROGRAM DESCRIPTION

This degree program was developed in response to the fundamental changes taking place in biomedical science research and education worldwide, with an increasing and stronger emphasis on interdisciplinary research to improve clinical care and population health outcomes. Achieving this requires much closer collaboration, integration and alignment of basic, clinical and population sciences. Consistent with this increasingly integrative and interdisciplinary paradigm for clinical and translational science, all aspects of this degree program, including didactic coursework and research experiences, will emphasize the integration of basic, population, and clinical sciences.

This program is intended for full-time students only. Student receiving institutionally-supported stipends are expected to devote full-time effort to their studies and research should not be employed elsewhere. Any exceptions must be approved by CTS Program Director in advance.

Coursework is organized around the three main branches of clinical and translational science: Basic/Laboratory Science, Population Science, and Clinical Science. Research experiences are organized around the three translational (T) research domains:

- **T1 research** expedites the movement between basic research and patient-oriented research that leads to new or improved scientific understanding or standards of care
- **T2 research** facilitates the movement between patient-oriented research and population-based research that leads to better patient outcomes, the implementation of best practices, and improved health status in communities
- **T3 research** promotes interaction between laboratory-based research and population-based research to stimulate a robust scientific understanding of human health and disease

## JOURNAL CLUB

Students are required to enroll in Journal Club each semester. The course involves the presentation and discussion of current research papers and will help acquaint students with the variety of methods used in scientific research.

## DOCTORAL RESEARCH

Students will conduct research with a dissertation mentor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation mentor.

## QUALIFYING AND DISSERTATION PROPOSAL/PH.D. CANDIDACY

The written qualifying exam is given typically at the end of the second year of study. The dissertation proposal is completed in the third year of study. Admission to Ph.D. candidacy occurs following the successful defense of the dissertation proposal.

## DISSERTATION DEFENSE AND FIRST-AUTHOR PAPER REQUIREMENT

Students are allowed to defend their dissertation when a minimum of one manuscript with the student as first author, based on dissertation research, is accepted in a peer-reviewed journal. The final examination for the Ph.D. degree consists of orally defending a written dissertation in a public seminar and then in private to the dissertation committee. Satisfactory performance in the oral defense will result in recommendation for granting of the PhD.

## PEER-REVIEWED PUBLICATION

Consistent with existing standards at the Health Sciences Center, all students in this program must have one first-authored, peer-reviewed, original research publication relevant to their dissertation research accepted for publication ("in press") before they may defend their dissertation. This manuscript must represent original research; a review article, even a systematic review, will not fulfill this requirement.

## Major Learning Outcomes

### DOCTOR OF PHILOSOPHY (PH.D.) IN CLINICAL AND TRANSLATIONAL SCIENCE

The goal of the Ph.D. program is to develop biomedical researchers who can integrate findings, information, and observations across basic, population, and clinical sciences, to accelerate and transform how we improve the health of individuals and populations.

By the completion of this degree, students will be able to:

- Design, implement, conduct, analyze and interpret research projects using the techniques unique to basic science, clinical research, and population science research
- Demonstrate mastery of research in a focused area as evidenced by academic and scientific presentations and publications
- Read, understand and critique the scientific literature of the basic, clinical, and population sciences
- Work effectively with and create collaborative, productive research partnerships with clinicians, population scientists, and basic / laboratory scientists
- Be able to communicate with and understand the research challenges and perspectives of each of the three branches of clinical and translational science (basic, clinical, and population sciences)
- Work with communities to translate scientific findings into programs and policies that improve the health of individuals and populations.



## MASTER OF SCIENCE (M.S.) IN CLINICAL AND TRANSLATIONAL SCIENCE

This program is designed to develop the next generation of clinical and translational scientists through education and mentored research training. The degree emphasizes a research project(s) that can be clinical (study of medications, devices, diagnostic products and treatments; may include clinical trials) and/or translational research (defined as research with human subjects or with populations or with direct application to human health). The degree culminates with a written grant proposal or thesis defended orally to three graduate faculty members.

Students will:

- Apply theories, methodologies, and knowledge to address questions in specific clinical and/or translational science
- Design and conduct research in clinical and/or translational science
- Engage with other students, faculty, and mentors to demonstrate teamwork
- Develop scientific writing skills and knowledge to develop a grant proposal

## Exercise Physiology

### Degree Offered

- Master of Science in Exercise Physiology

#### Chair and Director of Undergraduate Education

Randall W. Bryner, EdD, Associate Professor, rbryner@hsc.wvu.edu  
<http://medicine.wvu.edu/exercise-physiology/bachelor-of-science-bs/>

#### Director of MS Studies

Paul D. Chantler, PhD, Associate Professor, pchantler@hsc.wvu.edu  
<http://medicine.wvu.edu/exercise-physiology/master-of-science-ms/>

### Nature of the Program

The master's of science has three areas of emphasis: clinical, research, and tactical. Students will complete core coursework of 19 - 21 credit hours in addition to the hours required in their area of emphasis.

**Clinical exercise physiology** students engage in an intensive curriculum of 15 additional credits within the area of emphasis. Didactic coursework in biological and health sciences is balanced with the clinical experiences and techniques needed to take the Clinical Exercise Physiologist (CEP) exam as well as serve clinical populations. Students gain experience working with individuals in which exercise has been shown to be an effective treatment (e.g., cardiovascular, metabolic, and neuromuscular conditions). Students also assist clinical faculty in the WVU Human Performance Laboratory with functional assessment, risk factor modification, exercise prescription, and monitoring hemodynamic responses in populations with various medical conditions.

All students are required to complete clinical internships spread primarily between cardiac, pulmonary, metabolic, and musculoskeletal areas. These internships are performed in Phase I (inpatient), Phase II (outpatient), and Phase III (maintenance) cardiac rehabilitation programs, as well as observation opportunities within the WVU Heart and Vascular Institute and Bariatric Surgery. Students are also encouraged to become involved with any of the various clinically related research projects being performed within the Division of Exercise Physiology.

**Research exercise physiology** is a two-year program and is designed for students who wish to engage in an intensive research training experience, in preparation for further training in a PhD, MD, or similar postgraduate program. Students in the track select a research mentor and committee from faculty within the Division of Exercise Physiology (or an afflicted group) based on their research interests. The area of emphasis includes 14 additional credits beyond the core. The first year consists of didactic coursework, while learning the necessary research skills and tools to conduct research. In the second year, students can focus heavily on all aspects of research and the production and oral defense of a research thesis.

The faculty who will act as primary mentors in exercise physiology have research and/or clinical expertise in:

- Heart disease
- Motor unit recruitment in stroke and disability
- Biomechanical and motor control for gait in stroke or spinal cord injury
- Muscle injury and repair
- Cancer cachexia and muscle wasting diseases
- Aging and sarcopenia in skeletal muscle
- Cardiac and skeletal muscle growth and function
- Vascular dysfunction with the metabolic diseases

- Alzheimer's Disease and vascular contributions to cognitive impairment and dementia
- Stem cell biology and mechanical signal and tissue regeneration

**Tactical performance physiology** students will complete 13 additional credits within the area of emphasis. After program completion, graduates will be eligible to complete the highest nationally- and internationally-recognized certification exams within the field of tactical performance physiology: Tactical Strength and Conditioning-Facilitator (TSAC-F®), Certified Strength and Conditioning Coach (CSCS®), and Certified Performance and Sport Scientist (CPSS®), all offered by the National Strength and Conditioning Association (NSCA®).

This specialization will prepare students to address the overall health, fitness, and readiness of tactical personnel, integrating exercise physiology, sports nutrition, and human physiological responses to physical and psychological stress to increase readiness and resiliency among these populations.

## ADMINISTRATION

### CHAIR AND DIRECTOR, UNDERGRADUATE STUDIES

- Randall Bryner - EdD (West Virginia University)  
Associate Professor

### DIRECTOR, MASTERS OF SCIENCE GRADUATE PROGRAM

- Paul D. Chantler - PhD (Liverpool John Moores University)  
Professor

### DIRECTOR, PHD PROGRAM

- John M. Hollander - PhD (University of Wisconsin)  
Professor

### VICE DIRECTOR FOR GRADUATE STUDIES, DIVISION OF EXERCISE PHYSIOLOGY AND DIRECTOR OF ADMISSIONS, HSC OFFICE OF RESEARCH & GRADUATE EDUCATION

- Emidio E. Pistilli - PhD (West Virginia University)  
Associate Professor

### ASSISTANT CHAIR

- Miriam E. Leary - PhD (University of Texas at Austin)  
Assistant Professor

### DIRECTOR OF GLOBAL EDUCATION AND SERVICE LEARNING

- Beth Nardella - PhD (West Virginia University)  
Associate Professor

### EXECUTIVE DIRECTOR OF CLINICAL PROGRAMS AND RESEARCH, HUMAN PERFORMANCE LABORATORY

- Paul D. Chantler - PhD (Liverpool John Moores University)  
Professor

### DIRECTOR, HUMAN PERFORMANCE LABORATORY

- Brett Rice - MS (West Virginia University)

### PROGRAM COORDINATORS

- Jillian Descoteaux - PhD (Ohio University)  
Dance Science, Assistant Professor
- Lori Sherlock - EdD (West Virginia University)  
Aquatic Therapy, Associate Professor

### CO-DIRECTORS, CLINICAL & TRANSLATIONAL SCIENCE PHD PROGRAM

- Paul D. Chantler - PhD (Liverpool John Moores University)  
Professor
- I. Mark Olfert - PhD (Loma Linda University)  
Professor

## FACULTY

### PROFESSORS

- Paul D. Chantler - PhD (Liverpool John Moores University)  
Metabolic Syndrome, Vascular Biology, Effects of Aging and CV Diseases on Arterial and Ventricular Structure and Function
- John M. Hollander - PhD (University of Wisconsin-Madison)  
Diabetes, Mitochondria Dysfunction, Molecular Regulation of Heart Disease
- Jean L. McCrory - PhD (Penn State University)  
Biomechanics, Gait, Foot injuries
- I. Mark Olfert - PhD (Loma Linda University)  
Angiogenesis, Respiratory Physiology, Toxicology
- Ming Pei - PhD, MD (Beijing Medical University, Xuzhou Medical College)  
Stem Cells, Cartilage Repair

### ASSOCIATE PROFESSORS

- Daniel E. Bonner - MS (West Virginia University)  
Clinical Exercise Physiology
- Randall Bryner - EdD (West Virginia University)  
Diabetes, Exercise, and Cancer
- David Donley - MS (West Virginia University)  
Exercise and Metabolic Syndrome
- Beth Nardella - PhD (West Virginia University)  
Global Education and Service Learning
- Emidio E. Pistilli - PhD (West Virginia University)  
Muscular Dystrophy, Muscle Injury, Cytokines, Cancer Biology
- Emily Ryan - PhD (Kent State University)  
Obesity Exercise
- Lori Sherlock - EdD (West Virginia University)  
Aquatic Therapy in Obesity
- Sergiy Yakovenko - PhD (University of Alberta)  
Neuromuscular Integration of Movement

### ASSISTANT PROFESSORS

- Jillian Descoteaux - PhD (Ohio University)  
Dance Science
- Andrew Lane - PhD (University of Florida)
- Brian Leary - PhD (University of Texas at Austin)
- Miriam E. Leary - PhD (University of Texas at Austin)  
Student Retention, Teaching and Learning, Community Engagement, Exercise Nutrition
- Dharendra Thapa - PhD (West Virginia University)
- James Thomas - MS (West Virginia University)  
Exercise, Children, Strength Training

### ASSOCIATE PROFESSORS EMERITI

- Diana Gilleland - MS (West Virginia University)

## Master of Science

### Degree Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
A grade of B- or higher must be earned in all required courses		
EXPH 567	Exercise Physiology 2	4
EXPH 672	Professional Field Placement	8
or EXPH 697	Research	
PSIO Elective (500- to 700-level; consult with advisor)		4-5

Electives *		3-4
Select one of the following:		
Clinical Exercise Physiology		
PCOL 549	Applied Pharmacology	
Research Exercise Physiology		
Consult with research mentor on an individual basis.		
Tactical Performance Physiology		
EXPH 610	Environmental Exercise Physiology	
or EXPH 667	Advanced Exercise Nutrition	
Required Area of Emphasis **		13-15
Clinical Exercise Physiology (15 Hours)		
Research Exercise Physiology (14 Hours)		
Tactical Performance Physiology (13 Hours)		
Number of credits will vary based on selected area of emphasis.		
Total Hours		32-34

\*

Select one elective based on area of emphasis in consultation with advisor.

\*\*

As part of the total hours required for graduation, all students must complete one of the master's-level areas of emphasis in exercise physiology.

## Clinical Exercise Physiology Area of Emphasis

Code	Title	Hours
A grade of B- or higher must be earned in all required courses.		
EXPH 661	Clinical Research Methods 1	1
EXPH 662	Clinical Research Methods 2	1
EXPH 670	Lab Techniques and Methods 2	3
EXPH 680	Advanced Clinical Exercise Physiology	3
EXPH 681	Clinical Exercise Prescription	5
EXPH 695	Independent Study	2
Total Hours		15

## Research Exercise Physiology Area of Emphasis

Code	Title	Hours
A grade of B- or higher must be earned in all required courses.		
EXPH 682	Research Design and Methods	4
STAT 511	Statistical Methods 1	3-4
or AGBI 514	Animal Biotechnology	
Journal Club		2
EXPH 777	Journal Club	
EXPH 698	Thesis or Dissertation	5
Total Hours		14

## Tactical Performance Physiology Area of Emphasis

Code	Title	Hours
A grade of B- or higher must be earned in all required courses.		
EXPH 564	Applied Biomechanics	3
EXPH 601	Tactical Performance Assessment and Monitoring 1	2
EXPH 602	Tactical Performance Assessment and Monitoring 2	2
EXPH 610	Environmental Exercise Physiology	3
or EXPH 667	Advanced Exercise Nutrition	
EXPH 669	Advanced Strength and Conditioning Methods	3

NSCA Tactical Strength and Conditioning-Facilitator Certification

Certified Strength and Conditioning Specialist Certification

Total Hours

13

## Areas of Emphasis

- Clinical Exercise Physiology
- Research Exercise Physiology
- Tactical Performance Physiology

## Clinical Exercise Physiology Area of Emphasis

Code	Title	Hours
A grade of B- or higher must be earned in all required courses.		
EXPH 661	Clinical Research Methods 1	1
EXPH 662	Clinical Research Methods 2	1
EXPH 670	Lab Techniques and Methods 2	3
EXPH 680	Advanced Clinical Exercise Physiology	3
EXPH 681	Clinical Exercise Prescription	5
EXPH 695	Independent Study	2
Total Hours		15

## Research Exercise Physiology Area of Emphasis

Code	Title	Hours
A grade of B- or higher must be earned in all required courses.		
EXPH 682	Research Design and Methods	4
STAT 511	Statistical Methods 1	3-4
or AGBI 514	Animal Biotechnology	
Journal Club		2
EXPH 777	Journal Club	
EXPH 698	Thesis or Dissertation	5
Total Hours		14

## Tactical Performance Physiology Area of Emphasis

Code	Title	Hours
A grade of B- or higher must be earned in all required courses.		
EXPH 564	Applied Biomechanics	3
EXPH 601	Tactical Performance Assessment and Monitoring 1	2
EXPH 602	Tactical Performance Assessment and Monitoring 2	2
EXPH 610	Environmental Exercise Physiology	3
or EXPH 667	Advanced Exercise Nutrition	
EXPH 669	Advanced Strength and Conditioning Methods	3
NSCA Tactical Strength and Conditioning-Facilitator Certification		
Certified Strength and Conditioning Specialist Certification		
Total Hours		13

## Major Learning Outcomes

### MASTER OF SCIENCE (MS) IN EXERCISE PHYSIOLOGY

#### Master of Science (MS) in Exercise Physiology

The Exercise Physiology MS program prepares students for exciting careers in healthcare, human performance, research, or professional programs. Students select an Area of Emphasis (AoE) in one of three specializations: Clinical Exercise Physiology, Tactical Performance Physiology, or Research Exercise Physiology.

The Clinical Exercise Physiology AoE trains students to use exercise testing and prescription for persons with diseases, including obesity, cardiovascular disease, diabetes, Parkinson's, and aging. Graduates of the Clinical AoE will become Clinical Exercise Physiologists competitive for careers in healthcare, rehabilitation, fitness, or academic settings; many graduates also pursue professional programs (e.g., Medical School, Physician's Assistant, Physical Therapy).

The Tactical Performance Physiology AoE prepares students to optimize the readiness and resiliency of tactical professionals (e.g., military, firefighter, and law enforcement officers). Graduates of the Tactical Performance AoE can become Tactical Strength and Conditioning Coaches or Human Performance Specialists who work with military or fire/police departments or apply to professional programs (e.g., Athletic Training, Physical Therapy).

The Research Exercise Physiology AoE trains students to conduct research across a variety of disciplines (e.g., cardiovascular disease, musculoskeletal disorders, and biomechanics/rehabilitation) with a focus on the impact of exercise on disease states. Graduates of the Research AoE can pursue careers in research and academia or additional training in research intensive doctoral or professional programs.

### **Learning Objectives for Research Exercise Physiology Area of Emphasis**

To prepare research based exercise physiologists who:

1. Demonstrate proficiency in applying theories, and knowledge to address fundamental questions in health specific issues related to exercise physiology
2. Develop technical skills for conducting experimental procedures.
3. Develop skills in critical thinking in order to state research hypotheses, and to analyze and interpret research data using appropriate methodology and statistics.
4. Demonstrate skills in scientific written and oral communication.
5. Develop and apply key scientific traits such as professionalism and integrity, while understanding the principles of ethics associated with appropriate research conduct.

### **Learning Objectives for Clinical Exercise Physiology Area of Emphasis**

To prepare clinical exercise physiologists who:

1. Are proficient, evidence-based and patient-centered exercise physiology professionals.
2. Demonstrate effective collaboration in an interprofessional healthcare model.
3. Demonstrate integrative and critical thinking skills to allow application of scientific knowledge for clinical applications.
4. Demonstrate professionalism and career skills in clinical settings.
5. Demonstrate proficiency in modern applications in patient care.

### **Learning Objectives for Tactical Performance Physiology Area of Emphasis**

Students who complete the Tactical Performance AoE will be able to:

1. Integrate and apply foundational knowledge (e.g. human physiology, exercise physiology, environmental physiology, nutrition, and principles of strength and conditioning) in the area of tactical performance.
2. Design and implement evidence-based strength and conditioning programs and recovery modalities to improve overall health and performance in tactical populations.
3. Examine and interpret clinical (e.g. cardiovascular risk factors, muscular imbalances) and performance (e.g. muscular strength, power, and endurance) standards for tactical populations.
4. Demonstrate written and oral communication and critical thinking skills by analytically critiquing novel research in exercise physiology and tactical performance sciences.
5. Demonstrate proficiency in applying theories and knowledge to address fundamental questions in exercise physiology specific issues related to the tactical athlete.
6. Demonstrate integrative and critical thinking skills to lead or facilitate the application of scientific knowledge in tactical domains.

## **Accreditation**

The Bachelor of Science and Master of Science (Clinical) programs in Exercise Physiology are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP (<https://www.caahep.org/>)).

## **Health Sciences**

## Degree Offered

- Master of Science

## Nature of the Program

The Master of Science (M.S.) program in the **Health Sciences** emphasizes enhancing knowledge in the biomedical and public health disciplines to increase the student's competitiveness for admission to professional or graduate programs and/or to augment the student's career potential. The program is a one-year, non-thesis masters. Completion of the M.S. degree is realized when the student has fulfilled all course requirements and the independent study project. Students can enter the program in either the Fall semester or the Summer Session. The Master of Science (M.S.) in the Health Sciences is a terminal degree program targeting students interested in developing their skills toward a career requiring basic science knowledge. The objectives of this program are to:

1. provide integrative scientific education in the biomedical and public health sciences to graduates from an accredited undergraduate institution
2. provide the opportunity to explore career options in various health professional disciplines
3. develop integrative and critical thinking skills to allow application of scientific knowledge to traditionally non-scientific fields
4. train students in the rudiments of research on a basic science, public health or clinical topic; these include hypothesis testing, data collection, manuscript preparation
5. enhance competitiveness for admission to a health professional and/or Ph.D. program
6. enhance skills for job placement including resume and cover letter evaluation, and interviewing preparation.

To achieve these objectives, the program has two areas of emphasis: (1) advancement of basic science and public health knowledge for career enhancement and (2) partnering basic science with other disciplines. In the first area of emphasis, the student will augment his/her scientific skills with advanced coursework emphasizing critical thinking and application of that knowledge to problems facing human health. This area targets students interested in pursuing professional or advanced academic degrees. In the second area of emphasis, the student can expand their knowledge to allow them to direct a non-scientific career toward one that relies on a scientific skill set. Students in this area of emphasis may be teachers wishing to teach science in secondary schools, individuals interested in eventually achieving other professional degrees such as a J.D. or M.B.A. to pursue patent law or a position in a biotech/pharmaceutical company, or positions as a scientific liaison translating scientific knowledge to the general public in a community organization or a for profit company, a position sometimes called a knowledge broker.

Proposed coursework is designed to build the foundation knowledge common to first-year curricula in medical and dental schools and biomedical and public health Ph.D. programs. The common core curriculum will include coursework in the basic sciences course such as physiology and biochemistry and courses in public health, biostatistics, epidemiology, and social and behavioral theory. The director of the M.S. in the Health Sciences works with each student to tailor electives to fit the student's career goals. In addition to coursework, the student will participate in a series of activities:

- Participation in an independent study project with a research mentor for three semesters
- Training in reading, writing, and evaluation of the scientific literature
- Enrichment activities to enhance career development skills, such as preparation to take entrance exams, preparation of resumes and cover letters, seminar presentation skills, and interviewing skills
- Attendance at seminars to learn cutting edge advancements in science
- Cross-disciplinary approach to the acquiring and application of scientific knowledge

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## FACULTY

### PROGRAM DIRECTOR

- Stephanie Rellick  
srellick@hsc.wvu.edu

## Admissions

All applications to the M.S. in the Health Sciences program are accepted electronically and must be submitted electronically via the official WVU Graduate Education application:

<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024> (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>)

M.S. in the Health Sciences applications are reviewed beginning in January by a Common Admissions Committee comprised of the Director of the MS in Health Sciences program, the School of Medicine Associate Dean for Student Services & Curriculum, the School of Dentistry Associate Dean for Dental Admissions, Recruitment, & Access, the Director of Admissions for the Office of Research and Graduate Education, and the School of Medicine Program Director for Physician Assistant Studies.

Students may apply for admission beginning in either the summer (May) session or the fall (August) semester of that year. Decisions of acceptance are made on a rolling basis until all slots are filled. All decisions made by the Admissions Committee are final. For maximum admissions consideration, we recommend that you apply as early as possible.

Please visit <https://www.hsc.wvu.edu/resoff/graduate-education/ms-programs/health-sciences/> to review the application process.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8308

## Master of Science

### MAJOR REQUIREMENTS

Code	Title	Hours
<b>Minimum overall grade point average of 3.0 is required.</b>		
<b>Minimum grade of C is required.</b>		
PSIO 743	Fundamentals of Physiology	5
EPID 601	Public Health Epidemiology	3
BIOS 601	Applied Biostatistics 1	4
BIOC 531	General Biochemistry	4
or PCOL 549	Applied Pharmacology	
BMS 684	Journal Club and Seminar	1
BMS 685	Professionalism in Health Care	2
SBHS 601	Social and Behavioral Theory	3
BMS 695 (taken 3 times)		6
Electives (Courses numbered 400-799) *		9
Presentation of independent study project		
Total Hours		37

\*Credit toward a MS in Health Sciences graduate degree may be obtained only for elective courses listed in the graduate catalog.

#### Independent Study

Students are required to register for independent study each semester and during summer session. The student will conduct an independent project under the guidance of a faculty advisor. The project can involve data collection, retrospective analysis of patient data, a comprehensive literature review, or other activity approved by the graduate director that is consistent with the student's career goals. During the final semester in residence, the student presents a short talk of the results or culmination of his/her project.

#### Seminar: Journal Club

Students are required to register for seminar: journal club at least once during the course of the degree. Regardless of registration in this course, students still participate in the sessions. The fall semester emphasizes learning to read the scientific literature and gain new knowledge by attending seminars. The spring semester emphasizes learning how to present a seminar.

#### Additional Enrichment Activities

To enhance the attainment of his/her career goal, the student may take a preparative course for the MCAT, DAT or GRE exams. Students may shadow a professional in their field of interest. Additional activities can include: preparation for interviewing, resume preparation, writing the personal statement, and career development. These activities can occur throughout the degree program.

## Suggested Plan of Study

#### First Year

Fall	Hours	Spring	Hours	Summer	Hours
PSIO 743		5 BIOC 531		4 BMS 685	2
EPID 601		3 SBHS 601		3 BMS 695	2
BIOS 601		4 Elective		3 Elective	3
BMS 695		2 Elective		3	



BMS 684	1 BMS 695	2	
	15	15	7

Total credit hours: 37

## Major Learning Outcomes

### HEALTH SCIENCES

The Master of Science (M.S.) in the Health Sciences is a terminal degree program targeting students interested in developing their skills toward a career requiring basic science knowledge. The objectives of this program are to:

- provide integrative scientific education in the biomedical and public health sciences to graduates from an accredited undergraduate institution
- provide the opportunity to explore career options in various health professional disciplines
- develop integrative and critical thinking skills to allow application of scientific knowledge to traditionally non-scientific fields
- train students in the rudiments of research on a basic science, public health or clinical topic; these include hypothesis testing, data collection, manuscript preparation
- enhance competitiveness for admission to a health professional program
- enhance skills for job placement including resume and cover letter evaluation, and interviewing preparation.

## Immunology and Microbial Pathogenesis, Ph.D.

### Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

### Nature of the Program

The Doctor of Philosophy degree in Immunology and Microbial Pathogenesis will prepare students from diverse backgrounds to serve as professionals that are knowledgeable about the immune system of humans and other mammals, how the immune system functions, and the consequences of its malfunction on the health of the host. Knowledge of the immune system will be fully integrated with an excellent understanding of the diversity of microorganisms that cause disease in humans and other mammals and mechanisms of disease pathogenesis. Students in the program will apply this knowledge to broad areas of research including the understanding of pathogen-host interactions and development of immunotherapies and vaccines. Graduates will possess the laboratory skills and knowledge needed to assess the functional status of the immune system and to assess the mechanism used by microbial agents to cause disease in mammals. Graduates will be qualified to pursue several professional career paths in private industry, state and federal government, and academic institutions.

The doctoral program in Immunology and Microbial Pathogenesis emphasizes extensive laboratory research in microbiology, immunology, microbial pathogenesis, and/or cell biology, i.e. the major purpose of graduate education in the program is research training. The basic philosophy of the program is that students acquire a strong foundation in the basic concepts of immunology and microbial pathogenesis and have flexibility in choosing advanced coursework in their specific areas of interest. Each student will complete an original, in-depth research investigation. Its learner-centered curriculum integrates both classroom and hands-on research experiences to produce students capable of designing and doing independent research and teaching.

Completion of the Ph.D. degree is realized when the student successfully presents the research results to faculty of the graduate dissertation committee and program/department. Typically, four to five years are required to realize this goal.

Faculty members and students explore diverse areas of inquiry related to the medical implications of microbes and the human body's response to them.

## Current Research Areas

### IMMUNOLOGY

- Vaccines and immunotherapies against bacterial pathogens
- Autoimmune diseases and neuroimmunology
- Effects of stroke on the immune system
- Influence of sex chromosomes on immunity
- Biochemistry of inflammatory cytokines
- Immune response in bacterial and viral diseases
- Antibody function and use as therapeutics
- Regulation of signal transduction in immune responses
- Molecular aspects of cell signaling as it relates to cancer chemotherapy and cell growth

- Genomics studies of the immune system
- Effects of man-made pesticides and herbicides on the immune system
- Effects of heavy metals on the immune system

## **MICROBIOLOGY**

- Physiology of pathogenic microbes
- Microbial genetics
- Mechanisms of bacterial pathogenesis
- Chemotaxis and motility
- Interactions between microbes and their hosts
- Vaccines and immunotherapies against bacterial pathogens
- Molecular mimicry and structure-function relationship of bacterial virulence factors
- Microbial biofilms

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## **FACULTY**

### **GRADUATE PROGRAM DIRECTOR**

- Mariette Barbier - Ph.D. (Universitat de les Illes Balears)
- Cory Robinson - Ph.D. (Miami University of Ohio)

### **PROFESSOR**

- Slawomir Lukomski - Ph.D. (University of Lodz, Poland)

### **ASSOCIATE PROFESSORS**

- F. Heath Damron - Ph.D. (Marshall University)
- Meenal Elliott - Ph.D. (University of Alabama)
- Tim Eubank - Ph.D. (The Ohio State University)
- Karen Martin - Ph.D. (Duke University)
- Ivan Martinez - Ph.D. (University of Pittsburgh)
- Edmidio Pistilli - Ph.D.  
(West Virginia University)

### **ASSISTANT PROFESSORS**

- Kathy Brundage - Ph.D. (University of Pennsylvania)
- Jonathan Busada - Ph.D. (East Carolina University)
- Michael Hu - Ph.D. (Peking University)
- Tracy Liu - Ph.D. (University of Toronto)
- Edwin Wan - Ph.D. (City University of Hong Kong)

### **TEACHING ASSOCIATE PROFESSORS**

- Kelly Collins - Ph.D. (University of Cincinnati)

### **TEACHING ASSISTANT PROFESSORS**

- Chad Sethman - Ph.D. (Miami University)
- Valerie Watson - M.S. (West Virginia University)

### **LECTURER**

- Michelle Witt - M.S. (Virginia Tech)

### **ADJUNCT PROFESSORS**

- Don Beezhold - Ph.D. (University of Illinois Medical Center)
- Jennifer Franko - Ph.D. (Case Western Reserve University)
- John Noti - Ph.D. (Purdue University)
- David Weissman - M.D. (Northwestern University)

## ADJUNCT ASSISTANT PROFESSORS

- Stacey Anderson - Ph.D. (West Virginia University)
- Candice Brown - Ph.D. (Duke University)
- Alexandra Elliott - Ph.D. (West Virginia University)
- David Klinke - Ph.D. (Northwestern University)
- Yong Qian - Ph.D. (West Virginia University)
- Jenny Roberts - Ph.D. (West Virginia University)

## ADJUNCT ASSOCIATE SERVICE FELLOW

- Tara Croston - Ph.D. (West Virginia University)

## Doctor of Philosophy

### MAJOR REQUIREMENTS - STANDARD TRACK

Code	Title	Hours
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 702	Biomedical Lab Experience	2
BMS 706	Biomedical Research Methods	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 720	Scientific Writing	2
BMS 747	Foundations for Contemporary Biomedical Research I	4
BMS 777	Foundations for Contemporary Biomedical Research 2	4
Advanced MICB Courses - 2 from the following:		5-7
MICB 781	Advanced Immunology	
MICB 782	Advanced Microbiology	
MICB 793	Special Topics (Vaccinology)	
MICB 785	Immunology and Microbiology Journal Club (Minimum of 7; Every semester until graduation)	7
MICB 790	Teaching Practicum	2
MICB 796	Graduate Seminar (Minimum of 7; Every semester until graduation)	7
MICB 797	Research (1-15 per semester)	45
Qualifying Exam		
Dissertation Proposal		
Dissertation Defense		
Total Hours		83-85

### MAJOR REQUIREMENTS - FAST TRACK

Code	Title	Hours
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 720	Scientific Writing	2
Advanced MICB Courses - 2 from the following:		5-7
MICB 781	Advanced Immunology	
MICB 782	Advanced Microbiology	
MICB 793	Special Topics (Vaccinology)	
MICB 785	Immunology and Microbiology Journal Club (Minimum of 7; Every semester until graduation)	7
MICB 790	Teaching Practicum	2
MICB 796	Graduate Seminar (Minimum of 7; Every semester until graduation)	7
MICB 797	Research (1-15 per semester)	45
Qualifying Exam		
Dissertation Proposal		

## Dissertation Defense

Total Hours

72-74

**Seminars and Research Forum**

Students are required to register for MICB 796 each semester of residence and are required to present at least one seminar during each school calendar year (Fall – Spring semesters).

**Journal Club**

Students are required to enroll in Journal Club each semester. The course involves the presentation and discussion of current research papers and will help acquaint students with the variety of methods used in scientific research.

**Doctoral Research**

Students will conduct research with a dissertation mentor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation mentor.

**Qualifying and Dissertation Proposal/Ph.D. Candidacy**

The written qualifying exam is given at the end of the first year of study. The dissertation proposal is completed in the third year of study. Admission to Ph.D. candidacy occurs following the successful defense of the dissertation proposal.

**Dissertation Defense and First-Author Paper Requirement**

Students are allowed to defend their dissertation when a minimum of one manuscript with the student as first author, based on dissertation research, is accepted in a peer-reviewed journal. The final examination for the Ph.D. degree consists of orally defending a written dissertation in a public seminar and then in private to the dissertation committee. Satisfactory performance in the oral defense will result in recommendation for granting of the PhD.

**Suggested Plan of Study\*****First Year**

Fall	Hours	Spring	Hours	Summer	Hours	
BMS 700		1 BMS 701		1 MICB 797		3
BMS 706		1 MICB 785		1 Qualifying Examination		
BMS 702		2 MICB 796		1		
BMS 747		4 MICB 797		3		
BMS 777		4				
		12		6		3

**Second Year**

Fall	Hours	Spring	Hours	Summer	Hours	
MICB 785		1 MICB 781		3 BMS 720		2
MICB 790		1 MICB 785		1 MICB 797		1
MICB 782 or 793		2 to 4 MICB 790		1		
MICB 796		1 MICB 796		1		
MICB 797		3 MICB 797		3		
		Dissertation Proposal				
		8-10		9		3

**Third Year**

Fall	Hours	Spring	Hours	Summer	Hours	
MICB 785		1 MICB 785		1 MICB 797		1
MICB 796		1 MICB 796		1 BMS 707		2
MICB 797		7 MICB 797		7		
		9		9		3

**Fourth Year**

Fall	Hours	Spring	Hours	Summer	Hours	
MICB 785		1 MICB 785		1 MICB 797		3
MICB 796		1 MICB 796		1		

MICB 797	7 MICB 797	7	
	9	9	3

Total credit hours: 83-85

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the first year. The plan of study is developed by the graduate committee in consultation with the student. The courses listed above include the required and elective coursework necessary for the student to finalize his/her plan of study. When the student enters the laboratory of his/her doctoral dissertation mentor repetitive enrollments in research, seminars, and colloquia are typical and will determine total hours necessary for degree completion.

\*This is a suggested plan of study. Course sequences and length of time in program may vary depending on student and altered total credit hours.

## Major Learning Outcomes

### IMMUNOLOGY AND MICROBIAL PATHOGENESIS

Students will:

- Identify and summarize the basic concepts of microbiology, microbial pathogenesis, and immunology.
- Integrate detailed knowledge in microbiology, microbial pathogenesis, and immunology with the knowledge of student's area of research.
- Discuss, critique, and interpret primary research literature in microbiology, microbial pathogenesis, immunology, and in the student's area of research.
- Identify meaningful problems and questions for research in microbiology, microbial pathogenesis, and immunology.
- Acquire expertise and use laboratory techniques required to perform experiments in the student's area of research.
- Design experimental protocols and conduct self-directed research that results in presentations at scientific meeting and publications.
- Demonstrate oral, written, and visual communication skills that result in clear and organized dissemination of material at a level appropriate for the audience.

## Medical Laboratory Science, M.S.

Department website: <http://medicine.wvu.edu/biomedical-laboratory-diagnostics/>

### Degree Offered

- Master of Science

#### Nature of the Program

Medical laboratory scientists are healthcare professionals educated in all aspects of clinical laboratory analysis, including test development, performance, and evaluation. Medical laboratory scientists may work in many areas, including clinical chemistry, hematology, immunohematology, immunology, clinical microbiology, and molecular diagnostics.

Practice settings for medical laboratory scientists include hospital, clinic, public health, or private clinical laboratories; research, cytogenetic, pharmaceutical, or in-vitro fertilization laboratories; technical or sales representatives for medical manufacturers and suppliers; biotechnology; and state or federal forensics laboratories.

Students in the program receive both didactic instruction and practical experience at one or more of the affiliated hospital laboratories. Students must provide their own transportation and housing during the clinical rotations.

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## ADMINISTRATION

### VICE CHAIR AND PROGRAM DIRECTOR, MEDICAL LABORATORY SCIENCE

- Michelle Butina - PhD, MLS (ASCP) (University of Georgia)  
Associate Professor

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## FACULTY

### ASSOCIATE PROFESSORS

- Michelle Butina - PhD, MLS (ASCP) (University of Georgia)  
Vice Chair, Laboratory Sciences Division and Program Director, Medical Laboratory Science
- Jason V. Evans - PhD, MLS (ASCP) (West Virginia University)

## ASSISTANT PROFESSORS

- Luisa Battistella - MS, MLS (ASCP) (University of Padua)
- Amara Sugalski - MA, MLS (ASCP) (University of Michigan)

## ASSOCIATE PROFESSORS EMERITI

- Barbara J. Gutman
- Kerry Harbert
- Beverly Kirby
- Mary Ellen Koenn
- Karen S. Long

## Admissions

1. Bachelor's degree from a regionally accredited U.S. college or university\*
2. Minimum cumulative GPA of 3.0 or higher
3. Pre-requisite courses:
  - a. 12 credit hours of chemistry (including one course in organic or biochemistry)
  - b. 12 credit hours of biological sciences (including one course in microbiology)
  - c. 3 credit hours of college algebra or higher
4. Written statement of goals that clearly identifies how admission to the program will facilitate his/her professional goals
5. Resume
6. Qualified applicants will be interviewed by the Medical Laboratory Science Admissions Committee.

\*Disclaimer: Excluding those that have completed a NAACLS accredited medical laboratory science program.

## Admissions Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8353

## Degree Requirements

Code	Title	Hours
A minimum GPA of 2.75 is required.		
A minimum grade of C- is required in all coursework.		
PALM 412	Molecular Diagnostics Laboratory	1
PALM 422	Immunohematology Laboratory	2
PALM 432	Clinical Chemistry Laboratory	2
PALM 442	Clinical Hematology Laboratory	2
PALM 446	Hemostasis Laboratory	1
PALM 452	Clinical Microbiology Laboratory	2
PALM 462	Urinalysis and Body Fluids Laboratory	1
PALM 465	Medical Laboratory Management	2
PALM 510	Molecular Diagnostics	2
PALM 520	Immunohematology	3
PALM 525	Immunohematology Practicum	4
PALM 530	Clinical Chemistry	3
PALM 535	Clinical Chemistry Practicum	4
PALM 540	Clinical Hematology	3
PALM 544	Hemostasis	1
PALM 545	Clinical Hematology Practicum	4
PALM 550	Clinical Microbiology	3
PALM 554	Clinical Mycology & Parasitology	2
PALM 555	Clinical Microbiology Practicum	4
PALM 560	Urinalysis and Body Fluids	1

PALM 580	Medical Immunology	3
PALM 602	Leadership Theory	1
PALM 604	Educational Theory	1
PALM 606	Graduate Seminar	1
Total Hours		53

## Suggested Plan of Study

<b>First Semester</b>	<b>Hours</b>
PALM 554	2
PALM 560	1
PALM 462	1
PALM 530	3
PALM 432	2
PALM 540	3
PALM 442	2
	14
<b>Second Semester</b>	<b>Hours</b>
PALM 580	3
PALM 544	1
PALM 446	1
PALM 604	1
PALM 606	1
	7
<b>Third Semester</b>	<b>Hours</b>
PALM 510	2
PALM 412	1
PALM 520	3
PALM 422	2
PALM 550	3
PALM 452	2
PALM 465	2
	15
<b>Fourth Semester</b>	<b>Hours</b>
PALM 525	4
PALM 535	4
PALM 545	4
PALM 555	4
PALM 602	1
	17

Total credit hours: 53

## Major Learning Outcomes

### MEDICAL LABORATORY SCIENCE

Upon graduation, students will:

1. Demonstrate entry level knowledge for a laboratory medicine professional.
2. Perform accurate and reliable qualitative and quantitative test procedures using sophisticated instrumentation.
3. Model the professional traits of a laboratory medicine practitioner in a workplace setting (e.g., during clinical rotations).
4. Communicate effectively in written and oral forms appropriate to a laboratory medicine professional.
5. Apply fundamental principles of administration and leadership to clinical laboratory practice.

6. Use educational principles and methodologies to teach and/or inform students, colleagues, patients, members of patient care team, and public on clinical laboratory topics or general healthcare topics.

## Accreditation

The WVU Biomedical Laboratory Diagnostics tracks in Medical Laboratory Science and Histotechnology are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, and (773) 714-8880. Graduates of the Medical Laboratory Science and Histotechnology programs are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

## Medicine, M.D.

### Degrees Offered

- Doctor of Medicine
- Joint Doctor of Medicine and Doctor of Philosophy
- Joint Doctor of Medicine Jurisprudence Degree
- Joint Doctor of Medicine and MBA

The degree of doctor of medicine (MD) is granted to students who have completed the prescribed curriculum and who have been recommended for the degree by the faculty of the School of Medicine.

The MD/PhD program is available to students who show exceptional interest and scholarly promise. All admission requirements of the School of Medicine and the specific graduate program apply.

The following information applies only to students in the School of Medicine who are enrolled in the prescribed curriculum which culminates in the MD degree.

All other students, undergraduates, or graduates enrolled in other programs in the School of Medicine are governed by the policies found elsewhere in this catalog.

### Accreditation

The West Virginia University School of Medicine is accredited by the Liaison Committee on Medical Education (LCME).

## Promotion and Graduation Requirements

### EVALUATION OF STUDENT PROGRESS

Promotion of a student in the MD degree program is evaluated in four major areas: (1) successful completion of all required work, (2) successful completion of Step 1 and Step 2 of the United States Medical Licensure Examination (USMLE), (3) successful completion of the WVU School of Medicine Clinical Performance Exam, and (4) successful fulfillment of the professional standards of the School of Medicine, including 100 hours of community service.

The following information is only a brief outline of the School of Medicine policies and procedures. Detailed requirements and policies for evaluation of student progress and graduation may be found in the Policy on Academic and Professional Standards Governing the M.D. degree program at WVU School of Medicine on the Student Services website. The Committee on Academic and Professional Standards administers all promotion and dismissal rules.

### Academic Coursework Review

The Committee on Academic and Professional Standards of the School of Medicine reviews the performance of each student in every course at the end of each academic period. If a student has been found to have an unsatisfactory performance in grade or narrative evaluations in any of the required courses, the student will be required to remediate the deficiency or be dismissed from the program in the school. In selected circumstances, the committee may require remedial work of all or a portion of the curriculum.

The Committee on Academic and Professional Standards may require a student to complete remedial work or dismiss the student even though no failing (F) grade has been received in a required course. Such an event would occur only if, in the opinion of the committee, the student's overall performance does not meet the academic/professional standards of the School of Medicine.

Readmission of a dismissed student is the prerogative of the Admissions Committee after careful review of the student's performance, including but not limited to, actions taken by the Committee on Academic and Professional Standards.



## Grading Policy

Courses required for the M.D. degree are graded as honors (H), pass (P), or fail (F) at the completion of the course in lieu of other letter grades. The H, P, and F designations are accompanied by a narrative report of the student's progress, noting any factors requiring remedial work or counseling. The narrative is submitted by each course and filed in the student portfolio. A grade of F shall be regarded as a failing grade. The Honors designation is limited to no more than the top 15% of students completing the course in that academic year.

The grade of incomplete (I) is given when the instructor believes that the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of I is not removed by satisfactory completion of the work before the end of the next semester in which the student is in residence, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Academic and Professional Standards (University rule). All students who have a health problem which they feel may be causing difficulty with their academic progress are strongly advised to notify an associate dean for student services. It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

No student will be permitted to register for any course work of a subsequent year until all courses for the previous academic year have been completed successfully. The curriculum is divided into two phases: the preclerkship phase which ends with a passing score on USMLE Step 1, and the clerkship phase which is immersion in the clinical environment.

## United States Medical Licensure Examination (USMLE)

All states require that physicians be licensed to practice medicine independently. Satisfactory completion of all portions of the United States Medical Licensing Examination (USMLE) is the only examination mechanism by which this license may be obtained for allopathic physicians. The School of Medicine requires a passing score on both Step 1 and Step 2 for promotion and graduation. A failing grade will delay progress and require remediation. Students are limited to three attempts on each step. Failure on the third attempt will result in dismissal from the program.

Step 1 is required upon successful completion of all foundational and basic science coursework in the preclerkship phase of the curriculum. A passing grade on USMLE Step 1 is required for promotion into the clinical rotations, or the clerkship phase of the curriculum. USMLE Step 2 is required after successful completion of all required core clerkship rotations. A passing score on USMLE Step 2 is required before a recommendation can be made to grant the M.D. degree by the School of Medicine faculty and Committee on Academic and Professional Standards.

*Licensure examinations are administered using a computer-based testing format by the National Board of Medical Examiners (NBME).*

## Professional Standards Review

All non-disciplinary matters are governed by the concept of academic due process. Professionalism is one of the six core competencies of the degree program and an expectation of the profession itself.

In view of public and professional responsibilities, the faculty of each of the professional schools of WVU has the authority to recommend to the president of the University the removal of any student from its rolls whenever, by formal decision reduced to writing, the faculty finds that the student is unfit to meet the qualifications and responsibilities of the profession. For further information the reader is referred to the Policy on Academic and Professional Standards Governing the MD Degree Program at West Virginia University School of Medicine, which is available at the School of Medicine Student Services website and in the student handbook.

## Departure from Scheduled Work

Medical students are registered for all prescribed courses for each term except by special permission from the Committee on Academic Standards and an associate dean for student services of the School of Medicine. This permission is not valid until it has been reported to the assistant director of admissions and records, Health Sciences Center, and Student Services School of Medicine.

## Admissions

**For the most up-to-date information, please refer to our admissions website at:** <https://medicine.hsc.wvu.edu/md-admissions/>

## Mission

The Mission of the West Virginia University School of Medicine (WVU SOM) is "improving the health and wellbeing of everyone we serve."

The Committee on Admissions (COA) must select students who provide evidence that they will fulfill the mission of the WVU SoM. Applicants must have strong experiences in patient care (including shadowing), roles as educator and leader, research and service to the state of West Virginia and beyond.

The COA practices holistic review of each applicant, including the incorporation of competency-based admissions. Although the WVU SoM no longer requires specific coursework, all applicants must be able to provide evidence of a strong scientific fund of knowledge and strong social/interpersonal skills.

## Required Core Competencies for Entering Medical Students

Please review the required core competencies on the AAMC website through the link provided

<https://students-residents.aamc.org/>

Mastery of the scientific competencies can be demonstrated by a strong performance in the preferred courses (listed below) and on the MCAT (Medical College Admissions Test). Other ways to provide evidence of competency is through specialized experiences which have developed required knowledge base such as research, employment, military courses, and self-study.

## Medical College Admissions Test (MCAT)

All applicants are required to take the MCAT

- Scores will be accepted from exams taken between September 2020 and September of the year the application is submitted
- The most recent MCAT total and sub-section scores are what is reported to the committee, while all scores are reviewed
- If you are taking the MCAT this cycle, please wait to submit the secondary application until that score is released
- To identify what scores may be competitive for regular decision, please refer to our Class Profile (<https://medicine.hsc.wvu.edu/md-admissions/2023-class-profile/>) for more information
- Early Decision applicants must have a minimum MCAT total of 506 to apply. Please refer to the Early Decision Program (<https://medicine.hsc.wvu.edu/md-admissions/programs/early-decision-program/>) page for more information.

## Academic Experience

Minimum of 90 Credit Hours PLUS three years of higher education post-high school (at the undergraduate or graduate level) from an accredited US or Canadian academic institution are **required**. It is **preferred** that at least 30 hours are in the courses listed below.

An AMCAS calculated BCPM and Total GPA is **required** to apply

Preferred coursework in:

- **Biological Sciences**
- **Biochemistry**
- **Chemistry**
- **Organic Chemistry**
- **Engineering Sciences**
- **Physics**
- **Statistics**
- **Laboratory sciences**

Successful completion of these courses is the most common method in which applicants can demonstrate science competency

## Letters of Recommendation

- A committee letter provided by your undergraduate institution
- **or one letter from an individual who is able to attest to your fulfillment of the core competencies of the AAMC**
- Letters of recommendation should be uploaded to your AMCAS application at least two weeks prior to your interview

## Secondary Application

All AMCAS verified applicants will have the opportunity to complete a secondary application. Applicants will be notified via email with instructions on how to submit the secondary application. Please refer to the Admissions Timeline (<https://medicine.hsc.wvu.edu/md-admissions/admissions-timeline/>) for important deadlines for the secondary application.

Once we receive the completed secondary application, the applicant will then be placed on a roster to be holistically reviewed.

## Interview Invite

Strong interview skills will be one way for an applicant to provide evidence of interpersonal and communication competencies.

Applicants will be notified via email if offered an interview. As there are a limited number of interview slots, some applicants may be placed on a wait list for an interview and could potentially be invited for an interview if slots become available during the admissions cycle. Applicants are encouraged to continue to update their application as this may help increase chances of being offered an interview slot..

### CASPer Test: CASPer™ Test (Computer Based Assessment for Sampling Personal Characteristics)

All Applicants who receive a secondary application are encouraged to complete the CASPer™ evaluation to assist with our Admissions process. Your CASPer™ results will provide the Admissions Team with additional information about you as an applicant. It is permissible to sign up for a CASPer™ test date and complete the evaluation after your medical school application has been submitted. Please note that CASPer™ results will be available to our Team three weeks from your test date. Please be mindful that applicants will be invited for interviews with or without CASPer™ results, as testing for the 2023 cycle is optional. Please be aware that if an applicant has a CASPer™ score, it will be considered during waitlist pull decisions.

Our Admissions Team is unable to answer any informational calls, emails, or communications about CASPer™. Any queries should be directed to CASPer™ at <https://takecasper.com/contact-us> (<https://takecasper.com/contact-us/>)

More information is available at the following link: <https://takecasper.com/aboutcasper/>

## Functional Technical Standards

In accordance with section 504 of the Rehabilitative Act of 1973 (PL93-112) and following careful review of the 1979 report by a Special Advisory panel on Technical Standards of the Association of American Medical Colleges, and incorporating the guidelines of the Americans with Disabilities Act (ADA PL 1010-336) enacted by Congress in 1990, the West Virginia University School of Medicine has adopted minimal technical standards for the assessment of all applicants to the School of medicine. Please see the Functional Technical Standards Policy here. (<https://medicine.hsc.wvu.edu/media/368318/functional-technical-standards-2.pdf>)

## Ineligible Applicants

- Medical Students who have been dismissed or have been terminated by any allopathic or osteopathic school will **not** be considered for admittance.
- Individuals who have previously earned an allopathic or osteopathic medical degree, whether in this country or abroad, will **not** be considered for admittance.

## Admission Requirements 2023-2024

The Admission Requirements above will be the same for the 2023-2024 Academic Year, except for the required numbers of letters of recommendation and acceptable MCAT dates.

Major Code: 8342

## Doctor of Medicine

### CURRICULUM REQUIREMENTS

Code	Title	Hours
CCMD 801	Medical Biochemistry and Cellular Function	8
PALM 801	Human Structure	7
CCMD 802	Professional Development	1
CCMD 803	Problem Based Learning 1	1
CCMD 811	Physical Diagnosis/Clinical Integration (PDCI) 1	5
MICB 812	Immunity, Infection and Disease (MICRO) 1	4
PALM 812	Mechanisms of Human Disease (PATH) 1	3
PCOL 812	Medical Pharmacology 1	3
CCMD 812	Physical Diagnosis and Clinical Integration (PDCI) 2	3
CCMD 813	Neuroscience and Human Behavior	7
CCMD 814	Health Care Ethics	2
CCMD 815	Career and Professional Development Experiences	7
CCMD 816	Public Health	2
MICB 820	Immunity, Infection and Disease (MICRO) 2	4
PALM 820	Mechanisms of Human Disease (PATH) 2	7
PCOL 820	Medical Pharmacology 2	5
PSIO 820	Principles of Medical Physiology	5
CCMD 821	Physical Diagnosis and Clinical Integration (PDCI) 3	5
CCMD 823	Problem Based Learning 2	3
CCMD 824	Comprehensive Basic Medical Science Exam	3
CCMD 825	United States Medical Licensing (USMLE) Step 1 Prep	6
BMP 830	Clinical Clerkship in Psychiatry	6

FMED 830	Clinical Clerkship in Family Medicine	8
MED 830	Clinical Clerkship in Internal Medicine	8
NEUR 830	Clinical Clerkship in Neurology	2
OBST 830	Clinical Clerkship in Obstetrics & Gynecology	8
PEDI 830	Clinical Clerkship in Pediatrics	8
SURG 830	Clinical Clerkship in Surgery	8
CCMD Electives		20
CCMD 841	Electives	
CCMD 842	Hospital Care	4
CCMD 843	Anesthesiology Clerkship	2
CCMD 844	Critical Care Clerkship	2
CCMD 845	USMLE Step-2 Clinical Knowledge Examination	2
CCMD 847	Clinical Performance Examination	1
CCMD 848	Rural Health	4
Total Hours		174

## FIRST YEAR CURRICULUM

The first-and second-year of the curriculum is characterized as the pre-clerkship phase of the curriculum. The first-year curriculum includes fall, spring and summer terms that total to approximately 52 hours of academic credit. There are approximately 22 scheduled instructional contact hours per week. Students must take courses in a specific order.

The fall term includes CCMD 801 Medical Biochemistry and Cellular Function (integration of biochemistry and genetics), PALM 801 Human Structure (integration of human anatomy and histology), CCMD 811 Physical Diagnosis and Clinical Integration (PDCI) 1 and CCMD 802 Professional Development, which includes a full week of professional development activities designed to help students transition into the medical school curriculum.

The spring term includes an introduction to the foundation of several basic sciences and begins aligning content areas across organ systems, starting with the nervous system. Students enroll in several courses, including MICB 812 Immunity, Infection and Disease 1, PALM 812 Mechanisms of Human Disease 1, PCOL 812 Medical Pharmacology 1, CCMD 812 Physical Diagnosis and Clinical Integration (PDCI) 2, CCMD 813 Neurosciences and Human Behavior, CCMS 814 Health Care Ethics, and CCMD 803 Problem-based Learning.

The summer term includes two courses: CCMD 815 Career and Professional Development Experience and CCMD 816 Public Health.

## SECOND YEAR CURRICULUM

Medical students' second academic year includes a fall and spring term. There are approximately 22 scheduled instructional contact hours per week. Students must take courses in a specific order. The fall term is a unique term, which stretches into the early spring term. The fall term includes approximately 22 week of instruction, which continues to align courses' content across organ systems. This term includes MICB 820 Immunity, Infection and Disease (microbiology) 2, PALM 820 Mechanisms of Human Disease (pathology) 2, PCOL 820 Medical Pharmacology 2, PSIO 820 Physiology, CCMD 821 Physical Diagnosis and Clinical Integration (PDCI) 3, and CCMD 823 Problem-based Learning.

The spring term is designed to prepare students to complete the first step to being a licensed physician: the United States Medical Licensing Examination (USMLE) Step 1. Students are enrolled in CCMD 824 Basic Science Medical Examination, which includes a standardized exam prepared by the National Board of Medical Examiners (NBME). Students engage in approximately 2 weeks of self-directed learning to prepare for the examination. After completing this exam, students are given a profile and a report to help develop a study plan that targets knowledge gaps prior to taking the USMLE Step 1 licensure exam. Students also enroll in CCMD 825 Step Prep, which includes approximately 3-5 weeks of self-directed study time to prepare and pass the USMLE Step 1 examination.

## THIRD AND FOURTH YEAR CURRICULUM

The third-year and fourth-years of the curriculum are characterized as the "clerkship phase of the curriculum," which include required clerkships and elective clinical rotations across 82 weeks of instruction. Students must earn passing grades in all first- and second-year courses, including a passing designation on USMLE Step 1, to enroll in clerkships and clinical rotation electives. While some required clerkships and rotation electives have prerequisites, students may complete the clerkships and clinical rotations in a variety of orders. Students must complete the following required clerkships in any order: MED 830 Internal Medicine (8 weeks), SURG 830 Surgery (8 weeks), BMP Psychiatry (6 weeks), PEDI 830 Pediatrics (8 weeks), FMED 830 Family Medicine (8 weeks), NEURO 830 Neurology, OBST 830 Obstetrics and Gynecology (8 weeks). Students who graduate in May must complete all required clerkships by August 30<sup>th</sup> of the fourth-year curriculum, allowing enough time to figure the clerkship narratives into the Medical Student Performance Evaluation (MSPE). The MSPE is a required component of residency applications. Students must earn a passing grade on all required clerkships prior to completing CCMD 845 USMLE Step 2 Clinical Knowledge (CK) (2 weeks), CCMD 847 CPX Exam, CCMD 842 Subl Hospital Care (4 weeks) and CCMD 844 Critical Care and ICU (2 weeks). Students may also complete CCMD 843 Anesthesiology (2 weeks), CCMD 848 Rural/Community-based Care (4 weeks) at any time during the third- and fourth-year of the curriculum. CCMD 841 Electives (20 weeks) includes rotations

that may or may not have prerequisites. A catalog is available online that lists the approved electives (<http://medicine.hsc.wvu.edu/ms4catalog/>) across the three clinical campuses..

## SUGGESTED PLAN OF STUDY\*

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
CCMD 801		8 MICB 812		4 CCMD 815	7
PALM 801		7 PALM 812		3 CCMD 816	2
CCMD 811		5 PCOL 812		3	
CCMD 802		1 CCMD 803		1	
		CCMD 812		3	
		CCMD 813		7	
		CCMD 814		2	
		21		23	9

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
MICB 820		4 CCMD 824		3 MED 830	8
PALM 820		7 CCMD 825		6 SURG 830	8
PCOL 820		5			
PSIO 820		5			
CCMD 821		5			
CCMD 823		3			
		29		9	16

### Third Year

Fall	Hours	Spring	Hours	Summer	Hours
BMP 830		6 FMED 830		8 CCMD 841	4
NEUR 830		2 OBST 830		8 CCMD 842	4
PEDI 830		8		CCMD 843	2
				CCMD 845	2
				CCMD 847	1
		16		16	13

### Fourth Year

Fall	Hours	Spring	Hours
CCMD 841		8 CCMD 841	8
CCMD 844		2 CCMD 848	4
		10	12

Total credit hours: 174

\*This is a Suggested Plan of Study. Sequence may vary depending on student.

## Major Learning Outcomes

### MEDICINE

Medical Knowledge: Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, and apply this knowledge to patient care.

*Graduating Students of the WVUSOM program will be able to:*

- Describe the normal structure, development, function, and relationships among the organ systems of the human body.
- Describe the role of biochemical, physiological, neurological and immunological mechanisms in maintaining homeostasis.
- Describe and recognize normal and abnormal psychosocial development and cognitive function across the human lifespan.
- Describe the alterations of structure and function or organ systems and tissues that characterize disease (e.g., genetic, developmental, environmental, nutritional, toxic, infectious, inflammatory, neoplastic, degenerative, traumatic, and behavioral).
- Describe foundations of diagnostic methods, therapeutic interventions, and prevention with respect to specific disease processes in individuals and populations.

- Describe genetic and physiologic basis of individual patient responses to medical therapeutics.
- Describe and apply foundational principles of epidemiology, statistics, and ethics to the diagnosis and treatment of disease.
- Explain the effect of social determinants, nutrition, health behaviors, and preventive measures on health status and disease of individuals and populations.
- Describe the scientific method and demonstrate a critical and ethical evaluation of basic, epidemiological, clinical and translational research findings and their application to societal problems and acute, chronic, rehabilitative, end-of-life and primary care.

Patient Care: Provide patient care that is compassionate, appropriate, and effective.

*Graduating Students of the WVUSOM program will be able to:*

- Gather and interpret a complete and appropriately organized medical history, which incorporates cultural features for comprehensive patient care.
- Perform accurate, relevant, comprehensive and focused physical and mental status examinations.
- Gather, interpret, and prioritize information for patients requiring urgent or emergent care and initiate appropriate critical interventions.
- Select and interpret appropriate physical examination findings, diagnostic tests, laboratory tests, ultra sonographic imaging and standard imaging studies to formulate a complete and accurate differential diagnosis.
- Develop patient treatment and management plans that are evidenced-based and consider cultural, ethnic and individual patient preferences for shared decision-making.
- Counsel and educate patients and their families about prevention strategies, diagnostic tests, prognostic data, treatment options/plans, evidenced-based literature and patient orders/prescriptions.
- Provide patient care that is compassionate, safe, appropriate, and effective for the treatment of health problems.
- Perform basic medical procedures appropriately and professionally.
- Employ opportunities for early interventions to educate patients about disease prevention strategies taking into account barriers to change.
- Collaborate with an interprofessional team to provide preventive, acute, chronic, rehabilitative, and end-of-life care that is patient-focused and cost-effective.

Interpersonal and Communication Skills: Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, peers, and health professionals.

*Graduating Students of the WVUSOM program will be able to:*

- Communicate effectively and demonstrate caring and respectful behaviors with patients and families across a broad range of health literacy, socioeconomic and cultural backgrounds.
- Create and sustain a therapeutic and ethically sound relationship with patients and their families.
- Explain the key elements of informed consent to patients and their families, including the indications, contraindications, risks, benefits, alternatives, and potential complications of interventions and procedures.
- Provide and interpret accurate, prioritized, relevant and complete oral presentations of a patient encounter to effectively transition patient care.
- Demonstrate effectively the following communication skills to maintain a professional and safe healthcare environment: negotiation of conflicts within a healthcare team and maintain respect for all members of a healthcare team.
- Communicate timely, accurate, relevant, complete, succinct and confidential documentation of clinical encounters and patient transitions in written or electronic format.

Practice-Based Learning and Improvement: Demonstrate the ability to investigate and evaluate their role in the care of patients, to appraise and assimilate scientific evidence, and to continuously improve their contributions to patient care based through reflective and self-directed learning.

*Graduating Students of the WVUSOM program will be able to:*

- Locate, evaluate and assimilate evidence from scientific studies including basic, epidemiological, clinical, and translational-based research.
- Apply knowledge of study designs and statistical methods to appraise evidenced-based literature.
- Use information technology appropriately to manage information and support patient care decisions.
- Demonstrate lifelong and self-directed learning by analyzing strengths, identifying learning needs, and incorporating feedback in reflective learning to improve all six core competencies.

Systems-Based Practice: Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to learn about other resources in the system to promote optimal health care.

*Graduating Students of the WVUSOM program will be able to:*

- Describe the larger context and system of healthcare and identify how physicians may take a leadership role in its development.
- Demonstrate the ability to evaluate and mobilize resources, interpret extant and emerging policies, and identify forces in the healthcare system that influence disparities in health, access to healthcare and promotion of optimal healthcare.



- Define the roles of healthcare professionals and demonstrate how interprofessional collaboration improves patient safety, patient-centered outcomes, and system performance.
- Describe and distinguish effective methods of organizing, financing, and providing healthcare.
- Describe how the prevention and treatment of healthcare disparities may affect individual patients, populations, and the healthcare system.
- Recognize system limitations and failures, and identify ways to report patient safety concerns and potential solutions in a timely manner.

Professionalism: Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

*Graduating Students of the WVUSOM program will be able to:*

- Demonstrate respect, compassion, integrity, and responsiveness in all interactions with interprofessionals, colleagues, patients and their families and society.
- Demonstrate a commitment to ethical principles, including provision or withholding of care, confidentiality, informed consent, and respect for patient privacy and autonomy.
- Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in culture, national origin, age, gender, race, religion, disabilities, sexual orientation, veteran status and health.
- Create and sustain a therapeutic and ethically sound relationship with patients.
- Demonstrate the qualities and practices required to maintain personal wellness and resilience while pursuing lifelong learning and professional growth.
- Demonstrate honesty, timeliness, punctuality, integrity and accountability in the process of learning and completing professional and clinical responsibilities.
- Demonstrate a commitment to uphold and sustain the WVUSOM Code of Professionalism.

## Neuroscience, M.S., Ph.D.

Randy Nelson, Ph.D., Ph.D. (University of California, Berkeley) [randy.nelson@hsc.wvu.edu](mailto:randy.nelson@hsc.wvu.edu)

### Degrees Offered

- Master of Science
- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

### Nature of the Program

The doctoral program in Neuroscience is committed to training the next generation of researchers and educators. Successful completion of degree requirements is based on research and scholarly achievement. Students will have opportunities to experience and acquire the skills needed for successful careers as independent scientists, including critical thinking, problem solving, writing, public speaking, and leadership. After completion of core coursework, students conduct an original research project culminating in a doctoral dissertation. Research experiences include evaluating scientific literature, identifying critical scientific issues, experimental design, grant and manuscript writing, publication of scientific papers, and presentations at national meetings. Students with career interests in teaching will have the opportunity to gain experience in innovative teaching methods and techniques, including problem-based learning, computer-assisted learning, and integrated teaching approaches. Faculty members have appointments in basic and clinical departments with expertise that spans all neuroscience sub-disciplines, including structural, cellular, molecular, behavioral, and developmental.

The neuroscience graduate program emphasizes research on the function and dysfunction of the brain and nervous system, providing students with innovative approaches to understanding neural mechanisms responsible for diseases such as Alzheimer's disease, stroke, brain injury and repair, as well as fundamental understanding of cellular and molecular neurobiology, motor and sensory systems, neural processing, cognition, behavior, and neural development.

Completion of the Ph.D. degree is realized when a minimum of one first-authored manuscript, based on dissertation research, is accepted in a peer-reviewed journal, another manuscript is accepted in a peer-reviewed journal (any order of authorship is acceptable), and the student successfully presents the research results to faculty of the graduate dissertation committee and program/department. Typically, four to five years are required to realize these goals. The doctoral program in Neuroscience is committed to training the next generation of researchers and educators. Successful completion of degree requirements is based on research and scholarly achievement. Students will have opportunities to experience and acquire the skills needed for successful careers as independent scientists, including critical thinking, problem solving, writing, public speaking, and leadership. After completion of core coursework, students conduct an original research project culminating in a doctoral dissertation. Research experiences include evaluating scientific literature, identifying critical scientific issues, experimental design, grant and manuscript writing, publication of scientific papers, and presentations at national meetings. Students with career interests in teaching will have the opportunity to gain experience in innovative teaching methods and techniques, including problem-based learning, computer-assisted learning, and integrated teaching approaches. Faculty members have appointments in basic and clinical departments with expertise that spans all neuroscience sub-disciplines, including structural, cellular, molecular, behavioral, and developmental.

The neuroscience graduate program emphasizes research on the function and dysfunction of the brain and nervous system, providing students with innovative approaches to understanding neural mechanisms responsible for diseases such as Alzheimer's disease, stroke, brain injury and repair, as well as fundamental understanding of cellular and molecular neurobiology, motor and sensory systems, neural processing, cognition, behavior, and neural development.

### Research Areas

- *Sensory Neuroscience*: mechanisms of auditory and visual system development, inhibitory neural circuits in the brain stem and cortex, synaptic development of thalamocortical circuits, molecular genetic control of retinal development and neural patterning, cell biology of G-protein-mediated signal transduction in vertebrate photoreceptors, olfactory signal processing in the brain, post-translational modification of proteins and protein assembly.
- *Cognitive Neuroscience*: sound recognition, spatial hearing and sensory integration using fMRI, use-dependent plasticity in motor cortex after stroke, neurogenic communication disorders, or chemotherapy.
- *Neural Injury*: functional and structural integrity of the blood brain barrier in health and disease, role of neuroinflammation in CNS pathologies, stroke pathophysiology and neuroprotection.
- *Behavioral Neuroscience*: plasticity in the amygdala, development of new compounds to treat neurological and psychiatric disorders, sleep and circadian rhythm disorders, molecular psychopharmacology; learning, memory, and synaptic plasticity; signal transduction pathways involved in neurodegenerative and neuropsychiatric disorders.
- *Interdisciplinary research projects include*: structure and transcriptional mechanisms controlling neural gene expression, molecular biology, and molecular genetics of neural degeneration and regeneration in the central nervous system; developmental neurochemistry and environmental influences on brain development, especially nutrition; neuroanatomy and neurophysiology of somatosensory and auditory systems, structural plasticity of astrocytes and modulation of synaptic contacts in the central nervous system,

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## FACULTY

### GRADUATE PROGRAM DIRECTOR

- Bernard Schreurs - Ph.D. (University of Iowa)

### ASSOCIATE GRADUATE PROGRAM DIRECTOR

- Zachary Weil - Ph.D. (Ohio State University)

For specific information on the following program, Please see the link to the right:

- Neuroscience, M.S.

For specific information on the following program, please see the link to the right:

- Neuroscience, Ph.D.

## Neuroscience, M.S.

### Degree Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required.		
BIOL 548	Introduction to Cellular and Molecular Neuroscience	3
NSCI 793	Special Topics (Proseminar)	3
NSCI 774	Fundamentals of Neuroscience	4
Journal Club		4
NSCI 760	Neuroscience Journal Club	
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
Research Forum		4
NSCI 761	Neuroscience Research Forum	
NSCI 764	Human Functional Neuroanatomy	3
NSCI 697	Research	3



NSCI 797	Research	4
Total Hours		30

## Major Learning Goals

### NEUROSCIENCE

The goal of the Master's in Neuroscience is to develop a biomedical work force with expertise in the techniques needed to advance in the field of Neuroscience. Successful completion of this degree program will expand employment opportunities well beyond what is available to individuals with a Bachelor's Degree.

The intent is to prepare the highest caliber post-baccalaureate personnel so that they can effectively compete for jobs in biomedical science, particularly in areas where an understanding of Neuroscience will provide a competitive advantage. The program will include training in research techniques or in didactic teaching methodology.

Learning goals:

- Develop skills in critical thinking and problem solving;
- Read and critically interpret current scientific literature, both generally and specifically in Neuroscience;
- Gain an understanding of the functional complexities of systems neuroscience, including motor and somatosensory systems, behavior, cognitive function, developmental biology, and diseases of the nervous system;
- Develop skills to acquire and integrate knowledge in molecular and cellular structure and function of the nervous system;
- Gain experience in conducting experimental protocols, collecting scientific data, making accurate interpretations based on the evidence, and drawing appropriate scientific conclusions;
- Develop awareness of the ethical issues related to animal and human experimentation and the relevant laws and regulations
- Understand responsible and ethical research;
- Learn to identify what qualifies as scientific misconduct and how to avoid it and gain an appreciation for the critical need for intellectual honesty and scientific integrity in research;
- Learn to ascertain that studies are scientifically rigorous, and results are robust and unbiased; and
- Engage in beneficial collaborations with peers and colleagues;
- Students must maintain a 3.0 overall GPA. In addition to the Plan of Study, MS students are expected attend all Neuroscience-sponsored seminars (students are not required to enroll, but expected to attend).

## Neuroscience, Ph.D.

### Doctor of Philosophy

#### MAJOR REQUIREMENTS

Code	Title	Hours
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 702	Biomedical Lab Experience	2
BMS 706	Biomedical Research Methods	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 720	Scientific Writing	2
BMS 747	Foundations for Contemporary Biomedical Research I	4
BMS 777	Foundations for Contemporary Biomedical Research 2	4
Research		35
NSCI 797	Research	
Research Forum		7
NSCI 761	Neuroscience Research Forum	
Journal Club		5
NSCI 760	Neuroscience Journal Club	
NSCI 764	Human Functional Neuroanatomy	3
NSCI 770	Fundamentals of Neuroscience 1	6
F31+ Document and Oral Defense		
Dissertation Proposal		

Dissertation Defense

Electives	6
Total Hours	79

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
BMS 700		1 BMS 701		1 NSCI 797		1
BMS 702		2 NSCI 760		1		
BMS 706		1 NSCI 761		1		
BMS 747		4 NSCI 797		3		
BMS 777		4 NSCI 764		3		
		12		9		1

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours	
NSCI 760		1 NSCI 760		1 BMS 720		2
NSCI 761		1 NSCI 761		1 NSCI 797		1
NSCI 770		6 Written Rigor of Prior Research		F31+ Document and Oral Defense		
NSCI 797		3 NSCI 797		7		
		11		9		3

### Third Year

Fall	Hours	Spring	Hours	Summer	Hours	
NSCI 760		1 NSCI 760		1 NSCI 797		1
NSCI 761		1 NSCI 761		1 BMS 707		2
NSCI 797		5 NSCI 797		7		
Elective		2				
Dissertation Proposal						
		9		9		3

### Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours	
NSCI 761		1 NSCI 761		1 NSCI 797		1
NSCI 797		8 NSCI 797		8		
		9		9		1

Total credit hours: 85

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the first year. The plan of study is developed by the graduate committee in consultation with the student. The courses listed above include the required and elective coursework necessary for the student to finalize his/her plan of study. When the student enters the laboratory of his/her doctoral dissertation mentor repetitive enrollments in research, seminars, and colloquia are typical and will determine total hours necessary for degree completion.

\*This is a suggested plan of study. Course sequences and length of time in program may vary depending on student and altered total credit hours.

### Seminars and Research Forum

Students are required to register for seminar in each semester of residence.

### Journal Club

Students are required to enroll in Journal Club each semester. The course involves the presentation and discussion of current research papers and will help acquaint students with the variety of methods used in scientific research.

### Doctoral Research

Students will conduct research with a dissertation mentor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation mentor.

**Written Rigor of Prior Research**

A Written Rigor of Prior Research is completed during the second year of study.

**F31+ Document and Oral Defense**

An F31+ Document and Oral Defense will be completed in the second year of study.

**Dissertation Proposal/Ph.D. Candidacy**

The dissertation proposal is completed during the third year of study. Admission to Ph.D. candidacy occurs following the successful defense of the dissertation proposal.

**Dissertation Defense and First-Author Paper Requirement**

Students are allowed to defend their dissertation when a minimum of one manuscript with the student as first author, based on dissertation research, is accepted in a peer-reviewed journal. A second manuscript is also required, but does not have to be first-authored or on the dissertation research. The final examination for the Ph.D. degree consists of orally defending a written dissertation in a public seminar and then in private to the graduate dissertation committee. Satisfactory performance in the oral defense will result in recommendation for granting of the Ph.D. degree.

## Major Learning Outcomes

### NEUROSCIENCE

- Independently design experimental protocols, conduct the experiments, analyze the results, and defend the experimental approach to other scientists.
- Develop and plan the test of hypotheses regarding significant problems in neuroscience.
- Ability to effectively reference the relevant literature in support of the student's research project. Ability to identify significant gaps in knowledge on a scientific topic in neuroscience. Ability to critically evaluate the strengths and weaknesses of the scientific literature.
- Effectively communicate research in abstracts written for research presentations, manuscripts for publication, research grant proposals, and the final dissertation.
- Effectively communicate both the student's research and general scientific topics in both informal and formal settings.
- Develop experimental rigor and strategies for conducting reproducible research.
- Demonstrate principles of ethics associated with appropriate research conduct.

## Occupational Therapy

### Undergraduate Degree Offered

- Bachelor of Arts in Human Performance and Health, leading upon successful completion to the Master of Occupational Therapy (MOT) program. Refer to the Undergraduate Catalog (<http://catalog.wvu.edu/undergraduate/schoolofmedicine/occupationaltherapy/>) for more information.

### Graduate Degrees Offered

- Master of Occupational Therapy (MOT)
- Occupational Therapy Doctorate (OTD)

## Introduction

In the fall of 1993, the West Virginia University Board of Trustees approved the establishment of a new master's degree program at WVU, leading to an entry-level master's degree in occupational therapy. WVU accepted its first students into the professional program in the fall semester of 1996. The academic and fieldwork program requires three years to complete. Prior to application, students are required to complete several hours of prerequisite courses, which in most instances will take two years to fulfill.

In response to the rapidly changing environment in Occupational Therapy, the WVU Division of Occupational Therapy has added an OTD degree to their educational offerings. The Division of OT accepted their first class of doctoral students in May 2021. Students entering WVU in the fall of 2019 or later who want to pursue the OTD degree must complete a bachelor's degree, apply, and be accepted to the program before beginning classes in the OT program. The Exercise Physiology major, General Track will have all the necessary prerequisite courses. Students with other degrees who have completed 75% of the prerequisite courses at the time of application will receive equal consideration in admission decisions.

Students will typically apply to the OTD at the beginning of their senior year prior to completion of the Bachelor's degree. However, if accepted, all students must complete all prerequisite courses with at least a "B" prior to the beginning of classes in the OTD program.

Students seeking the MOT degree are admitted as undergraduates and transition to the graduate portion of the MOT program once they successfully complete the Bachelor of Arts (BA) in Human Performance and Health and have met all other Division of OT MOT academic requirements. Please refer to the OT Major section of the undergraduate catalog (<http://catalog.wvu.edu/undergraduate/schoolofmedicine/occupationaltherapy/>) for specific information regarding academic requirements of the undergraduate portion of the MOT program.

## The Profession of Occupational Therapy

Occupational therapy is the only profession that helps people across the lifespan to do the things they want and need to do through the therapeutic use of meaningful daily activities (occupations). Occupational therapists use the "occupations" of self-care, work, and play/leisure activities to increase independence, enhance development, and/or prevent disability. To achieve these goals occupational therapists may also adapt the task or the environment. Occupational therapists enable people of all ages to live life to its fullest by helping them promote health, and prevent—or live better with—injury, illness, or disability. Common occupational therapy interventions include helping children with disabilities to participate fully in school and social situations, helping people recovering from injury to regain skills, and providing supports for older adults experiencing physical and cognitive changes.

Occupational therapists work in a variety of settings. These could include hospitals, rehabilitation centers, nursing facilities, home health, outpatient clinics, private practice, school systems, private organizations, industry, and community agencies such as return to work programs, prisons, and community settings. The number of different places where therapists work is growing every year.

## What to Expect

Like many professional programs, the curriculum in the MOT and OTD occupational therapy programs is fixed and intense. The first professional year begins in the summer with basic science coursework and theories and science relevant to the profession and practice of occupational therapy. Students are immersed in practice from the first fall semester onward through involvement in clinical activities, simulated scenarios and integrated Level I and Level II fieldwork experiences. Coursework includes hands-on learning and inter-professional experiences that are directly linked to academic content, theory, and research. The OTD program finishes with a Doctoral Experiential and Capstone, that allows the student to gain advanced knowledge and skill in an area of interest.

Students in the program are required to participate in community service activities and the School of Medicine's laptop computer purchase lease-to-own program, which provides each student with a state-of-the-art computer that contains course and program-relevant software.

Students in occupational therapy must obtain a grade of at least C or a Satisfactory (S) in all professional courses. In addition, occupational therapy students must maintain an OT coursework GPA of 3.0 or higher while in the OT Program. Since professional courses are offered once per year and are specifically sequenced, course failure may result in program dismissal or the delay of fieldwork and graduation.

Students in the OTD Program must complete all didactic coursework, all fieldwork, and the Doctoral Experiential within a period of six years after commencing the occupational therapy program. Students in the MOT program must complete all didactic coursework and all fieldwork within a period of five years after commencing the occupational therapy program. Furthermore, students in both programs must complete all Level II Fieldwork within eighteen months following completion of academic coursework while remaining within the six- or five-year time frame.

## Housing and Travel for Clinical Fieldwork and Doctoral Experiential

The professional curriculum includes two off-campus, full-time clinical experiences known as Level II Fieldwork and the doctoral curriculum includes an additional 14-week full-time Doctoral Experiential. Clinical fieldwork and the Doctoral Experiential are an essential part of professional training. Students are assigned to Level I and Level II fieldwork sites locally, and at locations around the United States. Assignment to the Doctoral Experiential is done based on student interest and site availability. Students can expect that at least some of their placements will be at a distance from home. Students are responsible for any related fieldwork or experiential expenses (i.e., background checks, physicals, etc.) as well as transportation, housing, and meal expenses. Students are also responsible for making their own housing and travel arrangements for clinical fieldwork and the Doctoral Experiential. Information about housing options for affiliations is available from the academic fieldwork coordinator.

## Background Checks

A felony conviction may impact a graduate's ability to take the NBCOT (National Board for Certification in Occupational Therapy, Inc.) examination and/or obtain a state license. For further information on NBCOT's Character Review Program, interested parties can obtain information from the Board on their web site at: <http://www.nbcot.org> (<http://www.nbcot.org/>).

Students enrolled in the WVU OT education program must complete drug testing and background checks to qualify for clinical and fieldwork experiences.

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## ADMINISTRATION

### CHAIR

- Steven Wheeler - PhD, OTR/L (Virginia Commonwealth University)  
Professor

### VICE CHAIR AND PROGRAM DIRECTOR, OTD

- Diana Davis - PhD, OTR/L (West Virginia University)  
Associate Professor

### PROGRAM DIRECTOR, MOT

- Amy Kurowski-Burt - EdD, MOT, OTR/L (University of Pittsburgh)  
Associate Professor

### ACADEMIC FIELDWORK COORDINATOR

- Brian Scaife - OTD, OTR/L (Chatham University)  
Assistant Professor

### DOCTORAL CAPSTONE COORDINATOR

- SueAnn Woods - PhD, MOT, OTR/L, CHT (West Virginia University)  
Assistant Professor

## FACULTY

### PROFESSOR

- Steven Wheeler - PhD, OTR/L (Virginia Commonwealth University)  
Chair

### ASSOCIATE PROFESSORS

- Amanda Acord-Vira - EdD, MOT, OTR/L (West Virginia University)
- Diana Davis - PhD, OTR/L (West Virginia University)  
Vice Chair and Program Director, OTD
- Amy Kurowski-Burt - EdD, MOT, OTR/L (University of Pittsburgh)  
Program Director, MOT

### ASSISTANT PROFESSORS

- Breanna Adkins - MOT, OTR/L (West Virginia University)
- Jacob Tyler Greenfield - MOT, OTR/L (West Virginia University)
- Heather Livengood - PhD, MOT (University of Pittsburgh)
- Kayleigh Nolan - MOT, OTR/L (West Virginia University)
- Brandon "Seth" Powers - MOT, OTR/L, CHT (West Virginia University)
- Brian Scaife - OTD, OTR/L (Chatham University)  
Academic Fieldwork Coordinator
- SueAnn Woods - PhD, MOT, OTR/L, CHT (West Virginia University)  
Doctoral Capstone Coordinator

### INSTRUCTOR

- Carrie Smith-Bell - MOT, OTR/L (West Virginia University)

### PROFESSOR EMERITUS

- Anne Cronin - PhD, OTR/L (University of Florida)

### ASSOCIATE PROFESSOR EMERITUS

- Randy McCombie - PhD, OTR/L (Loyola University of Chicago)

## Admissions for the 2024 MOT

Students typically spend the first two years of undergraduate study completing pre-requisite courses. Successful applicants to the MOT come from a variety of undergraduate degree backgrounds, including Exercise Physiology; Health and Well-Being; Psychology; Biology; Education; and others, or the equivalent major at the college or university where the student initially enrolled. Students may consult with an advisor or admissions specialist in the School of Medicine's Division of Professional and Undergraduate Programs to identify an appropriate entry major.

Current undergraduate students may apply to the MOT using the OTCAS application system. The application will be open from September 15 – February 15 each year and each class starts in May.

Course and program of study information for the undergraduate phase of the Master of Occupational Therapy (MOT) degree can be found in the Undergraduate Catalog (<http://catalog.wvu.edu/undergraduate/schoolofmedicine/occupationaltherapy/>).

### Admissions Requirements

Admission to the MOT program is competitive. In order to apply and be eligible for an interview for the MOT 2024 program, students must complete the following:

- MOT application through OTCAS between November 15-February 15
- Completion of 20 hours of observation with at least two different occupational therapists in at least two different sites
- Two recommendation letters (professional, academic or personal/non-relative) that speak to your skills, knowledge, aptitude related to becoming an occupational therapist
- Overall and pre-requisite GPA of 3.0
- The following courses\* must be completed prior to admission to the program. Course work will only be accepted from an accredited institution in the United States. Applicants must complete each course with a grade of "C" or higher (including any remaining GEF courses).

Students applying to the program may only be enrolled in a maximum of 3 pre-requisite courses in the Spring semester prior to the start of the program. This does not include any remaining GEF courses.

- English Composition - 6 credits
- Introductory Psychology - 3 credits
- Developmental Psychology - 3 credits
- Abnormal Psychology - 3 credits
- Introduction to Sociology or Anthropology - 3 credits
- Biology with lab - 6-8 credits
- Statistics - 3 credits
- Physiology - 3 or 4 credits
- Medical Terminology - 1 credit
- Completion of General Education Foundations (GEF)\*\* - 9 to 12 credits

\*Some of the courses may have their own departmental pre-requisite requirements. Please check with individual departments to ensure that you have completed all requirements.

\*\*Applicants from another college or university should consult the WVU Office of the University Registrar for information on current General Education Foundations (GEF) (<https://registrar.wvu.edu/curriculum-catalog/general-education-foundations-gef/>) courses and on how to transfer courses to WVU (<https://registrar.wvu.edu/transfer/>).

## Admissions for the 2024 OTD

Students will apply using the OTCAS application system. The dates for OTCAS for OTD applications are August 1 - October 31 each year.

### Admission Requirements

Admission to the OTD program is competitive. In order to apply and be eligible for an interview for the OTD 2024 program, students must complete the following:

The following courses\* must be completed prior to admission to the program. Course work will only be accepted from an accredited institution in the United States. Applicants must complete each course with a grade of "C" or higher (including any remaining GEF courses).

Students applying to the program may only be enrolled in a maximum of 3 pre-requisite courses in the Spring semester prior to the start of the program. This does not include any remaining GEF courses.

- Completion of a baccalaureate degree scheduled to occur before the beginning of the OTD program
- Completion of 20 hours of observation with at least two different occupational therapists in at least two different sites
- Two recommendation letters (professional, academic or personal/non-relative) that speak to your skills, knowledge, aptitude related to becoming an occupational therapist
- An overall 3.00 grade point average on all college course work
- An overall pre-requisite course work grade point average of 3.00
- The following courses must be completed with at least a "B" prior to the beginning of classes in the OTD program. Students applying to the program may only be enrolled in a maximum of 3 pre-requisite courses in the Spring semester prior to the start of the program.
  - Introductory Psychology - 3 credits
  - Developmental Psychology - 3 credits
  - Abnormal Psychology - 3 credits
  - Introduction to Sociology or Anthropology - 3 credits
  - Biology with lab - 6 credits
  - Statistics - 3 credits
  - Physiology - 3 or 4 credits
  - Medical Terminology - 1 credit

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes: 8385 (MOT), 8386 (OTD)

## Degree Requirements

Code	Title	Hours
Minimum grade of C required in all courses. *		
Minimum GPA of 3.0 required.		
OTH 518	Interventions Across the Lifespan 4	4
OTH 521	Professional Development Seminar 1 Fieldwork Prep	1
OTH 522	Professional Development Seminar 2	1
OTH 513	Professional Development Seminar 3	1
OTH 533	Clinical Reasoning for Populations	3
OTH 540	Level 2 Fieldwork 1	6
OTH 550	Education in Occupational Therapy	3
OTH 586	Level 1 Fieldwork 3	2
OTH 607	Management and Supervision in OT	3
OTH 640	Level 2 Fieldwork 2	6
OTH 697	Research (Yr III Fall 2 credits, Spr 2 credits)	4
Total Hours		34

\*

Excludes OTH 540, OTH 640, and OTH 697.

## PROGRAM TIME FRAME

Students must complete all didactic coursework and Level II Fieldworks within a period of five years after commencing the occupational therapy program. Furthermore, all Level II Fieldwork must be completed within eighteen months following completion of academic coursework while remaining within the five-year time frame.

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required.		
OTH 502	Foundations of OT Intervention	3
OTH 504	Anatomic Foundations in OT	4
OTH 505	Disruptions in Occupational Performance	4

OTH 506	Functional Movement Across the Lifespan	2
OTH 507	Functional Kinesiology in Occupational Therapy	2
OTH 508	Developmental Life Tasks	3
OTH 509	Neurobiologic Foundations	4
OTH 510	Occupational Performance Evaluation 1	3
OTH 511	Occupational Performance Evaluation 2	4
OTH 514	Occupational Performance Eval 3	4
OTH 515	Interventions Across the Lifespan 1	4
OTH 516	Interventions Across the Lifespan 2	4
OTH 517	Interventions Across the Lifespan 3	4
OTH 518	Interventions Across the Lifespan 4	4
OTH 521	Professional Development Seminar 1 Fieldwork Prep	1
OTH 522	Professional Development Seminar 2	1
OTH 513	Professional Development Seminar 3	1
OTH 540	Level 2 Fieldwork 1	6
OTH 550	Education in Occupational Therapy	3
OTH 584	Level 1 Fieldwork 1 Clinical Skills	2
OTH 585	Level 1 Fieldwork 2	2
OTH 586	Level 1 Fieldwork 3	2
OTH 630	Clinical Reasoning in OT 1	2
OTH 631	Clinical Reasoning in OT 2	2
OTH 640	Level 2 Fieldwork 2	6
OTH 660	Scientific Inquiry in OT 1	3
OTH 661	Scholarship & Inquiry in OT 2	3
OTH 670	Theories and Science of Occupation	3
OTH 697	Research	1
OTH 708	Leadership in Occupational Therapy	2
OTH 732	Clinical Reasoning in OT 3	3
OTH 733	Clinical Reasoning in OT 4	3
OTH 788	Doctoral Capstone Planning 1	2
OTH 789	Doctoral Capstone Planning 2	2
OTH 807	Entrepreneurship and Innovation in Occupational Therapy	3
OTH 809	Doctoral Thesis Capstone	2
OTH 810	Doctoral Experiential	7
Total Hours		111

## Major Learning Outcomes

### MOT OCCUPATIONAL THERAPY

#### PRACTICE OUTCOMES

- Graduates will be reflective, competent, creative, flexible, and resourceful occupational therapists.
- Graduates will have an understanding of the distinct value of occupational therapy's unique role in promoting health, wellness, and quality of life at the individual, community, and population level.
- Graduates will be able to develop client-centered, evidence-based assessment plans and perform evaluations that reflect the Occupational Therapy Process and Domain.
- Graduates will be able to develop and implement client-centered, evidence-based, theory-driven interventions and discharge plans that reflect the Occupational Therapy Process and Domain.
- Graduates will be able to develop client-centered, evidence-based, theory-driven outcomes that reflect the Occupational Therapy Process and Domain.

#### LEADERSHIP & ADVOCACY

- Graduates will identify the leadership skills for engagement in professional advancement at the individual, group, and population level.
- Graduates will demonstrate skills to communicate about the distinct value/role of occupational therapy across all practice areas.



- Graduates will advocate for occupational therapy with policy makers, third-party payers, regulatory boards, consumers, and colleagues.
- Graduates will be able to identify the effects of health disparities and occupational injustice in the health and occupational performance of their clients.

## **SCHOLARSHIP & ETHICS**

- Graduates will be active consumers of knowledge becoming lifelong occupational therapy learners.
- Graduates will be able to critically appraise the ethical and practical aspects of client care, program development, and research.

## **Major Learning Outcomes**

### **OTD OCCUPATIONAL THERAPY**

#### **PRACTICE OUTCOMES**

- Graduates will be able to critically reflect on and evaluate the environment, opportunities, and barriers to innovate methods to address unmet occupational therapy needs in society.
- Graduates will model the value of occupational therapy's unique role in promoting health, wellness, and quality of life at the individual, community, and population level.
- Graduates will be able to develop client-centered, evidence-based assessment plans and perform evaluations that reflect the Occupational Therapy Process and Domain.
- Graduates will be able to develop and implement client-centered, evidence-based, theory-driven interventions and discharge plans that reflect the Occupational Therapy Process and Domain and evaluate their effectiveness.
- Graduates will be able to develop client-centered, evidence-based, theory-driven outcomes that reflect the Occupational Therapy Process and Domain.

#### **LEADERSHIP & ADVOCACY**

- Graduates will demonstrate effective leadership skills, which include effective communication, to advocate for the importance of occupational engagement.
- Graduates will demonstrate skills to communicate about the distinct value/role of occupational therapy across all practice areas.
- Graduates will advocate for occupational therapy with policy makers, third-party payers, regulatory boards, consumers, and colleagues.
- Graduates will be able to evaluate the effects of health disparities and develop and implement a plan to address these to support occupational justice.

## **SCHOLARSHIP & ETHICS**

- Graduates will be active consumers and inventors of knowledge becoming lifelong occupational therapy learners.
- Graduates will be able to critically appraise the ethical and practical aspects of client care, program development, and research.

## **Accreditation Status OTD**

The West Virginia University entry-level occupational therapy doctoral degree program has applied for accreditation by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 Executive Boulevard, Suite 200, North Bethesda, MD 30852-4929. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its Web address is [www.acoteonline.org](http://www.acoteonline.org).

The program was granted Candidacy status in December of 2020 and was allowed to admit its first cohort of students to begin classes in May of 2021. The program must have a pre-accreditation review, complete an on-site evaluation, and be granted Accreditation Status before its graduates will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). The pre-accreditation review is scheduled for November of 2022 and the onsite evaluation should occur in the Fall of 2023. Once accreditation has been granted students will be able to sit for the NBCOT exam after graduation. After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note: A felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

The timeline for the Accreditation process for the OTD is as follows:

- August 14, 2020 - Candidacy Application Submitted
- December 2020 - ACOTE Candidacy Status Granted
- December 2020 - Students Notified of Acceptance into the Program
- May 2021 - First Class Starts
- November 1, 2022 - Initial Report of Self-Study Due
- April 2023 - ACOTE Decision on Pre-Accreditation Review of Self-Study

- June 2023 - First Class Begins Level II Fieldwork
- August-November 2023 - Initial On-Site Evaluation Timeframe
- December 2023 - ACOTE Review of ROSE and Accreditation Decision
- January 2024 - First Class Begins Doctoral-Level Capstone Component
- May 2024 - First Class Graduates
- 2024 - NBCOT Certification Examination

Since the OTD program has not graduated students as of the publication of this catalog there is no program data on performance of OTD students on the national certification exam. Prospective students, applicants, and interested parties can review WVU MOT program data results for the National Board for Certification in Occupational Therapy (NBCOT) exam at: <https://www.nbcot.org/en/Educators/Home#SchoolPerformance> (<https://www.nbcot.org/en/Educators/Home#SchoolPerformance>).

## Accreditation Status MOT

WVU's Division of Occupational Therapy has been granted accreditation status by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) located at 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. ACOTE's phone number, c/o AOTA, is (301) 652-AOTA. The MOT program at WVU was initially awarded accreditation in 1998 and awarded re-accreditation in 2013. The next scheduled onsite visit for accreditation will be in 2023-2024. ACOTE information may be accessed at [www.acoteonline.org](http://www.acoteonline.org) (<http://www.acoteonline.org>).

Graduates of the program are able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy Inc. (NBCOT). The address for NBCOT is: National Board for Certification in Occupational Therapy, Inc., 1 Bank Street, Suite 300, Gaithersburg, MD 20878. For more information, NBCOT can be contacted at (301) 990-7979 or at <http://www.nbcot.org/>. After successful completion of this exam, the individual will be an occupational therapist, registered (OTR). All states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note: A felony conviction may impact a graduate's ability to sit for the NBCOT examination and/or obtain a state license.

Prospective students, applicants, and interested parties can review WVU MOT program data results for the National Board for Certification in Occupational Therapy (NBCOT) exam at: <https://www.nbcot.org/en/Educators/Home#SchoolPerformance> (<https://www.nbcot.org/en/Educators/Home#SchoolPerformance>).

## Pathologists' Assistant, M.H.S.

### Degree Offered

- Master of Health Science (MHS)

### The Profession

A pathologists' assistant is a healthcare professional who is qualified through academic and practical training to provide services in anatomic pathology under the direction of a qualified pathologist. Pathologists' assistants serve as physician-extenders in the same manner as physician assistants. The addition of pathologists' assistants to the pathology team can reduce cost, increase revenue, and improve workflow in the anatomic pathology lab. In practice, pathologists' assistants (PAs) are responsible for the processing of the surgical pathology specimen from receipt to dissection and description to submission of tissue to histology. In autopsy practice, the PA is involved in reviewing the medical record of the decedent, evisceration, dissection, and selection of tissue for submission to histology as well as formulation of a preliminary anatomic diagnosis and autopsy report under the direction of a pathologist. Many PAs are involved in laboratory management, teaching at the university level, training of residents and medical students, forensic investigation, or research.

### Nature of Program

The graduate program for pathologists' assistants began in January 2008 and is administered by the School of Medicine. Students are admitted into the Master of Health Science program after earning a baccalaureate degree from a regionally accredited college or university. Students with a cumulative grade point average of 3.25 or higher in the BS degree program in Medical Laboratory Science at West Virginia University may be provisionally admitted directly into the pathologists' assistant program at the end of their junior year.

This program is a twenty-four month master's-level program that prepares graduates as allied health professionals for careers as pathologists' assistants. During the second year, the student receives both didactic instruction and practical experience. Students receive practical experience at several of the program's affiliated medical facilities, which are listed on the departmental website (<https://medicine.hsc.wvu.edu/pa/curriculum/clinical-rotations/>).

## Certification

Graduates are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP). Graduation is not contingent upon passing the certification exam.

## Pathologists' Assistant Program Essential Functions

In accordance with Section 504 of the 1973 Vocational Rehabilitation Act, the West Virginia University Pathologists' Assistant program has adopted minimum technical standards for assessment of all applicants.

Because the master's degree in health science/pathologists' assistant signifies that the holder has obtained minimum competencies in all areas of the anatomic pathology laboratories, it follows that graduates must have the knowledge and skills to function in a wide variety of laboratory situations and to perform a wide variety of procedures. A detailed list of these essential functions can be found on the departmental website (<https://medicine.hsc.wvu.edu/pa/admission-process/essential-functions/>).

When an applicant does not meet a non-academic standard as defined in the list of essential functions, and when this would, in the professional judgment of the committee, not satisfy the pathologists' assistant objectives for the student in performing laboratory procedures, education, and research, such opinion will be documented by the Admissions Committee.

The questions are not designed to disqualify an applicant but rather to give the Admissions Committee more complete information about an applicant's ability to meet the following nonacademic standards:

1. Is the candidate able to observe demonstrations and perform procedures in the basic sciences and clinical courses?
2. Is the candidate able to analyze, synthesize, solve problems, and make judgments about results obtained on patient specimens?
3. Does the candidate have sufficient use of the senses of vision, hearing, and somatic sensation necessary to perform the indicated laboratory procedures?
4. Can the candidate reasonably be expected to communicate the results of laboratory tests to other members of the healthcare team with accuracy, clarity, and efficiency?
5. Can the candidate reasonably be expected to learn and perform laboratory tests and operate instruments?
6. Can the candidate reasonably be expected to display good judgment in the analysis of procedure results?
7. Can the candidate reasonably be expected to accept criticism and respond by appropriate modification of behavior?
8. Can the candidate reasonably be expected to possess the perseverance, diligence, and consistency to complete the pathologists' assistant program and to become a practicing pathologists' assistant?

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## ADMINISTRATION

### PROGRAM DIRECTOR

- Michelle M. Costas - MHS, PA(ASCP) (Quinnipiac University)  
Assistant Professor

### CLINICAL COORDINATOR

- Justin Falcon - MHS, PA(ASCP) (West Virginia University)  
Assistant Professor

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## FACULTY

### ASSISTANT PROFESSORS

- Carie Boykin - MHS, PA(ASCP) (West Virginia University)
- Michelle M. Costas - MHS, PA(ASCP) (Quinnipiac University)  
Program Director
- Justin Falcon - MHS, PA(ASCP) (West Virginia University)  
Clinical Coordinator
- Miranda Janucik - MHS, PA(ASCP) (West Virginia University)
- Samantha Pan - MHS, PA(ASCP) (West Virginia University)
- Hannah Smith - MHS, PA(ASCP) (West Virginia University)

### ADJUNCT INSTRUCTOR

- Alyssa Hoffman - MHS, PA(ASCP) (West Virginia University)

## Admissions

All students seeking admission to the Master of Health Science, Pathologists' Assistant program must meet the following admissions requirements:

- Hold an earned baccalaureate degree from a regionally accredited institution of higher education
- Successfully complete the specific prerequisite coursework in mathematics and sciences
- Have a cumulative GPA of 3.0 (on a 4.0 scale)
- Submit two letters of recommendation electronically, as part of the application
- Complete a shadowing experience with a certified PA in surgical pathology or have equivalent work experience
- Complete an interview with the admissions committee
- Submit an electronic admissions packet including the application form, personal statement, essential functions form, shadowing statement, and official transcripts from all colleges and universities attended

## REQUIREMENTS

Requirement	Description
College Prep	Baccalaureate Degree
Prerequisite Courses	8 hours of Biology with laboratory
Prerequisite Courses	3-4 hours of Human Anatomy
Prerequisite Courses	8 hours of College Chemistry with lab
Prerequisite Courses	3-4 hours of Organic Chemistry (CHEM 231 at WVU) or 3-4 hours of Biochemistry
Prerequisite Courses	3-4 hours of Microbiology, Immunology, Parasitology, or Virology
Prerequisite Courses	3 hours of college Algebra or higher
Prerequisite Courses	3 hours of English Composition or higher
Grade Point Average required	3.0 cumulative
Grade Point Average preferred	3.0 in the prerequisite courses
Recommendations	Two letters of recommendation
Interview	A personal interview with the Pathologists' Assistant Program Admissions Committee

## Shadowing or Work Experience

Applicants must complete a shadowing experience with a practicing pathologists' assistant in surgical pathology or have applicable work experience in surgical or autopsy pathology. A statement regarding this experience is required in the application packet. Please contact the program specialist for assistance if necessary.

## Admissions Classifications

Students must have a baccalaureate degree prior to beginning the professional sequence. However, the program has established the following admissions classifications:

- **Direct Admit:** a limited number of students completing the bachelor of science program in Biomedical Laboratory Diagnostics with an emphasis in either Medical Laboratory Science or Histotechnology who have a cumulative GPA of 3.25 may apply to the Master of Health Science, Pathologists' Assistant Program at the end of their junior year. These students will be admitted into the program after completing the BS in Medical Laboratory Science at West Virginia University.
- **Regular Decision:** a student applies in the admission cycle during their senior year.

Typically, applications will be submitted in the application period which extends from January 1 to April 30 of the senior year. Admission is contingent upon satisfactory completion of the baccalaureate degree.

## Performance Standards

Students are required to maintain a minimum GPA of 3.0 to progress in the first and second year of the professional program.

## Application Procedure

Each year, the pathologists' assistant program selects a limited number of students from the applications received for admission. Applications for admission to the program are available between December 1 and March 15 for the class beginning the following January. The application fee is sixty dollars. A completed admissions packet contains the following: completed application form (electronic), personal and shadowing statements, official transcripts, two recommendation letters, and the signed essential functions form. Each applicant must arrange for transcripts to be sent directly from all

institutions attended to the Office of Graduate Admissions. When the application is complete, the file is sent to the Pathologists' Assistant Admissions Committee. Recommendation letters can be from faculty in a pre-requisite course, a lab professional with whom the applicant has worked, current employer, or professional peer. Interviews are granted to qualified applicants after the committee has reviewed the completed admissions packet.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8357

## Degree Requirements

Code	Title	Hours
MICB 702	Microbiology	5
PA 507	Human Anatomy 1	3
PALM 465	Medical Laboratory Management	2
PA 527	Human Anatomy 2	3
PALM 605	Advanced Microanatomy	2
PALM 610	Pathology Assistant Education Methods	1
PALM 620	Clinical Pathology Seminar	2
PALM 625	Anatomical Pathology Techniques	4
PALM 627	Pathology Assistant Practicum 1	9
PALM 628	Pathology Assistant Practicum 2	9
PALM 629	Pathologists' Assistant Practicum 3	7
PALM 630	Pathology Review 1	2
PALM 631	Pathology Review 2	2
PSIO 743	Fundamentals of Physiology	5
PALM 648	Surgical and Autopsy Pathology Procedures	3
PALM 750	Systemic Pathology for Pathologists' Assistant Students	6
PALM 650	Introduction to Disease Mechanisms	4
PALM 652	Histology for Pathologists' Assistants	3
PALM 600	Pathologists' Assistant Microanatomy	2
Total Hours		74

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
MICB 702		5 PA 507		3 PALM 620	2
PSIO 743		5 PALM 600		2 PALM 750	6
PALM 465		2 PALM 625		4 PA 527	3
PALM 605		2 PALM 610		1	
PALM 648		3 PALM 650		4	
		PALM 652		3	
		17		17	11

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
PALM 629		7 PALM 627		9 PALM 628	9
PALM 631		2 PALM 630		2	
		9		11	9

Total credit hours: 74

## GRADUATION REQUIREMENTS

Students are required to maintain an overall GPA of at least 3.0 as a graduate student while enrolled in the pathologists' assistant program. A minimum 3.0 GPA is required to graduate from the program.

## Major Learning Outcomes

### PATHOLOGISTS' ASSISTANT

The Pathologists' Assistant Program prepares students to be highly skilled allied health professionals providing services in both surgical and autopsy pathology. Individuals are prepared both academically and professionally to be contributing members of the healthcare team.

Graduates will:

- Demonstrate proficiency in surgical pathology
  - Distinguish between normal and abnormal tissue both grossly and microscopically
  - Choose the appropriate tissue to submit based on clinical history
  - Gross complex surgical cases using the most recent cancer staging protocols
  - Choose the appropriate stains - routine, special, or IHC, - to assist the pathologist in making a diagnosis
- Demonstrate proficiency in autopsy pathology
  - Perform an autopsy using different techniques
  - Gather pertinent clinical history and all necessary documentation for a case
  - Compose a gross description for the autopsy report
  - Select tissue for processing
- Demonstrate concepts in medical laboratory management
  - Apply management principles to regulation and professional oversight
  - Compare healthcare delivery systems
  - Discuss ethical principles and decision making
  - Identify basic management concepts, functions, and styles
- Determine a differential diagnosis for tumors based on gross appearance and clinical history
- Engage in activities and behavior that promote the profession and positively represent the program
- Instruct residents, medical students, and other health professionals in surgical and autopsy techniques

#### Accreditation

The WVU Pathologists' Assistant Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, and (773) 714-8880.

## Pathophysiology, Rehabilitation & Performance, Ph.D

### Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

#### Director of PhD Studies

John M. Hollander, PhD, Professor, [jhollander@hsc.wvu.edu](mailto:jhollander@hsc.wvu.edu) ([johollander@hsc.wvu.edu](mailto:johollander@hsc.wvu.edu))  
<https://medicine.wvu.edu/exercise-physiology/pathophysiology-rehabilitation-and-performance-phd/>

### Nature of the Program

Exercise physiology is the comprehensive study of the biophysical, biomechanical and biochemical processes that contribute to movement production and disease progression. Advances in exercise physiology research have provided the foundation for human enhancement and medical treatment. The focus of the program is to promote student innovation and foster the development of independent thought. Students and faculty interact in a collegial fashion facilitating open inquiry and collaborative science.

Students entering the Pathophysiology, Rehabilitation, and Performance doctoral program have the ability to select a specialization in one of three research tracks: 1) Cardiovascular and Metabolic Diseases (CMD); 2) Muscle Pathophysiology (MPP); and 3) Rehabilitation Science and Engineering (RSE).

- **Cardiovascular and Metabolic Diseases (CMD):** Cardiovascular and respiratory function/dysfunction are studied at cellular, molecular, genetic and whole organ level in human and animal models that mimic chronic diseases, such as obesity, diabetes mellitus, stroke, and environmental exposure. Mitochondrial dysfunction, vascular remodeling, blood flow disruption, exercise and metabolic dysfunction are specific interests.

- **Muscle Pathophysiology (MPP):** Muscle function and dysfunction are studied under conditions of aging, cancer, disuse and obesity at the cellular, molecular, genetic and whole organ levels. Mechanisms contributing to dysfunction and therapeutic interventions are tested utilizing appropriate pre-clinical and clinical experimental models.
- **Rehabilitation Science and Engineering (RSE):** The research focus is on enhancing the understanding of the basic processes associated with sensorimotor control of reaching movements, balance, and locomotion after central or peripheral damage using tissue engineering, neurophysiology, biomechanics and computational neuroscience methodologies.

The philosophy of the program is to provide flexibility in coursework to support the student's research interest in accordance with the selected track. The student and faculty mentor will define an individualized curriculum to address specific requirements for accomplishing the dissertation research. The program fosters a high degree of collaboration among faculty with interests in clinical medicine and basic research. Completion of the doctoral degree is realized when the student successfully disseminates the research results in peer-reviewed journals, national/international conferences, and to the dissertation committee. Typically, five years are required to realize this goal.

Current areas of scientific inquiry among the faculty in exercise physiology include the following:

- Aging and repetitive use injury in skeletal muscle
- Cancer cachexia and muscle wasting diseases
- Mitochondria dysfunction in pathophysiological states
- Metabolic syndrome and diabetes mellitus
- Control of movement in health and disease
- Development of assisted technologies and wearable devices
- Assessment and enhancement of human performance
- Microvascular dysfunction in disease states
- Stem cell biology and mechanical signal and tissue regeneration
- Mechanisms of stroke and post-stroke recovery

Upon completion of the doctoral degree, the student will be capable of undertaking a career in a traditional research setting (academic, industrial, government, etc.). The acquired training will also prepare students for careers outside of a traditional research setting. Students will be periodically exposed to diverse opportunities for career development.

## Degree Requirements

Code	Title	Hours
Minimum overall GPA of 3.0 required.		
Minimum GPA of 3.0 in all EXPH courses required.		
A grade of B- must be earned in all required courses.		
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 702	Biomedical Lab Experience	2
BMS 706	Biomedical Research Methods	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 720	Scientific Writing	2
BMS 747	Foundations for Contemporary Biomedical Research I	4
BMS 777	Foundations for Contemporary Biomedical Research 2	4
EXPH 787	Cardiopulmonary Physiology	3
EXPH 793	Special Topics (Human Performance and Rehabilitation Engineering)	3
Graduate Seminar		3
EXPH 796	Graduate Seminar	
Research		55
EXPH 797	Research	
Electives		6
BMS 715	Molecular Genetics (recommended)	
PSIO 750	Graduate Physiology and Pharmacology 1	
PSIO 751	Graduate Physiology and Pharmacology 2	
Candidacy Exam		



## Dissertation Defense

Total Hours

87

Students will complete the BMS course sequence including the laboratory rotations before beginning to work with a dissertation research mentor and starting the specialized doctoral courses in the Exercise Physiology program.

**Seminars and Research Forum**

Students will present three seminars during their graduate study. The first seminar is on a topic outside of the student's research area. The second seminar is the public presentation of the dissertation proposal, which is the background and proposed research for the dissertation project. The third seminar is the public presentation of the dissertation defense.

**Journal Club**

Students are required to enroll in Journal Club each semester. The course involves the presentation and discussion of current research papers and will help acquaint students with the variety of methods used in scientific research.

**Doctoral Research**

Students will conduct research with a dissertation mentor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation mentor.

**Dissertation Proposal/Ph.D. Candidacy**

The candidacy exam is completed in the third year of study. Admission to Ph.D. candidacy occurs following the successful defense of the dissertation proposal.

**Dissertation Defense and First-Author Paper Requirement**

Students are allowed to defend their dissertation when a minimum of one manuscript with the student as first author, based on dissertation research, is accepted in a peer-reviewed journal. The final examination for the Ph.D. degree consists of orally defending a written dissertation in a public seminar and then in private to the dissertation committee. Satisfactory performance in the oral defense will result in recommendation for granting of the PhD.

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the first year. The plan of study is developed by the graduate committee in consultation with the student. The courses listed above include the required and elective coursework necessary for the student to finalize his/her plan of study. When the student enters the laboratory of his/her doctoral dissertation mentor repetitive enrollments in research, seminars, and colloquia are typical and will determine total hours necessary for degree completion.

**Major Learning Outcomes****DOCTOR OF PHILOSOPHY (PHD) IN PATHOPHYSIOLOGY, REHABILITATION & PERFORMANCE**

Students will:

- Attain a comprehensive understanding of the biophysical, biomechanical and biochemical processes that contribute to movement production and disease progression
- Learn to apply theories and methodologies to address fundamental questions in health-specific issues related to exercise physiology
- Obtain independent and critical thinking skills requisite for designing, conducting, and interpreting research data in an effort to advance knowledge related to health and disease through creative and innovative research
- Effectively communicate knowledge through oral and written means by disseminating research findings that have the potential to improve health and quality of life
- Demonstrate principles of ethics associated with appropriate research conduct
- Acquire technical skills requisite for conducting experimental procedures

**Physician Assistant, M.H.S.****Degree Offered**

- Master's in Health Sciences (MHS)

**Nature of the Program**

The Physician Assistant Studies curriculum is designed to provide a foundation in medical sciences, followed by an in-depth study of systems-based clinical medicine. The program consists of 4 semesters of didactic coursework followed by 12 months of clinical rotations. The clinical phase includes



rotations in family medicine, pediatrics, internal medicine, general surgery, emergency medicine, women's health, behavioral medicine, and rural medicine. Consistent with our mission, the program has a focus on population health, health disparity, and rural and Appalachian health issues.

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## ADMINISTRATION

### PROGRAM DIRECTOR

- Jennifer Momen - MD, MPH, FAAP (State University of New York at Buffalo, West Virginia University)  
Assistant Professor

### MEDICAL DIRECTOR

- Benjamin Silverberg - MD, MSc, FFAFP, FCUCM (University of Connecticut, Duke University)  
Associate Professor

### DIRECTOR OF CLINICAL EDUCATION

- Gregory Selasky - MS, PA-C (Alderson Broaddus University)  
Assistant Professor

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## FACULTY

### ASSOCIATE PROFESSOR

- Benjamin Silverberg - MD, MSc, FFAFP, FCUCM (University of Connecticut, Duke University)  
Medical Director

### ASSISTANT PROFESSORS

- David Baldwin - MSPA, PA-C (Mountain State University/University of Charleston)
- Jennifer Momen - MD, MPH, FAAP (State University of New York at Buffalo, West Virginia University)  
Program Director
- Forrest Olgers - MPAS, MBA, PA-C (Alderson Broaddus University)
- Gregory Selasky - MS, PA-C (Alderson Broaddus University)  
Director of Clinical Education

## Admissions

In order to be eligible for admission, a bachelor's degree in any discipline from an accredited U.S. institution is required. In addition, students must fulfill the following:

- Submit GRE test scores (Institution Code 4275).
- Have a minimum cumulative undergraduate and prerequisite grade point average of 3.2.
- Complete all prerequisite courses with a grade of C or higher.
- Complete 80 hours of experience in a clinical setting (paid or unpaid). Health care experience obtained to meet requirements for any course or degree program may not be counted toward the 80 hours of experience in a clinical setting. Examples of qualifying health care experience include shadowing a physician or physician assistant and working as a patient care aid, medical assistant, respiratory/occupational/physical therapist, paramedic, emergency medical technician, or scribe. Applicants logging more than the minimum of 80 hours will not receive additional preference in the admission selection process. Please note that individuals with hands-on patient care experience and those with decision-making responsibility will receive additional preference (see *Selection Process* section for details). All healthcare experience must have been obtained no earlier than the freshman year of college.
- Three letters of recommendation (one from a college or university professor, one from a supervisor of the clinical experience including evidence of how the student contributed to the delivery of care, and a third from either of the two preceding categories).

## Prerequisite Courses

The following courses are required in order to be eligible for admission to the program:

- Biology with lab - 4 credits
- General Chemistry with lab - 8 credits
- Organic or Biochemistry with lab - 4 credits
- \*Human Anatomy with lab - 4 credits
- \*Human Physiology - 3 credits
- Microbiology - 3 credits

- Psychology - 3 credits
- Statistics - 3 credits
- Medical Terminology - 1 credit

**Total Credits: 33**

**Please note the following information about prerequisite courses:**

- Prerequisite courses must be completed at a regionally accredited 2- or 4-year U.S. college or university within the 10 years prior to the date of matriculation.
- A prerequisite course may be retaken, and if a higher grade is earned upon retaking a course, the second grade will be used to calculate the prerequisite GPA. However, both grades will be reflected in the cumulative GPA.
- Credit hours represent semester hours.
- Advanced placement (AP) courses will not be accepted for prerequisite requirements.
- Due to changes in course delivery method associated with the COVID-19 pandemic, online courses taken during the spring 2020 semester and beyond will be accepted to meet ALL PA program prerequisite requirements. This policy will be in place until further notice and the online courses will meet requirements for future admissions cycles provided that they meet other prerequisite requirements as specified above. Courses in the natural sciences (i.e., biology, chemistry, physiology, and microbiology) taken prior to the spring 2020 semester must have been taken in person. Online courses in anatomy taken prior to the spring 2020 semester must receive approval of the PA Admissions Committee to fulfill this requirement.
- \*Combined Anatomy and Physiology courses are accepted; however, an applicant must take two semesters of Anatomy and Physiology with labs to fulfill the Anatomy and Physiology requirements; mammalian anatomy lab will be acceptable, but human anatomy lab is preferred
- An applicant may have prerequisites in progress at the time of application, however all outstanding prerequisites must be successfully completed prior to matriculation. In order to fairly evaluate each candidate, **no more than two prerequisite courses may be outstanding at the time of the interview.**
- There will be no waivers or exceptions to the requirements.

## Important Dates

Please refer to the Physician Assistant Studies program website (<http://medicine.wvu.edu/physician-assistant-studies/admission/application-process/>) for more information on important dates and the application timeline.

## Selection Process

### INTERVIEWS

Interviews will be conducted during the summer and, at the discretion of the department, may be conducted virtually or in person. Please refer to the Physician Assistant Studies program website (<http://medicine.wvu.edu/physician-assistant-studies/admission/application-process/>) for more information.

### FINAL SELECTION PROCESS

A total of 25 students will be admitted to each class.

Points will be awarded on the Admission Selection Rubric and candidates will be selected based upon the following criteria:

- Cumulative Undergraduate, Prerequisite, and Science GPA
- GRE scores (Verbal, Quantitative, and Analytical Writing)
- West Virginia residency status
- Interview score (average score of two interviewers)
- Strength of letters of recommendation (average score of three letters)
- Strength of CASPA statement and responses to two WVU-specific questions
- Quality and relevance of health care experience (see detail below)

Preference will be given to individuals based on previous health care experience as follows, and **in order of increasing preference:**

- No hands-on patient care (shadowing a physician or physician assistant)
- Involvement in patient care team as a scribe
- Hands-on patient care with limited need for professional judgment (patient care aid, medical assistant, physical therapy assistant)
- Patient care involving assessment and requiring some professional judgement (emergency medical technician (EMT), respiratory therapist, dietician)
- Patient care with independent decision-making and/or requiring significant professional judgement (paramedic, registered nurse)

In the event of a tie in the Admission Selection Rubric score, the following criteria will be applied in the order below until there is no longer a tie at the 25<sup>th</sup> position:

1. West Virginia residency status
2. Score on WVU mission question
3. Prerequisite GPA

Final decisions regarding admission will be made by the Admissions Committee.

Please note that applicants who are offered admission will often have academic records which exceed the published minimum standards. Data regarding the characteristics of successful applicants for the class entering in January 2023 will be provided when available.

## OFFERS OF ADMISSION

Applicants accepted to the program will receive an offer of admission through their preferred email (as identified in CASPA) with a link to the online *Declaration of Acceptance* form. Those wishing to accept a seat in the class will have one week to complete the online *Declaration of Acceptance* form. Applicants accepting the offer of admission will be sent an invoice from the WVU Graduate Admissions Office for a non-refundable deposit of \$1,000, which will be due within two weeks of receipt of the invoice. The deposit will be applied towards the first semester tuition. Failure to pay the deposit within the required time period will result in forfeiture of the seat.

An offer of admission may be revoked if an applicant's application materials are found to be falsified. An enrolled student may be dismissed from the program if the student's application materials are found to be falsified, consistent with applicable policies or procedures as contained in the WVU Graduate/Professional Catalog section on *Academic and Professional Standards*.

## POST-ACCEPTANCE REQUIREMENTS

The physician assistant studies program at West Virginia University begins in the spring term (January). Students accepting a seat in the program must submit proof of compliance with all post-acceptance requirements to the appropriate office (as instructed in the acceptance letter) by no later than the first day of orientation (January 5, 2023). Students failing to meet these requirements may not be permitted to matriculate into the program.

Students completing a Bachelor's degree or prerequisite course requirements in the fall semester preceding matriculation will be required to submit an unofficial transcript documenting degree conferral or prerequisite course completion by no later than the first day of orientation (January 5, 2023). The official transcript documenting degree and/or course completion is still required and must be received no later than the last day of class for the spring semester. Failure to complete this requirement will result in dismissal from the program.

In the event that a student is offered admission to the program after December 1<sup>st</sup>, the deadlines for submission of post-acceptance requirements will be stated in the acceptance letter and will supersede the deadlines provided above.

Post-acceptance requirements include:

- Official transcript verifying bachelor's degree from an accredited U.S. institution with cumulative undergraduate GPA of 3.2 or higher
- Official transcript verifying completion of all prerequisite courses within the 10 years prior to matriculation at a regionally accredited U.S. 2- or 4-year college or university with a grade of 'C' or higher and prerequisite GPA of 3.2 or higher
- Health screening form
- Proof of health insurance
- Proof of immunizations and titers
- Background check and drug screening
- Technical standards attestation

### Health Sciences & Technology Academy (HSTA) Scholars

One HSTA tuition waiver will be offered by the physician assistant studies program if a HSTA scholar is selected for admission to the program through the published admission selection process. In the event that more than one HSTA scholar is accepted for admission, the applicant with the strongest academic credentials (average of cumulative undergraduate GPA and prerequisite GPA) will be awarded the tuition waiver.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8373

## Degree Requirements

A minimum grade of "C-" is required in EACH didactic course; however, an overall GPA of 3.0 will be required to progress in the program. There will be a Committee on Academic and Professional Standards that will assign remediation plans and penalties associated with failure to meet these standards.

Code	Title	Hours
<b>A minimum cumulative GPA of 3.0 is required.</b>		
PA 507	Human Anatomy 1	3
PA 518	Health and Disease Across the Lifespan	3
PCOL 516	Pharmacology for PA	3
PA 515	Pathophysiology 1	2
PA 517	Genomic Medicine	1
PA 510	Physician Assistant Practice 1	2
PA 511	Evidence Based PA Practice 1	1
PA 512	Physical Diagnosis	3
PA 527	Human Anatomy 2	3
PA 522	Clinical Procedures 1	3
PA 524	Diagnostic Medicine 1	2
PA 523	Clinical Medicine & Pharmacotherapeutics 1	3
PA 528	Principles of Behavioral Health for PA	1
PSIO 743	Fundamentals of Physiology	5
PA 535	Pathophysiology 2	3
PA 533	Clinical Medicine & Pharmacotherapeutics 2	4
PA 534	Diagnostic Medicine 2	3
PA 530	Physician Assistant Practice 2	1
PA 531	Evidence Based PA Practice 2	2
PA 542	Clinical Procedures 2	2
PA 547	Neurobiology	4
PA 553	PA Practice in Pediatrics & Geriatrics	2
PA 549	Prevention and Community Health for PA	3
PA 541	Evidence Based PA Practice 3	1
PA 543	Clinical Medicine & Pharmacotherapeutics 3	4
PA 540	PA Practice in the US Health System	2
PA 610	Family Medicine PA Practice	6
PA 620	Internal Medicine PA Practice	8
PA 630	Pediatric PA Practice	6
PA 640	Women's Health PA Practice	5
PA 650	Surgery PA Practice	6
PA 660	Behavioral Medicine PA Practice	4
PA 670	Emergency Medicine PA Practice	4
PA 680	Elective PA Practice	4
PA 685	Rural PA Practice	4
PA 686	PA Summative Evaluation	1
Total Hours		114

## Suggested Plan of Study

First Semester	Hours
PA 507	3
PA 518	3
PCOL 516	3
PA 515	2
PA 517	1
PA 510	2
PA 511	1
PA 512	3

<b>Second Semester</b>	<b>Hours</b>
PA 527	3
PA 522	3
PA 524	2
PA 523	3
PA 528	1
	12
<b>Third Semester</b>	<b>Hours</b>
PSIO 743	5
PA 535	3
PA 533	4
PA 534	3
PA 530	1
PA 531	2
	18
<b>Fourth Semester</b>	<b>Hours</b>
PA 542	2
PA 547	4
PA 553	2
PA 549	3
PA 541	1
PA 543	4
PA 540	2
	18
<b>Fifth Semester</b>	<b>Hours</b>
PA 610	6
PA 620	8
	14
<b>Sixth Semester</b>	<b>Hours</b>
PA 630	6
PA 640	5
PA 650	6
	17
<b>Seventh Semester</b>	<b>Hours</b>
PA 660	4
PA 670	4
PA 680	4
PA 685	4
PA 686	1
	17

Total credit hours: 114

## Major Learning Outcomes

### PHYSICIAN ASSISTANT

Graduates of the physician assistant studies program will demonstrate competencies in each of six domains as noted below.

#### MEDICAL KNOWLEDGE

- Recognizes the underlying pathophysiologic processes of commonly encountered medical and surgical conditions
- Recognizes signs and symptoms of disease and abnormal findings on diagnostic studies
- Recognizes risk factors for acute and chronic medical conditions including mental health conditions

- Understands the effect of the patient's environment and stress on health outcomes and quality of life
- Understands the importance of using evidence-based interventions for disease prevention and health maintenance

## **INTERPERSONAL AND COMMUNICATION SKILLS**

- Communicates with patients and other members of the healthcare team in a professional and respectful manner
- Recognizes the unique contributions of other health care providers to patient care
- Demonstrates rapport with patients while obtaining and providing information
- Partners with patients in formulating a treatment plan
- Collaborates effectively with all members of the health care team
- Identifies relevant information from the medical record and accurately documents patient encounters and procedures

## **CLINICAL AND TECHNICAL SKILLS**

- Obtains a thorough and accurate medical history
- Performs a thorough and accurate physical examination for patients of all ages
- Performs commonly utilized medical and surgical procedures with proper technique and attention to patient safety
- Effectively counsels patients and provides education using a method tailored to the patient

## **PROFESSIONAL BEHAVIORS**

- Understands the legal requirements for practice as a physician assistant
- Demonstrates respect, compassion, and sensitivity in patient interactions
- Applies ethical principles to the care of patients
- Maintains patient confidentiality in all venues
- Respects the doctrines of informed consent and shared decision-making
- Seeks opportunities for professional development and scholarship
- Demonstrates willingness to teach and learn from fellow health professionals

## **PRACTICE-BASED LEARNING AND IMPROVEMENT**

- Identifies and uses evidence-based resources to answer clinical questions
- Recognizes and addresses personal deficits in knowledge and clinical skills
- Recognizes and addresses personal biases which may affect patient care
- Advocates effectively for patients as they navigate the health care system
- Recognizes and addresses the challenges facing patients in rural and/or underserved areas
- Takes into account costs to the patient and the health care system when ordering medication, diagnostic studies, or therapeutic interventions

## **CLINICAL REASONING AND PROBLEM SOLVING SKILLS**

- Selects diagnostic studies most likely to be useful in evaluation of patients with acute and chronic disease
- Formulates a patient-specific differential diagnosis using patient data including history, physical examination, and diagnostic studies
- Suggests appropriate treatment modalities for emergent, acute and chronic medical and surgical conditions, including pharmacologic treatment and behavioral modifications
- Identifies the appropriate site of care based on clinical presentation and patient demographics

- Reflects on the possible causes of a patient's failure to respond to treatment

## Accreditation

The ARC-PA has granted Accreditation-Provisional status to the West Virginia University Physician Assistant Program sponsored by West Virginia University.

Accreditation-Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program's ability to meet the ARC-PA Standards or when a program holding Accreditation-Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students.

Accreditation-Provisional does not ensure any subsequent accreditation status. It is limited to no more than five years from matriculation of the first class.

Additional details on the West Virginia University Physician Assistant Program and data disclosures as required by ARC-PA are available on the program website (<http://medicine.wvu.edu/physician-assistant-studies/accreditation/>).

## Physical Therapy, D.P.T.

### Degree Offered

- Doctor of Physical Therapy (DPT)

### Nature of the Program

The WVU Division of Physical Therapy was established in 1970 under the auspices of the School of Medicine to help meet the need for physical therapists in West Virginia. The program became an entry-level doctoral degree program in Fall 2005. The program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), a specialized body recognized by the Council on Postsecondary Accreditation. Forty full-time students are admitted in a typical annual admissions cycle. Preference is given to West Virginia residents and non-residents who have attended a West Virginia college or university or who have ties to West Virginia. All other non-residents who meet program requirements will also be considered for admission.

Students admitted into the program complete three years of combined classroom, laboratory, and clinical education, and part-time and full-time supervised clinical practice in various clinics in West Virginia and other states. A doctor of physical therapy (DPT) degree is awarded upon completion of the program which entitles the graduate to apply for examination for state licensure. A license to practice physical therapy is required by all states.

### The Profession of Physical Therapy

Physical therapy is a hands-on health care profession that defines and promotes the movement system as the foundation for optimizing movement to improve the health of society. The physical therapist is uniquely qualified to evaluate and manage an individual's movement system across the lifespan to promote optimal development; diagnose impairments, activity limitations, and participation restrictions; and provide interventions targeted at preventing or ameliorating activity limitations and participation restrictions. The movement system is the core of physical therapist practice, education, and research.

Demand for physical therapy services is expected to continue over the next ten years. The Bureau of Labor Statistics projects growth of 21 percent from 2020 to 2030, which is much faster than average for all occupations. The demand for physical therapists in all practice settings is affected by such factors as an aging population and increased emphasis on a healthy, active lifestyle. The American Physical Therapy Association (APTA) is the professional organization which represents therapists on healthcare issues and advocates for the profession with government and payor agencies to assure that physical therapy will continue to be a favorable career choice.

Physical therapists are respected members of the healthcare team. They work with other healthcare providers such as physicians, occupational therapists, music and arts therapists, rehabilitation nurses, psychologists, social workers, dentists, podiatrists, speech pathologists, and audiologists. Physical therapists work in hospitals, private physical therapy offices, community health centers, corporate or industrial health centers, sports facilities, research institutions, rehabilitation centers, nursing homes, home health agencies, schools, pediatric centers, and colleges and universities.

Some physical therapists work as employees in these settings, while others are self-employed as owners or partners in private practices. Settings, employment arrangements, career responsibilities, and career opportunities depend on the interests and skills of each practitioner.

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## ADMINISTRATION

### CHAIR

- Ivan Mulligan - PT, DSc, ATC, CSCS (Rocky Mountain University)  
Associate Professor; Sports and Orthopedic Physical Therapy

### ASSISTANT DEAN AND DIRECTOR, PT CLINICAL SERVICES

- Corrie Mancinelli - PT, PhD, GCS (West Virginia University)  
Professor; Orthopedics and Geriatrics

### DIRECTOR OF PROFESSIONAL DEVELOPMENT

- Anne Swisher - PT, PhD, CCS, FAPTA (West Virginia University)  
Professor; Cardiopulmonary, Oncology

### DIRECTOR OF CLINICAL EDUCATION

- Ralph Utzman - PT, MPH, PhD (West Virginia University, Virginia Commonwealth University)  
Professor; Balance Disorders, Professional Roles

### DIRECTOR OF RESIDENCY EDUCATION

- Renee McGinnis - PT, DPT, OCS (West Virginia University)  
Assistant Professor; Orthopedic PT

### CHAIR, ADMISSIONS COMMITTEE

- Carol Waggy - PT, PhD, CHS (West Virginia University)  
Associate Professor

### CHAIR, CURRICULUM COMMITTEE

- Teresa Rice - PT, NCS, MPH, EdD (West Virginia University)  
Associate Professor

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## FACULTY

### PROFESSORS

- Dina Jones - PT, PhD (University of Pittsburgh)  
Arthritis, Community-Based Physical Activity
- Corrie Mancinelli - PT, PhD, GCS (West Virginia University)  
PT Clinical Services, Orthopedics and Geriatrics
- MaryBeth Mandich - PT, PhD (West Virginia University)  
Neuroscience, Pediatric Physical Therapy
- Bill Stauber - PT, PhD (Rutgers University)  
Electrotherapy, Muscle Physiology
- Anne Swisher - PT, PhD, CCS, FAPTA (West Virginia University)  
Cardiopulmonary, Oncology
- Ralph Utzman - PT, MPH, PhD (West Virginia University, Virginia Commonwealth University)  
Clinical Education, Professional Roles, Balance Disorders

### ASSOCIATE PROFESSORS

- Kimeran Evans - PT, DPT (Virginia Commonwealth University)  
Clinical Education, General Physical Therapy
- Valeriya Gritsenko - PhD (University of Alberta, Edmonton)  
Neuroscience, Motor Control
- Ivan Mulligan - PT, DSc, ATC, CSCS (Rocky Mountain University)  
Sports and Orthopedic Physical Therapy
- Teresa Rice - PT, NCS, MPH, EdD (West Virginia University)  
Neurologic Physical Therapy
- Carol Waggy - PT, PhD, CHS (West Virginia University)  
Hand Therapy, General Orthopedics



## ASSISTANT PROFESSORS

- Cheryl Brandmeir - PT, MS (Ithaca College)  
Movement Disorders
- Megan Burkart - DPT (West Virginia University), Board Certified Oncology Clinical Specialist  
Oncology Physical Therapy
- Yu-Jen Chang - PT, PhD (University of Southern California)  
Musculoskeletal, Research, Prosthetics and Orthotics
- Melissa Henry - DPT, OCS (West Virginia University)  
Orthopedic Physical Therapy
- Renee McGinnis - OCS, PT, DPT (West Virginia University)  
Professional Roles, Orthopedics
- Justin Payette - PT, DPT, CSCS, SCS (Marquette University)

## CLINICAL ASSISTANT PROFESSOR

- Michael Timko - PT, MS, FAAOMPT (West Virginia University, University of Pittsburgh)  
Orthopedic and Manual Therapy

## VISITING FACULTY

- Madalyne James - DPT (West Virginia University)  
Visiting Instructor

## PROFESSOR EMERITUS

- John J. Petronis - PT, MS (West Virginia University)  
Orthopedic Physical Therapy

## Admissions

For the most up-to-date information, including temporary adjustments to requirements due to effects of COVID-19, please refer to our admissions website at: <https://medicine.wvu.edu/pt/>

## APPLICATION REQUIREMENTS

The following requirements must be met to apply to the WVU Physical Therapy Program:

### 1. Completion of a baccalaureate degree:

Applicants must complete a baccalaureate degree at an accredited US college or university prior to May of the year of matriculation. Students may apply with any degree background, as long as all prerequisite courses are completed.

### 2. Completion of prerequisite courses:

Prerequisite courses (listed in the table below) must be completed at a regionally accredited 2- or 4-year US college or university. Applicants may be enrolled in prerequisite courses at the time of application. However, all prerequisite courses and the undergraduate major must be successfully completed by the end of the Spring semester (typically mid-May) of the year of entering the program.

The applicant must earn a minimum grade of C in each prerequisite course.

It is recommended that prerequisite courses in human anatomy and human physiology be completed within two years prior to admission.

Pre-requisite Courses	WVU Course Number
Biology with lab (8 hours)	(BIOL 101 and BIOL 101L, BIOL 102 and BIOL 102L) OR (BIOL 115 and BIOL 115L, BIOL 117 and BIOL 117L)
Chemistry with lab (8 hours)	CHEM 115 and CHEM 115L, CHEM 116 and CHEM 116L
Physics with lab (8 hours)	PHYS 101, PHYS 101L, PHYS 102 and PHYS 102L
General psychology (3 hours)	PSYC 101
Developmental psychology (3 hours)*, should include development across the human lifespan	PSYC 241
Introductory statistics (3 hours), must include descriptive and inferential statistics	STAT 211 or ECON 225

Human anatomy (3 hours)\*\*

BIOL 345 or EXPH 440 or PALM 205 or PASS 319

Human physiology (3 hours)\*\*\*

PSIO 241 or PSIO 441 or BIOL 235

\*

A course in Developmental Psychology is strongly recommended, although other psychology courses (abnormal, social) are accepted. Students should seek Developmental Psychology courses that cover the entire human lifespan, from birth through older adulthood, when possible. Courses in Sports Psychology may not be used for this prerequisite.

\*\*

The anatomy courses included in the DPT curriculum are extremely rigorous. Students should seek out the highest level anatomy course(s) available. The minimum prerequisite is a 3 credit hour course in Human Anatomy; ideally with a laboratory. We will accept a 2-semester, 8 credit sequence of combined Human Anatomy & Physiology. Courses in comparative, mammalian, or animal anatomy will not be accepted.

\*\*\*

For the physiology prerequisite, we will accept a 2-semester, 8 credit sequence of combined Human Anatomy & Physiology. A separate Human Physiology course with lab is preferred. Animal, Mammalian, or Comparative Physiology courses are not acceptable.

### 3. Overall Cumulative GPA:

An overall cumulative GPA of 3.0 is required.

### 4. Prerequisite GPA:

A GPA in the prerequisite courses of 3.0 is required.

### 5. Graduate Record Examination (GRE) scores:

Submit official GRE scores using institution code #7639 for the [West Virginia U Sch Med Phys Therapy].

### 6. Volunteer/work experience in physical therapy:

A minimum of 60 hours of volunteer or work experience is required. This experience must be under the direction of a licensed physical therapist, and experience from two different practice settings is recommended. Practice settings include acute care/hospital, outpatient, adult rehabilitation hospital/center, nursing home, school system/pediatrics, and home health. Though these hours may be obtained during high school and college, some volunteer hours obtained during the junior or senior college years is strongly recommended. Volunteer/work experience must be completed within the US.

Hours devoted to internships in undergraduate majors in other fields (such as exercise physiology or athletic training) may NOT be used as part of the 60 hours of volunteer experience.

### 7. Three letters of recommendation

We require two references from US-licensed physical therapists with whom the student has worked in a clinical setting, either on a volunteer or work basis.

The third reference must be from a professor/instructor who taught the student in at least one course, or an academic advisor who is familiar with the applicant's academic background and performance.

We do NOT accept letters from physical therapist assistants or other healthcare providers.

We do NOT accept letters from relatives of the applicant, even if the relative is a physical therapist or professor.

## APPLICATION PROCESS

Applications to the DPT program at West Virginia University are submitted through the Physical Therapy Centralized Application Service (PTCAS). The PTCAS application cycle will open June 15, 2022.

The application deadline is November 1. For an application to be considered, it must be marked as "Complete" by PTCAS and all supporting materials (GRE scores, letters of recommendation, etc.) must be received by PTCAS on or before the November 1 deadline.

### Interviews

The admissions committee will offer personal interviews to well-qualified candidates. Interviews are conducted in late fall and early January at the WVU Health Sciences Center.

## OFFERS OF ADMISSION

Applicants accepted to the program will receive an offer of admission through their preferred email (as identified in PTCAS) with a link to an online Declaration of Acceptance form. Those wishing to accept a seat in the class will complete an online Declaration of Acceptance form. Applicants accepting the offer of admission will be sent an invoice from the WVU Graduate Admissions Office for a non-refundable deposit (\$400 for WV residents,

\$800 for non-residents), which will be due within two weeks of receipt of the invoice. The deposit will be applied towards the first semester tuition. Failure to pay the deposit within the required time period will result in forfeiture of the seat.

## EARLY ASSURANCE PROGRAM

The Early Assurance Program (EAP) provides a pathway for well-qualified WVU Exercise Physiology undergraduates to enter the DPT program following completion of their baccalaureate degree. To qualify, students entering WVU from high school must:

- Be admitted to WVU as an Exercise Physiology major
- Have a high school GPA of 3.50 or higher
- Have an ACT Math score of 24 or higher, or SAT Math score of 570 or higher

EAP students who meet the following requirements will continue into the DPT program following completion of their baccalaureate degree:

- Complete all prerequisite coursework (see table above) by the end of the spring semester of their junior year.
- Achieve both overall and prerequisite GPA of 3.50 or higher\*.
- Meet the program's other admissions requirements, including a successful interview and satisfactory letters of recommendation, with the following exceptions:
  - The GRE is waived for EAP students.
  - EAP students must obtain at least 10 of the required 60 PT volunteer/observation hours in our program's faculty practice and/or at a WVU Medicine facility.
- Participate in meetings each semester organized by the DPT Admissions Committee and the Exercise Physiology academic advisor.

\*EAP students will be evaluated for progression to the DPT program starting in June after completion of the junior year. Interviews will be conducted in August following the junior year.

Students who do not meet the EAP criteria for continuation outlined above but do meet our program's minimum admissions requirements are encouraged to apply using the traditional application process described above.

## UPDATES AND ADDITIONAL INFORMATION

For updates, please periodically check the WVU Division of Physical Therapy website (<https://medicine.wvu.edu/pt/future-students/>).

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8374

## Physical Therapy (PT)

Course information for the doctor of physical therapy degree can be found on the following website: <http://medicine.hsc.wvu.edu/pt> (<http://medicine.hsc.wvu.edu/pt/>).

## PHYSICAL THERAPY CURRICULUM

Note: This is subject to change without notice.

Code	Title	Hours
PT 701	Professional Development 1	3
PT 706	Advanced Clinical Anatomy	5
PT 708	Movement Diagnosis 1	2
PT 713	Lifespan Functional Movement	2
PT 714	Foundational Science 1	4
PT 715	Evidence Based Physical Therapy 1	3
PT 716	Kinesiologic Foundations	4
PT 718	Movement Diagnosis 2	3
PT 720	Clinical Education 1	2
PT 723	Developmental Life Tasks	3
PT 724	Cardiopulmonary Physical Therapy 1	3
PT 725	Evidence-Based Physical Therapy 2	3
PT 727	Neurobiologic Foundations	4
PT 729	Physical Therapy Interventions 1	3

PT 731	Professional Development 2	1
PT 734	Cardiopulmonary Physical Therapy 2	3
PT 736	Orthopedic Physical Therapy 1	4
PT 738	Movement Diagnosis 3	1
PT 739	PT Interventions 2	3
PT 740	Clinical Education 2	1
PT 741	Professional Development 3	3
PT 743	Geriatric Physical Therapy	2
PT 745	Evidence Based Physical Therapy 3	1
PT 746	Orthopedic Physical Therapy 2	4
PT 747	Neurorehabilitation 1	3
PT 754	Foundational Science 3	3
PT 749	Survey of PT Practice	1
PT 744	Foundational Science 2	2
PT 756	Orthopedic Physical Therapy 3	4
PT 757	Neurorehabilitation 2	3
PT 758	Movement Diagnosis 4	1
PT 759	Prosthetics and Orthotics	3
PT 760	Clinical Education 3	5
PT 761	Professional Development 4	2
PT 770	Clinical Education 4	5
PT 771	Professional Development 5	3
PT 773	Pediatric Physical Therapy	3
PT 775	Evidence Based Physical Therapy 4	1
PT 780	Clinical Education 5	8
PT 781	Professional Development 6	1
PT 785	Advanced Clinical Decision Making	2
Independent Study (Optional)		
PT 795	Independent Study	
PT 797	Research	5
Total Hours		122

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
PT 701 (Pre-fall)		3 PT 724		3 PT 734	3
PT 706 (Pre-Fall)*		5 PT 720		2 PT 731	1
PT 708		2 PT 723		3 PT 738	1
PT 713		2 PT 727		4 PT 736	4
PT 714		4 PT 729		3 PT 739	3
PT 715		3 PT 725		3	
PT 716		4			
PT 718		3			
		26		18	12

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
PT 740		1 PT 744		2 PT 760	5
PT 741		3 PT 754		3 PT 761	2
PT 743		2 PT 756		4 PT 797	1
PT 745		1 PT 757		3	
PT 746		4 PT 758		1	
PT 747		3 PT 759		3	

PT 749		1 PT 797		2	
PT 797		2 Independent Study (Optional) PT 795			
		17		18	8
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>		<b>Spring</b>	<b>Hours</b>	
PT 773		3 PT 780		8	
PT 775		1 PT 781		1	
PT 771		3 PT 785		2	
PT 770		5			
		12		11	

Total credit hours: 122

\*

The professional curriculum begins in summer before first year. Students should plan for these courses to begin on or around June 1st.

## Major Learning Outcomes

### PHYSICAL THERAPY

This program is designed to prepare future physical therapy professionals for practice with special emphasis on meeting the needs of the citizens of West Virginia. This is done by the delivery of instruction focused on providing students with knowledge, skills, and behaviors consistent with professional excellence as described below:

Graduates will:

- Deliver high quality physical therapy services to individuals and communities across a continuum of care, including rural settings
- Demonstrate the ability to make sound clinical decisions characterized by critical thinking, information literacy, and based on scientific evidence
- Demonstrate the ability to collaborate as a unique member of inter-professional teams
- Provide care distinguished by inclusion, cultural sensitivity, advocacy, trust, respect and appreciation for both individual differences and population health disparities
- Demonstrate a commitment to the health of the community through participation in primary, secondary and tertiary prevention programs
- Demonstrate attributes of life-long learning through ongoing professional development, engagement in professional organizations and advocacy for the profession

## Speech-Language Pathology, M.S.

### Degree Offered

- Master of Science

### Nature of the Program

Both the five-semester, full-time on-campus Master of Science (MS) program in Speech-Language Pathology and ten-semester, full-time online Master of Science (MS) program in Speech-Language Pathology provide aspiring professionals the competence to diagnose and treat the full range of communicative disorders in all age groups. The program affords students opportunities in externships, interprofessional practice, and research.

The program provides academic and unique clinical instruction across the lifespan. On-campus students are able to gain valuable experience in the West Virginia University Speech, Language, and Hearing Clinic while online students work as Speech-Language Pathology Assistants (SLP-A) with approved partner organizations. In addition, students will have an externship or clinical placement in a variety of education and medical settings. Career opportunities continue to expand and grow at a rate faster than the national average for speech-language pathology jobs. Graduates of the program are qualified to seek employment in a wide variety of settings, including schools, hospitals, clinics, special treatment centers, and private practice.

## ADMINISTRATION

### CHAIR

- Jayne Brandel - PhD, CCC-SLP (University of Kansas)  
Associate Professor

## VICE CHAIRS

- Nancy Aarts - PhD, CCC-A (Northwestern University)  
Associate Professor and Vice Chair, Audiology
- Michelle Moore - PhD, CCC-SLP (University of Pittsburgh)  
Associate Professor and Vice Chair, Speech-Language Pathology

## UNDERGRADUATE COORDINATOR

- Kimberly Meigh - PhD, CCC-SLP (University of Pittsburgh)  
Associate Professor

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## FACULTY

### ASSOCIATE PROFESSORS

- Nancy Aarts - PhD, CCC-A (Northwestern University)  
Vice Chair, Audiology
- Jayne Brandel - PhD, CCC-SLP (University of Kansas)  
Chair
- Ashleigh Callahan - PhD, CCC-A (James Madison University)
- Alex Hollo - PhD, BCBA-D (Vanderbilt University)
- Kimberly Meigh - PhD, CCC-SLP (University of Pittsburgh)  
Undergraduate Coordinator
- Michelle Moore - PhD, CCC-SLP (University of Pittsburgh)  
Vice Chair, Speech-Language Pathology

### ASSISTANT PROFESSORS

- Molly Abitbol - MS, CCC-SLP (Nova Southeastern University)
- Christa Babjack - MA, CCC-SLP (Western Michigan University)
- Christina Dastolfo-Hromack - MS, CCC-SLP (University of Pittsburgh)
- Heather Forbes - PhD, CCC-SLP, BCBA-D (University of Kansas)
- Tori Gilbert - SLPD, CCC-SLP (Northwestern University)
- Anna Gravelin - PhD, CCC-SLP (Bowling Green State University)
- Almara Hutchinson - MA, CCC-SLP (Radford University)
- Megan Israelsen - PhD, CCC-SLP (Utah State University)
- Eric Johnson - PhD, AuD, CCC-A (Ohio State University, University of Utah)
- Kenneth Morse - PhD, AuD, CCC-A (Syracuse University)
- Tracy Toman - MS, CCC-SLP (West Virginia University)
- Leah Valensi - AuD, CCC-A (Syracuse University)

### PROFESSORS EMERITI

- Mary Ellen Tekieli Koay - PhD
- Norman J. Lass - PhD
- Dennis M. Ruscello - PhD, ASHA Honors
- Kenneth O. St. Louis - PhD
- Charles M. Woodford - PhD

### ASSOCIATE PROFESSORS EMERITI

- Leslie Graebe - MS
- Conrad Lundeen - PhD

### TEACHING ASSOCIATE PROFESSORS EMERITI

- Karen B. Haines - MS
- Gayle B. Neldon - EdD

## ASSISTANT PROFESSORS EMERITI

- Lynn R. Cartwright - EdD
- Cheryl L. Prichard - EdD

## Admissions

### GRADUATE ADMISSIONS PHILOSOPHY

We commit to the mission and vision of the Division of Communication Sciences & Disorders by adopting a holistic review process that fosters a diverse and inclusive culture. We welcome students who are reflective critical thinkers and embody curiosity, compassion, collaboration, as well as an openness to feedback.

### ADMISSION REQUIREMENTS

Applicants will be considered for our graduate programs if they have remarkable personal attributes that are predictive of academic and clinical success, high academic achievement, and English proficiency.

- **Personal attributes.** Applicants are expected to possess remarkable personal characteristics that are necessary for success in graduate study as well as in professional clinical practice:
  - a. a desire for lifelong learning,
  - b. critical thinking ability,
  - c. strong interpersonal and collaborative skills, and
  - d. an openness to receiving constructive feedback.
- **Academic achievement.** Applicants must have:
  - a. Obtained a baccalaureate degree or equivalent from a properly recognized institution of higher learning prior to starting the program.
  - b. Maintained an overall undergraduate grade point average of at least 2.8 (where 'A' = 4.0). However, for an overall undergraduate GPA below a 3.0, the applicant must have achieved a GPA of 3.2 or higher in one of the following: CSD major coursework, all of the CSD prerequisites, or in the most recent 60 credits taken at the undergraduate or graduate level.
  - c. Completed the prerequisite coursework listed below with a grade of 'C' or better. A minimum of two courses in the CSD coursework must be completed before the application deadline. The remaining prerequisite courses must be completed prior to starting the graduate program.
    - At least one course in each of the following CSD content areas:
      - Phonetics
      - Language Acquisition/Development
      - Anatomy & Physiology of Speech and Hearing
      - Speech & Hearing Science
      - Introduction to Audiology
    - At least one course in each related content area listed below:
      - Physics or Chemistry
      - Social/Behavioral Science
      - Statistics
      - Biological Science
    - For more information on related academic courses, see the ASHA Coursework requirements (<https://www.asha.org/Certification/Course-Content-Areas-for-SLP-Standards/>) related to certification standards.
- **For the online SLP program only – Eligibility for SLP-Assistant licensure in West Virginia.** Students accepted to the online SLP program will work as an SLP Assistant in West Virginia schools while completing coursework online with periodic on-campus activities. Therefore, applicants for this program will need to be eligible for a Speech-Language Pathology Assistant license (<http://www.wvlegislature.gov/WVCODE/ChapterEntire.cfm?chap=30&art=32&section=15&year=2013&sessiontype=RS&btype=bill&input=2531>) in the state of West Virginia.
- **English proficiency.** Applicants who did not complete their bachelor's degree in the US, UK, Australia, Canada, or New Zealand must meet the minimum score requirements for English proficiency. WVU's minimum score requirements for English proficiency are: Academic IELTS score of 6.5, TOEFL iBT score of 79, PTE Academic score of 53, or Duolingo English Test score of 105.

For specific information about how to apply, including the current application timeline and tests/materials required, please visit the Communication Sciences & Disorders webpage (<https://medicine.hsc.wvu.edu/communications-sciences-and-disorders/>).

### Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8361 (on-campus MS SLP program)

Major Code: 8364 (online MS SLP program)

## Degree Requirements

- On-Campus Major Requirements (p. 824)
  - The minimum duration for graduate study in the on-campus program is five consecutive semesters (including summer sessions). On-campus major and residency requirements are detailed below.
- Online Major Requirements (p. 825)
  - The minimum duration for graduate study in the online MS program is ten consecutive semesters (including summer sessions). Online major and residency requirements are detailed below.

## Master of Science

### ON-CAMPUS MAJOR REQUIREMENTS

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
<b>Academic Coursework</b>		
CSAD 608	Audiological Foundations	2
CSAD 618	Evidence-Based Practice in Communication Sciences and Disorders	3
CSAD 620	Neurophysiological Bases of Speech and Language	4
CSAD 622	Voice Disorders	3
CSAD 624	Speech Sound Disorders	3
CSAD 625	Developmental Language Disorders: Early Stages	3
CSAD 626	Acquired Motor Speech Disorders	3
Advanced Stuttering Disorders		2
CSAD 628	Fluency Disorders	
CSAD 630	Acquired Language Disorders	3
CSAD 635	Developmental Language Disorders: Advanced Stages	3
Augmentative/Alternative Communication		2
CSAD 636	Augmentative/Alternative Communication	
CSAD 640	Supervision and Leadership	1
CSAD 662	Dysphagia	3
CSAD 663	Principles of Intervention	2
CSAD 664	Principles of Diagnostics in Communication Sciences and Disorders	2
CSAD 665	Diversity and Inclusion	2
CSAD 697	Research	4
Elective Courses		4
<b>Clinical Coursework</b>		
CSAD 610	Clinic 1	3
CSAD 612	Clinic 2	3
CSAD 614	Clinic 3	3
CSAD 616	Clinic 4	3
CSAD 718	Externship in Speech-Language Pathology	9
<b>Additional Program Requirements</b>		
Pass Knowledge/Skills Assessments		
Pass Final Project		
Complete 400 Clinical Clock Hours		
Total Hours		70

### RESIDENCY REQUIREMENTS

The majority of instruction is provided in a face-to-face classroom setting and physical attendance is expected. However, students may be expected to regularly supplement their learning through the use of distance learning technology.



## ONLINE MAJOR REQUIREMENTS

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
<b>Academic Coursework</b>		
CSAD 608	Audiological Foundations	2
CSAD 618	Evidence-Based Practice in Communication Sciences and Disorders	3
CSAD 620	Neurophysiological Bases of Speech and Language	4
CSAD 622	Voice Disorders	3
CSAD 624	Speech Sound Disorders	3
CSAD 625	Developmental Language Disorders: Early Stages	3
CSAD 626	Acquired Motor Speech Disorders	3
Advanced Stuttering Disorders		2
CSAD 628	Fluency Disorders	
CSAD 630	Acquired Language Disorders	3
CSAD 635	Developmental Language Disorders: Advanced Stages	3
Augmentative/Alternative Communication		2
CSAD 636	Augmentative/Alternative Communication	
CSAD 640	Supervision and Leadership	1
CSAD 642	SLP Service Provision: Education	2
CSAD 662	Dysphagia	3
CSAD 663	Principles of Intervention	2
CSAD 664	Principles of Diagnostics in Communication Sciences and Disorders	2
CSAD 665	Culturally Responsive Practices in Communication Sciences and Disorders	2
CSAD 697	Research	6
Elective Courses		4
<b>Clinical Coursework</b>		
CSAD 609	Introduction to the Clinical Experience	1
CSAD 610	Clinic 1	3
CSAD 612	Clinic 2	3
CSAD 614	Clinic 3	3
CSAD 616	Clinic 4	3
CSAD 718	Externship in Speech-Language Pathology	4
<b>Additional Program Requirements</b>		
Pass Knowledge/Skills Assessments		
Pass Final Project		
Complete 400 Clinical Clock Hours		
Total Hours		70

## RESIDENCY REQUIREMENTS

Limited residency requirement - A majority of the credit-bearing and non-credit bearing courses and activities are either entirely online or mostly online. Some credit- or non-credit-bearing activities may require campus visits and/or visits to designated locations.

## Major Learning Outcomes

### SPEECH-LANGUAGE PATHOLOGY

1. Plan and provide services for speech, language, and swallowing disorders across the lifespan using diagnostic and treatment principles which integrate evidence-based practice as an entry-level clinician.
2. Develop a plan for growth in clinical knowledge and skills following independent, systematic self-reflections to demonstrate skills for lifelong learning.
3. Collaborate with clients, caregivers, professionals, and other relevant stakeholders to provide clinical services which align with best practice and legislative requirements.

4. Effectively use oral and written communication in service to clients, stakeholders, and the profession.

## **Accreditation**

The Master of Science (M.S.) education program in speech-language pathology at West Virginia University is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard, #310, Rockville, MD 20850, 800-498-2071 or 301-296-5700.

# Nursing

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## Degrees Offered

- Bachelor of Science in Nursing
- Master of Science in Nursing Advanced Practice
- Master of Science in Nursing Executive Focus/MBA
- Doctor of Nursing Practice
- Doctor of Nursing Practice in Nurse Anesthesia
- Doctor of Philosophy in Nursing

## Introduction

The mission of the WVU School of Nursing is to lead in improving health in West Virginia and the broader society through excellence in student-centered educational programs, research and scholarship, the compassionate practice of nursing, and service to the public and the profession. This mission is responsive to changing healthcare needs and emerging national and state changes in technology and healthcare delivery and is enhanced by a supportive and open environment. The faculty's educational effort is directed at providing high quality, student-centered programs of instruction at all levels which prepare superb professional nurses to meet basic healthcare needs; advance practiced nurses to address complex health needs; and enable doctorally-educated nurses to advance nursing knowledge through research, to assist in the formulation of policies to improve health care, and to serve as faculty in higher degree programs. Unique characteristics of the state mandates that the healthcare needs of rural populations and vulnerable groups be a major focus of education, research, and service, including faculty practice.

The School of Nursing offers undergraduate and graduate degrees and post-graduate certificates of study. The baccalaureate program (BSN) is available for high school graduates who aspire to a career in nursing (basic or traditional BSN program) and to registered nurses (RNs) who are licensed graduates of associate degree or diploma nursing programs seeking to continue their career development (RN to BSN program). In addition, a BS/BA to BSN (fast track) program is available for the college graduate seeking a BSN.

The MSN programs at WVU offer baccalaureate-prepared nurses the opportunity to earn a master's degree and prepare graduates to sit for national advanced practice certification (family nurse practitioner). The SON also offers a post-graduate certificate program in that area for nurses who already have a graduate degree. The School of Nursing has expanded its post-master's certificate program options. In addition to the FNP certificate program, the SON offers psychiatric mental health nurse practitioner and nurse executive leadership options.

The WVU School of Nursing and the John Chambers College of Business & Economics offer a dual master's degree program to provide the skills and knowledge necessary to serve as a nurse leader. This blended degree program is done predominately online, and includes four 3-4 day residencies. Students take courses from both the MSN and MBA program concurrently. Graduates of the MSN (Executive Focus) and MBA program can work in a variety of settings, including hospitals, private practice, nonprofit organizations, and public sectors.

The Doctor of Nursing Practice (DNP) program prepares nurses with graduate degrees to practice at the highest level of professional nursing. Graduates of the DNP program advance the application of nursing knowledge through the translation and implementation of evidence for practice to improve health outcomes for diverse populations. This expert-level practice builds on past advanced practice education, experience, and certification.

The DNP Nurse Anesthetist program prepares registered nurses to become Certified Registered Nurse Anesthetists (CRNAs) through a rigorous, challenging curriculum, heavily based in sciences, including anatomy, physiology, pathophysiology, chemistry, and physics.

The Doctor of Philosophy in Nursing (PhD) prepares nurse scholars/scientists for roles in research, teaching, and service. The program prepares graduates who will contribute to the body of nursing knowledge, educate the next generation, and lead, ultimately impacting health policy, improving health, and reducing disparity.

## Accreditation

The baccalaureate degree program in nursing/master's degree program in nursing/Doctor of Nursing Practice program at West Virginia University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791.

The WVU School of Nursing DNP Nurse Anesthetist Program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) until 2024. Contact the COA by phone at 847-655-1160, on the web at [www.coacna.org](http://www.coacna.org), or at 222 S. Prospect Ave., Suite 304, Park Ridge, IL 60068-4001.

## Fees, Expenses, Housing, Transportation, and Immunization

Students enrolling at the Morgantown campus pay fees which are detailed at <http://admissions.wvu.edu/pay> (<http://admissions.wvu.edu/pay/>). Special fees and deposits are also required. Students enrolling at other sites pay the fees shown in the catalog for that site. Fees are subject to change without notice. Students' expenses vary according to the course of study and individual needs. Information concerning financial assistance, application forms, and the Free Application for Federal Student Aid (FAFSA) form may be obtained from the financial aid website at <https://financialaid.wvu.edu/students/>

professional-hsc (<https://financialaid.wvu.edu/students/professional-hsc/>) or by contacting the HSC Financial Aid Office, PO Box 9810, Morgantown, WV 26506-9810; telephone (304) 293-3706 (toll free) or 1-800-344-WVU1.

The University Housing and Residence Life Office, telephone (304) 293-4491, provides information concerning university-owned housing. The Student Life Office in E. Moore Hall, telephone (304) 293-5611, provides information concerning privately owned, off-campus housing.

Students are expected to provide their own transportation, equipment, and instruments for the clinical courses. Some clinical experiences require travel in a multi-county area.

Proof of specific immunizations is required for all health sciences students. Students in the BSN, BA/BS to BSN, RN-BSN, MSN Advanced Practice, DNP, and Post graduate certificate programs must undergo a criminal background check prior to clinical courses. Felony convictions, serious misdemeanors, illicit drug use, or positive drug screens may preclude participation in the clinical courses. This could, in turn, prevent the completion of course requirements and completion of the nursing program.

## Scholarships

The School of Nursing offers several scholarships. These scholarships are administered by the Health Science Center Financial Aid Office and require completion of the Free Application for Federal Student Aid (FAFSA) form in order to be considered for financial aid. Most School of Nursing scholarships are available only to students already admitted to the School of Nursing and are awarded each April for the following academic year. However, there are a limited number of scholarships for which students may apply before admission. Further information is provided on the School of Nursing website: <https://nursing.hsc.wvu.edu/students/current-students/>.

## Additional Information

Visit the School of Nursing website at <https://nursing.hsc.wvu.edu/> (<http://nursing.hsc.wvu.edu/>). Call the WVU School of Nursing Office of Student and Alumni Services at 1-866-WVUNURS or (304) 293-1386. Write to WVU School of Nursing at PO Box 9600, Morgantown, WV 26506-9600

## ADMINISTRATION

### DEAN

- Tara F. Hulseley - PhD (University of South Carolina)  
Professor

### ASSOCIATE DEAN OF CURRICULUM

- Stacy Huber - EdD (West Virginia University)  
Clinical Education Associate Professor

### ASSOCIATE DEAN OF UNDERGRADUATE PROGRAMS

- Brad Phillips - PhD (West Virginia University)  
Assistant Professor

### ASSOCIATE DEAN FOR RESEARCH

- Ubolrat Piamjariyakul - PhD (University of Kansas)  
Professor

### ASSISTANT DEAN FOR STUDENT AND ALUMNI SERVICES

- Gregory T. Cave - BA (West Virginia University)

### ASSISTANT DEAN FOR FACULTY PRACTICE AND COMMUNITY ENGAGEMENT

- Emily Barnes - DNP (West Virginia University)  
Clinical Professor

### DIRECTOR AND ASSISTANT DEAN OF BUSINESS & FINANCE

- Karis P. Wolfe - MBA (West Virginia University)

### CHAIR, DEPARTMENT OF ADULT HEALTH

- Heather Carter-Templeton - PhD (The University of Tennessee Health Science Center)  
Associate Professor

**CHAIR, DEPARTMENT OF FAMILY/COMMUNITY HEALTH**

- Billie Vance - PhD (West Virginia University)  
Clinical Associate Professor

**CHAIR, BECKLEY DIVISION**

- Hillary Parcell - MSN (West Virginia University)  
Clinical Education Assistant Professor

**CHAIR, BRIDGEPORT DIVISION**

- Veronica Gallo - PhD (West Virginia University)  
Clinical Education Assistant Professor

**CHAIR, CHARLESTON DIVISION**

- Theresa Cowan - DHEd (A.T. Still University of Osteopathic Medicine and Health Professions)  
Teaching Associate Professor

**CHAIR, KEYSER DIVISION**

- April L. Shapiro - PhD (West Virginia University)  
Assistant Professor

**DIRECTOR OF EVALUATION**

- Ashley Tasker - EdD (West Virginia University)  
Clinical Education Assistant Professor

**DIRECTOR, PHD PROGRAM**

- Roger Carpenter - PhD (West Virginia University)  
Associate Professor

**DIRECTOR, MSN/DNP PROGRAMS**

- Kendra Baker - DNP (West Virginia University)  
Clinical Associate Professor

**DIRECTOR, CRNA PROGRAM**

- Aaron Ostrowski - DNP (University of Pittsburgh)  
Clinical Assistant Professor

**DIRECTOR, UNDERGRADUATE PROGRAMS**

- Tina Antill-Keener - PhD (West Virginia University)  
Assistant Professor

**DIRECTOR OF NURSING SIMULATION**

- Andrea Bailey - MSN (West Virginia University)  
Clinical Associate Professor

**DIRECTOR, CONTINUING EDUCATION**

- Rebecca Smeltzer - DNP (Case Western Reserve University)  
Teaching Assistant Professor

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**FACULTY****PROFESSORS**

- Jennifer Mallow - PhD (West Virginia University)
- Mary Jane Smith - PhD (University of New York)

## **ASSOCIATE PROFESSORS**

- Susan Newfield - PhD (Texas Tech University)
- Suzy Walter - PhD (West Virginia University)
- Kesheng Wang - PhD (Augusta University)

## **CLINICAL ASSOCIATE PROFESSOR**

- Angel Smothers - DNP (West Virginia University)

## **CLINICAL ASSISTANT PROFESSORS**

- Amy Ankrom - MSN (University of Pittsburgh)
- Dana Friend - MSN (West Virginia University)
- Susan McKenrick - DNP (West Virginia University)
- Elizabeth Minchau - DNP (West Virginia University)
- Kellon Smith - DNAP (Saint Vincent College)
- Kayla Watson - DNP (West Virginia University)
- Stephanie Young - MSN (Gonzaga University)

## **CLINICAL EDUCATION ASSOCIATE PROFESSORS**

- Christy Barnhart - DHSc (California University of Pennsylvania)
- Patricia J. Maramba - DNP (West Virginia University)
- Tonya Thompson - MSN (Waynesburg University)
- Joanne Watson - MSN (West Virginia University)

## **CLINICAL EDUCATION ASSISTANT PROFESSOR**

- Kimberly Adams - MSN (Waynesburg University)
- Amanda Edwards - MSN (West Virginia University)
- Ann Hendrickson - DNP (University of South Alabama)
- Alexis Hicks - EdD (Grand Canyon University)
- Donna Leonard - MSN (Walden University)
- Jessica Matthews - MSN (West Virginia University)
- Danielle McGinnis - MSN (Waynesburg University)
- Amy Miner - MSN (Waynesburg University)
- Marian Reven - MSN (Walden University)
- Laura Vollmer - MSN (Chamberlain University)
- Amber Walker Ziese - MSN (Marshall University)

## **CLINICAL EDUCATION INSTRUCTORS**

- Colleen Kroll - MSN (West Virginia University)
- Kelly Lemon - MSN (Georgetown University)
- Amanda Nicola - MSN (West Virginia University)
- Joanne Rose - MSN (West Virginia University)
- Arden Townsend - MSN (West Virginia University)

## **TEACHING ASSISTANT PROFESSOR**

- Diana L. McCarty - MSN (West Virginia University)

## **SENIOR LECTURER**

- Ashley Barber - PhD (West Virginia University)

## **LECTURERS**

- Debbie Bellisario - MSN (University of Phoenix)
- Michael Bellisario - BSN (West Virginia University)
- Gina Greathouse - MSN (University of North Carolina)
- Angela Jeffries - DNAP (Missouri State University)

- David Keefover - MSN (Liberty University)
- Julia Linton - MSN (York College of Pennsylvania)
- Marian Longstreth - DNP (Waynesburg University)
- S. Beth Stiles - MSN (West Virginia University)
- R. Elaine Taylor - MSN (West Virginia University)

## **INSTRUCTORS**

- Derrick Conner - BSN (Waynesburg University)

## **DEAN EMERITUS**

- E. Jane Martin - PhD (University of Pittsburgh)

## **PROFESSOR EMERITUS**

- Laurie Badzek - MSN,JD (DePaul University)
- Sandra "Sam" Cotton - DNP (West Virginia University)
- Susan Coyle - PhD (West Virginia University)
- June Larrabee - PhD (University of Tennessee)
- Nan Leslie - PhD (University of Utah)
- Susan McCrone - PhD (University of Utah)
- Gaynelle McKinney - MSN,ED (Indiana University)
- Georgia Narsavage - PhD (University of Pennsylvania)
- Alvita Nathaniel - PhD (West Virginia University)
- Barbara Nunley - PhD (University of Kentucky)
- Aletha Rowlands - PhD (University of Virginia)

## **ASSOCIATE PROFESSOR EMERITUS**

- Peggy Burkhardt - PhD (University of Miami)  
Charleston Division
- Pamela Deiriggi - PhD (University of Texas)
- Imogene P. Foster - EdD (West Virginia University)
- Debra Harr - EdD (West Virginia University)
- Nancy A. Koontz - MSN (University of Maryland)
- Barbara Kupchak - PhD (University of Texas)
- Lois O'Kelley - MSN (Wayne State University)
- C. Lynne Ostrow - EdD (West Virginia University)
- Kari Sand-Jecklin - EdD (West Virginia University)
- Elisabeth Shelton - PhD (Widener University)
- Patricia Simoni - EdD (West Virginia University)

## **ASSISTANT PROFESSOR EMERITUS**

- Ann Cleveland - EdD (West Virginia University)
- Daniel DeFeo - MSN (West Virginia University)
- Suzanne Gross - PhD (University of Texas)
- Dorothy Johnson - EdD (West Virginia University)
- Susan Pinto - MSN (West Virginia University)

## **BECKLEY DIVISION - CLINICAL EDUCATION ASSOCIATE PROFESSOR**

- Robin Spencer - MSN (Marshall University)

## **BECKLEY DIVISION - CLINICAL EDUCATION ASSISTANT PROFESSORS**

- Mindy Harris - MSN (Marshall University)
- Kelly Morton - MSN (Capella University)

## **BECKLEY DIVISION - CLINICAL EDUCATION LECTURERS**

- Kelley Coleman - BSN (West Virginia University)
- Debra Crowder - MSN (Philadelphia University)
- Kathy Talley - MA (Marshall University)

## **BECKLEY DIVISION - CLINICAL EDUCATION INSTRUCTOR**

- Linda Angus - MSN (West Virginia University)
- Cynthia Clark - MSN (Chamberlain University)
- Engleish Flynn - MSN (Walden University)
- Heather Wood - BSN (Liberty University)

## **BRIDGEPORT DIVISION CLINICAL EDUCATION PROFESSOR**

- Tanya Rogers - EdD (West Virginia University)

## **BRIDGEPORT DIVISION - CLINICAL EDUCATION ASSISTANT PROFESSOR**

- Kimberly Derico - MSN (Marshall University)

## **BRIDGEPORT DIVISION - CLINICAL EDUCATION INSTRUCTOR**

- Linda Griffith - BSN (West Virginia University)
- Kelly Hazuka - MSN (West Virginia University)

## **CHARLESTON DIVISION - CLINICAL EDUCATION ASSISTANT PROFESSOR**

- Katherine Atassi - PhD (Medical University of South Carolina)
- Jarena Kelly - DNP (West Virginia University)

## **CHARLESTON DIVISION - TEACHING ASSOCIATE PROFESSOR**

- Evelyn Martin - DNP (West Virginia University)
- Teresa Ritchie - DNP (West Virginia University)
- Crystal Sheaves - PhD (West Virginia University)  
Director of Clinical Placements

## **CHARLESTON DIVISION-TEACHING ASSISTANT PROFESSOR**

- Melanie Whelan - PhD (West Virginia University)

## **KEYSER DIVISION - CLINICAL EDUCATION INSTRUCTORS**

- Krystal Abucevicz-Swick - MSN (West Virginia University)
- Kasey Beckman-Sirk - DNP (Chamberlain College of Nursing)
- Heather Coddington - MSN (Capella University)
- Matthew Hottle - MSN (Walden University)
- Diana Niland - PhD (West Virginia University)

## **KEYSER DIVISION - LECTURER**

- Mary Beth McCloud - PhD (Medical University of South Carolina)

## **Degree Designation Learning Outcomes**

### **MASTER OF SCIENCE IN NURSING EXECUTIVE FOCUS/MBA**

Upon completion of the Master of Science in Nursing Executive Focus/MBA, the graduate will be prepared to:

- Synthesize theories, research findings, and broad-based perspectives for application in the advanced practice of nursing or nursing leadership:
  1. Integrate nursing and related sciences into the delivery of advanced nursing care to diverse populations.
  2. Synthesize evidence for practice to determine appropriate application of interventions across diverse populations.
  3. Utilize nursing and related science evidence to analyze, design, implement and evaluate nursing care delivery systems.
- Utilize systematic inquiry and refined analytical skills in the provision of health care services and leadership:



1. Integrate organizational science and informatics to make changes in the care environment to improve health outcomes.
  2. Assume a leadership role in the management of human, fiscal, and physical healthcare resources.
  3. Critically appraise existing literature to identify best practices, apply knowledge to improve and facilitate systems of care in order to improve patient outcomes.
  4. Disseminate results through translational scholarship.
- Demonstrate safe, effective assessment, planning, implementation and evaluation skills in managing the care of individuals and groups while working in interprofessional collaborative relationships.
    1. Create a relationship with clients and healthcare organizations that builds and maintains a supportive and caring partnership.
    2. Analyze best practice evidence to implement effective quality improvement initiatives with measurable results.
    3. Advocates for patients, families, caregivers, communities and members of the healthcare team.
  - Articulate viewpoints and positions in order to improve the quality of health care delivery and outcomes of successful care.
    1. Assume a leadership role in effectively implementing patient safety and quality improvement initiatives within the context of the interprofessional team using effective communication skills.
    2. Examine the effect of legal and regulatory processes on nursing practice, healthcare delivery, and outcomes.
    3. Use ethical decision making to promote the well-being of individuals, families, and health care professionals in local, national & international communities.
  - Consults and collaborates in interdisciplinary and interagency endeavors to advance culturally sensitive health care to clients, families, groups, and communities:
    1. Synthesize broad ecological, global and social determinants of health; principles of genetics and genomics; and epidemiologic data to design and deliver evidence-based, culturally relevant clinical preventions interventions and strategies.
  - Integrates prior and current learning as a basis for growth and accountability in enacting the role of advanced practice nurse or nurse leader:
    1. Advocate for patients, families, caregivers, communities, and members of the healthcare team.
    2. Use information and communication technologies to advance patient education, enhance accessibility of care, analyze practice patterns, and improve health care outcomes, including nurse sensitive outcomes.
    3. Value life-long learning and continued professional development.
  - Assume a leadership role in advocacy, ethical issues, and health care policy development:
    1. Apply leadership skills and decision making in the provision of culturally responsive, high-quality nursing care, healthcare team coordination, and the oversight and accountability for care delivery and outcomes.
    2. Function as a leader and change agent in nursing and in health care delivery systems particularly to insure quality care for vulnerable and underserved populations.
    3. Demonstrates organizational and systems leadership that continually improves health outcomes and ensures patient safety.
  - Integrates all the functional areas of business into management decisions in a global environment.
    1. Evaluate factors that influence the competitive behavior of the firm.
    2. Predict and anticipate company and market responses to external factors.
    3. Identify the risks and opportunities in global markets.
  - Identify problems, collect appropriate data and analyze the data to make informed management decisions.
    1. Evaluate business reports to make meaningful decisions for the organization.
    2. Make data-driven, fact-based decisions using statistical techniques and principles.
    3. Take real world problems and express them in quantitative terms.
  - Make management decisions in an ethically sensitive and socially responsible manner.
    1. Negotiate and control information ethically to meet organizational needs.
    2. Understand how to use and acquire information in an ethically sensitive manner.
    3. Synthesize various ethical theories and design a corporate code of ethics.
  - Be effective team members in a virtual environment.

1. Demonstrate the ability to work together in a supportive and effective manner.
- Be an effective leader who influences people towards the attainment of organizational goals.
  1. Recommend actions for leader effectiveness in a scenario case and apply a theory or framework to propose and defend their recommendations.
  2. Identify various leadership styles and their relative effectiveness, along with real-life examples.
  3. Evaluate, in a case setting, the processes through which goals are set and accomplished in organizations.

## **MASTER OF SCIENCE IN NURSING ADVANCED PRACTICE (MSN)**

Upon completion of the Master of Science in Nursing Advanced Practice program, the graduate will be prepared to:

1. Use disciplined reasoning from sciences and the humanities to:
  - Integrate nursing and related sciences into the delivery of advanced nursing care to diverse populations.
  - Design nursing care for a clinical or community focused population based on biopsychosocial, public health, nursing and organizational sciences.
  - Apply ethical analysis and clinical reasoning to assess, intervene, and evaluate advanced nursing care delivery.
  - Analyze nursing history to expand thinking and provide a sense of professional heritage and identity.
2. Incorporate current and emerging genetic/genomic evidence in providing advanced nursing care to individuals, families, and communities while accounting for patient values and clinical judgment through:
  - Synthesizing broad ecological, global and social determinants of health; principles of genetics and genomics; and epidemiologic data to design and deliver evidence based, culturally relevant clinical prevention interventions and strategies.
  - Designing patient-centered and culturally responsive strategies in the delivery of clinical prevention and health promotion interventions and/or services to individuals, families, communities, and aggregates/clinical populations.
  - Integrating clinical prevention and population health concepts in the development of culturally relevant and linguistically appropriate health education, communication strategies, and interventions.
3. Support quality improvement and patient safety by:
  - Promoting a professional environment that includes accountability, peer review, advocacy for patients and families, reporting of errors, and professional writing.
  - Contributing to the integration of healthcare services to affect safety and quality of care to improve patient outcomes and reduce fragmentation of care.
  - Participating in, and leading when appropriate, in quality initiatives that integrate socio-cultural factors affecting the delivery of nursing and healthcare services.
4. Demonstrate organizational and systems leaderships that:
  - Emphasizes clinical practice.
  - Continually improves health outcomes.
  - Ensures patient safety.
5. Analyze and evaluate evidence to integrate scholarship into practice through:
  - Integrating theory, evidence, clinical judgment, and interprofessional perspectives to improve practice and health outcomes for patient aggregates.
  - Articulating to a variety of audiences the evidence base for practice decisions, including the credibility of sources of information and the relevance to the practice problem.
  - Applying practice guidelines to improve practice.
  - Participating, and leading when appropriate, in collaborative teams to improve care outcomes and support policy changes through knowledge generation, dissemination, and implementation.
6. Demonstrate proficiency in the analysis and use of information systems and technology to sustain improvements and promote transparency using high reliability and just culture principles through:
  - Analyzing current emerging technologies to support safe practice environments, and to optimize patient safety, cost-effectiveness, and health outcomes.
  - Using information and communication technologies, resources, and principles of learning to teach patients and others.
  - The use of current and emerging technologies in the care environment to support lifelong learning for self and others.
7. Assume an advocacy role in healthcare policy by:
  - The analysis of the influence of policy on the structure and financing of health care practice and health outcomes.
  - Participation in the development and implementation of institutional, local, state, and federal policy.
  - The examination of the effect of legal and regulatory processes on nursing practice, health care delivery, and outcomes.
  - Interpreting research and bringing the nursing perspective for policy makers and stakeholders.
  - Advocating for policies that improve the health of the public and the nursing profession.

8. Collaborate with other professions to improve patient and population health outcomes by:
  - Advocating for the value of the professional nurse as members, and leaders when indicated, of interprofessional healthcare teams.
  - Using collaboration in the design, coordination, and evaluation of patient-centered care.
  - Mentoring and coaching new and experienced nurses and other members of the healthcare team.
  - Understanding other health professions scopes of practice to maximize contributions within the healthcare team.
9. Plan, manage, and evaluate evidence-based clinical prevention and population care by:
  - Evaluating the effectiveness of clinical prevention interventions that affect individual and population-based health outcomes.
  - Delivering patient-centered and culturally responsive strategies in prevention and health promotion to individuals, families, communities, and aggregates/clinical populations.
10. Ensure accountability for advanced practice based on refined assessment skills; advanced communication skills; and biophysical, genetic, genomic, psychosocial, sociopolitical, economic, ethical, and cultural principles through:
  - Delivering safe, quality care to diverse populations in a variety of settings and roles.
  - Conducting a comprehensive and systematic assessment as a foundation for decision making.
  - Applying the best available evidence from nursing and other sciences as the foundation for practice.
  - Using knowledge of illness and disease management to provide evidence-based care to populations, perform risk assessments, and design plans or programs of care.
  - Incorporating core scientific and ethical principles in identifying potential and actual ethical issues arising from practice, in assisting patients and other healthcare providers to address such issues.

## DOCTOR OF NURSING PRACTICE

Upon completion of the Doctor of Nursing Practice program, the graduate will be prepared to:

1. Use disciplined reasoning, science-based theories, and concepts from sciences and humanities to:
  - Determine the nature and significance of health and health care delivery phenomena.
  - Describe actions and advance strategies to improve healthcare delivery, to diverse populations.
  - Develop, deliver, and evaluate theory-based health care.
  - Analyze nursing history to expand thinking and provide a sense of professional heritage and identity.
2. Demonstrate organizational and systems leadership that:
  - Emphasizes clinical practice.
  - Continually improves health outcomes.
  - Ensures patient safety.
3. Use analytical methods, evidence, and nursing science to:
  - Critically appraise existing literature to identify and evaluate best practices and practice guidelines.
  - Facilitate the evaluation of systems of care in order to improve patient outcomes.
  - Serve as a practice specialist/consultant in collaborative knowledge generating research.
  - Disseminate results through translational scholarship.
4. Demonstrate proficiency and provide leadership for the integration of information systems/technology to:
  - Support, monitor, and improve patient care, healthcare systems, clinical decision-making, nurse-sensitive outcomes, and academic settings.
  - Support quality improvement and patient safety.
5. Assume a leadership role in advocacy and health care policy development.
6. Establish, participate, and lead interprofessional collaborations for improving patient, population, and systems outcomes.
7. Develop, implement, and evaluate practice and healthcare delivery models for the purpose of quality improvement and improved patient outcomes considering
  - Safety and quality.
  - Epidemiological, bio-statistical, environmental, and other appropriate scientific data.
  - Culturally appropriate care.
  - Values based professional practice and behaviors.
  - Economies of care, business principles and health policy related to individual, aggregate, and population health.
8. Ensure accountability for advanced practice based on refined assessment skills, advanced communication skills, biophysical, genetic, genomic, psychosocial, sociopolitical, economic, ethical, and cultural principles.
9. Practice and provide services for populations with in the area of advanced nursing specialization.

## DOCTOR OF NURSING PRACTICE NURSE ANESTHETIST

Upon completion of the nurse anesthetist program, the graduate will be prepared to:

1. Implement advanced knowledge in nurse anesthesia science, theory, and practice.
2. Evaluate, develop, implement, and lead organizational change to improve care delivery and quality.
3. Develop evidence-based interventions and implement solutions to address clinical problems.
4. Examine and evaluate technology and the utility of information systems and data to improve patient care.
5. Influence and participate in health policy development in the institution and region of practice.
6. Collaborate with the healthcare community, working with nursing, medical, surgical and anesthesia team members to promote patient advocacy and safety.
7. Demonstrate technical, professional, and cultural competence in nurse anesthesia practice by safely caring for patients across the lifespan and at all levels of acuity.
8. Formulate physiologically sound plans for anesthesia care.
9. Participate in the clinical, administrative, and educational advancement of fellow CRNAs and other advanced practice practitioners.

## DOCTOR OF PHILOSOPHY (PHD)

Upon completion of the PhD program, the graduate will be prepared to:

1. Rigorously test, generate, and extend knowledge to inform nursing science, practice, and policy.
2. Contribute to the development of knowledge and interventions to address health disparity and promote or improve health.
3. Assume collaborative leadership roles in academia, health organizations, research teams, and scholarly networks.
4. Demonstrate expertise within an area of study that incorporates nursing and trans disciplinary perspectives.

## School of Nursing Academic Progression Standards

### MSN AND MSN/MBA PROGRESSION POLICY

#### 1. Grade Point Average (GPA) requirements:

Graduate program students are required to maintain a 3.0 in all work attempted in the program. A student who falls below 3.0 after nine or more credit hours are completed in the program will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program. Post-graduate certificate students are required to take fewer than those in degree programs. Therefore, a GPA lower than 3.0 will not be grounds for probation or dismissal.

2. Earn a letter grade (A, B, C) on all required courses. A grade of F in any course results in dismissal from the program.
3. Carry forward only one C grade in a nursing course. A second C in any nursing course will result in dismissal from the program.
4. Students can withdraw from only one course (resulting in a "W" on the academic transcript), and only one time.

If a student needs to withdraw from all courses in a semester, the student must meet with their faculty advisor. (see Leave of Absence and Withdrawal policies below).

**Note: Any student who has been dismissed from the WVU School of Nursing will not be readmitted to the program.**

### DNP PROGRESSION POLICY

#### 1. Grade Point Average (GPA) requirements:

Graduate program students are required to maintain a 3.0 in all work attempted in the program. A student who falls below 3.0 after nine or more credit hours are completed in the program will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program.

2. Earn a letter grade (A, B, C) on all required courses. A grade of F in any course results in dismissal from the program.
3. Carry forward only one C grade in a nursing course. A second C in any nursing course will result in dismissal from the program.
4. Students can withdraw from only one course (resulting in a "W" on the academic transcript), and only one time.

If a student needs to withdraw from all courses in a semester, the student must meet with their faculty advisor. (see Leave of Absence and Withdrawal policies below).

**Note: Any student who has been dismissed from the WVU School of Nursing will not be readmitted to the program.**

## DNP NURSE ANESTHETIST PROGRESSION POLICY

To progress in the graduate curriculum, a Nurse Anesthetist Program student must meet the following performance standards. Failure to meet the criteria below will result in dismissal from the program.

1. Maintain an overall academic Grade Point Average of at least 3.0 in all work attempted in the DNP Nurse Anesthetist Program. A student who falls below 3.0 after nine or more credit hours are completed in the program will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program.
2. Earn a letter grade (A, B, C, or Pass) on all required courses. A grade of F or Fail in any course results in dismissal from the program.
3. Carry forward only one C grade in a core DNP nursing course. A second C in a core DNP nursing course will result in dismissal from the program. A student earning below a B- grade in any anesthesia specialty course must repeat the course. This means the student will fall out of progression with the current cohort and must wait until the course is offered in the next academic year.
4. Repeat only one course in the DNP Nurse Anesthetist progression plan and only one time.

If a student needs to withdraw from all courses in a semester, the student must meet with their faculty and academic advisors to request a Leave of Absence if they plan to return to course work. Students at all times are expected to demonstrate professionalism and respect for faculty, staff, preceptors, and student colleagues. If a student is dismissed from their clinical placement site for lack of professionalism, or if the student's behavior compromises the school's relationship with the agency, the student is subject to failure in the course and dismissal from the program. Any student who has been dismissed from the West Virginia University School of Nursing will not be readmitted to the program.

## PHD PROGRESSION POLICY

To progress in the PhD curriculum, a student must meet the following performance standards:

### Grade Criteria for Progression

1. Achieve an overall academic GPA of 3.0 in all course work.
2. Grades of C. Students may carry forward one C grade in any course. However, a second C will result in dismissal from the program.
3. Grades of F. Students with a grade of F in any course will be dismissed from the program.
4. Withdrawals. Students can only have one "W" (class withdraw) while in the PhD program.
5. Unsatisfactory Grade. If students earn an unsatisfactory or "U" in NSG 797 Research, the chair and student must devise a plan to rectify deficiencies in the next semester. If the student receives another "U", they will be dismissed from the program.

### The grading scale for WVU graduate programs is:

A = 93 – 100

B = 85 – 92

C = 77 – 84

F = 0-76

## Certificate Programs

The certificate programs at WVU offer masters-prepared nurses the opportunity to earn a certificate in family nurse practitioner (FNP), psychiatric mental health nurse practitioner (PMHNP), and nurse executive leadership (NEL) specialties.

## ADMISSION CRITERIA

Eligible applicants are required to have:

- Master's degree in Nursing (or higher) from a nationally accredited nursing program and regionally accredited institution.
- Minimum nursing GPA of 3.0 on a 4.0 scale
- Minimum cumulative GPA of at least 3.0 on a 4.0 scale on all graduate work attempted. (Provisional admission may be considered if the overall GPA is 2.75-2.99 depending upon space available and other qualifications.)
- Active, unrestricted RN license in the state where the student plans to complete clinical hours.
- Letters of good standing (required for transfer students or those that have taken courses in another graduate program but did not complete the degree).

Students must satisfactorily complete background checks and drug screens upon admission.

### In addition, applicants:

- *for the PMHNP Certificate Programs:* must provide evidence of completion of stand-alone graduate level courses in advanced pathophysiology, advanced pharmacotherapeutics, and advanced physical assessment

- for the **PMHNP Certificate Program**: must hold national certification and licensure as an APRN; admission preference is given to applicants with at least one year of experience in an advanced practice role in an approved psychiatric mental health setting and/or at least two years of experiences as an APRN.

Notes: To be considered, applicants must meet all WVU admission requirements (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>), in addition to program specific admission criteria. Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at <https://nursing.hsc.wvu.edu> (<https://nursing.hsc.wvu.edu/>). Any student who has been dismissed from the West Virginia University School of Nursing or any other nursing program will not be eligible for admission or readmission to the program. Exceptions may be considered if the dismissal was academic and was followed by successful completion of an additional degree or credential.

- Post-MSN Certificate FNP (p. 61)
- Post-MSN Certificate NEL (p. 62)
- Post-MSN Certificate PMHNP (p. 63)

## PROGRESSION STANDARDS

To progress in the graduate curriculum, a student must meet the following performance standards. Failure to meet the criteria below will result in dismissal from the program.

1. Grade Point Average (GPA) requirements:
  - a. Graduate program students are required to maintain a 3.0 in all work attempted in the program. A student who falls below 3.0 after nine or more credit hours are completed in the program will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program.
  - b. Post-Graduate Certificate students are required to take fewer credits than those in the degree programs. Therefore, a GPA lower than 3.0 will not be grounds for probation or dismissal. However, students earning two C grades or one F will be dismissed from the Post-Graduate Certificate Program.
2. Earn a letter grade (A, B, C) on all required courses. A grade of F in any course results in dismissal from the program.
3. Carry forward only one C grade in a nursing course. A second C in any nursing course will result in dismissal from the program.
4. Students can withdraw from only one course (resulting in a "W" on the academic transcript), and only one time.

If a student needs to withdraw from all courses in a semester, the student must meet with their advisor to request a Leave of Absence if they plan to return to course work. See Leave of Absence policy in the MSN Student Handbook.

The grading scale for nursing as posted in each course syllabus is:

A = 93 – 100

B = 85 – 92

C = 77 – 84

F = 0-76

## Accreditation

The School of Nursing has specialized accreditation through the Commission on Collegiate Nursing Education.

The baccalaureate degree program in nursing, the master's degree program in nursing, and the Doctor of Nursing Practice program at West Virginia University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791.

The WVU School of Nursing DNP Nurse Anesthetist Program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) until 2024. Contact the COA by phone at 847-655-1160, on the web at [www.coacna.org](http://www.coacna.org), or at 222 S. Prospect Ave., Suite 304, Park Ridge, IL 60068-4001.

# Master of Science in Nursing Advanced Practice Online Program, M.S.N.

## Degree Offered

- Master of Science in Nursing

## Nature of the Program

### DESCRIPTION

The West Virginia University School of Nursing offers a Master of Science in Nursing (MSN) degree that provides the skills necessary to sit for advanced practice certification. The major areas of study are Family Nurse Practitioner (FNP) and Pediatric Nurse Practitioner (PNP). Throughout the curriculum, students are guided in the process of self-development aimed at pursuing excellence in scholarly and professional endeavors. Courses are offered via web-based modalities using synchronous and asynchronous formats. The MSN program offers a curriculum that allows students to enroll on a part-time or full-time basis. The 46-credit program can be completed in five semesters (including a summer session) of full-time study (average of nine to twelve credit hours per semester)\*. Flexibility within the basic curricular structure is achieved through the individualization of learning experiences and students may complete the program over a longer duration. The pattern and duration of the student's plan of study is determined in consultation with a faculty advisor and is based upon the student's background and goals.

Graduates meet all requirements to sit for the national certification examination in his or her major area of study, family nurse practitioner or pediatric nurse practitioner. They are prepared to offer care at the advanced practice level to select populations and are able to perform all activities encompassed in the traditional scope of practice.

\*It is a strong recommendation by the University and the School of Nursing that graduate students limit their credit load if they are also involved in full-time work. Full-time work and studies may negatively affect the student's ability to succeed academically.

## Admissions

### MSN CRITERIA

- Bachelor of Science in nursing degree from a nationally accredited nursing program and regionally accredited institution.
- A minimum overall nursing GPA of a 3.0 on a 4.0 scale.
- A minimum cumulative GPA of at least 3.0 on a 4.0 scale on all college work attempted. (Provisional admission may be considered if the overall GPA is 2.75-2.99 depending upon space available and other qualifications).
- An active, unrestricted RN license in at least one state at the time of application.
- Letters of good standing (required for transfer students or those that have taken courses in another graduate program but did not complete the degree).

Students must satisfactorily complete background checks and drug screens upon admission.

Notes: To be considered, applicants must meet all WVU admission requirements (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>), in addition to program specific admission criteria. Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at <https://nursing.hsc.wvu.edu> (<https://nursing.hsc.wvu.edu/>). Any student who has been dismissed from the West Virginia University School of Nursing or any other nursing program will not be eligible for admission or readmission to the program. Exceptions may be considered if the dismissal was academic and was followed by successful completion of an additional degree or credential.

### APPLICATION PROCESS

Applications may apply at any time for fall admission. Complete applications will be considered up to July 1st for MSN and post-master's certificate programs. Applicants can apply via the West Virginia University Graduate Admissions website and completing the main graduate student application. Applicants should select the fall term, "Masters" as the admission type, "Nursing MSN" as the intended program, and FNP track. Applicants will then be asked to select a full-time or part-time progression plan. Please note that full-time and part-time placements are based on space availability. The most qualified applicants will receive priority for full-time placements. Class size and progression plans may be limited based on available faculty resources and space. Applicants to the MSN program need to complete the following steps in order to be considered for admission:

1. Application for Admission to Graduate Studies (available at: [https://westvirginia.force.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB) ([https://westvirginia.force.com/wvugrad/TX\\_SiteLogin/?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin/?startURL=%2Fwvugrad%2FTargetX_Portal__PB)))
2. Request an official transcript of records from each college or university attended.
  - a. It is preferred that official transcripts be sent via an online, secure service such as eScrip-Safe (<https://escrip-safe.com/signup/>), National Student Clearinghouse (<https://studentclearinghouse.org/>), or Parchment (<https://www.parchment.com/>) to [graduateadmissions@mail.wvu.edu](mailto:graduateadmissions@mail.wvu.edu).
  - b. Alternatively, sealed, untampered, physical official transcripts can be sent directly to WVU Graduate Admissions, P.O. Box 6510, Morgantown, WV 26506-6510.
  - c. Applicants who completed prior education outside of the U.S. must have their transcripts evaluated by World Education Services (WES) (<https://www.wes.org/evaluations-and-fees/education/graduate-admissions/>). Please request a "course-by-course" International Credential Advantage Package (ICAP).
3. Submit a current curriculum vitae, evidence of licensure, and applicable letters of good standing.



For more information, visit the website at <https://nursing.hsc.wvu.edu> (<https://nursing.hsc.wvu.edu/>), write to West Virginia University School of Nursing, P.O. Box 9600, Morgantown, WV 26506-9600; or call (304) 293-1386.

ADMISSION PROCESS FOR THE MSN PROGRAM

The Graduate Admissions Committee will meet periodically throughout the year to review all qualified applicants. Acceptance is dependent upon space available in the program, and the most qualified applicants are accepted.

Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8649

Master of Science in Nursing Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required		
A minimum grade of C- is required in all courses		
Core Courses		
NSG 622	Theory and Disciplined Reasoning	3
NSG 623	Advanced Practice Role & Interprofessional Collaboration	3
NSG 625	Statistics	3
NSG 626	Lifespan Health Promotion	3
NSG 627	Evidence Based Practice	3
NSG 628	Leadership/Policy/Ethics	3
NSG 706	Advanced Pathophysiology	3
NSG 709	Health Care Informatics	3
Required Area of Emphasis (select one of the following):		22
Family Nurse Practitioner (FNP)		
Pediatric Nurse Practitioner (PNP)		
Total Hours		46

Suggested Plan of Study for Family Nurse Practitioner Area of Emphasis

First Year					
Fall	Hours	Spring	Hours	Summer	Hours
NSG 622		3 NSG 625		3 NSG 626	3
NSG 623		3 NSG 627		3 NSG 712	3
NSG 706		3 NSG 701		3	
		NSG 705		3	
		9		12	6
Second Year					
Fall	Hours	Spring	Hours		
NSG 709		3 NSG 628		3	
NSG 714		3 NSG 721		5	
NSG 720		5			
		11		8	

Total credit hours: 46

A minimum of 10 credits of Family Practicum (including Practicum 1 and 2) is required for graduation. This equates to a total of 600 hours of supervised clinical experience.



## Suggested Plan of Study for Pediatric Nurse Practitioner Area of Emphasis

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
NSG 622		3 NSG 625		3 NSG 626	3
NSG 623		3 NSG 627		3 NSG 770	3
NSG 706		3 NSG 701		3	
		NSG 705		3	
		9		12	6

### Second Year

Fall	Hours	Spring	Hours
NSG 709		3 NSG 628	3
NSG 771		3 NSG 773	5
NSG 772		5	
		11	8

Total credit hours: 46

A minimum of 10 credits of Pediatric Practicum (including Practicum 1 and 2) is required for graduation. This equates to a total of 600 hours of supervised clinical experience.

## Areas of Emphasis

- Family Nurse Practitioner
- Pediatric Nurse Practitioner

## Family Nurse Practitioner Area of Emphasis Requirements

Code	Title	Hours
NSG 701	Advanced Pharmacotherapeutics	3
NSG 705	Advanced Lifespan Assessment	3
NSG 712	Primary Care of Families 1	3
NSG 714	Primary Care of Families 2	3
NSG 720	Family Practicum 1	5
NSG 721	Family Practicum 2	5
Total Hours		22

## Pediatric Nurse Practitioner Area of Emphasis Requirements

Code	Title	Hours
NSG 701	Advanced Pharmacotherapeutics	3
NSG 705	Advanced Lifespan Assessment	3
NSG 770	Pediatric Primary Care 1	3
NSG 771	Pediatric Primary Care 2	3
NSG 772	Pediatric Practicum 1	5
NSG 773	Pediatric Practicum 2	5
Total Hours		22

## Progression Standards

To progress in the MSN and post-master's curricula, a student must meet the following performance standards. Failure to meet the criteria below will result in dismissal from the program.

### 1. Grade Point Average (GPA) requirements:

- Graduate program students are required to maintain a 3.0 in all work attempted in the program. A student who falls below 3.0 after nine or more credit hours are completed in the program will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program.

- b. Post-Graduate Certificate students are required to take fewer credits than those in the degree programs. Therefore, a GPA lower than 3.0 will not be grounds for probation or dismissal. However, all other progression standards apply to post-graduate certificate students.
2. Earn a letter grade (A, B, C) on all required courses. A grade of F in any course results in dismissal from the program.
3. Carry forward only one C grade in a nursing course. A second C in any nursing course will result in dismissal from the program.
4. Students can withdraw from only one course (resulting in a "W" on the academic transcript), and only one time.
5. If a student needs to withdraw from all courses in a semester, the student must meet with his or her faculty advisor (see Leave of Absence and Withdrawal policies in program handbook at <https://nursing.wvu.edu/students/resources/student-handbooks/> (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnursing.wvu.edu%2Fstudents%2Fresources%2Fstudent-handbooks%2F&data=04%7C01%7Cbtoothman%40hsc.wvu.edu%7C2fa5bc36333e4eb6f92108d8dce02368%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C637502202526508450%7CUnknown%7CTWFPbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQljoiv2luMzliLCJBtIl6lk1haWwiLCJXVCi6Mn0%3D%7C1000&sdata=JilqL7WJajVfQoCzXnKw3xpGN64fuStpksq5lhv1B3Q%3D&reserved=0>)).

Any student who has been dismissed from the WVU SON will not be readmitted to the program.

### Grading Scale

The grading scale for nursing as posted in each course syllabus is:

A = 93-100, B = 85-92, C = 77-84, F = 76 and below.

## Major Learning Outcomes

### MASTER OF SCIENCE IN NURSING

**At the completion of the program, the graduate will be able to:**

1. Use disciplined reasoning from sciences and the humanities to:
  - a. Integrate nursing and related sciences into the delivery of advanced nursing care to diverse populations.
  - b. Design nursing care for a clinical or community focused population based on biopsychosocial, public health, nursing, and organizational sciences.
  - c. Apply ethical analysis and clinical reasoning to assess, intervene, and evaluate advanced nursing care delivery.
  - d. Analyze nursing history to expand thinking and provide a sense of professional heritage and identity.
2. Incorporate current and emerging genetic/genomic evidence in providing advanced nursing care to individuals, families, and communities while accounting for patient values and clinical judgment through:
  - a. Synthesizing broad ecological, global and social determinants of health; principles of genetics and genomics; and epidemiologic data to design and deliver evidence based, culturally relevant clinical prevention interventions and strategies.
  - b. Designing patient-centered and culturally responsive strategies in the delivery of clinical prevention and health promotion interventions and/or services to individuals, families, communities, and aggregates/clinical populations.
  - c. Integrating clinical prevention and population health concepts in the development of culturally relevant and linguistically appropriate health education, communication strategies, and interventions.
3. Support quality improvement and patient safety by:
  - a. Promoting a professional environment that includes accountability, peer review, advocacy for patients and families, reporting of errors, and professional writing.
  - b. Contributing to the integration of healthcare services to affect safety and quality of care to improve patient outcomes and reduce fragmentation of care.
  - c. Participating in, and leading when appropriate, in quality initiatives that integrate socio-cultural factors affecting the delivery of nursing and healthcare services.
4. Demonstrate organizational and systems leadership that:

- a. Emphasizes clinical practice.
  - b. Continually improves health outcomes.
  - c. Ensures patient safety.
5. Analyze and evaluate evidence to integrate scholarship into practice through:
- a. Integrating theory, evidence, clinical judgment, and interprofessional perspectives to improve practice and health outcomes for patient aggregates.
  - b. Articulating to a variety of audiences the evidence base for practice decisions, including the credibility of sources of information and the relevance to the practice problem.
  - c. Applying practice guidelines to improve practice.
  - d. Participating, and leading when appropriate, in collaborative teams to improve care outcomes and support policy changes through knowledge generation, dissemination, and implementation.
6. Demonstrate proficiency in the analysis and use of information systems and technology to sustain improvements and promote transparency using high reliability and just culture principles through:
- a. Analyzing current emerging technologies to support safe practice environments, and to optimize patient safety, cost-effectiveness, and health outcomes.
  - b. Using information and communication technologies, resources, and principles of learning to teach patients and others.
  - c. The use of current and emerging technologies in the care environment to support lifelong learning for self and others.
7. Assume an advocacy role in healthcare policy by:
- a. The analysis of the influence of policy on the structure and financing of health care practice and health outcomes.
  - b. Participation in the development and implementation of institutional, local, state, and federal policy.
  - c. The examination of the effect of legal and regulatory processes on nursing practice, health care delivery, and outcomes.
  - d. Interpreting research and bringing the nursing perspective for policy makers and stakeholders.
  - e. Advocating for policies that improve the health of the public and the nursing profession.
8. Collaborate with other professions to improve patient and population health outcomes by:
- a. Advocating for the value of the professional nurse as members, and leaders when indicated, of interprofessional healthcare teams.
  - b. Using collaboration in the design, coordination, and evaluation of patient- centered care.
  - c. Mentoring and coaching new and experienced nurses and other members of the healthcare team.
  - d. Understanding other health professions scopes of practice to maximize contributions within the healthcare team.
9. Plan, manage, and evaluate evidence-based clinical prevention and population care by:
- a. Evaluating the effectiveness of clinical prevention interventions that affect individual and population-based health outcomes.
  - b. Delivering patient-centered and culturally responsive strategies in prevention and health promotion to individuals, families, communities, and aggregates/clinical populations.
10. Ensure accountability for advanced practice based on refined assessment skills; advanced communication skills; and biophysical, genetic, genomic, psychosocial, sociopolitical, economic, ethical, and cultural principles through:
- a. Delivering safe, quality care to diverse populations in a variety of settings and roles.
  - b. Conducting a comprehensive and systematic assessment as a foundation for decision making.
  - c. Applying the best available evidence from nursing and other sciences as the foundation for practice.
  - d. Using knowledge of illness and disease management to provide evidence- based care to populations, perform risk assessments, and design plans or programs of care.

- e. Incorporating core scientific and ethical principles in identifying potential and actual ethical issues arising from practice, in assisting patients and other healthcare providers to address such issues.

## Doctor of Nursing Practice Nurse Anesthetist, D.N.P.

### Degree Offered

- Doctor of Nursing Practice

### Nature of the Program

#### DESCRIPTION

The DNP Nurse Anesthetist Program prepares registered nurses to become certified registered nurse anesthetists (CRNAs) through a rigorous, challenging curriculum based on the Standards of Accreditation from the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) and the DNP Essentials of the American Association of Colleges of Nursing (AACN). Only offered as a full-time program, students are required to take 88 credits over 3 years or 9 continuous semesters. The program received a five-year initial accreditation from the COA effective October 9, 2019.

Nurse anesthesia practice covers the continuum of care from pre-operative assessment to discharge from the recovery unit. Nurse anesthetists interview and assess each patient to best formulate and implement an individualized plan of care while collaborating with members of a multi-disciplinary health care team. The DNP Nurse Anesthetist Program prepares students through course work that develops knowledge and skill in anesthesia practice, translation and implementation of evidence to practice, improvement in health outcomes for diverse populations, and organizational leadership.

Courses are divided into four categories, including core DNP, anesthesia specialty, clinical practicum, and DNP project offerings. Core DNP courses are offered online and address foundations of nursing theory, assessment, pharmacology, statistics, evidence-based practice methods, health promotion, informatics, leadership, ethics, and health policy. Anesthesia specialty courses are face-to-face classes with online capabilities. They are heavily based in sciences including chemistry, physics, advanced anatomy, physiology, pathophysiology, pharmacology, and basic and advanced principles of anesthesia. Additional specialty courses present physical assessment and principles of business, management, and finance pertinent to anesthesia practice. Clinical practicum begins in the third semester and provides the student the opportunity to integrate didactic content with application of state-of-the-art techniques in the provision of anesthesia care to patients in all risk categories and age ranges in a variety of health care settings. Students are required to administer a minimum of 650 anesthetics and complete over 2000 clinical hours; however, graduating WVU DNP student nurse anesthetists are expected to exceed that minimum. DNP project courses are incorporated early in the curriculum to give the student and faculty time to develop a project question, perform a literature search, refine and implement an initiative, collect and analyze data, and write a manuscript. The DNP Project manuscript and a portfolio of course work will demonstrate a synthesis of the student's efforts in the program and will lay the foundation for future clinical scholarly initiatives directed at improving health and organizational outcomes in nurse anesthesia practice.

The graduate will earn a DNP degree and be eligible to sit for the National Certification Exam (NCE). This is a board exam administered by the National Board of Certification and Recertification of Nurse Anesthetists (NBCRNA). Graduates who pass the Certification Exam become *Certified* Registered Nurse Anesthetists. Certified graduates have the opportunity to practice in traditional hospital operating suites; ambulatory surgical centers; offices of dentists, podiatrists and pain management specialists; or in a wide variety of settings including the U.S. military and Public Health Services. The Bureau of Labor Statistics projects that demand for Nurse Anesthetists will grow 13% by 2030. According to the most current American Association of Nurse Anesthetists (AANA) statistics, the mean total compensation for full time CRNAs is greater than \$200,000.

#### ACCREDITATION INFORMATION

The WVU Nurse Anesthetist Program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) through October, 2024. The COA may be contacted by mail at 10275 W. Higgins Road, Suite 906, Rosemont, IL 60018-5603; by phone at 224-275-9130; or on the web at [www.coacna.org](http://www.coacna.org) (<http://www.coacna.org/>).

The WVU School of Nursing DNP program is accredited by the Commission on Collegiate Nursing Education (CCNE). A 10-year renewed accreditation was confirmed in June, 2019 and is effective through June, 2029.

### Admissions

#### DNP NURSE ANESTHETIST ADMISSION CRITERIA

Qualifications to apply to the WVU DNP Nurse Anesthetist program include:

- Degree of Bachelor of Science in Nursing from a nationally-accredited nursing program and regionally-accredited institution.
- Minimum nursing GPA of at least a 3.0 on a 4.0 scale.
- Cumulative GPA of a 3.0 on a 4.0 scale on all college work attempted. (Provisional admission may be considered if the overall GPA is 2.75-2.99 depending upon space available and other qualifications.)
- Minimum of 1-year post-orientation, and preferably 2-3 years of current, full-time critical care experience.
  - Employment in telemetry, cardiac catheterization lab, operating room, post-anesthesia care unit, interventional radiology, or emergency department is not considered critical care experience.

- American Heart Association certification in basic life support and advanced cardiac life support. (Pediatric advanced life support is required prior to the first day of classes.)
- Current, unrestricted RN license. (Licensure in West Virginia will be required during the program and possibly one or more of the following states: Maryland, Ohio, and/or Pennsylvania.)
- Letters of good standing (required for transfer students or those that have taken courses in another graduate program but did not complete the degree).

Applicants must submit official transcripts from all degree programs of attendance, a curriculum vitae/resume, 3 letters of recommendation (Professor/Faculty Member, Supervisor/Employer responsible for your annual performance review, and a professional colleague, physician or CRNA), evidence of licensure, BLS, and ACLS certification, and an application fee by the specified deadline. It is also strongly recommended that students shadow a CRNA prior to applying to the program.

Competitive applicants will be invited for an on-campus interview. Applicants will not be admitted without an interview. Admission into any graduate program is granted on a competitive basis and students meeting minimum requirements may be denied admission based on factors, such as program capacity or academic discretion.

Students must satisfactorily complete background checks and drug screens upon admission.

Notes: To be considered, applicants must meet all WVU admission requirements (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/first-time-graduate-applicant/>), in addition to program specific admission criteria. Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at <https://nursing.hsc.wvu.edu> (<https://nursing.hsc.wvu.edu/>). Any student who has been dismissed from the West Virginia University School of Nursing or any other nursing program will not be eligible for admission or readmission. Exceptions may be considered if the dismissal was academic and was followed by successful completion of an additional degree or credential.

### Application Process

Complete two application forms as indicated below and return to the appropriate offices by the deadline.

1. Application for Admission to Graduate Studies (available at: [https://westvirginia.force.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB) ([https://westvirginia.force.com/wvugrad/TX\\_SiteLogin/?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin/?startURL=%2Fwvugrad%2FTargetX_Portal__PB)))
  - On the Supplemental Materials screen, you will upload the following:
    - Current curriculum vita or resume
    - Professional goals statement. View the guidelines on writing the essay on the School of Nursing website.
  - Applicants must also provide three letters of recommendation (Professor/Faculty Member, Supervisor/Employer responsible for your annual performance review, and a professional colleague, physician or CRNA). You will list your references, with their email addresses, on the Recommendations screen. Your references will receive an email from the application vendor with an electronic form. They will also need to upload a letter of recommendation.
2. Supplemental Application for the DNP Nurse Anesthetist Program (<https://nursing.wvu.edu/students/graduate-programs/dnp-nurse-anesthetist/application-information/>).
3. Request an official transcript of records from each college or university attended.
  - a. It is preferred that official transcripts be sent via an online, secure service such as eScrip-Safe (<https://escrip-safe.com/signup/>), National Student Clearinghouse (<https://studentclearinghouse.org/>), or Parchment (<https://www.parchment.com/>) to [graduateadmissions@mail.wvu.edu](mailto:graduateadmissions@mail.wvu.edu).
  - b. Alternatively, sealed, untampered, physical official transcripts can be sent directly to WVU Graduate Admissions, P.O. Box 6510, Morgantown, WV 26506-6510.
  - c. Applicants who completed prior education outside of the U.S. must have their transcripts evaluated by World Education Services (WES) (<https://www.wes.org/evaluations-and-fees/education/graduate-admissions/>). Please request a "course-by-course" International Credential Advantage Package (ICAP).

For more information, visit the website at <https://nursing.hsc.wvu.edu>, write to West Virginia University School of Nursing, P.O. Box 9600, Morgantown, WV 26506-9600; or call (304) 293-1386.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8625

## Degree Requirements

Code	Title	Hours
<b>A minimum cumulative GPA of 3.0 is required for the degree.</b>		
NSG 701	Advanced Pharmacotherapeutics	3
NSG 702	Population Health Promotion	3
NSG 704	Health Care Leadership	3
NSG 705	Advanced Lifespan Assessment	3
NSG 706	Advanced Pathophysiology	3
NSG 707	Evidence Based Practice Methods	3
NSG 710	Health Care Issues, Policy, and Ethics	3
NSG 724	Health Research Statistics 1	3
NSG 739	Scientific Underpinnings of the DNP Role	3
NSG 740A	Standards of Practice, Professionalism, and Overview of the Nurse Anesthesia Role	2
NSG 740B	Professional Issues in Nurse Anesthesia	2
NSG 741	Genetics, Chemistry, and Physics of Anesthesia	3
NSG 742A	Foundations of Anesthesia 1: Basic Principles of Safe Anesthesia Care	3
NSG 742B	Foundations of Anesthesia 2: Regional Anesthesia and Considerations for Common Procedures	2
NSG 743	Foundations of Anesthesia Lab	1
NSG 744A	Advanced Anatomy, Physiology, and Pathophysiology 1: Cardiac, Pulmonary, and CNS	3
NSG 744B	Advanced Anatomy, Physiology, and Pathophysiology 2: Hepatic, Renal, and Related Systems	2
NSG 746	Advanced Pharmacology for Nurse Anesthetists	3
NSG 747	Perioperative Assessment and Care	1
NSG 748A	Advanced Principles of Anesthesia 1: Cardiothoracic, Vascular, and Neuroanesthesia	3
NSG 748B	Advanced Principles of Anesthesia 2: Management Across the Lifespan	3
NSG 748C	Advanced Principles of Anesthesia 3: Management of Special Populations	2
NSG 749	Business, Management, and Finance in Nurse Anesthesia Practice	3
NSG 751	Evidence-Based Anesthesia Review	3
NSG 752A	Foundations Clinical Practicum 1	1
NSG 752B	Foundations Clinical Practicum 2	2
NSG 753A	Advanced Clinical Practicum 1	2
NSG 753B	Advanced Clinical Practicum 2	2
NSG 753C	Advanced Clinical Practicum 3	3
NSG 754	Transforming Health Care Through Information Technology	3
NSG 810	Nurse Anesthesia Clinical Immersion 1	3
NSG 812	Nurse Anesthesia Clinical Immersion 2	2
NSG 830	Doctor of Nursing Practice Project Development	2
Project Implementation		3
NSG 831	Doctor of Nursing Practice Project Implementation	
NSG 832	Doctor of Nursing Practice Project Presentation	2
Total Hours		88

## Suggested Plan of Study

First Semester	Hours
NSG 706	3
NSG 724	3
NSG 739	3
NSG 740A	2
	11
Second Semester	Hours
NSG 701	3
NSG 705	3

NSG 707	3
NSG 741	3
	12
<b>Third Semester</b>	<b>Hours</b>
NSG 702	3
NSG 742A	3
NSG 743	1
NSG 752A	1
NSG 830	2
	10
<b>Fourth Semester</b>	<b>Hours</b>
NSG 742B	2
NSG 744A	3
NSG 746	3
NSG 752B	2
NSG 831	1
	11
<b>Fifth Semester</b>	<b>Hours</b>
NSG 744B	2
NSG 747	1
NSG 748A	3
NSG 753A	2
NSG 754	3
NSG 831	1
	12
<b>Sixth Semester</b>	<b>Hours</b>
NSG 748B	3
NSG 753B	2
NSG 831	1
	6
<b>Seventh Semester</b>	<b>Hours</b>
NSG 704	3
NSG 740B	2
NSG 748C	2
NSG 753C	3
	10
<b>Eighth Semester</b>	<b>Hours</b>
NSG 710	3
NSG 749	3
NSG 810	3
	9
<b>Ninth Semester</b>	<b>Hours</b>
NSG 751	3
NSG 812	2
NSG 832	2
	7

Total credit hours: 88

## Progression and Performance Standards

To progress in the graduate curriculum, a Nurse Anesthetist Program student must meet the following performance standards. Failure to meet the criteria below will result in dismissal from the program.

1. Maintain an overall academic Grade Point Average of at least 3.0 in all work attempted in the DNP Nurse Anesthetist Program. A student who falls below 3.0 after nine or more credit hours are completed in the program will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program.
2. Earn a letter grade (A, B, C, or Pass) on all required courses. A grade of F or Fail in any course results in dismissal from the program.
3. Carry forward only one C grade in a core DNP nursing course. A second C in a core DNP nursing course will result in dismissal from the program. A student earning below a B- grade in any anesthesia specialty course must repeat the course. This means the student will fall out of progression with the current cohort and must wait until the course is offered in the next academic year.
4. Repeat only one course in the DNP Nurse Anesthetist progression plan and only one time.
5. Students may withdraw from only one course (resulting in a "W" on the academic transcript), and only one time.

If a student needs to withdraw from all courses in a semester, the student must meet with his or her faculty advisor. See program handbook for Leave of Absence and Withdrawal policies at <https://nursing.wvu.edu/students/resources/student-handbooks/> (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnursing.wvu.edu%2Fstudents%2Fresources%2Fstudent-handbooks%2F&data=04%7C01%7Caaron.ostrowski%40hsc.wvu.edu%7C137a21e4a5ff47a48e9808d8dcccde2f8%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C637502124113567884%7CUnknown%7CTWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTil6lk1haWwiLCJXVCi6Mn0%3D%7C1000&sdata=vyntsWc7nYZ0wqNqVQkY9Q1DEIRvz6tPKI5czO0Wmos%3D&reserved=0>).

### Grading Scale

The grading scale for nursing as posted in each course syllabus is:

A = 93-100, B = 85-92, C = 77-84, F = 76 and below.

## Doctor of Nursing Practice in Nurse Anesthesia Learning Outcomes

Upon completion of the Nurse Anesthetist Program, the graduate will be prepared to:

1. Implement advanced knowledge in nurse anesthesia science, theory, and practice.
2. Evaluate, develop, implement, and lead organizational change to improve care delivery and quality.
3. Develop evidence-based interventions and implement solutions to address clinical problems.
4. Examine and evaluate technology and the utility of information systems and data to improve patient care.
5. Influence and participate in health policy development in the institution and region of practice.
6. Collaborate with the healthcare community, working with nursing, medical, surgical and anesthesia team members to promote patient advocacy and safety.
7. Demonstrate technical, professional, and cultural competence in nurse anesthesia practice by safely caring for patients across the lifespan and at all levels of acuity.
8. Formulate physiologically sound plans for anesthesia care.
9. Participate in the clinical, administrative, and educational advancement of fellow CRNAs and other advanced practice practitioners.

## Doctor of Nursing Practice Online Program, D.N.P.

### Degree Offered

- Doctor of Nursing Practice

### Nature of the Program

#### DESCRIPTION

The West Virginia University School of Nursing offers a post-master's program of study leading to the Doctor of Nursing Practice (DNP) degree. Graduates of the DNP program advance the application of nursing knowledge through the translation and implementation of evidence for practice to improve health outcomes for diverse populations. This expert level practice builds on the past advanced practice education, experience, and certification.

The DNP-prepared nurse is prepared to participate in healthcare in numerous roles including:

- advanced practice nurse
- nurse entrepreneur
- nurse administrator
- health care advocate



This post-graduate DNP program can be completed in as few as 32 credit hours. The plan of study for the DNP degree requires 1,000 post-baccalaureate hours of clinical immersion and completion of a DNP project. Students must complete a minimum of 5 credits of clinical immersion and 6 credits in DNP project courses (additional clinical immersion and DNP project credits may be required to meet program outcomes).

The clinical immersion experience is intended to broaden clinical experience through the assessment of system level changes and the evaluation of such changes. Approved precepted Master's level clinical hours may be counted toward the 1,000 hours, but a minimum of 300 clinical immersion hours must be earned at the DNP level.

The DNP Project is used to demonstrate mastery of the DNP curriculum content. According to the American Association of Colleges of Nursing (AACN), doctoral education is distinguished by the completion of a specific project that demonstrates synthesis of the student's work and lays the groundwork for future clinical scholarly work directed at improving health or organizational outcomes in the area of focus. The curriculum primarily involves mastery of an advanced specialty within nursing practice and methods of practice improvement and change. Guided by faculty and with assistance of an expert in the area of interest, the DNP project demonstrates the student's ability to identify a practice or system-related problem through clinical immersion, to synthesize and critically appraise the evidence related to addressing that practice problem, to negotiate within the system, to implement evidence-based change within an organization, to implement that change, and to systematically measure the results of the practice or system-related change initiative. The DNP Project documents outcomes of the student's educational experiences and summarizes the student's growth in knowledge and expertise. The DNP Project experience serves as a foundation for leadership in future scholarly practice with the clinical setting.

The programs are offered by faculty on the Morgantown and Charleston campuses. Courses are offered via web-based modalities, with both synchronous and asynchronous formats. Enrollment in nursing courses is based upon readiness, availability of space, and an adequate cohort of students. The DNP project proposal and final presentation take place on either campus depending on the preference of the committee chair.

It is a strong recommendation by the University and the School of Nursing that graduate students limit their credit load if they are also involved in full-time work. Full-time work and studies may negatively affect the student's ability to succeed academically.

## Admissions

### CRITERIA

Applicants for the DNP Program must have:

- a Master of Science in Nursing degree from a nationally accredited nursing program and regionally accredited institution,
- a minimum overall nursing GPA or a 3.0 on a 4.0 scale,
- a minimum cumulative GPA of 3.0 on a 4.0 scale on all graduate work attempted. (Provisional admission may be considered if the overall GPA is 2.75-2.99 depending upon space available and other qualifications.)an overall GPA on all college work attempted of at least 3.0 on a 4.0 scale,
- an active, unrestricted RN license in at least one state at the time of application (and licensure in the state in which he or she plans to complete clinical immersion),
- Letters of good standing (required for transfer students or those that have taken courses in another graduate program but did not complete the degree).

Applicants must submit official transcripts from all degree programs of attendance, a curriculum vitae/resume, evidence of licensure, and an application fee by the specified deadline. It is also strongly recommended that students shadow a CRNA prior to applying to the program.

Competitive applicants will be invited for an on-campus interview. Applicants will not be admitted without an interview.

Students must satisfactorily complete background checks and drug screens upon admission.

Notes: To be considered, applicants must meet all WVU admission requirements (<https://graduateadmissions.wvu.edu/how-to-apply/>), in addition to program specific admission criteria. Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at <https://nursing.hsc.wvu.edu> (<https://nursing.hsc.wvu.edu/>). Any student who has been dismissed from the West Virginia University School of Nursing or any other nursing program will not be eligible for admission or readmission. Exceptions may be considered if the dismissal was academic and was followed by successful completion of an additional degree or credential.

### Application Process

Applicants may apply at any time for fall admission by going to the West Virginia University Graduate Admissions website and completing the main graduate student application. Applicants should select the fall term, "Professional" as the student type, and "Nursing DNP" as the intended program. Applicants will then be asked to select a full-time or part-time progression plan. Applicants to the DNP program need to complete the following steps in order to be considered for admission:

Complete one application form as indicated below and return to the appropriate offices by the deadline.

1. Application for Admission to Graduate Studies (available at: [https://westvirginia.force.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB)) ([https://westvirginia.force.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB))
2. Request an official transcript of records from each college or university attended.

- a. It is preferred that official transcripts be sent via an online, secure service such as eScrip-Safe (<https://escrip-safe.com/signup/>), National Student Clearinghouse (<https://studentclearinghouse.org/>), or Parchment (<https://www.parchment.com/>) to [graduateadmissions@mail.wvu.edu](mailto:graduateadmissions@mail.wvu.edu).
  - b. Alternatively, sealed, untampered, physical official transcripts can be sent directly to WVU Graduate Admissions, P.O. Box 6510, Morgantown, WV 26506-6510.
  - c. Applicants who completed prior education outside of the U.S. must have their transcripts evaluated by World Education Services (WES) (<https://www.wes.org/evaluations-and-fees/education/graduate-admissions/>). Please request a "course-by-course" International Credential Advantage Package (ICAP).
3. Submit a current curriculum vitae.
  4. Submit a professional writing sample using the guidelines (<https://nursing.hsc.wvu.edu/media/74626/wvu-dnp-personal-statement-guidelines-for-application.pdf>) provided on our website.

For more information, visit the website at <https://nursing.hsc.wvu.edu>, write to West Virginia University School of Nursing, P.O. Box 9600, Morgantown, WV 26506-9600; or call (304) 293-1386.

### Admission Process for the DNP Program

The Graduate Admissions Committee will meet periodically throughout the year to review all qualified applicants. Acceptance is dependent upon space available in the program, and the most qualified applicants are accepted.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8664

## Doctor of Nursing Practice Requirements

Code	Title	Hours
NSG 702	Population Health Promotion	3
NSG 704	Health Care Leadership	3
NSG 707	Evidence Based Practice Methods	3
NSG 710	Health Care Issues, Policy, and Ethics	3
NSG 724	Health Research Statistics 1	3
NSG 739	Scientific Underpinnings of the DNP Role	3
NSG 745	Clinical Immersion *	5
NSG 754	Transforming Health Care Through Information Technology	3
<b>DNP Project **</b>		
NSG 830	Doctor of Nursing Practice Project Development	2
NSG 831	Doctor of Nursing Practice Project Implementation	2
NSG 832	Doctor of Nursing Practice Project Presentation	2
Total Hours		32

\*

A minimum of 5 credits of Clinical Immersion is required prior to graduation. A total of 1000 hours post baccalaureate supervised clinical practice is required prior to graduation and therefore students may be required to take additional credits to meet this total. Spread over multiple semesters.

\*\*

Total DNP Project hours - at least 6 credits. Spread over multiple semesters.

\*\*\*

Individual progression plans to be developed based on previous course work. Total credit hours will vary according to previous course work provided credit for, including number of post-baccalaureate clinical experience hours gained prior to admission to the program.

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
NSG 724		3 NSG 707		3 NSG 702	3
NSG 739		3 NSG 754		3 NSG 745	1
				NSG 830	2
		6		6	6

**Second Year**

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>	
NSG 704		3 NSG 710		3 NSG 745		1
NSG 745		1 NSG 745		1		
NSG 831		1 NSG 831		1		
		5		5		1

**Third Year**

<b>Fall</b>	<b>Hours</b>	
NSG 745		1
NSG 832		2
		3

Total credit hours: 32

## Progression and Performance Standards

To progress in the DNP curriculum, a student must meet the following performance standards. Failure to meet the criteria below will result in dismissal from the program.

- Grade Point Average (GPA) requirements:
  - DNP students are required to maintain a 3.0 in all work attempted in the program. A student who falls below 3.0 after nine or more credit hours are completed in the program will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program.
- Earn a letter grade (A, B, C) on all required courses. A grade of F in any course results in dismissal from the program.
- Carry forward only one C grade in a nursing course. A second C in any nursing course will result in dismissal from the program.
- Students can withdraw from only one course (resulting in a "W" on the academic transcript), and only one time.
- If a student needs to withdraw from all courses in a semester, the student must meet with his or her faculty advisor (see Leave of Absence and Withdrawal policies in program handbook).

Note: Any student who has been dismissed from the WVU SON will not be readmitted to the program.

## GRADING SCALE

The grading scale for nursing as posted in each course syllabus is:

- A = 93-100, B = 85-92, C = 77-84, F = 76 and below.

## Major Learning Outcomes

### POST-MASTER'S DNP PROGRAM GOALS

Upon completion of the program, the graduate will be able to:

- Use disciplined reasoning, science-based theories, and concepts from sciences and humanities to:
  - Determine the nature and significance of health and health care delivery phenomena.
  - Describe actions and advanced strategies to improve health care delivery, to diverse populations.
  - Develop, deliver and evaluate theory based health care.
  - Analyze nursing history to expand thinking and provide a sense of professional heritage and identity
- Demonstrate organizational and systems leadership that:
  - Emphasizes clinical practice.
  - Continually improves health outcomes.
  - Ensures patient safety.
- Use analytic methods, evidence, and nursing science to:
  - Critically appraise existing literature to identify and evaluate best practices and practice guidelines.

- b) Facilitate the evaluation of systems of care in order to improve patient outcomes.
  - c) Serve as a practice specialist/consultant in collaborative knowledge generating research.
  - d) Disseminate results through translational scholarship.
4. Demonstrate proficiency and provide leadership for the integration of information systems/technology to:
- a) Support, monitor, and improve patient care, healthcare systems, clinical decision-making, nurse-sensitive outcomes, and academic settings.
  - b) Support quality improvement and patient safety.
5. Assume a leadership role in advocacy and health care policy development.
6. Establish, participate in, and lead interprofessional collaborations for improving patient, population, and systems outcomes.
7. Develop, implement, and evaluate practice and healthcare delivery models for the purpose of quality improvement and improved patient outcomes considering:
- a) Safety and quality.
  - b) Epidemiological, bio-statistical, environmental, and other appropriate scientific data.
  - c) Culturally appropriate care.
  - d) Values based professional practice and behaviors.
  - e) Economies of care, business principles and health policy related to individual, aggregate, and population health.
8. Ensure accountability for advanced practice based on refined assessment skills, advanced communication skills, biophysical, genetic, genomic, psychosocial, sociopolitical, economic, ethical, and cultural principles.
9. Practice and provide services for populations within the area of advanced nursing specialization.

## Doctor of Philosophy, Ph.D.

### Degree Offered

- Doctor of Philosophy

### Nature of the Program

The purpose of the Ph.D. program is to prepare nurse scholars/scientists for roles in research, teaching, and service. The program prepares graduates who will contribute to the body of nursing knowledge, educate the next generation, and assume collaborative leadership roles in shaping health policy, improving health, and reducing disparity.

The goals of the program are to prepare graduates who will:

- 1. Rigorously test, generate, and extend knowledge to inform nursing science, practice, and policy.
- 2. Contribute to the development of knowledge and interventions to address health disparity and promote or improve health.
- 3. Assume collaborative leadership roles in academia, health organizations, research teams, and scholarly networks.
- 4. Demonstrate expertise within an area of study that incorporates nursing and trans disciplinary perspectives.

Visit the School of Nursing website at <https://nursing.hsc.wvu.edu/>. Call the WVU school of Nursing Office of Student Services at 1-866-WVUNURS or (304) 293-1386. Write to WVU School of Nursing at PO Box 9600, Morgantown, WV 26506-9600

## Admissions

### CRITERIA

- 1. Master's degree in nursing (or higher) from a nationally accredited nursing program and a regionally accredited institution. A Master's degree in a health-related discipline will be considered.
- 2. A minimum nursing GPA of 3.0 on a 4.0 scale.
- 3. A minimum cumulative GPA of 3.0 on a 4.0 scale on all graduate work attempted. (Provisional admission may be considered if the overall GPA is 2.75-2.99 depending upon space available and other qualifications.)
- 4. An active, unrestricted RN license in at least one state at the time of application.

5. Letters of good standing (required for transfer students or those that have taken courses in another graduate program but did not complete the degree.

Competitive applicants will be invited for an on-campus interview. Applicants will not be admitted without an interview.

Notes: To be considered, applicants must meet all WVU admission requirements (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>) in addition to program specific admission criteria. Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at <https://nursing.hsc.wvu.edu> (<https://nursing.hsc.wvu.edu/>). Any student who has been dismissed from the West Virginia University School of Nursing or any other nursing program will not be eligible for admission or readmission. Exceptions may be considered if the dismissal was academic and was followed by successful completion of an additional degree or credential.

## APPLICATION PROCESS

The application process is on a rolling basis. The beginning sequence of courses in the PhD in nursing program starts in the Fall semester only. Class size and progression plans may be limited based on available faculty resources and space. Applicants should plan to submit an application and all official documents that accompany the application by July 1st of the year of the desired admission cohort. Applicants to the PhD in nursing program need to complete the following steps in order to be considered for admission:

1. Application for Admission to Graduate Studies (available at: [https://westvirginia.force.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB) ([https://westvirginia.force.com/wvugrad/TX\\_SiteLogin/?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin/?startURL=%2Fwvugrad%2FTargetX_Portal__PB)))
2. Request an official transcript of records from each college or university attended.
  - a. It is preferred that official transcripts be sent via an online, secure service such as eScrip-Safe (<https://escrip-safe.com/signup/>), National Student Clearinghouse (<https://studentclearinghouse.org/>), or Parchment (<https://www.parchment.com/>) to [graduateadmissions@mail.wvu.edu](mailto:graduateadmissions@mail.wvu.edu).
  - b. Alternatively, sealed, untampered, physical official transcripts can be sent directly to WVU Graduate Admissions, P.O. Box 6510, Morgantown, WV 26506-6510.
  - c. Applicants who completed prior education outside of the U.S. must have their transcripts evaluated by World Education Services (WES) (<https://www.wes.org/evaluations-and-fees/education/graduate-admissions/>). Please request a "course-by-course" International Credential Advantage Package (ICAP).
3. Submit a current curriculum vitae or resume.
4. Submit a professional writing sample using the guidelines (<https://nursing.hsc.wvu.edu/media/74626/wvu-dnp-personal-statement-guidelines-for-application.pdf>) provided on our website.

The Graduate Admissions Committee will meet periodically throughout the year to review all qualified applicants. Acceptance is dependent upon space available in the program, and the most qualified applicants are accepted.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8652

## Degree Requirements

Code	Title	Hours
<b>Core Requirements</b>		
NSG 727	Contemporary Nursing Science	3
NSG 728	Nursing Science Theory/Philosophy	4
NSG 732	Seminar in Nursing Scholarship	3
NSG 735	Principles: Nursing Education	3
NSG 736	Advanced Health Policy and Ethics	3
NSG 737	Leadership	3
<b>Cognate/Electives</b>		<b>6</b>
Select two 3 credit courses. At least one of the two courses must be taken outside the School of Nursing		
<b>Research</b>		
NSG 724	Health Research Statistics 1	3
NSG 725	Health Research Statistics 2	3
NSG 729	Quantitative Methods	3
NSG 731	Qualitative Research Methods	3
NSG 733	Research Grant Development	3
NSG 734	Use of Data	3

NSG 781	Research Mentorship	1
NSG 783	Dissertation Seminar	2
NSG 797	Research	8
NSG 785	Qualifying Examination	1
Residency Requirement <sup>1</sup>		
Total Hours		55

1

Meet the residency requirement of the university prior to taking the qualifying examination.

## Suggested Plan of Study

Students are required to be on campus for the six-week Summer sessions, once in the Fall for two days, and once in the Spring for two days. During residency, students are provided with an opportunity to participate with nurse researchers and peers in the ongoing development of a scholarly community.

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
NSG 724		3 NSG 725		3 NSG 728	4
NSG 727		3 NSG 732		3 NSG 729	3
		6		6	7

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
NSG 731		3 NSG 737		3 NSG 736	3
NSG 735		3 NSG 734		3 NSG 733	3
		6		6	6

### Third Year

Fall	Hours	Spring	Hours	Summer	Hours
NSG 785		1 NSG 781		1 NSG 797	2
Cognate		3 NSG 783		2	
		Cognate		3	
		4		6	2

### Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
NSG 797		2 NSG 797		2 NSG 797	2
		2		2	2

Total credit hours: 55

## Major Learning Outcomes

### DOCTOR OF PHILOSOPHY

The PhD in Nursing at WVU is a blended program composed of on-campus classroom and distance learning components. For part-time students it will require three years of coursework, delivered online during fall and spring semesters with both synchronous and asynchronous components. Students are not required to come to campus for fall and spring semesters for regular nursing course work. Summer courses for the first two summers will include limited time on campus. Once a student successfully passes the written and oral components of the qualifying examination, they must complete the research and dissertation phase, culminating in a written and oral dissertation defense. The purpose of the PhD program is to educate nurse scholars-scientists for roles in research, teaching, and service. The program prepares graduates who will contribute to the body of nursing knowledge; educate the next generation; and assume collaborative leadership roles in shaping health policy, improving health, and reducing disparity. The goals of the program are to:

- Rigorously test, generate, and extend knowledge to inform nursing science, practice, and policy.
- Contribute to the development of knowledge and interventions to address health disparity and promote or improve health.
- Assume collaborative leadership roles in academia, healthcare organizations, research teams, and scholarly networks.
- Demonstrate expertise within an area of study that incorporates nursing and trans-disciplinary perspectives.

## Academic Progression Standards

To progress in the PhD program, a student must:

1. Take nursing courses in the sequence stated in the WVU School of Nursing PhD Progression Plan. All prerequisites from preceding semesters must be completed prior to registration for new courses *unless* a student has obtained permission from the PhD Program Director and the course instructor. **Note:** Students must be continuously enrolled in order to maintain active status. See the Leave of Absence and Withdrawal Policies in the PhD Student Handbook.
2. Courses are only applicable for graduation credit if they have been taken within the last eight years.
3. Achieve an overall academic GPA of 3.0 in all course work. The following guidelines apply to grades in the PhD program:
  - Grades of C. Students may carry forward one C grade in any course. However, a second C will result in dismissal from the program.
  - Grades of F. Students with a grade of F in any course will be dismissed from the program.
  - Withdrawals. Students can only have one "W" (class withdraw) while in the PhD program.
  - Unsatisfactory Grade. If students earn an unsatisfactory or "U" in NSG 797 Research, the chair and student must devise a plan to rectify deficiencies in the next semester. If the student receives another "U", they will be dismissed from the program.
  - Incomplete Grades. The PhD program follows the West Virginia University Policy for grads of Incomplete (I).
4. Successfully complete the QE prior to beginning the dissertation. The QE may be repeated once as outlined in the QE section of the student handbook. If the student passes the 5 year limit and has not successfully completed the QE, they will be removed from the PhD program and their status changed to non-degree at the university level.
5. Within the first semester, complete an individualized plan to meet the university residency requirements for doctoral education. Doctoral education involves many learning experiences that take place outside the formal classroom setting. These involve observing and participating in activities conducted by the graduate faculty, using departmental and University libraries, attending lectures presented by visiting scholars, informally debating other students, and similar activities. To ensure that graduate students experience this kind of informal learning, doctoral programs at WVU generally require at least two semesters in residence on campus. However, an individual student or graduate committee may propose an alternative plan by which the student can gain equivalent educational experience. This plan must be submitted in writing, approved by the college or school dean or designee, and placed in the student's program file. [http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree\\_regulations/#requirementstext](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree_regulations/#requirementstext). See the PhD Student Handbook for specific residency requirements.
6. Meet with his or her advisor at least once a year to review and submit documentation of progression. Following spring advisement, student will complete an online mentor evaluation survey. Complete and submit an individualized development plan for program success to the advisor within one year of entering the program.
7. Generate a syllabus each time they are enrolled in an independent study course (NSG 795) and/or a research course (NSG 797). Working with the chair or instructor, the student will identify course learning outcomes. Before the course is released for enrollment, the syllabus must be signed by both the student and chair and a copy provided to the PhD Program Director.

### Grading Scale

The grading scale for nursing as posted in each course syllabus is:

A = 93-100, B = 85-92, C = 77-84, F = 76 and below.

## Master of Science in Nursing Executive Focus/MBA

### Degree Offered

- Master of Science in Nursing/Master of Business Administration

### Nature of the Program

#### DESCRIPTION

The School of Nursing, together with the John Chambers College of Business & Economics, offers a program of study leading to the dual degree of Master of Science in nursing (MSN) (Executive Focus), and Master of Business Administration (MBA). This program is designed for nurses who already have a bachelor's degree in nursing, and two or more years professional, full-time work experience. The program is offered predominantly online, in both synchronous and asynchronous formats. Students take courses from both the MSN and MBA program concurrently, allowing assimilation of advanced business management concepts into the nursing administration role.

The MSN Executive Focus major is offered only to students enrolled in the dual MSN/MBA degree. It is not offered as a "stand-alone" major. The combined MSN/MBA curriculum meets the Essentials of Master's Education in Nursing, the American Organization of Nurse Executive Competencies,



and the expectations of the Association to Advance Collegiate Schools of Business. Throughout the curriculum, students are guided in the process of self-development aimed at pursuing excellence in scholarly and professional endeavors.

The 57-credit-hour program can be completed in eight semesters of full-time study, including summer sessions. Graduates of the program will be eligible to sit for Nurse Executive board certification (ANCC) or the Certification in Executive Nursing Practice (AONL) exams after having held a nursing administration position for at least 2 years.

## Admissions

### CRITERIA

Eligible applicants are required to have:

- A Bachelor of Science in nursing degree from a nationally accredited nursing program and regionally accredited college or university.
- A minimum nursing GPA of 3.0 on a 4.0 scale.
- A cumulative GPA of at least 3.0 on a 4.0 scale on all college work attempted. (Provisional admission may be considered if the overall GPA is 2.75-2.99 depending upon space available and other qualifications).
- An active, unrestricted RN license in at least one state at the time of application.
- Letters of good standing (required for transfer students or those that have taken courses in another graduate program but did not complete the degree).

There are no prerequisite courses; however, online, not-for-credit classes in financial accounting, economics, and statistical concepts through Ivy Software are recommended for those who do not have a strong background in these disciplines.

Students must satisfactorily complete background checks and drug screens upon admission.

Notes: To be considered, applicants must meet all WVU admission requirements (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/>), in addition to program specific admission criteria. Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at <https://nursing.hsc.wvu.edu> (<https://nursing.hsc.wvu.edu/>). Any student who has been dismissed from the West Virginia University School of Nursing or any other nursing program will not be eligible for admission or readmission to the program. Exceptions may be considered if the dismissal was academic and was followed by successful completion of an additional degree or credential.

## APPLICATION PROCESS FOR MSN EXECUTIVE FOCUS/MBA DUAL DEGREE PROGRAM

Students must apply to **both** the MSN Executive Focus nursing program and the online hybrid MBA program simultaneously. Classes in the MSN/MBA program start bi-annually in January and August. Applications are accepted on a rolling admissions schedule, allowing the opportunity to apply prior to the application deadline and receive a decision shortly thereafter. The application deadline is December 1<sup>st</sup> for January start and July 1<sup>st</sup> for August start with a transcript deadline of December/July 15<sup>th</sup>.

**To be considered for admission, please complete the following steps:**

### MBA Application

1. Online Application- Be sure to indicate Business Administration (Online MBA) when responding to "Intended Major". Please select "Off Campus" as the primary delivery method. The application along with the \$60 application fee should be submitted prior to the application deadline. All material should be sent to: Office of Graduate Admissions, P.O. Box 6510, Morgantown, WV 26506-6510 or submitted electronically with your application.
2. Official transcripts from all prior academic work must be forwarded by your previous institution to West Virginia University, Office of Graduate Admissions, P.O. Box 6510, Morgantown, WV 26506-6510. Contact prior institutions as early as possible. If undergraduate work was completed at WVU, admissions will pull transcripts automatically.
  - a. It is preferred that official transcripts be sent via an online, secure service such as eScrip-Safe (<https://escrip-safe.com/signup/>), National Student Clearinghouse (<https://studentclearinghouse.org/>), or Parchment (<https://www.parchment.com/>) to [graduateadmissions@mail.wvu.edu](mailto:graduateadmissions@mail.wvu.edu).
  - b. Alternatively, sealed, untampered, physical official transcripts can be sent directly to WVU Graduate Admissions, P.O. Box 6510, Morgantown, WV 26506-6510.
  - c. Applicants who completed prior education outside of the U.S. must have their transcripts evaluated by World Education Services (WES) (<https://www.wes.org/evaluations-and-fees/education/graduate-admissions/>). Please request a "course-by-course" International Credential Advantage Package (ICAP).
3. Your current resume should include enough information for the admissions committee to trace your entire professional work history and should indicate any relevant affiliations.
4. Your statement of purpose should be a short essay in which you reflect on the contribution of the Online MBA degree to your future and the special characteristics that you would bring to the Online MBA program. We are interested in value-added experiences, both from the program to you and from you to the program.



5. We recommend that your one letter of reference provide some information that is not found in the other materials being submitted. Topics with regards to your ability to work with others, your discipline and ambition, leadership potential, etc. should be addressed. If applicable, an Employers Commitment letter would also be beneficial. In particular, we'd like to know that your manager is aware of the program residency requirements and is in support of your efforts to complete your degree.
6. GMAT/GRE score (or waiver): You should have test scores submitted from the Graduate Management Admissions Test® (GMAT) (WVU GMAT code: C2S-6D-13) or from the Graduate Record Examination (GRE) (WVU GRE code:5904.). Early test taking is encouraged. If you have 5+ years of continuous full-time professional work experience or a terminal degree, you may request a GMAT waiver. To do so, the completed GMAT waiver request form must be uploaded as "Supplemental Information" on your online application. Once all application materials are received, you will be contacted for a phone interview regarding the GMAT waiver request.

### MSN Application

Applicants should select the desired term, "Online" as campus, "Masters" as the student type, "Nursing MSN" as the intended program, and "Yes" for applying to multiple graduate programs. Applicants will then be asked to select a full-time or part-time progression plan.

1. Application for Admission to Graduate Studies (available at: [https://westvirginia.force.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB) ([https://westvirginia.force.com/wvugrad/TX\\_SiteLogin/?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://westvirginia.force.com/wvugrad/TX_SiteLogin/?startURL=%2Fwvugrad%2FTargetX_Portal__PB)))
2. Submit a current curriculum vitae, evidence of licensure, and applicable letters of good standing.

The Graduate Admissions Committee will meet periodically throughout the year to review all qualified applicants. Acceptance is dependent upon space available in the program, and the most qualified applicants are accepted.

## MASTER OF NURSING/MASTER OF BUSINESS ADMINISTRATION

- Admission. Students seeking to enter the Program must apply separately and be admitted independently to each degree program's standard admission procedure.
- For additional details and requirements for each program, please visit the MSN or OMBA pages.
- Students will develop a combined plan of study with their graduate advisors in each program.
- Students must meet the academic standards of both degrees earned.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

### MASTER OF NURSING REQUIREMENTS

Code	Title	Hours
NSG 611	System Based Decision Making	2
NSG 616	Role Seminar for Leadership MSN	2
NSG 617	Leadership Practicum 1	3
NSG 618	Leadership Practicum 2	3
NSG 622	Theory and Disciplined Reasoning	3
NSG 625	Statistics	3
NSG 626	Lifespan Health Promotion	3
NSG 627	Evidence Based Practice	3
NSG 628	Leadership/Policy/Ethics	3
NSG 709	Health Care Informatics	3
Total Hours		28

### MASTER OF BUSINESS ADMINISTRATION REQUIREMENTS

Code	Title	Hours
BADM 612	Managerial and Team Skills	3
BADM 618	Macroeconomics and Managerial Economics	3
BADM 622	Financial Statements Analysis	3
BADM 641	Decision Analysis for Executives	3
BADM 644	Legal Environment and Ethics	3
BADM 630	Corporate Leadership	3
BADM 650	Global Trade and Supply Chain	3

## Progression Standards

To progress in the MSN curriculum, a student must meet the following performance standards. Failure to meet the criteria below will result in dismissal from the program.

1. Grade Point Average (GPA) requirements:
  - a. Graduate program students are required to maintain a 3.0 in all work attempted in the program. A student who falls below 3.0 after nine or more credit hours are completed in the program will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program.
  - b. Post-Graduate Certificate students are required to take fewer credits than those in the degree programs. Therefore, a GPA lower than 3.0 will not be grounds for probation or dismissal. However, students earning two C grades or one F will be dismissed from the Post-Graduate Certificate Program.
2. Earn a letter grade (A, B, C) on all required courses. A grade of F in any course results in dismissal from the program.
3. Carry forward only one C grade in a nursing course. A second C in any nursing course will result in dismissal from the program.
4. Students can withdraw from only one course (resulting in a "W" on the academic transcript), and only one time.
5. If a student needs to withdraw from all courses in a semester, the student must meet with his or her faculty advisor (see Leave of Absence and Withdrawal policies in program handbook at <https://nursing.wvu.edu/students/resources/student-handbooks/> (<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnursing.wvu.edu%2Fstudents%2Fresources%2Fstudent-handbooks%2F&data=04%7C01%7Cbtoothman%40hsc.wvu.edu%7C2fa5bc36333e4eb6f92108d8dce02368%7Ca2d1f95f851044248ae15c596bdbd578%7C0%7C0%7C637502202526508450%7CUnknown%7CTWFpbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C1000&sdata=JilqL7WJajVfQoCzXnKw3xpGN64fuStpksq5lhv1B3Q%3D&reserved=0>)).

**Note:** The MSN Executive Focus major is offered only to students enrolled in the dual MSN/MBA degree. It is not offered as a "stand-alone" major. A post-master's certificate program is also available for the nurse executive leadership focus.

The grading scale for nursing as posted in each course syllabus is:

- A = 93 – 100
- B = 85 – 92
- C = 77 – 84
- F = 0-76

## Major Learning Outcomes

### MASTER OF SCIENCE IN NURSING EXECUTIVE FOCUS/MBA ONLINE PROGRAM

Upon successful completion of the program, the graduate will:

- Synthesize theories, research findings, and broad-based perspectives for application in the advanced practice of nursing or nursing leadership:
- Integrate nursing and related sciences into the delivery of advanced nursing care to diverse populations.
- Synthesize evidence for practice to determine appropriate application of interventions across diverse populations.
- Utilize nursing and related science evidence to analyze, design, implement and evaluate nursing care delivery systems.
- Utilize systematic inquiry and refined analytical skills in the provision of health care services and leadership:
- Integrate organizational science and informatics to make changes in the care environment to improve health outcomes.
- Assume a leadership role in the management of human, fiscal, and physical healthcare resources.
- Critically appraise existing literature to identify best practices, apply knowledge to improve and facilitate systems of care in order to improve patient outcomes.
- Disseminate results through translational scholarship.
- Demonstrate safe, effective assessment, planning, implementation and evaluation skills in managing the care of individuals and groups while working in interprofessional collaborative relationships:
- Create a relationship with clients and healthcare organizations that builds and maintains a supportive and caring partnership.
- Analyze best practice evidence to implement effective quality improvement initiatives with measurable results.
- Advocates for patients, families, caregivers, communities and members of the healthcare team.
- Articulate viewpoints and positions in order to improve the quality of health care delivery and outcomes of successful care:

- Assume a leadership role in effectively implementing patient safety and quality improvement initiatives within the context of the interprofessional team using effective communication skills.
- Examine the effect of legal and regulatory processes on nursing practice, healthcare delivery, and outcomes.
- Use ethical decision making to promote the well-being of individuals, families, and health care professionals in local, national & international communities.
- Consults and collaborates in interdisciplinary and interagency endeavors to advance culturally sensitive health care to clients, families, groups, and communities:
- Synthesize broad ecological, global and social determinants of health; principles of genetics and genomics; and epidemiologic data to design and deliver evidence-based, culturally relevant clinical preventions interventions and strategies.
- Integrates prior and current learning as a basis for growth and accountability in enacting the role of advanced practice nurse or nurse leader:
- Advocate for patients, families, caregivers, communities, and members of the healthcare team.
- Use information and communication technologies to advance patient education, enhance accessibility of care, analyze practice patterns, and improve health care outcomes, including nurse sensitive outcomes.
- Value life-long learning and continued professional development.
- Assume a leadership role in advocacy, ethical issues, and health care policy development:
- Apply leadership skills and decision making in the provision of culturally responsive, high-quality nursing care, healthcare team coordination, and the oversight and accountability for care delivery and outcomes.
- Function as a leader and change agent in nursing and in health care delivery systems particularly to insure quality care for vulnerable and underserved populations.
- Demonstrates organizational and systems leadership that continually improves health outcomes and ensures patient safety.
- Integrates all the functional areas of business into management decisions in a global environment:
- Evaluate factors that influence the competitive behavior of the firm.
- Predict and anticipate company and market responses to external factors.
- Identify the risks and opportunities in global markets.
- Identify problems, collect appropriate data and analyze the data to make informed management decisions:
- Evaluate business reports to make meaningful decisions for the organization.
- Make data-driven, fact-based decisions using statistical techniques and principles.
- Take real world problems and express them in quantitative terms.
- Make management decisions in an ethically sensitive and socially responsible manner:
- Negotiate and control information ethically to meet organizational needs.
- Understand how to use and acquire information in an ethically sensitive manner.
- Synthesize various ethical theories and design a corporate code of ethics.
- Be effective team members in a virtual environment:
- Demonstrate the ability to work together in a supportive and effective manner.
- Be an effective leader who influences people towards the attainment of organizational goals:
- Recommend actions for leader effectiveness in a scenario case and apply a theory or framework to propose and defend their recommendations.
- Identify various leadership styles and their relative effectiveness, along with real-life examples.
- Evaluate, in a case setting, the processes through which goals are set and accomplished in organizations.

# Pharmacy

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## Degrees Offered

- Doctor of Pharmacy (Pharm.D.)
- Doctor of Philosophy (Ph.D.)

## Introduction

The mission of the West Virginia University (WVU) School of Pharmacy is to improve the health of West Virginians and our global community by developing exemplary pharmacists and scientists; conducting meaningful research; and advancing pharmacy practice.

Pharmacy was first offered at West Virginia University as a department in the School of Medicine in 1914. The College of Pharmacy emerged as a separate entity in 1936 and became the School of Pharmacy in 1958. In 1960, the School of Pharmacy changed from a four-year to a five-year program and in 1998 to a six-year program. The Doctor of Pharmacy (Pharm.D.) program comprises four years of professional study preceded by a minimum of two years of pre-pharmacy study.

Many pharmacy graduates enter practice in community or institutional pharmacy. Graduates from WVU are very competitive for receiving postgraduate pharmacy residency programs that offer the opportunity for additional training and experience in general pharmacy practice and in areas of specialty practice. Positions are also available in ambulatory care clinics, various government agencies, the pharmaceutical industry, long-term care, nuclear pharmacy, home health-care organizations and many other areas. Pharmacists are eligible for commissions in the armed forces and the U.S. Public Health Service. Pharmacists may also have a career in teaching or research.

The WVU School of Pharmacy also offers Ph.D. programs in health services and outcomes research and the pharmaceutical and pharmacological sciences.

## Accreditation

The School of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education, an autonomous and independent agency that is recognized by the U.S. Department of Education as the national agency for the accreditation of professional degree programs in pharmacy. The Council is composed of members from the American Pharmacists Association, the National Association of Boards of Pharmacy, the American Association of Colleges of Pharmacy, and the American Council on Education.

The School of Pharmacy holds membership in the American Association of Colleges of Pharmacy, whose mission is to lead and partner with member institutions in advancing pharmacy education, research, scholarship, practice, and service to improve societal health.

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## ADMINISTRATION

### DEAN

- William P. Petros - Pharm.D. (Philadelphia College of Pharmacy and Science)

### SENIOR ASSOCIATE DEAN FOR ACADEMIC AFFAIRS AND EDUCATIONAL INNOVATION

- Mary K. Stamatakis - Pharm.D. (The Ohio State University)

### SENIOR ASSOCIATE DEAN FOR RESEARCH AND STRATEGIC INITIATIVES

- Paul R. Lockman - Ph.D. (Texas Tech University Health Sciences Center)

### ASSOCIATE DEAN FOR ADMISSIONS AND STUDENT AFFAIRS

- Mary L. Euler - Pharm.D. (University of Missouri-Kansas City School of Pharmacy)

### ASSISTANT DEAN FOR ASSESSMENT AND STRATEGIC PLANNING

- Marie A. Abate - Pharm.D. (University of Michigan)

### ASSISTANT DEAN FOR COMMUNITY ENGAGEMENT

- Thomas E. Menighan - B.S. Pharm (West Virginia University)
-

## FACULTY

### PROFESSORS

- Marie A. Abate - Pharm.D. (University of Michigan)  
Department of Clinical Pharmacy
- Gina M. Baugh - Pharm.D. (University of Pittsburgh)  
Director, Introductory Pharmacy Practice Experiences, Department of Clinical Pharmacy
- Patrick S. Callery - Ph.D. (University of California)  
Department of Pharmaceutical Sciences
- Krista D. Capehart - Pharm.D. (University of Michigan)  
Director, Wigner Institute for Advanced Pharmacy Practice, Department of Clinical Pharmacy
- David P. Elliott - Pharm.D. (University of Texas)  
Associate Chair for the Charleston Division, Department of Clinical Pharmacy
- Mary L. Euler - Pharm.D. (University of Missouri-Kansas City School of Pharmacy)  
Department of Clinical Pharmacy
- Werner J. Geldenhuys - Ph.D. (North-West University, South Africa)  
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- Lori A. Hazlehurst - Ph.D. (University of Vermont)  
Department of Pharmaceutical Sciences
- Gerald M. Higa - Pharm.D. (University of the Pacific)  
Department of Clinical Pharmacy and Hematology/Oncology
- Jason D. Huber - Ph.D. (Florida A&M)  
Department of Pharmaceutical Sciences
- Khalid Kamal - Ph.D. (West Virginia University)  
Chair, Department of Pharmaceutical Systems and Policy
- Kimberly M. Kelly - Ph.D. (Rutgers University)  
Director, HSOR Graduate Program, Department of Pharmaceutical Systems and Policy
- Paul R. Lockman - Ph.D. (Texas Tech University)  
Chair, Department of Pharmaceutical Sciences
- Lena M. Maynor - Pharm.D. (West Virginia University)  
Department of Clinical Pharmacy
- Mark L. McLaughlin - Ph.D. (Georgia Institute of Technology)  
Director, Section of Medicinal Chemistry, Department of Pharmaceutical Sciences
- William P. Petros - Pharm.D. (Philadelphia College of Pharmacy & Science)  
Department of Pharmaceutical Sciences
- Ronald C. Reed - Pharm.D. (University of Cincinnati)  
Associate Chair for Clinical Research and Innovation, Department of Clinical Pharmacy
- Elizabeth J. Scharman - Pharm.D. (Virginia Commonwealth University/Medical College of Virginia)  
Director, West Virginia Poison Center, Department of Clinical Pharmacy, Charleston Division
- Ginger Scott - Ph.D. (University of Minnesota)  
Director of Continuing Education, Department of Pharmaceutical Systems and Policy
- Douglas Slain - Pharm.D. (Duquesne University)  
Chair, Department of Clinical Pharmacy
- Mary K. Stamatakis - Pharm.D. (The Ohio State University)  
Department of Clinical Pharmacy
- Jon P. Wietholter - Pharm.D. (University of Pittsburgh)  
Department of Clinical Pharmacy

### ASSOCIATE PROFESSORS

- Ashleigh L. Barrickman - Pharm.D. (West Virginia University)  
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- Matthew Blommel - Pharm.D. (Mercer University)  
Director, West Virginia Center for Drug and Health Information, Department of Clinical Pharmacy
- Betsy M. Elswick - Pharm.D. (West Virginia University)  
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- Marina Galvez Peralta - Ph.D. (University of Seville, Spain)  
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- Gretchen M. Garofoli - Pharm.D. (University of Pittsburgh)  
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Department of Clinical Pharmacy
- Sarah Karpinski - Pharm.D. (Drake University)  
Department of Clinical Pharmacy
- Kazuhiko Kido - Pharm.D. (University of Iowa College of Pharmacy)  
Department of Clinical Pharmacy
- John (Jay) Martello - Pharm.D. (Duquesne University)  
Department of Clinical Pharmacy
- Mohammed A. Nayeem - Ph.D. (Osmania University, India)  
Department of Pharmaceutical Sciences
- Grazyna Szklarz - Ph.D. (Clarkson University)  
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## ASSISTANT PROFESSORS

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- Ahmad Hanif - Ph.D. (West Virginia University)  
Department of Pharmaceutical Sciences
- Heather Johnson - Pharm.D. (University of Pittsburgh)  
Departments of Clinical Pharmacy and Family Medicine
- Sabina O. Nduaguba - Ph.D. (The University of Texas at Austin)  
Department of Pharmaceutical Systems and Policy and the Cancer Institute
- Cassandra Simpkins - Pharm.D. (University of Charleston)  
Department of Clinical Pharmacy
- Angela Wowczuk - Pharm.D. (West Virginia University)  
Director, Rational Drug Therapy Program, Department of Pharmaceutical Systems and Policy

## Degree Designation Learning Outcomes

### DOCTOR OF PHARMACY (PHARM.D.)

Upon successful completion of the West Virginia University Doctor of Pharmacy degree program, the graduate will be able to accomplish the following educational outcomes (EOs):

**EO 1 Foundational Knowledge and Skills (Learner)** - Develop, integrate, and apply foundational knowledge (e.g., concepts, facts, principles) from biological, pharmaceutical, social, behavioral, administrative, and clinical sciences to evaluate the scientific literature, explain drug actions, solve therapeutic problems, and advance individual and population health.

- Acquire and demonstrate depth and breadth of knowledge of foundational scientific, clinical, socioeconomic, and humanistic concepts and skills.
- Explain how knowledge in the foundational sciences is integral to pharmacy practice.
- Integrate knowledge from foundational sciences to explain how specific drugs or drug classes work and evaluate their potential value in individuals and populations.
- Apply foundational concepts and skills to practice.
- Use scientific reasoning and critical thinking skills in practice to address problems, issues, or concerns.
- Develop and apply creative and innovative approaches to effectively resolve problems and improve patient outcomes.

- Apply an evidence-based approach to practice by identifying appropriate questions to address, using databases and other resources to retrieve information, critically analyzing and interpreting relevant scientific information and other evidence, formulating sound conclusions, and integrating the best published evidence with expertise and individual patient values/needs.
- Analyze and use epidemiologic, pharmaco-economic, medication utilization, and quality improvement data when developing evidence-based programs and protocols.
- Apply knowledge of research methodology to design or conduct basic research, practice-based studies, or clinical trials.
- Use information technology where appropriate to enhance individual knowledge and skills.

**EO 2 Communication Skills (Communicator, Educator)** – Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

- Use appropriate verbal and nonverbal communication skills with individuals or groups, including patients, health professionals and others.
- Use effective written communication skills with patients, health professionals, and others, including the development of documents pertinent to professional or organizational needs (e.g., monographs, reports).
- Educate target audiences by using the most effective method to deliver information, in coordination with other health care professionals as appropriate.
- Use technology to facilitate or enhance professional communications and presentations.

**EO 3 Professionalism, Advocacy, and Leadership (Professional, Leader, Advocate)** - Exhibit behaviors and values consistent with the professional trust given by patients, healthcare providers, and society; assure that patients' best interests are represented; and demonstrate responsibility for achieving shared goals regardless of position.

- Conduct pharmacy practice duties and patient care responsibilities in accordance with applicable federal, state, and local laws, statutes, and regulations, as well as professional guidelines and standards.
- Serve as an advocate, leader, and change agent for pharmacy and pharmacists' professional roles and responsibilities by implementing or participating in new, evidence-based models for cost-effective pharmacist-delivered patient care.
- Serve as an advocate for community and patient health and medication therapy needs, including disadvantaged or underserved patients and those from diverse cultural and socioeconomic backgrounds, while honoring their autonomy and dignity.
- Serve as a positive role model in actions/communications for peers and other health care providers by maintaining a high standard for personal and professional demeanor and ethical conduct.
- Respect all points of view in professional interactions while placing patients' needs and desires at the forefront.
- Demonstrate compassion, empathy, honesty, integrity, ethical behavior and altruism in all actions and communications with patients, families, and care providers.
- Develop professional competence through ongoing, active and self-directed pursuit of new knowledge and skills.
- Identify and analyze emerging health care and pharmacy issues and incorporate new roles, products and services into practice that can improve patient outcomes.
- Accept accountability and responsibility for one's words and actions.

**EO 4 Self-Awareness (Insightful)** – Examine and assess personal knowledge, skills, abilities, attitudes, beliefs, motivation, and emotions and strive for continual improvement.

- Conduct self-assessments on a regular basis and create, implement, evaluate, and modify as needed plans for personal improvement and continuing professional development.
- Recognize personal strengths and limitations and seek assistance when needed.
- Approach tasks and situations with flexibility and a desire to learn.
- Accept constructive criticism and display a willingness to correct and learn from errors.

**EO 5 Interprofessional Collaboration (Collaborator)** – Actively participate as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.

- Collaborate with health care professionals, patients, and/or caregivers to ensure that desired patient-specific or population-based health outcomes are achieved.
- Facilitate team building among health care professionals by developing and maintaining an atmosphere of mutual respect and shared values that place the patient at the forefront.
- Effectively utilize the knowledge, expertise, and unique roles of health care team providers and refer patients to others when indicated.
- Serve as the medication expert on a collaborative care team by managing the pharmacotherapy for patients' medical conditions and by proactively providing drug product and other medication related information to team members.
- Accept responsibility for medication-related outcomes on the care team.

**EO 6 Patient Care (Provider)** – Provide patient-centered care as the medication expert.



- Accurately interpret, prepare and/or compound, handle and dispense prescriptions for patients.
- Obtain necessary patient-specific data (e.g., consulting patient records, taking medication histories, performing basic physical assessments, ordering/interpreting lab tests), and evaluate and use these data when performing patient care related responsibilities.
- Evaluate pharmaceutical products, including information about the drug, dosage form, delivery system and cost/benefit, when conducting a medication review or preparing a care plan.
- Conduct comprehensive medication reviews and prepare individualized care plans to optimize patient outcomes, with emphasis on commonly encountered chronic or high risk conditions amenable to pharmacotherapy and patients at greater risk for adverse events.
- Work with patients, caregivers, and health care professionals to implement specific therapy plans.
- Educate and empower patients to take an active role in their health and incorporate recommendations for healthy living and self-care into care plans.
- Monitor and evaluate patients during therapy for drug product or pharmacotherapy problems, patient concerns, or adherence issues and recommend or implement solutions.
- Work with patients and other health care providers to ensure the continued success of individual care plans.
- Document patient-care services in charts/medical records and on forms needed for reimbursement.
- Counsel patients and/or caregivers about the following to help ensure a care plan's success: i) medications, non-drug therapy, dietary supplements and natural products; ii) insurance and other options for obtaining necessary medications; iii) proper use of testing devices and medical goods and equipment; and iv) healthy lifestyle changes.

**EO 7 Population-Based Care (Promoter, Provider)** – Design and implement prevention, intervention, and educational strategies for communities to manage chronic disease and improve health and wellness.

- Develop, recommend, and provide preventive health services, such as administration of vaccines and screening tests.
- Develop and implement disease management programs based upon identified needs and priorities (e.g., cost, access, and patient satisfaction considerations; commonly encountered, chronic conditions managed by pharmacotherapy).
- Evaluate and adjust interventions as needed to maximize population health.
- Promote public awareness of health promotion and disease prevention strategies.
- Design, develop, and disseminate public health related educational materials or services in a culturally competent manner.
- Work with health care professionals and other personnel to identify and help resolve key public health issues and problems, and participate in policies or strategies to address them.

**EO 8 Pharmacy and Medication Use Systems (Manager)** – Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.

- Demonstrate knowledge of pharmacy management including operations, human and fiscal resources, marketing, and leadership principles.
- Design, use, and manage systems to prepare, dispense, distribute and administer medications to optimally serve patient's drug-related needs.
- Use knowledge of the organization and financing of the U.S. healthcare system to provide and effectively manage progressive pharmacy services.
- Develop a business plan for integrating clinical and distributive services that includes methods for supporting and obtaining reimbursement for clinical services provided to patients.
- Demonstrate and apply knowledge of national standards, guidelines, best practices, and established principles and processes for safe medication use to protect patient safety.
- Participate in quality improvement programs and employ performance indicators to enhance the quality of care and cost effectiveness of services provided and to optimize safe, appropriate medication use.
- Participate in developing and performing medication use evaluations to identify and resolve drug therapy problems or concerns.
- Reconcile a patient's medications when transitioning from one care setting to another by communicating effectively with all involved health care professionals.
- Use current and emerging information and system technologies to enhance safe and effective medication use.
- Provide recommendations for developing and managing a formulary that incorporate pharmacoeconomic principles.
- Actively participate in, and contribute to the development of, strategies to minimize drug misuse/abuse.

## DOCTOR OF PHILOSOPHY (PH.D.)

The overall goals of the Ph.D. program in Health Services and Outcomes Research are:

- To educate and train highly qualified individuals to pursue independent research in health services and outcomes research (HSOR) within interdisciplinary teams, and to function and contribute as a member of a research team.
- To prepare competent scientists able to contribute to health-related research, industrial research and development, pharmaceutical education, and scholarship.
- To advance research in pharmaceutical and healthcare delivery.
- To provide leadership for the pharmacy profession in research, graduate education, and health policy making.



The program is designed to prepare students to become independent researchers. Students will develop competencies in the scientific research process through didactic studies and conceptualizing, designing, conducting, and reporting original research.

#### **Didactic Studies**

- To learn basic principles and apply these principles to specific disciplines and related fields to cultivate a broad background of knowledge.
- To develop research skills, including scientific communication and critical thinking/problem solving abilities by participating in seminars and designated research skill courses.

#### **Research Training**

- To acquire practical experience in conducting original research, including acquisition of background information (e.g. literature research), problem development, experimental design and experimentation, collecting primary data and using secondary data, and data analyses.
- To foster research communication skills by writing abstracts for research presentations, manuscripts for publication, research grant proposals, and a thesis or dissertation.
- To gain additional insight into research and scholarship by participating in scholarly exchanges with faculty and students in the WVU School of Pharmacy, the Health Sciences Center (HSC), as well as the national and international healthcare community.

## **DOCTOR OF PHILOSOPHY (PH.D.)**

Student Learning Outcomes of the Pharmaceutical & Pharmacological Sciences graduate education program are focused on preparing students to become independent researchers. To be successful in our program pathways, students will need to develop competencies in the scientific research process through didactic studies in an area of emphasis and then conceptualizing, designing, conducting, and reporting original research.

#### **Student Learning Outcomes**

- Demonstrate competency in the 5 content areas of pharmaceutical and pharmacological sciences:
  - Drug Chemistry
  - Pharmacokinetics
  - Principles of Drug Action
  - Approaches to Drug Discovery
  - Biopharmaceutics
- Independently design experimental protocols that include the principles of rigor and reproducibility, conduct the experiments, analyze the results, and defend the experimental approach to other scientists.
- Develop and plan the test of hypotheses regarding significant problems in the student's chosen area of specialization
- Demonstrate critical thinking/problem solving ability by effectively criticizing the neuroscience literature and by asking relevant questions in seminars.
- Ability to effectively reference the relevant literature in support of the student's research project. Ability to identify significant gaps in knowledge on this scientific topic.
- Effectively communicate scientific information in written abstracts for research presentations, manuscripts for publication, research grant proposals, and the dissertation.
- Effectively communicate scientific information in both formal and informal oral presentations.

## **Accreditation**

The Pharm.D. program within the School of Pharmacy has specialized accreditation through the Accreditation Council for Pharmacy Education.

## **Health Services and Outcomes Research, Ph.D.**

### **Degree Offered**

- Doctor of Philosophy

### **Nature of the Program**

#### **WHAT IS HEALTH SERVICES AND OUTCOMES RESEARCH?**

The Health Services and Outcomes Research program emphasizes population-based, health services delivery and outcomes, and policy research.

Health services research examines how people get access to health care, how much care costs, and what happens to patients as a result of this care. The main goals of health services research are to identify the most effective ways to organize, manage, finance, and deliver high quality care; reduce medical errors; and improve patient safety. (AHRQ, 2002)

Outcomes research refers to the scientific design, data collection, and analysis of the end results of medical care. It focuses on quality, cost-effectiveness and the effect of treatment on quality of life in patients. Outcomes research evaluates the effectiveness of health interventions through changes in outcomes such as improvements in patient functional status, satisfaction with care, and mortality. Apart from traditional experimental and quasi-experimental designs, outcomes research methodology embraces epidemiological research designs (such as retrospective or prospective, longitudinal or cross-sectional, case-control or cohort study designs), pharmacoeconomic modeling (such as decision analysis, cost-benefit analysis, cost-effectiveness analysis), health data science (such as predictive modeling, machine learning), and survey research methods (such as quality of life measurements, satisfaction with care).

## WHY STUDY HEALTH SERVICES AND OUTCOMES RESEARCH?

With health care costs increasing five fold in the last two decades, there has been increasingly greater accountability demanded of health care systems and providers. There has been growing recognition that resources are limited, and health care interventions have to be cost-effective, and not just efficacious in clinical trials. Three particular factors have contributed to growing interest in determining effectiveness of health care interventions: (1) unexplained differences in quality of care or effectiveness by region, population, and type of systems; (2) the desire to control rising health care costs and spread the availability of services to those who do not currently have access; and (3) concern that cost-containment strategies and improving quality of health care are two competing goals.

## HOW IS OUTCOMES RESEARCH USED?

Data collected from outcomes research provide patients, providers, payers, and decision makers information about what does and does not work in real life settings. It provides other measures of effectiveness such as what treatment provides the best return on investment, and from a patient perspective, what is the most preferred or satisfying treatment option. Comparative effectiveness research of technology and drugs; structure of healthcare delivery, process, quality and outcomes; pharmacovigilance; patient-centered care; and evaluating the intended and unintended consequences of health policy are some of the major aspects of outcomes research. (<https://pharmacy.hsc.wvu.edu/pharmaceutical-systems-and-policy/phd-program-in-health-services-and-outcomes-research/>) Overall, outcomes research will lead to better use of limited resources, informed decision-making by patients, providers, and payers; development of guidelines for better disease management - especially for chronic diseases, and better health policy decisions.

## WHAT ARE THE GOALS OF THE GRADUATE PROGRAM IN HEALTH SERVICES AND OUTCOMES RESEARCH?

The focus of Health Services and Outcomes Research is to prepare highly qualified graduate students for careers in academia, industry, government, and institutional settings such as insurance companies through training in health outcomes and policy research. Areas of specialization include: pharmacoeconomics, health services research, machine learning, pharmacoepidemiology, health behavior and risk. The core courses include pharmacoepidemiology, pharmacoeconomics, patient-centered outcomes, large data analysis, econometrics, social and behavioral theory, machine learning, survey methods and the evaluation of health policies, programs and interventions. Several courses include research projects that result in peer-reviewed publications. Based on your research experience and interests, you can select your area of emphasis, which include quantitative, behavioral, health policy, epidemiology, health management, disease management, data science and/or healthcare administration. The coursework and research experiences are designed to equip you with the conceptual thinking, analytical and problem-solving skills necessary to find innovative solutions to complex healthcare problems. (<https://pharmacy.hsc.wvu.edu/pharmaceutical-systems-and-policy/phd-program-in-health-services-and-outcomes-research/>)

## WHAT ARE THE JOB OPPORTUNITIES FOR GRADUATES OF THE PROGRAM?

Job opportunities for individuals with a Ph.D. in this field are excellent and growing. Our students have had 100% job placements at reputable universities, pharmaceutical companies, government agencies, clinical research organizations and in the managed care industry. Please visit the Alumni section of our website at [pharmacy.hsc.wvu.edu/PSPalumni](https://pharmacy.hsc.wvu.edu/PSPalumni) to view job placements of our Ph.D. graduates.

## Frequently Asked Questions

### Does this program offer a Master's degree?

This program does not at this time have a terminal Master's degree.

### How long does it take to finish a PhD degree in this field?

Typically, a student starting without a research Master's degree could take anywhere from 4 to 5 years to complete all of the degree requirements. Students who already have a research Master's degree take less time, about 3 to 4 years.

### Is financial assistance available?

A limited number of teaching and research assistantships (with a stipend of \$30,000 per year) are available within the department. Several fellowships may also be available to apply for depending on criteria for eligibility. These include an annual stipend and full tuition waiver with the student required to perform 20 hours/week of assistantship duties. Students with assistantships have to pay approximately \$675/semester towards the use of the recreation center, the public rapid transport system (PRT), and other such conveniences. The assistantships are available to students for at least 3 years as long as they are performing well in their duties, and making satisfactory progress toward their degree objective. The stipends are sufficient for graduate students to live comfortably and devote sufficient time to their educational program and research training. These assistantships are awarded on a competitive basis each year with the highest ranked applicants given the first offer of available assistantships. Some qualified students may be

also offered admission without an assistantship. These students are provided guidance to seeking other campus employment opportunities subject to Immigration and Naturalization Services' regulations in case of foreign students.

#### **Is a BS in Pharmacy or Pharm.D. degree (or a pharmacy background) required for admission?**

No. Generally, a professional degree in pharmacy, medicine, or a health-related discipline is preferred. Students with Master's Degrees in related fields such as epidemiology, economics, and public health are also encouraged to apply. Students with a Master's degree in marketing management, psychology, or sociology with a demonstrated interest or experience in health care may also apply.

#### **What is the entry date into the program?**

Because of the sequence of core courses, students are admitted in the Fall semester only, which typically begins in the middle or last week of August every year. In very rare instances, a student may be admitted in the Spring semester if they already have a research Master's degree, and if the PSP faculty agree that the circumstances of his/her admission warrant special consideration.

#### **How do I apply to the program and what is the application deadline?**

All application materials, transcripts, test scores, three letters of recommendation, curriculum vitae of educational qualifications and training and job experiences, and statement of purpose must be submitted to WVU Graduate Admissions ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantConnectLogin.asp?id=vvugrad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=vvugrad)) by **February 1st** of the year for consideration of admission in the Fall semester of that year. It is best to start the admission process by September of the year before the Fall semester that you want to be considered to give yourself sufficient time to complete the process and not be affected by unexpected delays. Reviews are completed by the middle or end of March, and applicants are notified of acceptance or rejection with a signed acceptance from those offered an admission required no later than April 15.

#### **How many applications do you receive each year?**

The number of applications we receive vary from year to year but has shown a dramatic increase in the last few years. In recent years the numbers have ranged from 25 to 40.

#### **How many students are accepted each year?**

The number of students accepted each year vary depending on the number of students who have graduated in the preceding year. Typically, 3-4 students have been admitted per year in the recent past. A total number of 13-16 students are maintained in the program to enable close mentoring and training relationships with faculty advisors.

#### **How is an application to the graduate program evaluated?**

An application to the graduate program along with all supporting materials is reviewed by all members of the department graduate faculty. Each application is holistically reviewed first in terms of meeting the minimum academic (a 'B' average or a 3.0 GPA on 4.0 scale) and TOEFL (550 on the paper-based exam, 79-80 on the Internet exam, or 213 on the computer-based exam) criteria. Applications not meeting these criteria are immediately rejected. The subsequent reviews take place in a committee meeting in which all applications are discussed and ranked through a consensus process. While individual faculty may weigh each criteria slightly different, sustained academic excellence, good to outstanding GRE scores, past work or research experience in areas of interest, well written statement of purpose, leadership and extracurricular activities are all considered important and considered in a holistic way. Telephone or personal interview are typically required by the graduate faculty. Students ranked according to merit are offered admission with an assistantship in the order of listing until no more assistantships are available. A few additional students may be offered admission without an assistantship. A verbal offer by telephone is made to students who are offered admission with assistantships, and upon verbal acceptance of the offer, are sent formal letters of acceptance.

#### **How are grades and GRE scores considered in the overall admissions evaluation?**

While sustained academic excellence is considered to be among the best predictors of academic performance, GRE scores are also important to compare students from different domestic and international education systems. For students from English speaking parts of the world, quantitative and analytical scores are given more weight than the verbal scores. Faculty participating in application reviews typically look for overall educational achievements, competitive GRE scores, extracurricular and leadership activities, and demonstrated interest in research in the chosen area of study.

#### **What role does TOEFL play in the admission process?**

Since all of the education process and research training is in English, students from non-English speaking parts of the world are required to provide TOEFL scores by the University with a score of 500 on the paper-based exam, 173 on the computer-based exam, 61 for TOEFL internet-based, and 60 for IELTS considered to be minimum University requirement. Once admitted, and if awarded a Teaching Assistantship, students are also required to pass a test of spoken English before they are allowed to teach in classes or labs.

#### **Can English Language Proficiency test be waived?**

Students who have received a Bachelor's degree in the United States, United Kingdom, Australia, Canada, or New Zealand are not required to submit language proficiency scores. Language Proficiency Score waivers may be considered for individuals with graduate degrees from these countries.

#### **What are acceptable GRE scores?**

Scores on the GRE are reported in terms of percentiles. So, for example, if a student scores at the 65th percentile, this means that he or she scored at or better than 65 percent of the students who took that test. We obviously want the best students who apply.

#### **If my GRE or TOEFL scores are not good, should I retake these exams?**

These tests are standardized tests, and typically, student scores do not change much on retaking of these exams. Make sure that you are familiar with the format of these tests and the time constraints for their completion. Practice books are available to familiarize yourself with the exam. If you take these

exams and are not satisfied with your scores, you should retake them only if you feel certain that retaking them will help you improve your test scores. If you do retake them, Educational Testing Service will report the results of all attempts within the previous three years.

#### **Are applicants interviewed?**

Applicants chosen for interview may be interviewed either by video conference (e.g., Zoom) or in person in Morgantown.

#### **Can I transfer graduate coursework from my current institution if I have not completed a Masters degree?**

Yes, on admission to the graduate program and upon forming a PhD committee with an advisor, the committee will take into consideration whatever recent graduate coursework you have completed that can contribute to your plan of study given your educational goals and program needs. WVU allows up to 18 credit hours of coursework to be transferred that are not part of a degree program. See **Application for Transfer of Graduate Credit to WVU**

#### **Are there examples of completed PhD dissertations from recent graduates in the Health Services and Outcomes Research program?**

Yes, please visit Recent MS thesis and PhD dissertations (<https://pharmacy.hsc.wvu.edu/pharmaceutical-systems-and-policy/phd-program-in-health-services-and-outcomes-research/information-for-new-applicants/phd-dissertations/>) for titles completed by recent graduates.

#### **What is it like to study at West Virginia University (WVU) and live in Morgantown?**

West Virginia University, founded in 1867, is located in Morgantown, West Virginia, is one of only 46 public universities that serve their state as research and land-grant institutions. Through 15 colleges and schools, WVU offers 193 bachelors, master's, doctoral and professional degree programs. WVU was ranked in the top 3% of 19,000 universities worldwide by the Center for World University Rankings.

WVU is a Doctoral/ Research University - Extensive as classified by the Carnegie Classification of Institutions of Higher Education -- based on the complexity and breadth of the institution's mission. As West Virginia's major research and development center and only comprehensive doctoral-granting institution, WVU faculty conducts over \$150 million in sponsored contracts and grants per year.

The WVU System spans the state, including 518 buildings on 15,880 acres (main campus 430 buildings/1,456 acres). Eleven main campus buildings are on the National Register of Historic Places, and WVU operates eight experimental farms and four forests throughout the state. The University's total operating budget is approximately \$900 million. WVU's student body is comprised of over 31,524 students with 28,776 on the Morgantown campus. These students hail from all West Virginia counties, nearly all 50 states, and close to 100 foreign nations. Chartered in 1873, the WVU Alumni Association is made up of more than 190,000 graduates worldwide in some 135 nations. For more information about West Virginia University and a virtual tour of the campus, visit: <http://www.wvu.edu/>.

Morgantown, W.Va., population 30,347 (US Census Bureau, 2021), was rated "No. 1 place to live in West Virginia" out of the best place to live in every state by *Money* magazine. Morgantown was named one of the "South's Best Small Towns" by *Southern Living*. Morgantown is one of the "Best Affordable Places to Live" by *Livability*. Within easy traveling distance of Washington, D.C., to the east, Pittsburgh, Pa., to the north, and Cleveland and Columbus, Ohio, to the northwest. WVU has divisional campuses in Charleston, Keyser, Martinsburg and Montgomery.

Monongalia County in which Morgantown is located is a community of about 80,000 people in the Appalachian Mountains on West Virginia's northern border. While the state is rural and the community quiet, Morgantown is within easy traveling distance from Pittsburgh, which is 75 miles (115 kilometers) north, and Baltimore and Washington, both of which are 200 miles (325 kilometers) east. Two major four-lane highways, Interstate 79 and Interstate 68, pass through Morgantown. U.S. 19 and U.S. 119 also pass through Morgantown.

For information about the Morgantown area, students can visit the Greater Morgantown Convention and Visitors Bureau homepage at [www.tourmorgantown.com/](http://www.tourmorgantown.com/) (<http://tourmorgantown.com/>) or the City of Morgantown homepage at [www.morgantownwv.gov/](http://www.morgantownwv.gov/) (<http://www.morgantownwv.gov/>). (<http://morgantown.com/>)

#### **What if I have more questions or concerns?**

If your question is not addressed anywhere in the list of frequently asked questions...

- For questions about other programs, life at WVU, and other information for prospective students please visit Graduate Education at <http://graduate.wvu.edu/>.
- For questions about University policies on graduate programs at West Virginia University, please visit: Undergraduate, Graduate, and Health Sciences Center Catalogs (<http://catalog.wvu.edu/>).

For application related inquiries, status of application file, confirmation of materials, scores, received, admission status, or HSOR graduate program related inquiries etc., please contact:

Kimberly M. Kelly, Ph.D.  
Professor  
HSOR Graduate Program Director and Admissions Coordinator  
Pharmaceutical Systems & Policy  
Telephone: 304-293-1453  
E-mail: [kmkelly@hsc.wvu.edu](mailto:kmkelly@hsc.wvu.edu)

For more details about the PhD program in HSOR go to: <https://pharmacy.hsc.wvu.edu/pharmaceutical-systems-and-policy/phd-program-in-health-services-and-outcomes-research/>

## Admissions

Applicants considered for admission to the doctoral program must meet the following minimum requirements.

- A professional degree in Pharmacy (Pharm.D.), Medicine (M.D.), or a Master's degree in pharmacy administration. Students with a Master's degree in related fields such as epidemiology, public health, health care administration, are also encouraged to apply. Students with a Master's degree in related fields such as marketing, management, economics, psychology, or sociology with a demonstrated interest or experience in health care may also apply.
- Outstanding students with a B.S. in pharmacy or pharmaceutical sciences may be considered for direct admission into the Doctoral program
- College transcript with a minimum of a B average (3.0 on a 4.0 scale)
- GRE or GMAT scores (International applicants must meet WVU's minimum score requirements for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)) evaluating potential for graduate studies
- Supportive letters of recommendation (at least three)
- Satisfactory personal or telephone interview (whenever possible)
- Statement (one page) of personal goals describing background, academic/ research interests and career objectives
- A resume or curriculum vitae listing educational and employment history
- Application deadline is February 1st of each year

## INTERNATIONAL APPLICANTS

International students should also be aware of the following:

- International applicants must present the Test of English as a Foreign Language or TOEFL minimum score requirements (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>) if they are from a non-English speaking country or the official language of the country is not English. Applicants are urged to arrange for one of these tests well in advance of the desired enrollment period.
- International students who have completed a M.S. degree or any degree in the U.S. may request a waiver for submitting TOEFL results. They should contact the Office of International Students and Scholars (<https://oiss.wvu.edu/>) for approval.
- International students should not plan to leave their country without a formal notification of admission from the Office of Admissions at WVU. International students admitted without an assistantship must submit a statement of financial status in order to be registered at WVU.
- International students admitted to the program must report to the Office of International Students and Scholars upon arrival at WVU. Students are responsible for making sure that they are in compliance with immigration requirements.

## APPLICATION PROCESS (MAJOR CODE 8980)

### DEADLINE: FEBRUARY 1

Application to the Health Services and Outcomes Research PhD program is completed electronically at [https://wvu.my.site.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://wvu.my.site.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB) ([https://wvu.my.site.com/wvugrad/TX\\_SiteLogin?startURL=%2Fwvugrad%2FTargetX\\_Portal\\_\\_PB](https://wvu.my.site.com/wvugrad/TX_SiteLogin?startURL=%2Fwvugrad%2FTargetX_Portal__PB))

Please choose Major Code: **8980**.

West Virginia University requires the following information for application through the WVU online application portal. Please note that all materials are submitted through the portal. Do not send materials to the School of Pharmacy unless instructed to do so by the Office of Student Services.

1. One copy of official transcripts (original or certified; minimum of a B average or a 3.0 GPA on a 4.0 scale) in a sealed envelope from each college you have attended.
2. Original or certified copies of all degrees/diplomas/certificates received in the original language.
3. Translation of an applicant's foreign transcripts and diplomas/certificates may be sent directly to a foreign transcript service for evaluation. If using a foreign transcript service, please have the evaluated documents submitted the WVU Office of Graduate Admissions.
4. Official GRE Scores and TOEFL or IELTS scores.
5. Statement of personal goals describing your background, academic interests, and career objectives.
6. A resume or curriculum vitae listing educational and employment history.
7. Three letters of recommendation from persons who are in a position to evaluate your potential for graduate school. At least one recommendation must be from a person at the last school you attended for full-time study, unless you have been out of school for five years or longer.

Direct admission related inquiries to:

Kimberly M. Kelly, Ph.D.

Professor

HSOR Admissions Coordinator and Admissions Coordinator

Pharmaceutical Systems & Policy

Telephone: 304-293-1453

E-mail: [kmkelly@hsc.wvu.edu](mailto:kmkelly@hsc.wvu.edu)

Students considered for admission will participate in an interview and will be notified of their candidacy in the spring prior to admission.

- See more at: <http://pharmacy.hsc.wvu.edu/department-of-pharmaceutical-systems-and-policy/phd-program-in-health-services-and-outcomes-research/>

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8980

## Curriculum Requirements

Code	Title	Hours
PUBA 670	Health Systems	3
PHAR 769	Advanced Health Service Research Methods	3
PHAR 757	Patient Reported Outcomes	3
BIOS 601	Applied Biostatistics 1	4
BIOS 603	Applied Biostatistics 2	3
PHAR 755	Pharmacoeconomics	3
PHAR 753	Social and Behavioral Theory and Health Outcomes Research	3
PHAR 756	Health Survey Research Methods	3
PHAR 785	Pharmacoepidemiology	3
PHAR 786	Health Services Research and Secondary Database	3
PHAR 777	Health Outcomes Research Designs	2
PHAR 754	Decision Analysis in Healthcare	3
PHAR 767	Scientific Writing: Health Services and Outcomes Research	3
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
Research		6
PHAR 797	Research	
Seminar		6
PHAR 788	Graduate Seminar in Health Outcomes Research	
<b>Electives (from Suggested Electives or potentially other relevant courses as approved)</b>		<b>12</b>
Total Hours		65

## Suggested Electives

Code	Title	Hours
<b>Quantitative Emphasis</b>		
BIOS 610	Biostatistical Theory and Methods 1	4
BIOS 611	Data Management and Reporting	3
BIOS 612	Biostatistical Theory and Methods 2	3
BIOS 620	Applied Linear Models HS	3
BIOS 621	Categorical Data Analysis HS	3
PSYC 711	Seminar in Methodology	3
PHAR 768	HEOR/HSOR Internship	1 to 6
<b>Behavioral Emphasis</b>		
PHAR 759	Clinical and Population Practicum	1
PUBH 613	Public Health Program Evaluation	3
SBHS 761	Qualitative Research Methods	3
<b>Health Policy Emphasis</b>		
HPML 601	Foundations of Health Policy	3
HPML 622	Analytic Methods for Health Policy, Management, and Leadership	3
HPML 624	Advanced Issue Analysis for Health Policy	3



HPML 670	Policy Analysis for Population Health 1	3
HPML 671	Population Health Policy Analysis Informatics 1	3
<b>Epidemiology Emphasis</b>		
EPID 611	Concepts and Methods of Epidemiology	3
EPID 712	Quantitative Methods in Epidemiology	3
<b>Health Care Administration</b>		
PUBA 671	Healthcare Organization and Operation	3
PUBA 672	Healthcare Finance	3

## Major Learning Outcomes

The overall goals of the PhD program in Health Services and Outcomes Research are:

1. To educate and train highly qualified individuals to pursue independent research in health services and outcomes research (HSOR) within interdisciplinary teams, and to function and contribute as a member of a research team.
2. To prepare competent scientists able to contribute to health-related research, industrial research and development, pharmaceutical education, and scholarship.
3. To advance research in pharmaceutical and healthcare delivery.
4. To provide leadership for the pharmacy profession in research, graduate education, and health policy making.

The program is designed to prepare students to become independent researchers. Students will develop competencies in the scientific research process through didactic studies and conceptualizing, designing, conducting, and reporting original research.

### Didactic Studies

1. To learn basic principles and apply these principles to specific disciplines and related fields to cultivate a broad background of knowledge.
2. To develop research skills, including scientific communication and critical thinking/problem solving abilities by participating in seminars and designated research skill courses.

### Research Training

1. To acquire practical experience in conducting original research, including acquisition of background information (e.g. literature research), problem development, experimental design and experimentation, collecting primary data and using secondary data, and data analyses.
2. To foster research communication skills by writing abstracts for research presentations, manuscripts for publication, research grant proposals, and a thesis or dissertation.
3. To gain additional insight into research and scholarship by participating in scholarly exchanges with faculty and students in the WVU School of Pharmacy, the Health Sciences Center (HSC), as well as the national and international healthcare community.

## Pharmaceutical and Pharmacological Sciences, Ph.D.

### Degree Offered

- Doctor of Philosophy

The Pharmaceutical and Pharmacological Sciences Graduate Program is housed in the School of Pharmacy and associated with the Department of Pharmaceutical Sciences. The program is one of the Ph.D. degree-granting programs in Biomedical Sciences at the WVU Health Sciences Center (HSC).

The Pharmaceutical and Pharmacological Sciences Graduate Program at West Virginia University is an interdisciplinary program that prepares students for a future in a variety of employment settings, ranging from academic research and industry to federal positions. Our students have a unique and rich training environment, which gives them a basis in such pharmaceutical sciences disciplines as drug development and discovery, pharmaceuticals, pharmacology, toxicology, therapeutic development and regulatory affairs. Students can take additional graduate courses in drug delivery systems, drug metabolism, molecular modeling, bench to bedside and biotechnology.

The core areas of Ph.D. training in Pharmaceutical and Pharmacological Sciences are:

1. pharmacology and therapeutic development,
2. drug delivery, and,
3. drug discovery and biotechnology.

The students are mentored by experts with an international reputation and publish in prestigious journals. They also have opportunities to present their research at national and international scientific meetings and to enroll in internships with pharmaceutical or biotech companies.

Upon completion of the second year of study, students must submit a formal plan of study and a research plan that is approved by their Ph.D. committee. Progress is expected to continue with guidance from the student's research committee. Final admission to candidacy requires satisfactory performance on written and oral qualifying examinations, including a dissertation proposal defense. Subsequent to admission to candidacy, a substantial part of the program is devoted to an original research project which culminates in a first-authored publication and dissertation. To be recommended for a Ph.D., the dissertation must be satisfactorily completed and defended at an oral examination. Typically, four to five years are needed to graduate.

## Academic Standards

No credits are acceptable toward a graduate degree with a grade lower than a C. A graduate student is expected to have a cumulative grade point average of at least 3.0 in all graduate courses to continue in the program and to qualify for a Ph.D. degree.

## Introduction

The WVU School of Pharmacy offers graduate programs in the pharmaceutical and pharmacological sciences for the Ph.D. degree. The school is advantageously located in the Health Sciences Center complex which also houses all departments of the Schools of Medicine, Nursing, and Dentistry, as well as a comprehensive medical library, audio-visual and computer-based learning center, research core facilities, and laboratory animal quarters. State-of-the-art research laboratories are located throughout the Health Sciences Center complex to facilitate interactions with the Mary Babb Randolph Cancer Center, Center for Neuroscience, and Center for Cardiovascular and Respiratory Sciences. In addition, the Health Sciences Center has easy access to the Evansdale and Downtown campuses of WVU through a personal rapid transit (PRT) system. The scientific community, which is especially well-developed, draws on area scientists throughout WVU, the Centers of Disease Control/National Institute on Occupational Safety and Health (CDC/NIOSH), Federal Bureau of Investigation (FBI), and a variety of research centers supported by the National Institutes of Health (NIH), National Science Foundation (NSF), and the Department of Energy (DOE). A CDC/NIOSH research facility is two blocks away, and Mylan Pharmaceuticals, a leading generic drug producer in the world, is located across the street from the Health Sciences Center. In addition, the school has long-standing collaborations with several state agencies and multinational pharmaceutical companies.

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## ADMINISTRATION

### CHAIR

- Paul Lockman - PhD

### GRADUATE PROGRAM DIRECTORS

- Werner Geldenhuys - PhD
- Grazyna Szklarz - PhD

## Admissions

Applicants for admission into the graduate program must satisfy the WVU and Health Sciences Center general requirements for admission as a graduate student. Applicants interested in this program must apply through a common admissions portal. Choice of this graduate program occurs during the first year of graduate study after selection of an advisor for your dissertation research. Applications include a personal statement, unofficial transcripts from all Colleges or Universities attended, and 3 letters of recommendation. Admitted applicants must arrange to have official copies of transcripts sent directly to the WVU Office of Graduate Admissions and Recruitment. Competitive applicants have a STEM GPA of 3.5 or higher and possess a baccalaureate degree that provides sufficient scientific background in the basic sciences. Note that the graduate record exam (GRE) is not required and will not be considered in evaluating applications. International applicants must satisfy English Language Proficiency requirements as established by WVU International Admissions (<https://graduateadmissions.wvu.edu/information-for/international-students/>).

To review the application process, please visit: <https://health.wvu.edu/research-and-graduate-education/graduate-education/phd-programs/biomedical-sciences/admissions/>

To obtain specific information related to the school's graduate programs, graduate faculty research interests, and availability of graduate assistantships or fellowships, applicants may contact program directors.

Graduate Directors:

Werner J. Geldenhuys, B.Pharm., Ph.D.

Phone: 304-581-1683

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## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.



Major Code: 8975

## Doctor of Philosophy

The School of Pharmacy offers a doctor of philosophy (Ph.D.) degree in pharmaceutical and pharmacological sciences aimed at training competent researchers and educators.

### MAJOR REQUIREMENTS

Code	Title	Hours
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
BMS 702	Biomedical Lab Experience	2
BMS 706	Biomedical Research Methods	1
BMS 707	Experiential Learning for Biomedical Trainees	2
BMS 720	Scientific Writing	2
BMS 747	Foundations for Contemporary Biomedical Research I	4
BMS 777	Foundations for Contemporary Biomedical Research 2	4
PHAR 779	Drug Discovery	3
PHAR 706	Biopharmaceutics	2
PHAR 805	Drug Chemistry	2
PHAR 809	Principles of Drug Action	2
PHAR 816	Pharmacokinetics	2
Graduate Seminar		7
PHAR 796	Graduate Seminar	
Research		42-44
PHAR 797	Research	
Journal Clubs (Select from the following)		7
PHAR 773	Recent Research Advancement in Cardiology Journal Club	
PHAR 782	Tumors of the Central Nervous System Journal Club	
PHAR 784	Pharmacology Journal Club	
PHAR 787	Drug Discovery and Development	
Advanced Courses/Electives*		4-8
PHAR 780	Introduction to Molecular Modeling	
PHAR 781	Drug Metabolism	
PHAR 793	Special Topics	
PHAR 803	Physical Pharmacy	
PHAR 804	Drug Delivery Systems	
PHAR 806	Pharmaceutical Biotechnology	
PHAR 808	Pharmacogenomics	
Qualifying Exams		
Dissertation Proposal Defense		
Dissertation Defense		
*Note: Other graduate courses at WVU may be taken as an elective with the permission of the student's advisory committee.		
Total Hours		90-92

### PHARMACEUTICAL AND PHARMACOLOGICAL SCIENCES PATHWAY SUGGESTED PLAN OF STUDY

#### First Year

Fall	Hours	Spring	Hours	Summer	Hours
BMS 700		1 BMS 701		1 PHAR 797	3
BMS 706		1 PHAR 797		1	
BMS 702		2 PHAR 796		1	

BMS 747		4 Journal Club (select from the following)		1	
BMS 777		4 PHAR 773 PHAR 782 PHAR 784 PHAR 787 PHAR 706 PHAR 805 PHAR 809 PHAR 816		2 2 2 2	
		12		12	3
<b>Second Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
PHAR 779		3 Advanced Courses/ Elective Modules (select from list)		2-3 PHAR 797	1
Advanced Courses/ Elective Modules (Select from the list)		2-5 PHAR 796		1 BMS 720	2
PHAR 796		1 Journal Club (Select from the following)		1	
Journal Club (Select from the following)		1 PHAR 773			
PHAR 773		PHAR 782			
PHAR 782		PHAR 784			
PHAR 784		PHAR 787			
PHAR 787		PHAR 797		4-5	
PHAR 797		1-2 Take Qualifying Exams			
* Students must sign up for a minimum of 9 credit hours.		* Students must sign up for a minimum of 9 credit hours.			
		9-11		9	3
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
PHAR 796		1 PHAR 796		1 PHAR 797	1
Journal Club (Select from the following)		1 Journal Club (Select from the following)		1 BMS 707	2
PHAR 773		PHAR 773			
PHAR 782		PHAR 782			
PHAR 784		PHAR 784			
PHAR 787		PHAR 787			
PHAR 797		7 PHAR 797		7	
Proposal Defense		*Students must sign up for a minimum of 9 hours			
*Students must sign up for a minimum of 9 hours					
		9		9	3
<b>Fourth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
PHAR 797		7 PHAR 797		7 PHAR 797	3
PHAR 796		1 PHAR 796		1	

Journal Club (Select from the following)	1 Journal Club (Select from the following)	1
PHAR 773	PHAR 773	
PHAR 782	PHAR 782	
PHAR 784	PHAR 784	
PHAR 787	PHAR 787	
*Students must sign up for a minimum of 9 hours.	*Students must sign up for a minimum of 9 hours	
	9	9
		3

Total credit hours: 90-92

## Major Learning Outcomes

### DOCTOR OF PHILOSOPHY (PHD)

Student Learning Outcomes of the Pharmaceutical & Pharmacological Sciences graduate education program are focused on preparing students to become independent researchers. To be successful in our program pathways, students will need to develop competencies in the scientific research process through didactic studies in an area of emphasis and then conceptualizing, designing, conducting, and reporting original research.

#### Student Learning Outcomes

1. Demonstrate competency in the 6 content areas of pharmaceutical and pharmacological sciences:
  - a. Drug Chemistry
  - b. Pharmacokinetics
  - c. Principles of Drug Action
  - d. Approaches to Drug Discovery
  - e. Biopharmaceutics
  - f. Pharmacology
2. Independently design experimental protocols that include the principles of rigor and reproducibility, conduct the experiments, analyze the results, and defend the experimental approach to other scientists.
3. Develop and plan the test of hypotheses regarding significant problems in the student's chosen area of specialization
4. Demonstrate critical thinking/problem solving ability by effectively criticizing the relevant literature and by asking relevant questions in seminars.
5. Ability to effectively reference the relevant literature in support of the student's research project. Ability to identify significant gaps in knowledge on this scientific topic.
6. Effectively communicate scientific information in written abstracts for research presentations, manuscripts for publication, research grant proposals, and the dissertation.
7. Effectively communicate scientific information in both formal and informal oral presentations.

## Doctor of Pharmacy (Pharm. D.)

### Degree Offered

- Doctor of Pharmacy (Pharm.D.)

### Nature of the Program

#### INTERPROFESSIONAL EDUCATION (IPE) OPPORTUNITIES

A wide array of health care learners at West Virginia University Health Sciences Center enables pharmacy students to learn with, from and about other health care professionals and students to prepare them to improve patient outcomes through interprofessional collaboration. Students work collaboratively in interprofessional learning experiences along with students from other health professional schools such as medicine, dentistry, public health, nursing, physical therapy, and occupational therapy. At WVU, IPE is a longitudinal thread that is progressive and reinforced throughout all four years of the curriculum. These experiences are supplemented by co-curricular activities such as community service projects outside of the classroom and other extracurricular activities. Experiences include:

- First Year Experience: First year longitudinal experience with students from a variety of health professions discussing and working through hands-on activities related to the core competencies of IPE including professional roles and responsibilities, teams and teamwork, IPE communication, and values and ethics.

- **Second Year Practice Experience:** The second year IPE experiences are included in the Population Health and Policy course. Students will learn about an important public health topic from an interprofessional team of faculty and participate in a simulation and clinical practice experience with other health professional students related to this topic.
- **Third Year Acute Care Pharmacy Practice Experience:** Students participate in IPE simulation and clinical practice activities. Simulation activities include IPE rounding, Project Delivery of Chronic Care (DOCC), and the Interdisciplinary Education Apartment Simulation (IDEAS).
- **Fourth Year Advanced Pharmacy Practice Experiences:** Students work with a variety of students from other health professions providing direct and indirect patient care during five-week rotations in a variety of healthcare settings.

## **PROGRAM INFORMATION**

### **AREA OF EMPHASIS IN ADVANCED CLINICAL PRACTICE**

The Advanced Clinical Practice Area of Emphasis (AoE) is designed to enhance the preparation and competitiveness of Doctor of Pharmacy students applying for a PGY-1 residency. The AoE focuses on providing didactic and experiential education, as well as one-on-one mentorship, to allow students to understand and appreciate the nuances of clinical pharmacy practice. This track will offer a road map for students to be successful in critical areas including scholarship experience, organizational involvement, experiential education, and additional basic tools for navigating the application and interview process. The experiences provided in the AoE will provide students with a strong core foundation upon which further training in a residency program can expand upon. More information can be found on the School's web page (<https://pharmacy.hsc.wvu.edu/student-services/pharmd-program/areas-of-emphasis-program/>).

### **AREA OF EMPHASIS IN COLLEGE TEACHING IN PHARMACY**

This area of emphasis program helps to prepare student pharmacists for teaching at the college level. The program combines courses and expertise at the university level with those at the School of Pharmacy to provide a broad range of knowledge and experience in pedagogy training, diversity issues in higher education, current issues in academic pharmacy education, and mentored teaching experience. Together, the program components will develop students' ability to design and teach their own courses while implementing effective classroom techniques and assessment. By completing the area of emphasis, students will be more competitive for residency and fellowship programs with an emphasis in teaching and will also be prepared to participate in college teaching as an adjunct pharmacy instructor or preceptor. More information can be found on the School's web page (<https://pharmacy.hsc.wvu.edu/student-services/pharmd-program/areas-of-emphasis-program/>).

### **AREA OF EMPHASIS IN GERIATRIC PHARMACY**

This area of emphasis program offers students pursuing the Doctor of Pharmacy degree the opportunity to explore the basic biological, psychological, sociological and medical processes of aging, the needs and experiences of older people, and the impact of social policies related to human aging. An understanding of the unique experiences and needs of older adults in Appalachia and other rural areas is emphasized. More information can be found on the School's web page (<https://pharmacy.hsc.wvu.edu/student-services/pharmd-program/areas-of-emphasis-program/>).

### **AREA OF EMPHASIS IN GLOBAL HEALTH (FOR PHARMACY)**

The area of emphasis program in global health trains students to be able to provide patient-centered care at home and abroad. Its focus is on providing both didactic and experiential education that will allow students to have an understanding and an appreciation for the global nature of healthcare and how pharmacy practice can impact individuals worldwide. More information can be found on the School's web page (<https://pharmacy.hsc.wvu.edu/student-services/pharmd-program/areas-of-emphasis-program/>).

### **AREA OF EMPHASIS IN TRANSLATIONAL PHARMACY RESEARCH**

The Area of Emphasis (AoE) in Translational Pharmacy Research will allow students to understand and recognize the importance of and participate in translational research (e.g., how basic sciences contributions are applied in improving the quality of patients' health, how observations in the clinic direct new scientific hypotheses, and how health services and outcomes research impacts access, cost, quality and outcomes of health care). Participants conduct original research under the mentorship of a faculty member. More information can be found on the School's web page (<https://pharmacy.hsc.wvu.edu/student-services/pharmd-program/areas-of-emphasis-program/>).

## **DUAL PHARM.D./ONLINE HYBRID MASTER OF BUSINESS ADMINISTRATION (OHMBA)**

The dual Pharm.D./Online Hybrid Master of Business Administration (OHMBA) program provides outstanding career opportunities for graduates by building expertise in business administration principles and managerial practices coupled with therapeutic knowledge and expertise in medication management. The goal of the dual degree program is to prepare the next generation of leaders, managers, and administrators for rewarding careers in health care or pharmaceutical organizations. Opportunities for the dual degree graduates include leadership positions in hospitals and health systems, pharmacy benefit management companies, government organizations, the pharmaceutical industry, chain pharmacy corporations, and owning, franchising, or operating an independent pharmacy. Through a well-coordinated plan of study in both degree programs, the dual Pharm.D./OHMBA degree students will be able to obtain two nationally-accredited graduate degrees - OHMBA and Pharm.D. degrees - during the course of the 4-year Pharm.D. program. Additional information, including the plan of study, can be found at the School's web page (<http://pharmacy.hsc.wvu.edu/student-services/pharmd-program/pharmdmdba-program/>).

## Academic and Technical Standards

In accordance with section 504 of the Rehabilitative Act of 1973 (PL 93-112), and incorporating the guidelines of the Americans with Disabilities Act (ADA PL 101-336) enacted by Congress in 1990, the West Virginia University School of Pharmacy has adopted minimal technical standards for the assessment of admission, scholastic advancement, and graduation for its professional degree (Doctor of Pharmacy) program.

Because the Doctor of Pharmacy (Pharm.D.) degree signifies that the holder is a pharmacist prepared for entry into the practice of pharmacy, it follows that graduates must have the knowledge, skills, and demeanor to function in a broad variety of clinical situations and to conduct a wide spectrum of pharmaceutical care activities.

Candidates for admission into, progression through, and graduation from the Pharm.D. program must have the functional use of the senses of vision and hearing. Candidates' pharmaceutical skills will also be lessened without the functional use of the senses of equilibrium, smell, and taste. Additionally, they must have sufficient motor function to permit them to carry out the activities described in the sections that follow. They must be able to consistently, quickly, and accurately integrate all information received by whatever sense(s) employed, and they must have the intellectual ability to learn, integrate, analyze, and synthesize data.

A candidate for the Pharm.D. degree must have abilities and skills of five varieties including:

- Observation
- Communication
- Motor
- Conceptual, integrative, and quantitative
- Behavioral and social

Technological compensation can be made for some handicaps in certain of these areas, but a candidate should be able to perform in a reasonably independent manner. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation. For details, see the Technical Standards document published online (<http://pharmacy.hsc.wvu.edu/media/1960/technical-standards-revised-november-17-2015.pdf>).

## Student Course Load

Students in the Doctor of Pharmacy program are expected to register for all required classes in a semester unless directed not to do so by the Committee on Academic and Professional Standards or the Office of Admissions and Student Affairs. Full-time students in the School of Pharmacy may not register for less than nine credit hours during any semester without written approval of the Committee on Academic and Professional Standards. For an exception, a letter of petition must be submitted to the Committee on Academic and Professional Standards through the School of Pharmacy's Office of Admissions and Student Affairs.

## Promotion and Graduation Requirements

### EVALUATION OF STUDENT PROGRESS

Promotion of a student in the Doctor of Pharmacy program is evaluated in two major areas: successful completion of all curricular and co-curricular requirements, and appropriate adherence to the professional standards of the School of Pharmacy.

The following information is only a brief outline of the School of Pharmacy policies and procedures. Detailed requirements and policies for evaluation of student progress and graduation can be found in the *Policy on Academic and Professional Standards Governing the Doctor of Pharmacy Degree Program at West Virginia University School of Pharmacy* and may be viewed on the School of Pharmacy website. Copies are available at the Office of Admissions and Student Affairs. The Committee on Academic and Professional Standards administers all promotion and academic penalty rules.

## ACADEMIC COURSEWORK REVIEW

The Committee on Academic and Professional Standards of the School of Pharmacy reviews the performance of each student in every course at the end of each academic period.

If a student has been found to have unsatisfactory performance in any course as indicated by a grade less than a C or a semester GPA less than 2.5, a student will be placed on probation. Students on probation are not eligible to hold office in student organizations or receive School of Pharmacy scholarships. Students on probation are expected to be present for all of their classes and laboratories. Students failing to complete any required remedial actions or meet the specified performance requirements during the probationary period may be subject to academic suspension or dismissal.

After academic dismissal, a student may apply for readmission to the School of Pharmacy. Readmission of a student is the decision of the Admissions Committee following a recommendation by the Committee on Academic and Professional Standards.

## GRADING POLICY

Courses in the Doctor of Pharmacy degree program are graded either as A (excellent), B (good), C (fair), D (less than satisfactory), F (failing), I (incomplete), or on a (P) pass/(F) fail basis. Grades may be accompanied by a narrative report on the student's progress, noting any factors requiring remedial work or counseling. It is customary that all experiential courses are accompanied by a narrative evaluation.

The grade of incomplete (I) is given when the instructor believes that the work is unavoidably incomplete. If the grade of I is not removed by the satisfactory completion of the work before the end of the next semester in which the student is in residence, it becomes a failure (F) unless special permission to postpone the work is obtained from the course coordinator of record. It is the responsibility of the student to consult the instructor about the means and schedule for completing incomplete courses. A contract specifying what work must be completed and when should be drawn up by the instructor and signed by the instructor and student.

## PROFESSIONAL STANDARDS REVIEW

In view of public and professional responsibilities, the faculty of each of the professional schools of WVU has the authority to recommend the removal of any student from its program whenever, by formal decision reduced to writing, the faculty finds that the student is unfit to meet the qualifications and responsibilities of the profession. Further information is provided in The Policy on Academic and Professional Standards Governing the Doctor of Pharmacy Degree at West Virginia University School of Pharmacy, which is available at the School of Pharmacy Office of Admissions and Student Affairs.

## Special Requirements

The Board of Pharmacy requires 1,500 clock hours of internship experience for licensure in West Virginia. Students are required to obtain an Intern Certificate from the West Virginia Board of Pharmacy in order to accrue intern hours. Any hours worked before becoming a registered intern will not apply toward meeting the WV board requirements. Students must have a valid Intern Certificate throughout their entire experiential years of the Pharm.D. program. The Board of Pharmacy holds final authority over internship rules and regulations. All 1,500 hours required by the WV Board of Pharmacy may be obtained via the WVU School of Pharmacy experiential program.

Students in the Pharm.D. program will perform one four-week experiential rotation in a community pharmacy setting at the conclusion of the first year and a two-week experiential rotation in an institutional pharmacy setting at the conclusion of the second year of the professional curriculum. Students complete eight, five-week advanced pharmacy practice experiences (APPE) during the final year of the program. One to two rotations are performed in rural/geographically diverse locations throughout West Virginia. Site placement and sequencing will occur in the semesters prior to the experiential activities. Students may incur additional housing and/or travel costs when taking part in the experiential rotations. Opportunity will be provided for students to prioritize their site selection; however, ultimate authority for site selection will be maintained by the School of Pharmacy. All didactic coursework (required and elective) must be successfully completed prior to beginning the fourth-year APPE experiential rotations.

## Legal Requirements

To qualify for examination for licensure by the West Virginia Board of Pharmacy, information can be found at the West Virginia Board of Pharmacy website (<https://www.wvbop.com/>).

Interns must be registered with the West Virginia Board of Pharmacy and must be enrolled in or a graduate of an accredited school of pharmacy to gain experience acceptable for the internship requirement. Details may be obtained from the Office of Admissions and Student Affairs.

## Course Exemptions

A student who seeks exemption from one or more professional courses based upon previous academic experience must submit a written petition to the Committee on Academic and Professional Standards. Only courses taken through an accredited school of pharmacy or medicine will be considered for possible substitution.

## Undergraduate Admissions

First-time freshmen and undergraduate transfer students may apply through the main WVU application. Applicants should note "pharmacy" as their major of choice. Upon application evaluation, the applicant is automatically admitted to the direct admit pathway (<https://pharmacy.hsc.wvu.edu/student-services/pre-pharmacy/direct-admit-pathway-pre-pharmacy-program/>) if he, she or they meet the criteria. If the applicant does not meet the requirements for the direct admit pathway (DAP) program, he, she or they are admitted to the Healthcare Pathways with Pharmacy Interest major, formerly known as prepharmacy. Students may continue to update test scores, GPA and other means of meeting the math requirement for the DAP program through May 1, 2024.

## PharmD Admissions

Admissions are competitive. Criteria used to evaluate candidates include academic performance, as measured by the grade point averages (GPA) for all the above-noted prerequisite courses and the cumulative GPA achieved in all prior college-level coursework, a personal statement, letters of recommendation, and a personal interview. Prerequisite courses may be taken at an accredited U.S. or foreign institution of higher education and

completed with a grade of C or better. Careful consideration is given to those personal qualifications which bear upon the fitness of applicants for the study and practice of the profession of pharmacy.

All applicants must first file an initial electronic application with the Pharmacy College Application Service (PharmCAS). Instructions for completing the application are found on the PharmCAS website: <http://www.pharmcas.org/>. Application deadlines are subject to change; check PharmCAS, the School of Pharmacy website at <http://pharmacy.hsc.wvu.edu> or contact the School to verify current deadlines. It is recommended students apply early as the PharmD Program operates on rolling admissions basis.

Each applicant recommended for acceptance is required to pay a deposit of \$100 before his or her name is added to the official list of those accepted by the School of Pharmacy. If the applicant enrolls, this sum is applied to the first-semester tuition. If the applicant fails to enroll, this deposit is forfeited.

With enrollment in the School of Pharmacy, all students must comply with the immunization and diagnostic procedures required by the WVU Board of Governors, WVU, the WVU Health Sciences Center, and the School of Pharmacy.

Complete information may be obtained from:

School of Pharmacy Office of Admissions and Student Affairs  
WVU Health Sciences Center  
P.O. Box 9500  
Morgantown, WV 26506-9500

### **Pharmacy College Admission Test**

Completion of the Pharmacy College Admission Test is optional for admission to the School. Test results can only help an applicant's candidacy. If taking, it is recommended that the student take this test in the summer or fall before making application for admission. Information concerning time and place of the test can be obtained from NCS Pearson, Inc.

PCAT Customer Relations  
19500 Bulverde Road  
San Antonio, TX 78259  
1-800-622-3231 or (210) 339-8710  
Fax 1-800-727-0811 or 1-800-999-5941  
or <http://www.PCATweb.info>

## **Personal Interview**

The Admissions Committee requires a personal interview with selected candidates. Interviews are held during the fall and spring semesters at the WVU Health Sciences Center in Morgantown.

## **Letters of Recommendation**

A total of three recommendations are required. One academic recommendation is required and must be provided by a course instructor in any of the pre-pharmacy course requirements. The second and third recommendation may be provided by a variety of individuals including a second faculty member or advisor, employer, etc. Please refer to the PharmCAS or the School's PharmD Admissions page ([pharmacy.hsc.wvu.edu/student-services/pharmd-admissions](http://pharmacy.hsc.wvu.edu/student-services/pharmd-admissions)) for a list of appropriate letter sources.

## **Admission to Advanced Standing for Transfer Students**

If space is available, students from other accredited schools of pharmacy may be admitted provided they meet the prerequisite course requirements of the WVU School of Pharmacy, have at least a 2.5 professional grade point average, are in good academic and professional standing at the school of origin, and are eligible for continuation toward a degree in pharmacy at the school initially attended. Grades of D in professional courses cannot be transferred.

## **Provisional Admission**

An applicant accepted into the first year or an advanced standing transfer student is expected to have met all entrance requirements and satisfactorily completed all pre-pharmacy coursework in progress prior to matriculation. A satisfactory performance in the completion of such coursework is defined as one that is consistent with the student's previous academic record and must include no grades of D or lower in prerequisite courses. While it is preferred that all prerequisite coursework be completed by the end of the spring term prior to matriculation, it is possible to complete up to two non-sequential prerequisite courses before the start of pharmacy student orientation in the fall semester of matriculation. Failure to do so will result in revocation of the acceptance by the Admissions Committee.

Admitted students must remain free of any violations of local, state, or federal law that would prohibit their ability to obtain an intern license from the West Virginia Board of Pharmacy.



Furnishing or causing to furnish false or incorrect information for the purpose of gaining admission to the School of Pharmacy constitutes grounds for disciplinary action including, but not limited to, expulsion or revocation of acceptance.

Students in the School of Pharmacy agree to abide by the provisions of the Student Code of Academic and Professional Integrity. Upon admission, each student is required to return a signed statement to the Office of Admissions and Student Affairs indicating the student has read and understands the Policy on Academic and Professional Standards and the Student Code of Academic and Professional Integrity of the West Virginia University School of Pharmacy. The code and copies of the statement are available in the Office of Admissions and Student Affairs in the School of Pharmacy and on the School of Pharmacy website.

## Academic and Technical Standards and Policies

<http://pharmacy.hsc.wvu.edu/student-services/pharmd-program/>

## ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8950

## General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (<http://registrar.wvu.edu/gef/>)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
<b>General Education Foundations</b>		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

## Degree Requirements

The awarding of a doctor of pharmacy degree to a student is approved by the dean of the School of Pharmacy after receipt of recommendations from the Academic and Professional Standards Committee. Candidates must meet the following criteria:

1. Meet the academic and professional standards, criteria, and requirements outlined in The Policy on Academic and Professional Standards Governing the Doctor of Pharmacy Degree at West Virginia University School of Pharmacy, which is available at the School of Pharmacy Office of Admissions and Student Affairs and on the school's website.
2. Satisfactorily complete all of the required coursework in a timely fashion, which may not exceed five years from the date of initial enrollment into the professional program.
3. Pay all fees.
4. Complete coursework as a cohort; students cannot progress to the next year's coursework without satisfactorily completing all previous year's academic requirements.
5. Satisfactorily complete the required number of experiential rotations and demonstrate the attainment of minimum competencies.
6. Complete 100 hours of volunteer community service.



## Curriculum Requirements

Code	Title	Hours
<b>Biochemistry Requirement</b>		
Select one of the following:		3
AGBI 410 & 410L	Introductory Biochemistry and Introduction to Biochemistry Laboratory	
BIOC 339	Introduction to Human Biochemistry	
<b>Biology Requirement</b>		
Select one of the following BIOL 115 preferred - (May fulfill GEF 2): *		4
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 101 & BIOL 102 & 101L & BIOL 102L	General Biology 1 and General Biology 2 and General Biology 1 Laboratory and General Biology 2 Laboratory	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (May fulfill GEF 8)	4
<b>Chemistry Requirement</b>		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (May fulfill GEF 8)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (May fulfill GEF 8)	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
<b>Economics Requirement</b>		
ECON 201	Principles of Microeconomics (May fulfill GEF 4)	3
<b>English Requirement</b>		
ENGL 101	Introduction to Composition and Rhetoric (May fulfill GEF 1)	3
ENGL 102	Composition, Rhetoric, and Research (May fulfill GEF 1)	3
<b>Math Requirement</b>		
Select one of the following (May fulfill GEF 3):		3
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
<b>Microbiology Requirement</b>		
Select one of the following:		3
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory	
MICB 200	Medical Microbiology	
<b>Physiology Requirement</b>		
PSIO 241 or BIOL 235	Elementary Physiology Human Physiology	4
<b>Public Speaking Requirement</b>		
WVUE 270	Effective Public Speaking	3
<b>Statistics Requirement</b>		
STAT 211 or ECON 225	Elementary Statistical Inference Elementary Business and Economics Statistics	3
<b>General University Orientation Requirement</b>		
PHAR 191	First-Year Seminar	1

**General Education Foundations**

GEF Requirements 5, 6, 7	9
Total Hours	62

\*

BIOL 101, 102, 103, and 104 are equivalent to BIOL 115.

**PHARMACY REQUIREMENTS**

Code	Title	Hours
PALM 301	Principles of Human Anatomy	3
PSIO 541	Integrative Physiology	4
PHAR 703	Pharmacy Practice Experience 1	1
PHAR 710	Pharmacy Practice Experience 2	1
PHAR 800	Introduction to Pharmacy	4
PHAR 801	Drug Delivery	5
PHAR 802	Preparation of Pharmaceutical Products	1
PHAR 807	Pharmacy Calculations	1
PHAR 810	Community Pharmacy Practice	2
PHAR 811	Foundational Pharmacy Skills	1
PHAR 812	Drug Chemistry and Biotechnology	3
PHAR 813	Biopharmaceutics and Pharmacogenomics	4
PHAR 814	Biochemical Pharmacology	4
PHAR 815	Self-Care	3
PHAR 817	Principles of Immunology and Microbiology	2
Community Rotation Requirement		4
PHAR 818	Intro Community Rotation	
PHAR 820	Population Health and Policy	3
PHAR 821	Pain	1
PHAR 823	Pulmonology	3
PHAR 824	Cardiology	5
PHAR 826	Evidence-Based Practice	3
PHAR 825	Nephrology	2
PHAR 830	Health Systems Pharmacy Practice	2
PHAR 833	Endocrinology	3
PHAR 835	Autoimmune Diseases	2
Research in the Pharmaceutical Sciences		2
PHAR 836	Research in the Pharmaceutical Sciences	
PHAR 837	Quality and Outcomes in Pharmacy Practice	2
Intro to Institutional Rotation (repeated for a total of 2 credit hours)		2
PHAR 838	Intro Institutional Rotation	
PHAR 840	Pharmacy Practice Management	3
PHAR 843	Gastroenterology and Nutrition	3
PHAR 844	Infectious Diseases	3
PHAR 845	Neurology and Psychiatry	4
PHAR 848	Acute Care Practice Experience	2
PHAR 849	Ambulatory Care Practice Experience	2
PHAR 853	Hematology/Oncology	3
PHAR 854	Special Populations	3
PHAR 858	Comprehensive Assessment of Practice	3
PHAR 859	Pharmacy Law and Ethics	3
Rotations		40
PHAR 760	Acute Care Rotation 1	
PHAR 761	Acute Care Rotation 2	

PHAR 762	Ambulatory Care Rotation 1	
PHAR 763	Ambulatory Care Rotation 2	
PHAR 764	Elective Rotation 1	
PHAR 765	Elective Rotation 2	
PHAR 766	Selective Rotations	
PHAR 770	Community Rotation	
PHAR 772	Institutional Rotation	
Current Topics Requirement		2
PHAR 860	Current Topics in Pharmacy	
Electives (only approved professionally related courses)		8
Selected from the following (ACCT, ASP, BADM- 3 credit hours only, BIOL, BUSA, C&I, CHEM, COUN, CSAD, COMM, CHPR, DISB, ENGL, ENTR, EDP, EPID, FIN, GEN, GERO, GRAD, HIED, HPML, IDT, HN&F, LDR, NSG, OEHS, PHAR, PHIL, POLS, PUBA, PUBH, RELG, SBHS, SHED, SOC, STAT, WGST)		
Total Hours		152

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
PALM 301		3 PHAR 810		2 Intro Community Rotation		4
PSIO 541		4 PHAR 811		1 PHAR 818		
PHAR 800		4 PHAR 812		3		
PHAR 801		5 PHAR 813		4		
PHAR 802		1 PHAR 814		4		
PHAR 807		1 PHAR 815		3		
PHAR 703		1 PHAR 817		2		
		PHAR 710		1		
		19		20		4

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours	
PHAR 820		3 PHAR 821		1 Intro Institutional Rotation		2
PHAR 823		3 PHAR 825		2 PHAR 838		
PHAR 824		5 PHAR 830		2		
PHAR 826		3 PHAR 833		3		
Elective		2 PHAR 835		2		
		Research in the Pharmaceutical Sciences		2		
		PHAR 836				
		PHAR 837		2		
		Elective		2		
		16		16		2

### Third Year

Fall	Hours	Spring	Hours	Summer	Hours	
PHAR 840		3 PHAR 859		3 Complete 2 rotations from the following:		10
PHAR 843		3 Hematology/Oncology		3 PHAR 760		
PHAR 844		3 PHAR 854		3 PHAR 761		
PHAR 845		4 PHAR 858		3 PHAR 762		
Select 1 of the following:		2 Select course not yet completed:		2 PHAR 763		
PHAR 848		PHAR 848		PHAR 764		

PHAR 849		PHAR 849		PHAR 765	
Elective		2	Elective	2	PHAR 766
					PHAR 770
					PHAR 772
		17		16	10
Fourth Year					
Fall	Hours	Spring	Hours		
PHAR 860		1 PHAR 860		1	
Complete 3 rotations		15 Complete 3 rotations		15	
from the following		from the following of			
of those not yet		those not yet completed:			
completed:					
PHAR 760		PHAR 760			
PHAR 761		PHAR 761			
PHAR 762		PHAR 762			
PHAR 763		PHAR 763			
PHAR 764		PHAR 764			
PHAR 765		PHAR 765			
PHAR 766		PHAR 766			
PHAR 770		PHAR 770			
PHAR 772		PHAR 772			
		16		16	

Total credit hours: 152

\*

Prior to beginning the experiential rotations, each student enrolled in the School of Pharmacy professional program must complete a minimum of eight credit hours of school of pharmacy elective courses or courses from a list of approved professionally-related electives as part of the pharmacy curriculum. Electives must be completed during the first three years of the four-year professional program. No course taken prior to admission into the School of Pharmacy may be used nor repeated to meet the elective requirements of the professional curriculum, and no reduction in elective requirements will be allowed for courses completed or degrees earned prior to enrollment in the program.

This program has specific admission criteria for students who are not continuing the pursuit of the PharmD degree, and have not already completed a bachelor's degree.

## Curriculum Requirements

Code	Title	Hours
University Requirements		46
Pre-Pharmacy Requirements		46
Pharmacy Requirements		28
Total Hours		120

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
PHAR 191	First-Year Seminar	1
General Electives		30
Total Hours		46

## Pre-Pharmacy Requirements

Code	Title	Hours
<b>Biochemistry Requirement</b>		
Select one of the following:		3
AGBI 410	Introductory Biochemistry	

BIOC 339	Introduction to Human Biochemistry	
<b>Biology Requirement</b>		<b>8</b>
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	
OR		
BIOL 101 & 101L & BIOL 102 & BIOL 102L	General Biology 1 and General Biology 1 Laboratory and General Biology 2 and General Biology 2 Laboratory	
<b>General Chemistry Requirement</b>		<b>8</b>
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
<b>Organic Chemistry Requirement</b>		<b>8</b>
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	
<b>Calculus Requirement</b>		<b>3</b>
Select one of the following:		
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
<b>Economics Requirement</b>		
ECON 201	Principles of Microeconomics	3
<b>Microbiology Requirement</b>		<b>3</b>
Select one of the following:		
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory	
MICB 200	Medical Microbiology	
<b>Physiology Requirement</b>		<b>4</b>
Select one of the following:		
PSIO 241	Elementary Physiology	
BIOL 235	Human Physiology	
<b>Public Speaking Requirement</b>		
WVUE 270	Effective Public Speaking	3
<b>Statistics Requirement</b>		<b>3</b>
Select one of the following:		
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Total Hours		46

## Pharmacy Requirements

Code	Title	Hours
<b>Pharmacy Requirements</b>		<b>26</b>
PALM 301	Principles of Human Anatomy	
PSIO 541	Integrative Physiology	
PHAR 703	Pharmacy Practice Experience 1	

PHAR 710	Pharmacy Practice Experience 2	
PHAR 800	Introduction to Pharmacy	
PHAR 801	Drug Delivery	
PHAR 802	Preparation of Pharmaceutical Products	
PHAR 807	Pharmacy Calculations	
PHAR 810	Community Pharmacy Practice	
PHAR 811	Foundational Pharmacy Skills	
PHAR 812	Drug Chemistry and Biotechnology	
PHAR 813	Biopharmaceutics and Pharmacogenomics	
PHAR 814	Biochemical Pharmacology	
PHAR 815	Self-Care	
PHAR 817	Principles of Immunology and Microbiology	
PHAR 820	Population Health and Policy	
PHAR 821	Pain	
PHAR 823	Pulmonology	
PHAR 824	Cardiology	
PHAR 825	Nephrology	
PHAR 826	Evidence-Based Practice	
PHAR 830	Health Systems Pharmacy Practice	
PHAR 833	Endocrinology	
PHAR 835	Autoimmune Diseases	
PHAR 836	Research in the Pharmaceutical Sciences	
PHAR 837	Quality and Outcomes in Pharmacy Practice	
Capstone		2-4
Select one of the following:		
PHAR 749	Pharmaceutical Investigation (2 Credits)	
PHAR 818	Intro Community Rotation (4 Credits)	
Total Hours		28

## Dual Degree

- Doctor of Pharmacy/Master of Business Administration (p. 886)

## DOCTOR OF PHARMACY/MASTER OF BUSINESS ADMINISTRATION

- Admission. Students seeking to enter the dual degree program must apply separately and be admitted independently to each program in accordance with each college's standard admission procedures.
- For additional details and requirements for each program, please visit the PharmD (<http://catalog.wvu.edu/graduate/schoolofpharmacy/pharmd/#majortext>) or the OHMBA page ([http://catalog.wvu.edu/graduate/collegeofbusinessandconomics/businessadministration/mba\\_ohmba/](http://catalog.wvu.edu/graduate/collegeofbusinessandconomics/businessadministration/mba_ohmba/)).
- Students will develop a combined plan of study with their graduate advisors in each program.
- Students must meet the academic standards of both degrees earned.
- Students admitted to an approved dual degree program should plan to have their two degrees conferred simultaneously upon completion of all requirements for both degrees.
- Only courses included in an approved plan of study will count and satisfy graduation requirements.

## ONLINE MBA REQUIREMENTS

The Online MBA program requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

Code	Title	Hours
<b>A program GPA of 3.0 is required by the Chambers College.</b>		
BADM 611	Management Information Systems	3
BADM 612	Managerial and Team Skills	3

BADM 618	Macroeconomics and Managerial Economics	3
BADM 622	Financial Statements Analysis	3
BADM 630	Corporate Leadership	3
BADM 641	Decision Analysis for Executives	3
BADM 650	Global Trade and Supply Chain	3
BADM 652	Marketing Strategy	3
Total Hours		24

## PHARMACY REQUIREMENTS

The School of Pharmacy Committee on Academic and Professional Standards reviews the performance of each student in every course at the end of each academic period. If a student has been found to have unsatisfactory performance in any course as indicated by a grade less than a C or a grade less than pass (for pass/fail courses), or a cumulative GPA less than 2.5, a student will be placed on probation. Students may be required to step out of the OHMBA program if placed on probation. Students failing to successfully complete any required remedial actions or meet the specified performance requirements during the probationary period may be subject to academic suspension or dismissal from the PharmD program.

Code	Title	Hours
PALM 301	Principles of Human Anatomy	3
PSIO 541	Integrative Physiology	4
PHAR 703	Pharmacy Practice Experience 1	1
PHAR 710	Pharmacy Practice Experience 2	1
PHAR 800	Introduction to Pharmacy	4
PHAR 801	Drug Delivery	5
PHAR 802	Preparation of Pharmaceutical Products	1
PHAR 807	Pharmacy Calculations	1
PHAR 810	Community Pharmacy Practice	2
PHAR 811	Foundational Pharmacy Skills	1
PHAR 812	Drug Chemistry and Biotechnology	3
PHAR 813	Biopharmaceutics and Pharmacogenomics	4
PHAR 814	Biochemical Pharmacology	4
PHAR 815	Self-Care	3
PHAR 817	Principles of Immunology and Microbiology	2
Community Rotation Requirement		4
PHAR 818	Intro Community Rotation	
PHAR 820	Population Health and Policy	3
PHAR 821	Pain	1
PHAR 823	Pulmonology	3
PHAR 824	Cardiology	5
PHAR 826	Evidence-Based Practice	3
PHAR 825	Nephrology	2
PHAR 830	Health Systems Pharmacy Practice	2
PHAR 833	Endocrinology	3
PHAR 835	Autoimmune Diseases	2
Research in the Pharmaceutical Sciences		2
PHAR 836	Research in the Pharmaceutical Sciences	
PHAR 837	Quality and Outcomes in Pharmacy Practice	2
Intro to Institutional Rotation (repeated for a total of 2 credit hours)		2
PHAR 838	Intro Institutional Rotation	
PHAR 840	Pharmacy Practice Management	3
PHAR 843	Gastroenterology and Nutrition	3
PHAR 844	Infectious Diseases	3
PHAR 845	Neurology and Psychiatry	4
PHAR 848	Acute Care Practice Experience	2
PHAR 849	Ambulatory Care Practice Experience	2

PHAR 853	Hematology/Oncology	3
PHAR 854	Special Populations	3
PHAR 858	Comprehensive Assessment of Practice	3
PHAR 859	Pharmacy Law and Ethics	3
Rotations		40
PHAR 760	Acute Care Rotation 1	
PHAR 761	Acute Care Rotation 2	
PHAR 762	Ambulatory Care Rotation 1	
PHAR 763	Ambulatory Care Rotation 2	
PHAR 764	Elective Rotation 1	
PHAR 765	Elective Rotation 2	
PHAR 766	Selective Rotations	
PHAR 770	Community Rotation	
PHAR 772	Institutional Rotation	
Current Topics Requirement		2
PHAR 860	Current Topics in Pharmacy	
Total Hours		144

## Areas of Emphasis Offered:

- Advanced Clinical Practice (p. 888)
- College Teaching in Pharmacy (p. 889)
- Geriatric Pharmacy (p. 890)
- Global Health (for Pharmacy) (p. 890)
- Translational Pharmacy Research (p. 892)

## Advanced Clinical Practice Area of Emphasis Requirements

Code	Title	Hours
Required Course:		
PHAR 776	Preparing Residency Applicants	2
Clinical Development Electives		4
Select two of the following:		
PHAR 705	Advanced Cardiology Pharmacotherapy	
PHAR 707	Drug-Induced Diseases	
PHAR 713	Oncology Pharmacotherapy	
PHAR 718	Pediatric Pharmacotherapy	
PHAR 745	Critical Care Pharmacotherapy	
PHAR 748	Acute Care Case Studies	
PHAR 751	Geriatrics	
PHAR 771	Introduction to Specialty Pharmacy	
PHAR 778	Travel Medicine and Global Pharmacy Practice	
Professional Development Elective(s)		
Select 2 credit hours from the either the Clinical Development list above or the professional development list below. *		2
PHAR 721	Advocacy and Leadership	
PHAR 743	Teach to Learn: Learn to Teach	
PHAR 749	Pharmaceutical Investigation	
PHAR 773	Recent Research Advancement in Cardiology Journal Club	
PHAR 779	Drug Discovery	
PHAR 781	Drug Metabolism	
PHAR 793	Special Topics (Managed Care Principles and Policies)	
PHAR 793	Special Topics (Exploring Wellness and Mindfulness in Health Care)	
PHAR 796	Graduate Seminar	



Other courses may be added to the list as approved by the Curriculum Committee

Total Hours

8

\*

Any of the courses from the clinical development list above OR the professional development electives below

## ADDITIONAL REQUIREMENTS

### MENTORSHIP PROGRAM:

- Each student will be assigned or will identify a faculty mentor to meet with regularly to discuss career goals, progression through the program, curriculum vitae development, and other issues that arise.
- In addition, the AoE coordinator(s) will meet with the students as a group at least twice a semester to discuss global issues and professional development topics.

### RESEARCH PROJECT:

- Each student must complete some type of scholarly project that is presented for dissemination in some venue. This can be a research project presented as a poster at a national meeting, a review article published in a peer-reviewed journal, a patient case series presented at the local WVU HSC research day, or any number of other options. The mentors assigned to students as part of this AoE are not necessarily scholarship mentors. Students may ask their mentors if they are able to work with them on a scholarly project; however, the onus is on the student to find an appropriate mentor and project. Students are encouraged to talk to the AoE coordinator(s) if they need assistance with completing this requirement of the AoE.

### ADVANCED PHARMACY PRACTICE EXPERIENCES (APPE) ROTATIONS:

- As part of the advanced pharmacy practice experiences (APPEs), students will be required to complete an approved plan of study, which will include at least four acute or ambulatory care rotations.
- All student APPE schedules must comply with Accreditation Council for Pharmacy Education (ACPE) Standards.

### APPLICATION PROCESS:

- All PharmD students in good academic standing are eligible to apply for acceptance during the fall of their second professional year.
- Applications must include a cover letter, an essay describing the applicant's future career goals and what they expect to gain through completion of the area of emphasis, and a current curriculum vitae. Additionally, an unofficial transcript will be obtained through the Office of Admissions and Student Affairs. An interview may also be included for consideration in the admission process.

## College Teaching in Pharmacy Area of Emphasis

The area of emphasis has three major requirements: a pharmacy-specific pedagogy course; elective course options from across the university; and a pharmacy teaching experience.

Eligibility and Deadlines:

Students must be currently enrolled in the Doctor of Pharmacy program and in good academic standing. Up to five students will be enrolled per year. Students must complete an application for admission to the area of emphasis program. Applications are due by November 30 of each year. Enrollment at other times may be considered if spots are available. Applicants must provide:

- 1) a cover letter or email with intent to enroll
- 2) a brief essay describing the applicant's future career goals and what they gain through completion of the Area of Emphasis
- 3) a current curriculum vitae
- 4) an unofficial transcript will be accessed to verify GPA requirement.

Code	Title	Hours
Required Course		
PHAR 743	Teach to Learn: Learn to Teach	2
Required Teaching Experience - Select one of the following:		1-5
PHAR 764	Elective Rotation 1	
PHAR 765	Elective Rotation 2	
PHAR 790	Teaching Practicum	
Elective Course Options *		6
PHAR 749	Pharmaceutical Investigation (Research project must be teaching related and approved prior to registration; can register for 1 - 2 credit hours only.)	

C&I 643	Brain-Based Teaching and Learning
C&I 687	Advanced Teaching Strategies
C&I 689	Cultural Diversity in the Classroom
C&I 789	Teaching in Higher Education
EDP 600	Educational Psychology
EDP 640	Instructional Design
EDP 700	Psychological Foundations of Learning
GRAD 593	Special Topics (Accessible Teaching)
GRAD 593	Special Topics (Readability in the Online Course)
GRAD 593	Special Topics (Designing Scenarios to Engage Students)
GRAD 680	Classroom Assessment Techniques
GRAD 693	Special Topics (Teaching Different Cultures)
GRAD 710	Scholarly Teaching
GRAD 793	Special Topics (Scholarship of Teaching and Learning)
HIED 651	College Student Development
HIED 693	Special Topics (Women & Gender Issues in Higher Education)
HIED 750	Diversity Issues in Higher Education
HIED 760	Curriculum Development and Reform in Higher Education
HIED 763	International Higher Education
IDT 655	Technology for Teachers
IDT 693	Special Topics (Online Teaching and Learning)
WGST 593	Special Topics (Gender and Sexuality Theory)
Other courses may be added to the list as they become available.	

Total Hours

9

## Geriatric Pharmacy Area of Emphasis

Eligibility and Deadlines:

Students must be currently enrolled in the Doctor of Pharmacy program and in good academic standing. Students will complete an application for admission to the area of emphasis program, including the following elements:

- 1) a letter/email regarding your intent to enter the program
- 2) a brief description/essay describing the applicant's future career goals and what you expect to gain through completion of the Area of Emphasis
- 3) a current Curriculum Vitae (CV)

Code	Title	Hours
GERO 681	Rural Gerontology	3
PHAR 751	Geriatrics	2
Public Policy of Aging		3
GERO 412	Public Policy of Aging	
GERO 512	Public Policy of Aging	
<b>Students must choose one additional course from the approved electives listed below.</b>		<b>2</b>
COMM 693	Special Topics (Communication in Later Life)	
GERO 645	Fundamentals of Gerontology	
GERO 628	Aging Women & Cultural Issues	
PHAR 749	Pharmaceutical Investigation	
PHAR 764	Elective Rotation 1 (Geriatrics or Long-Term Care)	

Total Hours

10

## Global Health (for Pharmacy) Area of Emphasis Requirements

The area of emphasis program in global health (for pharmacy) trains students to be able to provide patient-centered care at home and abroad. Its focus is on providing both didactic and experiential education that will allow students to have an understanding and an appreciation for the global nature of

healthcare and how pharmacy practice can impact individuals and populations worldwide. More information can be found on the School's webpage at <http://pharmacy.hsc.wvu.edu> (<https://pharmacy.hsc.wvu.edu/>).

#### **Application Process:**

All Pharm.D students in good standing are eligible to apply for acceptance during the fall of their P2 year. Information will be emailed to students regarding the specific date that applications are due.

Applications will include:

- 1) an essay describing the applicant's future career goals and what they expect to gain through completion of the Area of Emphasis
- 2) a current Curriculum Vitae
- 3) professional grade point average will be accessed through the Office of Admissions and Student Affairs

Code	Title	Hours
PHAR 778	Travel Medicine and Global Pharmacy Practice	2
Select one of the following:		5
PHAR 764	Elective Rotation 1	
PHAR 765	Elective Rotation 2	
Select one of the following*:		3-4
ANTH 350	Latin American Culture	
ASP 220	Introduction to Africana Studies	
COMM 309	Health Communication	
COMM 316	Intercultural Communication	
POLS 250	Introduction to Comparative Politics	
POLS 260	Introduction to International Relations	
POLS 363	International Law	
PUBH 201	Global Perspectives of Public Health	
RELG 231	Religions of China and Japan	
<ul style="list-style-type: none"> <li>• or course not on the list with pre-approval by the Global Health for Pharmacy advisors. Of note, students are responsible for checking on the semester-by-semester availability and any potential pre-requisites required for any of the following courses.</li> </ul>		
Total Hours		10

## **EXPERIENTIAL ROTATION REQUIREMENT**

Students will complete one international APPE. Currently available international rotations include South Africa, Oman, Brazil, and Thailand. Students in the AoE program will not be guaranteed an international rotation and must go through the standard application process for selection for these international rotations. If students are unable to successfully complete an international APPE, they will not meet the requirements for completion of the AOE.

## **ADDITIONAL REQUIREMENTS**

1) All students will have to complete either: a) an APPE that takes place in an underserved community, such as a rotation in Alaska, one with the Indian Health Service, or one at a Federally Qualified Health Center (e.g., Cabin Creek, Camden-on-Gauley), or b) an approved summer internship or medical mission that contains a global health emphasis. The summer internship or medical mission must be focused on global health and be of a minimum duration of 2 weeks; this requirement could be completed all at once or via multiple internships/medical missions but a total duration of 2 weeks is required. The school will maintain a list of approved internships when possible. However, the student may inquire about the acceptability of other programs which are not listed.

2) All students will serve as Global Health Ambassadors for international students visiting the West Virginia University School of Pharmacy when they are in Morgantown. The Ambassador's role will require students to: a) organize and host social events outside of the School of Pharmacy attempting to incorporate the visiting students' wishes into the planned activities, and b) organizing and participating as School of Pharmacy representatives during the HSC's Global Health Week.

All students must remain in good academic standing in the Doctor of Pharmacy program to remain in the area of emphasis program. Students on probation in the Doctor of Pharmacy program will be evaluated by the Academic Standards committee and may be removed from the area of emphasis program.

## Translational Pharmacy Research Area of Emphasis

Research is an integral component of the education and practice of pharmacy, enabling development of new information, technologies, and processes which are essential for improving patient care, therapeutics outcomes and growth of the profession. The importance of research in the profession of pharmacy is well established. The Area of Emphasis (AoE) in Translational Pharmacy Research will allow students to understand and recognize the importance of translational research (e.g., how basic sciences contributions are applied in improving the quality of patients' health, how observations in the clinic direct new scientific hypotheses, and how health services and outcomes research impacts access, cost, quality and outcomes of health care).

All Pharm.D. students in good academic standing are eligible for participation. Acceptance and continuation in the program is contingent on each student identifying a research mentor and committee members, who will guide the research progress and completion.

Students must enroll by the end of the P3 year. Applicants must provide:

- a cover letter or email with intent to enroll
- a brief essay describing the applicant's future career goals and what they to gain through completion of the Area of Emphasis
- a current curriculum vitae
- an unofficial transcript will be accessed to verify academic standing.

### Course Requirements

Code	Title	Hours
<b>Required research course:</b>		
PHAR 749	Pharmaceutical Investigation (must register for at least 1 credit hour in two separate semesters.) *	2
<b>Electives **</b>		<b>7</b>
CCB 705	Journal Club	
PHAR 749	Pharmaceutical Investigation (Can repeat for 7 hours of elective credit)	
PHAR 753	Social and Behavioral Theory and Health Outcomes Research	
PHAR 755	Pharmacoeconomics	
PHAR 756	Health Survey Research Methods	
PHAR 758	Ethical and Regulatory Aspects of Clinical Research	
PHAR 764	Elective Rotation 1 (must be a research elective)	
or PHAR 765	Elective Rotation 2	
PHAR 769	Advanced Health Service Research Methods	
PHAR 773	Recent Research Advancement in Cardiology Journal Club	
PHAR 777	Health Outcomes Research Designs	
PHAR 779	Drug Discovery	
PHAR 781	Drug Metabolism	
PHAR 784	Pharmacology Journal Club	
PHAR 785	Pharmacoepidemiology	
PHAR 786	Health Services Research and Secondary Database	
PHAR 788	Graduate Seminar in Health Outcomes Research	
or PHAR 796	Graduate Seminar	
PHAR 793	Special Topics (Herbs and Supplements)	
Credit may be given for other courses that relate to a student's research project.		
Written Summary of Research		
Oral Presentation to Participant's Research Committee		
Poster or Oral Presentation at Research Conference		
Total Hours		9

\*

Students may complete 1-3 hours of research credit. Each credit hour equals 3 hours of laboratory or clinic based research per week.

\*\*

Students complete 7 hours from the list of electives. Electives may not be taught each year and may have capacity limits; thus, students are instructed to consult with the director of the Area of Emphasis prior to course selection. Students are required to complete 2 hours of PHAR 749, but can complete additional hours as elective hours.

## ADDITIONAL REQUIREMENTS

- Students involved in clinical research must take the CITI training for Human Research offered through WVU and which must be kept current.
- Present his/her project as a poster or oral presentation at the Annual HSC Research Day or other equivalent research meeting.
- Complete an oral presentation of the work (which is open to the public). Students that are enrolled in the AoE must attend.
- Write a summary of his/her research and findings. This project will be distributed to the certification committee members at least three weeks prior to the oral presentation. The certification committee will be comprised of the research mentor, two additional faculty members selected by the research mentor, and the AoE program director. The research mentor or one committee member can be from outside of the School of Pharmacy with prior approval by the Area of Emphasis Director.

## Major Learning Outcomes

### DOCTOR OF PHARMACY (PHARM. D.)

#### Educational Outcomes

Upon successful completion of the West Virginia University Doctor of Pharmacy degree program, the graduate will be able to accomplish the following educational outcomes (EOs):

**EO 1 Foundational Knowledge and Skills (Learner)** - Develop, integrate, and apply foundational knowledge (e.g., concepts, facts, principles) from biological, pharmaceutical, social, behavioral, administrative, and clinical sciences to evaluate the scientific literature, explain drug actions, solve therapeutic problems, and advance individual and population health.

- Acquire and demonstrate depth and breadth of knowledge of foundational scientific, clinical, socioeconomic, and humanistic concepts and skills.
- Explain how knowledge in the foundational sciences is integral to pharmacy practice.
- Integrate knowledge from foundational sciences to explain how specific drugs or drug classes work and evaluate their potential value in individuals and populations.
- Apply foundational concepts and skills to practice.
- Use scientific reasoning and critical thinking skills in practice to address problems, issues, or concerns.
- Develop and apply creative and innovative approaches to effectively resolve problems and improve patient outcomes.
- Apply an evidence-based approach to practice by identifying appropriate questions to address, using databases and other resources to retrieve information, critically analyzing and interpreting relevant scientific information and other evidence, formulating sound conclusions, and integrating the best published evidence with expertise and individual patient values/needs.
- Analyze and use epidemiologic, pharmaco-economic, medication utilization, and quality improvement data when developing evidence-based programs and protocols.
- Apply knowledge of research methodology to design or conduct basic research, practice-based studies, or clinical trials.
- Use information technology where appropriate to enhance individual knowledge and skills.

**EO 2 Communication Skills (Communicator, Educator)** – Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

- Use appropriate verbal and nonverbal communication skills with individuals or groups, including patients, health professionals and others.
- Use effective written communication skills with patients, health professionals, and others, including the development of documents pertinent to professional or organizational needs (e.g., monographs, reports).
- Educate target audiences by using the most effective method to deliver information, in coordination with other health care professionals as appropriate.
- Use technology to facilitate or enhance professional communications and presentations.

**EO 3 Professionalism, Advocacy, and Leadership (Professional, Leader, Advocate)** - Exhibit behaviors and values consistent with the professional trust given by patients, healthcare providers, and society; assure that patients' best interests are represented; and demonstrate responsibility for achieving shared goals regardless of position.

- Conduct pharmacy practice duties and patient care responsibilities in accordance with applicable federal, state, and local laws, statutes, and regulations, as well as professional guidelines and standards.
- Serve as an advocate, leader, and change agent for pharmacy and pharmacists' professional roles and responsibilities by implementing or participating in new, evidence-based models for cost-effective pharmacist-delivered patient care.
- Serve as an advocate for community and patient health and medication therapy needs, including disadvantaged or underserved patients and those from diverse cultural and socioeconomic backgrounds, while honoring their autonomy and dignity.
- Serve as a positive role model in actions/communications for peers and other health care providers by maintaining a high standard for personal and professional demeanor and ethical conduct.
- Respect all points of view in professional interactions while placing patients' needs and desires at the forefront.

- Demonstrate compassion, empathy, honesty, integrity, ethical behavior and altruism in all actions and communications with patients, families, and care providers.
- Develop professional competence through ongoing, active and self-directed pursuit of new knowledge and skills.
- Identify and analyze emerging health care and pharmacy issues and incorporate new roles, products and services into practice that can improve patient outcomes.
- Accept accountability and responsibility for one's words and actions.

**EO 4 Self-Awareness (Insightful) – Examine and assess personal knowledge, skills, abilities, attitudes, beliefs, motivation, and emotions and strive for continual improvement.**

- Conduct self-assessments on a regular basis and create, implement, evaluate, and modify as needed plans for personal improvement and continuing professional development.
- Recognize personal strengths and limitations and seek assistance when needed.
- Approach tasks and situations with flexibility and a desire to learn.
- Accept constructive criticism and display a willingness to correct and learn from errors.

**EO 5 Interprofessional Collaboration (Collaborator) – Actively participate as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.**

- Collaborate with health care professionals, patients, and/or caregivers to ensure that desired patient-specific or population-based health outcomes are achieved.
- Facilitate team building among health care professionals by developing and maintaining an atmosphere of mutual respect and shared values that place the patient at the forefront.
- Effectively utilize the knowledge, expertise, and unique roles of health care team providers and refer patients to others when indicated.
- Serve as the medication expert on a collaborative care team by managing the pharmacotherapy for patients' medical conditions and by proactively providing drug product and other medication related information to team members.
- Accept responsibility for medication-related outcomes on the care team.

**EO 6 Patient Care (Provider) – Provide patient-centered care as the medication expert.**

- Accurately interpret, prepare and/or compound, handle and dispense prescriptions for patients.
- Obtain necessary patient-specific data (e.g., consulting patient records, taking medication histories, performing basic physical assessments, ordering/interpreting lab tests), and evaluate and use these data when performing patient care related responsibilities.
- Evaluate pharmaceutical products, including information about the drug, dosage form, delivery system and cost/benefit, when conducting a medication review or preparing a care plan.
- Conduct comprehensive medication reviews and prepare individualized care plans to optimize patient outcomes, with emphasis on commonly encountered chronic or high risk conditions amenable to pharmacotherapy and patients at greater risk for adverse events.
- Work with patients, caregivers, and health care professionals to implement specific therapy plans.
- Educate and empower patients to take an active role in their health and incorporate recommendations for healthy living and self-care into care plans.
- Monitor and evaluate patients during therapy for drug product or pharmacotherapy problems, patient concerns, or adherence issues and recommend or implement solutions.
- Work with patients and other health care providers to ensure the continued success of individual care plans.
- Document patient-care services in charts/medical records and on forms needed for reimbursement.
- Counsel patients and/or caregivers about the following to help ensure a care plan's success: i) medications, non-drug therapy, dietary supplements and natural products; ii) insurance and other options for obtaining necessary medications; iii) proper use of testing devices and medical goods and equipment; and iv) healthy lifestyle changes.

**EO 7 Population-Based Care (Promoter, Provider) – Design and implement prevention, intervention, and educational strategies for communities to manage chronic disease and improve health and wellness.**

- Develop, recommend, and provide preventive health services, such as administration of vaccines and screening tests.
- Develop and implement disease management programs based upon identified needs and priorities (e.g., cost, access, and patient satisfaction considerations; commonly encountered, chronic conditions managed by pharmacotherapy).
- Evaluate and adjust interventions as needed to maximize population health.
- Promote public awareness of health promotion and disease prevention strategies.
- Design, develop, and disseminate public health related educational materials or services in a culturally competent manner.
- Work with health care professionals and other personnel to identify and help resolve key public health issues and problems, and participate in policies or strategies to address them.

**EO 8 Pharmacy and Medication Use Systems (Manager)** – Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.

- Demonstrate knowledge of pharmacy management including operations, human and fiscal resources, marketing, and leadership principles.
- Design, use, and manage systems to prepare, dispense, distribute and administer medications to optimally serve patient's drug-related needs.
- Use knowledge of the organization and financing of the U.S. healthcare system to provide and effectively manage progressive pharmacy services.
- Develop a business plan for integrating clinical and distributive services that includes methods for supporting and obtaining reimbursement for clinical services provided to patients.
- Demonstrate and apply knowledge of national standards, guidelines, best practices, and established principles and processes for safe medication use to protect patient safety.
- Participate in quality improvement programs and employ performance indicators to enhance the quality of care and cost effectiveness of services provided and to optimize safe, appropriate medication use.
- Participate in developing and performing medication use evaluations to identify and resolve drug therapy problems or concerns.
- Reconcile a patient's medications when transitioning from one care setting to another by communicating effectively with all involved health care professionals.
- Use current and emerging information and system technologies to enhance safe and effective medication use.
- Provide recommendations for developing and managing a formulary that incorporate pharmacoeconomic principles.
- Actively participate in, and contribute to the development of, strategies to minimize drug misuse/abuse.

# Public Health

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## Degrees Offered

### MASTER

- Master of Health Administration (MHA)
- Master of Public Health (MPH)
- Master of Science (MS):
  - MS in Biostatistics
  - MS in Industrial Hygiene
  - MS in Population Health

### DOCTORAL

- Doctor of Philosophy (Ph.D.) in Public Health Sciences
  - Epidemiology
  - Occupational and Environmental Health Sciences
  - Social and Behavioral Sciences

## General Information

West Virginia University's School of Public Health has well-established faculty and successful programs that focus on education, research, and service.

West Virginia University and its academic programs are accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. The School of Public Health is further accredited by the Council on Education in Public Health (CEPH). MPH Students from throughout the world who choose West Virginia University begin making a difference even before graduation. We truly believe in learning by doing. Students remain engaged in community health throughout their training and complete practicum/internship experiences in diverse settings. Our MHA students will work closely with WVU Medicine and other West Virginia health systems as they gain essential knowledge required for managerial, planning and implementation work in the health services and systems sectors. We are currently seeking Commission of Accreditation of Healthcare Management Education (CAHME). The school's portfolio of Master of Science programs (Biostatistics, Industrial Hygiene, and Population Health) offer students vital career pathways in rapidly growing professions. The Doctor of Philosophy in Public Health Sciences prepares graduates for future careers in academia and research in a variety of settings. School of Public Health faculty and staff involve students in their active research programs. Research efforts at the School often focus on the health of rural communities, consistent with our West Virginia roots. Students publish in leading peer-reviewed journals and present at national scientific conferences with their faculty mentors.

**The *mission* of the West Virginia University School of Public Health is to improve the quality of life for West Virginians and all who call Appalachia home.**

**The *vision* of the School of Public Health is to attain healthy people in thriving communities.**

**The School of Public Health is guided by the following *values*:**

- *Community Engagement*: we are proud of the communities we serve and recognize the importance of bidirectional participatory activities.
- *Collaboration*: we collaborate with partners who join us in improving the public's health.
- *Equity*: we promote equity and social justice in defining health and eliminating health disparities.
- *Integrity*: we adhere to the highest ethical standards of honesty and fairness and we recognize that integrity and ethical behavior are essential elements of our professions.
- *Respect*: we respect diverse points of view and the cultural heritage and traditions of all people.
- *Accountability*: we hold ourselves accountable to one another and to the many stakeholders who support the School of Public Health.

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## ADMINISTRATION

### DEAN

- Jeffrey Coben - MD (University of Pittsburgh)  
Professor, Department of Health Policy, Management and Leadership



## SENIOR ASSOCIATE DEAN FOR ACADEMIC AND STUDENT AFFAIRS

- Erik Carlton - DrPH (University of Kentucky)  
Associate Professor, Department of Health Policy, Management and Leadership

## SENIOR ASSOCIATE DEAN FOR ADMINISTRATION

- Sarah Woodrum - DrPH (University of Illinois, Chicago)  
Assistant Professor, Department of Health Policy, Management, and Leadership

## ASSISTANT DEAN FOR STUDENT AFFAIRS

- Scot McIntosh - MS (Eastern Kentucky University)

## DIRECTOR OF DOCTORIAL PROGRAMS

- Alfgeir Kristjansson - PhD (Karolinska Institute, Stockholm, Sweden)  
Associate Professor, Department of Social and Behavioral Sciences

## DIRECTOR OF GRADUATE STUDIES

- Erik Carlton - DrPH (University of Kentucky)  
Associate Professor, Health Policy, Management and Leadership

## DIRECTOR OF MS INDUSTRIAL HYGIENE

- Sergio Caporali Filho - PhD (West Virginia University)  
Professor, Department of Occupational and Environmental Health Sciences

## DIRECTOR OF PUBLIC HEALTH PRACTICE AND SERVICE LEARNING

- Diane Gross - DVM, PhD (The Ohio State University)  
Associate Professor, Department of Epidemiology and Biostatistics

## DIRECTOR OF UNDERGRADUATE STUDIES

- Audra Hamrick - MA (West Virginia University)  
Assistant Professor, Social and Behavioral Sciences

## CHAIRS

- Nicholas Castle - PhD (Pennsylvania State University)  
Professor, Department of Health Policy, Management and Leadership
- Weimin Gao - PhD (University of Pittsburgh)  
Professor, Department of Occupational and Environmental Health Sciences
- Bethany Barone Gibbs - PhD (Johns Hopkins University)  
Associate Professor, Department of Epidemiology and Biostatistics
- Keith Zullig - PhD (University of South Carolina)  
Professor, Department of Social and Behavioral Sciences

## Accreditation

The WVU School of Public Health is fully accredited (<http://publichealth.wvu.edu/about/accreditation/>) by the Council on Education for Public Health (CEPH (<https://ceph.org/>)). The only accredited public health program in the state, the School is home to undergraduate and graduate programs in various public health disciplines at the BS, MPH, MS and PhD levels. The school's Master of Science in Industrial Hygiene program is accredited by the Applied Natural Sciences Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET-ANSAC (<https://www.abet.org/>)). The school is also seeking accreditation for the Master of Health Administration (MHA) program by the Commission on Accreditation of Healthcare Management Education (CAHME (<https://www.cahme.org/>)) and certification of the Bachelor of Science in Health Services Management and Leadership by the Association of University Programs in Health Administration (AUPHA (<https://www.aupha.org/home/>)).

## Degree Designation Learning Outcomes

### MASTER OF HEALTH ADMINISTRATION (MHA)

#### MHA Competencies

- Interpersonal Communication: Students will build collaborative and productive relationships.
- Relationship Management: Students will demonstrate negotiation and conflict resolution skills.
- Writing Skills: Students will prepare effective business communications.

- **Presentation Skills:** Students will demonstrate professional oral communication and presentation skills.
- **Leading & Managing Others:** Students will hold self and others accountable for team and/or organizational goal attainment.
- **Change Management:** Students will show the ability to promote and manage change.
- **Honest Self-Assessment:** Students will exhibit self-awareness through active reflection and self-assessment.
- **Systems Thinking:** Students can assess the potential impacts and consequences of decisions in a broad variety of situations.
- **Problem-Solving & Decision-Making:** Students are able to apply evidence-based techniques to health services decisions.
- **Personal & Professional Ethics:** Students will exhibit honesty, integrity, and ethical behavior.
- **Personal Responsibility:** Students will fulfill their commitments and demonstrate accountability.
- **Professional & Community Contribution:** Students demonstrate a commitment to community engagement and service.
- **Working in Teams:** Students will demonstrate the capacity to work in and lead teams.
- **Health Services Issues & Trends:** Students can examine important issues in health services, including circumstances causing major changes and reform in U.S. health systems and services
- **Health Services Legal Principles:** Students are able to discuss and analyze health-related legal principles, including compliance standards, regulations, and risk management
- **Health Policy:** Students are able to articulate the impact of health policies on the delivery of health services.
- **Public & Population Health:** Students understand and explain the major factors in population health status.
- **Financial Management:** Students are able to compile, analyze, and interpret financial information for health services decision making.
- **Human Resources:** Students will apply methods and techniques related to the management of health services organizations, employees and professional staff.
- **Organizational Dynamics & Governance:** Students can articulate the roles, responsibilities, structures, and influence of governing bodies in health services organizations.
- **Strategic Planning:** Based on environmental analysis, development of strategic alternatives, and discernment of a competitive strategy, students will formulate an evidence-based business strategy appropriate for health services and systems.
- **Marketing:** Students will analyze and assess markets, market segmentation, strategy, change, and innovation related to health systems and services.
- **Information Management:** Students will demonstrate proficient technology skills and understanding of information technology in health services environments.
- **Quality/Performance Improvement:** Students will discern relevant problems and apply principles and concepts of quality/performance improvement of health services and systems.
- **Data Analytics:** Students can analyze and interpret quantitative information.
- **Planning and Managing Projects:** Students will design, plan, implement and assess health services projects, including developing appropriate timelines related to performance, structure and outcomes.
- **Health Economic Analysis and Application:** Students will analyze and apply health economics theories and concepts to decision making.

## **MASTER OF PUBLIC HEALTH (MPH)**

### **MPH Foundational Competencies**

- Apply epidemiological methods to the breadth of settings and situations in public health practice.
- Select quantitative and qualitative data collection methods appropriate for a given public health context.
- Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.
- Interpret results of data analysis for public health research, policy or practice.
- Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings.
- Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels.
- Assess population needs, assets and capacities that affect communities' health.
- Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.
- Design a population-based policy, program, project or intervention.
- Explain basic principles and tools of budget and resource management.
- Select methods to evaluate public health programs.
- Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence.
- Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.
- Advocate for political, social or economic policies and programs that will improve health in diverse populations.
- Evaluate policies for their impact on public health and health equity.
- Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making.

- Apply negotiation and mediation skills to address organizational or community challenges.
- Select communication strategies for different audiences and sectors.
- Communicate audience-appropriate public health content, both in writing and through oral presentation.
- Describe the importance of cultural competence in communicating public health content.
- Perform effectively on interprofessional teams.
- Apply systems thinking tools to a public health issue.

## MASTER OF SCIENCE (MS)

### MS Biostatistics Program Competencies

- Assess foundational concepts of probability and statistical inference.
- Analyze clinical and public health data using descriptive biostatistical methods.
- Distinguish appropriate basic inferential statistical analyses and summarize their results.
- Manage standard statistical software to efficiently manage data structures.
- Summarize the central concepts of statistical theory and inference.
- Develop appropriate plans to analyze standard continuous data in order to make valid inferences.
- Develop appropriate plans to analyze standard categorical data in order to make valid inferences.
- Communicate effectively, in writing and verbally, with substantive investigators and members of the community when assisting in the design of research studies as well as the results of statistical analyses.
- Weigh a public health problem in terms of magnitude, person, time, and place.
- Explain each of the five core disciplines in public health and illustrate the ways each of the core disciplines have contributed to the historical evolution of public health.

### MS Industrial Hygiene Program Competencies

- Identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to industrial hygiene
- Formulate or design a system, process, procedure, or program to meet desired needs
- Develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions
- Communicate effectively with a range of audiences
- Understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
- Function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

### MS Population Health Program Competencies

- Identify determinants of population health that impact health outcomes in a community.
- Describe methods for assessing the health needs of a population.
- Demonstrate how to collect, analyze and use data to inform decisions and improve health outcomes of targeted populations.
- Communicate effectively about population health issues to constituencies both within and outside of the health system.
- Apply population health principles and concepts to develop and implement healthcare and/or public health strategies.
- Integrate clinical care and public health practice around an identified community need.

## DOCTOR OF PHILOSOPHY (PH.D.)

### Program Competencies

- Develop effective strategies for teaching in higher education
- Review and synthesize pertinent literature and formulate focused research questions that address identified knowledge gaps
- Design and conduct original research that uniquely contributes to the public health scientific knowledge
- Disseminate research findings through appropriate peer-reviewed publications and presentations, and to other public health community audiences

Major-specific competencies can be found under each major's Learning Goals tab.

## In this section:

- Master (p. 900)
- Doctoral (p. 901)

## Master of Public Health (MPH)

Welcome to the West Virginia University School of Public Health. Our mission is to improve the health of West Virginians through innovation and leadership in education, research, and service. Each day, the affiliates and centers within the School of Public Health conduct research on today's pressing public health issues. Diabetes, obesity, substance abuse, and tobacco use top the list of health disparities faced by West Virginians. Public health strategies are typically focused on broad, societal, and population levels; for example, environmental regulations, water quality control, immunization programs, and health education initiatives.

The Master of Public Health program seeks students with a strong, genuine commitment to a career in public health. This degree is appropriate for health professionals, as well as individuals with bachelors' degrees from a wide range of disciplines, who have a strong interest in community/population health and preventive medicine. Our faculty and staff look forward to your decision to become a public health practitioner, researcher, and educator by enrolling in one of our master degree programs. Each department and major can be explored by visiting our website <http://publichealth.hsc.wvu.edu>.

### Program Description

Public Health is shaped by our nation's public health agencies via health assessment, policy development, and public health services. The WVU School of Public Health addresses the core functions of public health by offering the MPH with areas of emphasis in:

- Applied Biostatistics and Epidemiology
- Public Health Practice and Leadership
- Social and Behavioral Science

All MPH programs are accredited by the National Council for Education for Public Health (CEPH). For more information about the MPH program, please contact:

Office of Student Services  
West Virginia University  
School of Public Health  
P.O. Box 9190  
64 Medical Center Drive  
Morgantown, WV 26505-9190  
Phone (304) 293-2502

## Master of Health Administration (MHA)

A Master of Health Administration (MHA) is a professional degree focused on the organization, delivery and management of healthcare and public health systems and services. It is the premier professional program for those seeking to lead the healthcare organizations and health systems of the future.

The WVU MHA program prepares students for promising careers leading innovative, population health-oriented organizations and health systems. Graduates leave our program with the skills necessary to work in a variety of healthcare and public health settings such as hospitals, medical group practices, long-term and rehabilitation care, behavioral health systems, healthcare consulting firms, and health departments. Students will also be excellently prepared for post-graduate administrative fellowships.

The MHA program at WVU focuses on providing students with both a breadth and depth of knowledge in areas critical to success as an administrative leader in the health sector, including:

- Health Services & Operations Management
- Leadership & Organizational Behavior
- Health Finance & Economics
- Health Policy, Law & Ethics
- Strategic Planning & Managerial Decision Making
- Project Management
- Healthcare Quality & Outcomes Management

The program requires courses across these disciplines. Additionally, elective courses allow students to specialize in a variety of areas. Importantly, a robust practice-based internship requirement assures students experiential application of the competencies and skills learned in the classroom.

## Master of Science (MS) Biostatistics

The Master of Science (MS) Program in Biostatistics is meant for college graduates with interest and background in mathematics and statistics who wish to learn both the methodology and the application of biostatistics in the health sciences. The goals of this program are similar to the current MPH in Biostatistics Program in learning objectives; however, MS students will receive a more extensive methodological foundation as well as be expected to take additional statistical courses instead of the “core” public health courses required for any MPH.

A typical student who graduates with an MS in Biostatistics from WVU would be qualified to work as a biostatistician or research coordinator in research organizations such as a pharmaceutical company, contract research organization (CRO), a university, or a health department. MS graduates also will be prepared to pursue doctoral education in biostatistics or similar disciplines.

## Master of Science (MS) Industrial Hygiene

The industrial hygiene program is designed for students with undergraduate training in the areas of engineering, chemistry, biology, medical sciences, animal sciences or the physical sciences who have an interest in occupational and environmental health and safety. Through this program, working professionals and full time students can obtain education in industrial hygiene with the overall goal of providing the technical competence to anticipate, recognize, evaluate and control occupational health hazards. This degree is structured to encourage participatory, collaborative and applied problem-solving strategies to address modern day occupational health issues.

## Master of Science (MS) Population Health

The Master of Science in Population Health program at West Virginia University will prepare students for a variety of population-oriented leadership, clinical, and research-oriented positions in both healthcare and public health organizations. The design of the curriculum will reflect the program's belief that both healthcare and public health must take more broader and more intentional perspective of how to identify and address pressing health issues while working for the health of the public. This includes concepts and skills that cover social determinants of health, the nature and process of public health, population health analytics, and population health management, as well as an emphasis management and leadership skills. Students will learn under a comprehensive, competency-driven curriculum constructed to address contemporary and emerging trends.

## Doctor of Philosophy (Ph.D.) in Public Health Sciences

The mission of the **Ph.D. program in Public Health Sciences** is to provide high-quality doctoral education to motivated students who desire to positively impact the public's health. We aim to train these students in a research-intensive curriculum that is guided by a distinguished faculty at the leading edge of effective public health science. The degree emphasizes both evidence-based primary prevention of disease and injury, and health promotion research and practice.

The Ph.D. program in Public Health Sciences is a degree for scientist-practitioners focused on prevention of premature mortality, morbidity, and disability from disease and injury. The Ph.D. program offers three discipline-specific majors of:

- Epidemiology
- Occupational and Environmental Health Sciences
- Social and Behavioral Sciences

### Goals of the Ph.D. Program

- Educate and train the next generation of public health leaders who will help shape public health education, practice, and policy.
- Identify and address public health disparities.
- Improve the health of West Virginians and improve their access to quality health care.
- Provide trans-disciplinary teaching and research experience that prepares graduates for jobs in academia, research, and high-level practice settings.

### Program Description

The early years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to the student's selected area of specialty. During the later years of the program, students are engaged in their dissertation research while given the freedom to further diversify their training by choosing electives.

### Qualifying Examination

Once students complete the majority of their coursework, they are required to pass a comprehensive qualifying examination. This comprehensive exam is based on core public health and discipline-specific material and administered within the student's home department.

### Doctoral Dissertation

Upon passing the Qualifying Exam, the student begins the dissertation work, which includes:

- a written research proposal
- a defense of the research proposal
- original dissertation research
- a defense of the dissertation research

### Dissertation Proposal

The dissertation proposal should include the following sections:

- **Specific Aims.** In this section, you will lay out the goals of your research.
- **Significance.** In this section, you will locate your research aims within the relevant literature to demonstrate the need for your proposed study.
- **Approach.** In this section, you will lay out your proposed research design and methods used to achieve your specific aims.
- **Literature Cited.** Here you will include a bibliography of the works cited in the proposal.
- **Human Subjects.** If the proposal involves human subjects you must include this section. Here you will summarize the measures you propose to protect the human subjects involved in your research project.

The proposal must be defended by the student in a forum that includes the student's complete Dissertation Committee.

### Dissertation Research

The program will culminate in a research dissertation on a public health topic of interest to the student. The dissertation format can be either a traditional book format or the Journal Article Format (JAF) which consists of a series of three publishable papers on the students' dissertation research.

The Ph.D. program emphasizes peer-reviewed research publications as the dissertation product because of its positive impact on the student's skills and their post-graduation success.

### Dissertation Defense

The dissertation will be defended in a forum that includes all Dissertation Committee members, who must sign the dissertation approval form in order for the dissertation to be complete.

The defense must be announced to the entire School of Public Health and the University, and students are required to post fliers that announce the details of the defense.

The written dissertation must be submitted in accordance with the WVU policy regulating the electronic submission of theses and dissertations. <https://etd.lib.wvu.edu/>

### Program Delivery

Most courses in the program will be taught using the face-to-face, on-campus, small, or large group format. A small number of core courses and some electives may be delivered by web-based technology.

### For more information contact:

Office of Student Services  
West Virginia University  
School of Public Health  
P.O. Box 9190  
64 Medical Center Drive  
Morgantown, WV 26505-9190  
Phone (304) 293-2502

## Certificate Programs

- Applied Biostatistics (p. 44)
- Health Data Science (p. 54)

## Biostatistics, M.S.

### Degree Offered

- Master of Science (MS)

## Certificate Offered

- Applied Biostatistics

## Nature of the Program

Biostatistics is the science of applying statistical theory and principles to research in public health, medicine, biology, pharmaceuticals, environmental science, and other related fields.

The Master of Science (MS) Program in Biostatistics is meant for college graduates with interest and background in mathematics and statistics who wish to learn both the methodology and the application of biostatistics in the health sciences. The goals of this program are similar to the current MPH in Biostatistics Program in learning objectives; however, MS students will receive a more extensive methodological foundation as well as be expected to take additional statistical courses instead of the “core” public health courses required for any MPH.

A typical student who graduates with an MS in Biostatistics from WVU would be qualified to work as a biostatistician or research coordinator in research organizations such as a pharmaceutical company, contract research organization (CRO), a university, or a health department. MS graduates also will be prepared to pursue doctoral education in biostatistics or similar disciplines.

## APPLIED BIOSTATISTICS CERTIFICATE

The Applied Biostatistics Certificate is designed for those individuals who lack formal training in biostatistics and would like to gain skills needed to understand and apply standard statistical techniques. It is a **fully online program** that is available to practitioners and/or students at WVU and elsewhere.

The primary objectives of the program are thus to:

- Describe basic concepts of probability and statistical inference
- Demonstrate standard techniques of database management and analysis
- Compare and contrast study designs common to health research
- Recognize the primary sources of bias observed in health research
- Interpret appropriate inferences from data based on strengths and limitations of major epidemiologic study designs as well as the results of descriptive and inferential statistical analyses

Individuals who would be interested in such a Certificate include clinical and translational researchers at varying levels of their career (faculty, fellows, residents, basic scientists) as well as public health practitioners, in the state of West Virginia or beyond. Interested individuals in the program should have a desire to be more self-sufficient with their research, specifically being able to know basic study design principles, analyze their data, and interpret their results.

The entire curriculum will be available both **online and in-person (live)**, thus being accessible to individuals from a variety of backgrounds, locations, and experiences. The program will take advantage of existing course technology where courses are taught in a synchronous fashion in which the instructor lectures in-class, and the lecture (along with associated PowerPoint slides or other files, such as SAS programs) is broadcast online. While the lecture is available live during the lecture itself, the video or audio of the lecture is archived and available on the course for access at any time. All course notes, homeworks, programs, etc. are available online, and the instructor is available in a number of formats (online chat, email, phone) to accommodate distance-learning students.

Applied Biostatistics Certificate Program students will typically take one class per semester. Completion of the program will typically take two years. Certificate Program students will pay tuition at the standard School of Public Health per-credit rate. Please visit the School of Public Health financial information link (<http://publichealth.hsc.wvu.edu>) for more information on current rates.

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## FACULTY

### CHAIR

- Bethany Barone Gibbs - PhD (Johns Hopkins University)

### PROFESSOR

- George A. Kelley - DA (Middle Tennessee State University)

### ASSOCIATE PROFESSOR

- Christa L. Lilly - PhD (Vanderbilt University)
- Sijin Wen - PhD (The University of Texas Health Sciences Center at Houston)



## ASSISTANT PROFESSOR

- Caroline P Groth - PhD (University of Minnesota)

## RESEARCH INSTRUCTOR

- Kristi Kelley - MEd (University of North Carolina at Charlotte)

## Admissions

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you.

## ADMISSIONS GUIDELINES

- Baccalaureate degree from an accredited college or university (preferred GPA: 3.0 overall; 3.4 for quantitative courses)
- Course experience including:
  - Multivariable calculus (equivalent to WVU MATH 251)
  - Matrix or elementary linear algebra (equivalent to WVU MATH 343)
  - Knowledge of a programming language
- A completed MS application, including a Statement of Purpose
- Three letters of recommendation

## APPLICATION PROCESS

Complete the WVU graduate application and submit with the processing fee: <http://graduateadmissions.wvu.edu/>. (<http://graduateadmissions.wvu.edu/>)

Applicants must submit a statement of purpose, three letters of reference, a current resume/curriculum vitae, and all university transcripts. The deadline for applications to be considered for the fall (no spring/summer admissions are permitted) is July 1 (priority deadline: April 1).

Applications that are complete will be sent to the department for review. Students will receive an e-mail through from the WVU School of Public Health regarding their recommendation for acceptance.

## Applied Biostatistics Certificate

### ADMISSIONS GUIDELINES

- Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0 (official transcripts required)
- GRE scores or a terminal degree (MD, Ph.D., etc.)
- Essay describing previous education and experience and career objectives
- Resume or curriculum vitae
- At least two letters of recommendation
- Computer skills are a program requirement. It is the responsibility of the **students to become skilled in computer applications** and to participate in the Health Sciences Center Mandatory Laptop Program.
- The admissions process will include a 15-20 minute phone interview between the Biostatistics Certificate Admissions Committee and the applicant.

**Students currently enrolled at WVU should fill out the admissions form for current students to apply for the Applied Biostatistics Certificate. Please contact Dr. Christa Lilly ([cice@hsc.wvu.edu](mailto:cice@hsc.wvu.edu)) with questions or the completed form.**

### STUDENTS INTERESTED IN APPLYING FOR THE APPLIED BIOSTATISTICS CERTIFICATE MUST:

- Complete the WVU graduate application and indicate Applied Biostatistics Certificate and submit with the processing fee.
- <https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=vvugrad>
- Submit official school transcripts and official GRE scores to:

WVU HSC Admissions  
64 Medical Center Drive  
1170 HSC North  
Morgantown, WV 26506

- International students must submit to:

Office of Graduate Admissions and Recruitment  
PO Box 6510  
Morgantown, WV 26506-6510



## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

MS Major Code: 8413

### Master of Science in Biostatistics

MS-Biostatistics students will gain the following general competencies that will be assessed continuously through the assessment processes already in place in the School of Public Health (SPH):

1. Assess foundational concepts of probability and statistical inference.
2. Analyze clinical and public health data using descriptive biostatistical methods.
3. Distinguish appropriate basic inferential statistical analyses and summarize their results.
4. Manage standard statistical software to efficiently manage data structures.
5. Summarize central concepts of statistical theory and inference.
6. Develop appropriate plans to analyze standard continuous data in order to make valid inferences.
7. Develop appropriate plans to analyze standard categorical data in order to make valid inferences.
8. Communicate effectively, in writing and verbally, with substantive investigators and members of the community when assisting in the design of research studies as well as the results of statistical analyses.

### MAJOR REQUIREMENTS

Code	Title	Hours
<b>MS Required Courses</b>		
BIOS 610	Biostatistical Theory and Methods 1	4
BIOS 611	Data Management and Reporting	3
BIOS 612	Biostatistical Theory and Methods 2	3
BIOS 620	Applied Linear Models HS	3
BIOS 621	Categorical Data Analysis HS	3
BIOS 623	Biostatistics Careers and Skills	2
PUBH 510	Contemporary Foundations of Public Health Practice	2
<b>Electives</b>		<b>9</b>
BIOS 622	Analysis of Time-to-Event Data	
BIOS 662	Statistics in Clinical Trials	
BIOS 663	Introduction to Meta-Analysis	
STAT 513	Design of Experiments	
EPID 601	Public Health Epidemiology	
EPID 611	Concepts and Methods of Epidemiology	
EPID 612	Applied Epidemiology for Public Health	
STAT 521	Statistical Analysis System Programming	
STAT 522	Advanced Statistical Analysis System Programming	
STAT 523	Statistical Computing	
STAT 531	Sampling Theory and Methods	
STAT 541	Applied Multivariate Analysis	
STAT 543	Bioinformatics Data Analysis	
STAT 551	Nonparametric Statistics	
Or other approved courses		
<b>Choice of Thesis or Non-Thesis Option</b>		<b>6</b>
<b>Thesis Option</b>		
BIOS 628	Biostatistics Practicum	
BIOS 697	Research	
<b>Non-Thesis Option</b>		
BIOS 628	Biostatistics Practicum	

Elective

Total Hours	35
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## SUGGESTED PLAN OF STUDY(THESIS OPTION)

### First Year

Fall	Hours	Spring	Hours
BIOS 610		4 BIOS 620	3
BIOS 611		3 BIOS 621	3
BIOS 623		2 BIOS 612	3
		9	9

### Second Year

Fall	Hours	Spring	Hours
BIOS 628		3 BIOS 697	3
PUBH 510		2 Elective	3
Elective		3 Elective	3
		8	9

Total credit hours: 35

## SUGGESTED PLAN OF STUDY(NON-THESIS OPTION)

### First Year

Fall	Hours	Spring	Hours
BIOS 610		4 BIOS 612	3
BIOS 611		3 BIOS 620	3
BIOS 623		2 BIOS 621	3
		9	9

### Second Year

Fall	Hours	Spring	Hours
BIOS 628		3 Elective	3
PUBH 510		2 Elective	3
Elective		3 Elective	3
		8	9

Total credit hours: 35

## Major Learning Outcomes

### BIOSTATISTICS

1. Assess foundational concepts of probability and statistical inference.
2. Analyze clinical and public health data using descriptive biostatistical methods.
3. Distinguish appropriate basic inferential statistical analyses and summarize their results.
4. Manage standard statistical software to efficiently manage data structures.
5. Summarize central concepts of statistical theory and inference.
6. Develop appropriate plans to analyze standard continuous data in order to make valid inferences.
7. Develop appropriate plans to analyze standard categorical data in order to make valid inferences.
8. Communicate effectively, in writing and verbally, with substantive investigators and members of the community when assisting in the design of research studies as well as the results of statistical analyses.

## Epidemiology, Ph.D.

### Degrees Offered

- Doctor of Philosophy

## Nature of the Program

### PH.D. IN EPIDEMIOLOGY

The Doctor of Philosophy (Ph.D.) in Public Health Sciences, Epidemiology Major, prepares students for careers in research, teaching, and consulting. Students develop research and teaching skills in epidemiology through coursework and practice opportunities. The curriculum provides rigorous and comprehensive training in epidemiologic methods for clinical and population-based research including study design, statistical analysis and interpretation of results, as well as research areas of focus for epidemiologic research including chronic diseases, infectious diseases, injury, and gene by environment interactions. The program's etiologic orientation is based on the premise that knowledge of genetic, physiologic, behavioral, and environmental factors contribute to understanding the underlying causes of complex human diseases needed to develop and evaluate effective preventive and treatment measures. The first years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to epidemiology. The latter years will largely be dedicated to dissertation research.

Ph.D. graduates in the Epidemiology Major work as faculty members in academic institutions; scientists in research centers, e.g., the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC) or the pharmaceutical industry; or may assume leadership positions in state or federal health agencies (such as CDC, Food and Drug Administration [FDA], and the Environmental Protection Agency [EPA]).

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## FACULTY

### CHAIR

- Bethany Barone Gibbs - PhD (Johns Hopkins University)

### PROFESSOR

- Gordon Smith - MB, ChB (MD equivalent), MPH (University of Otago Medical School, Harvard School of Public Health)

### ASSOCIATE PROFESSORS

- Diane Gross - DVM, PhD (The Ohio State University)
- Robin Pollini - PhD (Johns Hopkins University)

### ASSISTANT PROFESSORS

- Ruchi Bhandari - PhD (West Virginia University)
- Brian Hendricks - PhD (West Virginia University)
- Toni Rudisill - PhD (West Virginia University)

### RESEARCH ASSOCIATE PROFESSOR

- Cara Stokes - PhD (West Virginia University)

### ADJUNCT ASSISTANT PROFESSOR

- Miguella Mark-Cares - PhD (Cornell University)  
Office of Epidemiology and Prevention Services, WV DHHS

### EMERITUS

- Kimberly Innes - PhD (Cornell University)
- Sarah Knox - PhD (University of Stockholm)
- Ian R. H. Rockett - PhD (Brown University)

## Admissions

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you.

### DOCTOR OF PHILOSOPHY (PH.D.) IN PUBLIC HEALTH SCIENCES (EPIDEMIOLOGY MAJOR)

#### ADMISSION GUIDELINES

- A Master's degree in Public Health or a closely related field is strongly preferred. Exceptional applicants with a Bachelor's degree in a relevant field may also be considered.
- A minimum GPA of 3.0 is required, 3.5 is preferred.
- Preferred GRE scores of 150 Verbal; 155 Quantitative; and 3.5 Writing. Submission of GRE scores are optional. Applicants may submit GRE scores if they feel that scores enhance their application.

- International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

## APPLICATION PROCESS

Applying to the Ph.D. program is a two-step process in which prospective students first submit an application through the national SOPHAS service, <http://www.sophas.org/>. If you are accepted into the Ph.D. program by the School, the next step is for you to complete a WVU Graduate Application, <https://graduateadmissions.wvu.edu/>.

The SOPHAS application requires:

- Official test scores
- Official transcripts from all US institutions attended
- A Personal Statement
- 3 Letters of Recommendation
- Current CV/Resume

Applicants must indicate their first choice of Major and may indicate a second choice (you are allowed a maximum of two choices).

There is a SOPHAS application fee. However, SOPHAS grants fee waivers based upon financial need for McNair Scholars, Gates Millennium Scholars, as well as for AmeriCorps and Peace Corps Volunteers.

TIPS for completing the SOPHAS application:

- **APPLY EARLY!** Allow up to 4 weeks for SOPHAS to verify your transcripts and test scores and send them to the Universities to which you have applied. *Your application may not be reviewed if it does not contain verified transcripts and test scores.*
- *If opting to submit your GRE scores, **be sure to use the college code 0157 for the WVU School of Public Health.** This code **MUST** be used so that verified scores are sent by SOPHAS to the WVU School of Public Health for review.*
- Submit your application once you have provided the required information. **DO NOT** wait for SOPHAS to receive transcripts, recommendations or test scores prior to submitting your application.

### Personal Statement

The Personal Statement is a critical piece of the application. The content of the Statement and the applicant's writing skills will be evaluated in the admissions decision. The Statement should address the following in no more than 1000 words:

- What is it about Public Health that interests you?
- What is it about your selected major, specifically, that interests you?
- What are your career goals?
- What topics or areas of research do you wish to pursue and why? If you have identified a potential dissertation topic, briefly describe that as well.
- Which faculty members in the SPH do you see as being potential mentors to help you succeed in your area of interest?

Applicants should also include any additional information about their interests, background, prior experience, or special circumstances that may be helpful to the School of Public Health Admissions Committee.

### Letters of Recommendation

Three letters of recommendation are required. At least two of these should be from people who can attest to your academic abilities.

### Deadlines

**Please refer to SOPHAS for the current deadline.** Applications received after this deadline will not be considered. All admissions are for the Fall semester. We do not admit students into the Ph.D. program in the Spring or Summer semesters.

### Review process

All completed and verified SOPHAS applications are first reviewed by the Admissions Committees of the major to which an applicant has applied (EPID, OEHS, or SBHS). Candidates that are recommended for admission at this level, are put forth to the School of Public Health Doctoral Admissions Committee, which makes the final decisions on admissions and funding.

### Advanced Standing for Applicants with a Master's Degree

Students who enter the Ph.D. program with an MPH or approved Master's degree are eligible for *Advanced Standing*. This allows students to complete an abbreviated course of study that takes between 2 and 3 years to complete, depending on the student's past course work and current interests.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

PhD Major Code: 8411

## Doctor of Philosophy

### MAJOR REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required.		
BIOS 603	Applied Biostatistics 2	3
BIOS 611	Data Management and Reporting	3
BIOS 621	Categorical Data Analysis HS	3
BMS 700	Scientific Integrity (and Ethics)	1
EPID 675	GIS Applications in Public Health	3
EPID 711	Methodological Issues in Design & Analysis of Cohort Studies	3
EPID 712	Quantitative Methods in Epidemiology	3
PUBH 510	Contemporary Foundations of Public Health Practice	2
PUBH 511	Epidemiology for Public Health Practice	3
PUBH 512	Research Translation and Evaluation in Public Health Practice	3
PUBH 701	Public Health Grant Writing	3
PUBH 796	Graduate Seminar (Taken 2 times for 1 credit)	2
PUBH 797	Research (Two 1-hour research rotations)	2
PUBH 790	Teaching Practicum (Two 1-hour experiences)	2
Electives		12
Qualifying Examination - written and oral components		
Dissertation Proposal		
Dissertation Research (minimum credit number shown)		27
PUBH 797	Research	
Dissertation Defense		
Total Hours		75

### PROGRAM REQUIREMENTS FOR STUDENTS ENTERING WITH ADVANCED STANDING

Students entering the EPID PhD program that are admitted with advanced standing (that already hold strongly relevant Master's degrees) will work with the departmental PhD advisor for a recommended course of study. This includes initiating a selection of course credits that can be transferred (600 level and above, graded B or above, passed in the last 5 years) and/or waived that ultimately will be reviewed and approved by the PhD Program Director in consultation with the PhD Advisory Committee. Under typical circumstances a student with a recent MPH degree or similar, can expect to transfer and/or waive up to 20 credits or roughly one year of course work.

### ELECTIVES

Courses may be selected from among the Department, School, or University's many course offerings. This will allow students to develop an area of focus. These courses will be discussed and approved with the faculty advisor.

### TEACHING PRACTICUMS

Students will complete two (1 credit) teaching practicums (PUBH 790) during which they will spend time in a mentored relationship with a faculty member, assisting with the administration and teaching of a course. These may be graduate or undergraduate level courses. Students who have a strong interest in teaching should also consider taking C&I 789 Teaching in Higher Education (3 credits). This is a general methods course involving instructional concepts and strategies for present/prospective faculty in higher education.

*\*Full-time HSC-funded stipend students are expected to participate in the SPH teaching mission to a greater degree.*

## QUALIFYING EXAM

The qualifying examination is the capstone experience for the EPID PhD program. Successful completion of the examination signifies competence in the field of epidemiology and indicates readiness to engage in independent research. Following completion of the majority of the PhD coursework, students are then eligible to take the qualifying examination, which consists of two components, a written exam and an oral defense as follows:

**Written exam:** The written exam will consist of questions related to epidemiology generally as well as those pertinent to the student's research focus.

**Oral defense:** The oral component consists of a defense of student's answers to the written exam and includes additional questions that further test the student's understanding of key concepts in epidemiology and knowledge specific to the student's research focus. The oral defense of the written exam must be attempted within two academic weeks of completing the written exam. *Note: Students are not eligible to begin their dissertation, or sign up for dissertation credits, until they have successfully completed both components of the qualifying examination.*

## RESEARCH

The research component of the EPID PhD program consists of both a dissertation (27 credits, minimum) and completion of two research rotations (2 credits).

**Research Rotations:** Students will participate in two research rotations during their first year, meeting and working with research faculty with similar interests in order to develop mentorships for dissertation research.

**Dissertation:** Students will complete a dissertation in which they design and conduct an original work of research. First, students will develop a proposal for an original research project. This proposal will be presented and defended orally before the student's dissertation committee. Upon successful completion of the proposal defense, students are admitted to PhD candidacy and may then complete their dissertation research. There are two options for the dissertation format, a traditional book format or a three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with their committee chairperson. Regardless of the format selected, students must have a minimum of one first-authored publication based on their dissertation topic area, at least under review in a peer-reviewed journal before they can defend their dissertation. While the required publication may come from one of the student's three dissertation articles if using the JAF, this is not mandatory. Upon completion of the written dissertation, the student will present and defend their work before the dissertation committee. *Note: The dissertation defense is open to all members of the WVU community and the public.*

**University Doctoral Degree Requirements:** For further details on WVU's requirements for Doctoral programs please visit the following website: [http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree\\_regulations/](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree_regulations/).

## PLAN OF STUDY

Upon matriculating into the PhD program, students should contact the EPID PhD Program Coordinator, or their advisor if already identified, to discuss the course requirements and to develop a plan of study (POS) to meet their individual needs. Below is a suggested POS with the minimum requirements for students entering the program with a BA/BS. *Note: Research credits show below reflect the minimum requirements. Students may enroll in additional research credits as necessary to achieve the degree competencies.*

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
BIOS 611		3 BIOS 603	3
BMS 700		1 BIOS 621	3
PUBH 510		2 PUBH 701	3
PUBH 511		3 PUBH 797	1
PUBH 512		3 Elective	3
PUBH 796		1	
		13	13

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
EPID 675		3 EPID 712		3 Qualifying Exam	
EPID 711		3 PUBH 790		1	
PUBH 790		1 Elective		3	
PUBH 796		1 Elective		3	

PUBH 797	1			
	9		10	0
<b>Third Year</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Elective		3 PUBH 797	10	
PUBH 797		7		
Dissertation Proposal				
	10		10	
<b>Fourth Year</b>				
<b>Fall</b>	<b>Hours</b>			
PUBH 797		10		
Dissertation Defense				
	10			

Total credit hours: 75

## DOCTOR OF PHILOSOPHY

### Program Competencies

- Develop effective strategies for teaching in higher education
- Review and synthesize pertinent literature and formulate focused research questions that address identified knowledge gaps
- Design and conduct original research that uniquely contributes to the public health scientific knowledge
- Disseminate research findings through appropriate peer-reviewed publications and presentations, and to other public health community audiences

### Major Competencies

- Design investigations of acute and chronic conditions, as well as other adverse health outcomes in targeted populations.
- Analyze and evaluate data from epidemiologic investigations, and disease and injury surveillance systems.
- Evaluate health behaviors and outcomes in populations by such variables as age, sex, race/ethnicity, socioeconomic status, and disability.
- Critically evaluate results of epidemiologic studies, including study design, analysis results, and conclusions.
- Prepare written and oral reports and presentations to effectively communicate to professional audiences, policymakers, and the general public.
- Prepare research proposals for extramural peer-reviewed funding.
- Promote and model ethical conduct in epidemiologic practice.
- Bring epidemiologic perspectives to the development and analysis of public health policies.

## Health Administration, M.H.A.

### Degrees Offered

- Master of Healthcare Administration

### Nature of the Program

A Master of Health Administration (MHA) is a professional degree focused on the organization, delivery and management of healthcare and public health systems and services. It is the premier professional program for those seeking to lead the healthcare organizations and health systems of the future.

The WVU MHA program prepares students for promising careers leading innovative, population health-oriented organizations and health systems. Graduates leave our program with the skills necessary to work in a variety of healthcare and public health settings such as hospitals, medical group practices, long-term and rehabilitation care, behavioral health systems, healthcare consulting firms, and health departments. Students will also be excellently prepared for post-graduate administrative fellowships.

The MHA program at WVU focuses on providing students with both a breadth and depth of knowledge in areas critical to success as an administrative leader in the health sector, including:

- Health Services & Operations Management
- Leadership & Organizational Behavior
- Health Finance & Economics
- Health Policy, Law & Ethics
- Strategic Planning & Managerial Decision Making

- Project Management
- Healthcare Quality & Outcomes Management

The program requires courses across these disciplines. Additionally, elective courses allow students to specialize in a variety of areas. Importantly, a robust practice-based internship requirement assures students experiential application of the competencies and skills learned in the classroom.

## FACULTY

### PROFESSORS

- Nicholas Castle - PhD (Pennsylvania State University)
- Jeffrey Coben - MD (University of Pittsburgh)
- Darren Liu - DPH (University of Pittsburgh)

### ASSOCIATE PROFESSORS

- Thomas Bias - PhD (West Virginia University)
- Erik Carlton - DrPH (University of Kentucky)
- Stephen Davis - PhD (West Virginia University)
- Robert Duval - PhD (Florida State University)
- France Weaver - PhD (University of North Carolina - Chapel Hill)  
Director, MHA Program

### ASSISTANT PROFESSORS

- Sarah Woodrum - DrPH (University of Illinois - Chicago)
- Heather Henderson - EdD (West Virginia University)
- W. Constina Charbonnette - EdD (West Virginia University)
- Michael Fisher - PhD (University of California - San Francisco)

## Admissions

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you.

## MASTER OF HEALTH ADMINISTRATION (MHA)

### ADMISSION GUIDELINES

- Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.5, minimum 3.0
- International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/information-for/international-students/#:~:text=WVUs%20minimum%20score%20requirements%20for,TOEFL%20Essentials%3A%2090>)
- Other requirements:
  - Resume
  - Letter(s) of recommendation (2-3)
  - Personal statement

### APPLICATION PROCESS

Our Master of Health Administration program participates in the Schools of Public Health Application Service (SOPHAS), <http://www.sophas.org/>. **The MHA Admissions process has two steps.** (1) All **MHA applications** must be submitted through the national SOPHAS service and (2) applicants must also submit a WVU Graduate application, <https://graduateadmissions.wvu.edu/>.

In addition to the application, applicants must submit to SOPHAS a personal statement, two or three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires **original transcripts** from **ALL** U.S. and International institutions attended (even Study Abroad).

There is a SOPHAS application fee.

- E-submit your application as soon as the applicant entered information is complete. Do NOT wait for SOPHAS to receive transcripts, recommendations or test scores.
- Plan Ahead! Allow up to 4 weeks for SOPHAS to verify grades, process, and mail your application to your designated institutions after your documents have been received.
- SOPHAS grants fee waivers based on financial need for Peace Corps Volunteers, McNair Scholars, Gates Millennium Scholars Program, AmeriCorps, U.S., and International applicants.



Once the department has reviewed the SOPHAS application, students will receive a communication from the WVU School of Public Health regarding their recommendation for acceptance and instructions to complete the WVU graduate application and pay the application fee.

Please Note: There are both SOPHAS and WVU application fees.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8415

## Master of Health Administration

Code	Title	Hours
<b>Minimum GPA of 3.0 is required.</b>		
PUBH 540	Health Systems Leadership	3
HPML 502	U.S. Healthcare Organization and Delivery	3
HPML 510	Health Economics	3
HPML 520	Health Administration and Operations Management	3
HPML 622	Analytic Methods for Health Policy, Management, and Leadership	3
HPML 523	Healthcare Finance	3
HPML 626	Internship	3
HPML 650	Professional Issues in Health Administration: Health Policy	1
HPML 652	Professional Issues in Health Administration: Law and Ethics	1
HPML 653	Professional Issues in Health Administration: Talent and Culture	1
HPML 654	Professional Issues in Health Administration: Health Information and Management Systems	1
HPML 555	Health Services Project Management	3
HPML 556	Managerial Epidemiology & Strategy	3
HPML 659	Comprehensive Experience in Healthcare Management	3
HPML 582	Managing Quality Improvement in Healthcare	3
Seminar		4
HPML 696	Graduate Seminar	
Electives		4-6
Foundational Public Health Knowledge		
Total Hours		45-47

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours
HPML 502		3 PUBH 540		3 HPML 626	3
HPML 520		3 HPML 510		3	
HPML 523		3 HPML 555		3	
HPML 582		3 HPML 556		3	
HPML 696		1 HPML 696		1	
		13		13	3

### Second Year

Fall	Hours	Spring	Hours
HPML 622		3 HPML 653	1
HPML 650		1 HPML 654	1
HPML 652		1 HPML 659	3
HPML 696		1 HPML 696	1
Elective		2-3 Elective	2-3
		8-9	8-9

Total credit hours: 45-47

## Accelerated Program

In order to be admitted to this ABM program, applicants must:

- be enrolled in the Bachelor of Science in Health Services Management and Leadership (BS-HSML) program.
- have a minimum GPA of 3.5.
- complete a minimum of 60 credit-hours, but not more than 92 credit-hours, as prescribed in the BS-HSML Plan of Study.
  - Transfer students (internal or external) are not eligible for the ABM program at this time.
- earn a minimum grade of "B+" in PUBH 205: Writing for Public Health Audiences.
- schedule one meeting with their WVU School of Public Health undergraduate advisor to ensure they are eligible to apply for the program.
- not be enrolled in a dual degree or certificate program.
- not have any documented infractions with the WVU Office of Student Conduct or any external law enforcement agencies.
- transfer students must complete at least 24 credit hours as degree-seeking students at WVU before applying.

## Degree Requirements

Code	Title	Hours
A cumulative GPA of 3.0 is required for the degree.		
University Requirements		46
College Core Requirements		25
Health Services Management and Leadership Major Requirements		30
MHA Health Administration Program Requirements		44
Total Hours		145

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6 and 7		25
PUBH 191	First-Year Seminar	1
General Electives		20
Total Hours		46

## College Core Requirements

Code	Title	Hours
PUBH 101	Introduction to Public and Community Health	3
PUBH 200	Introduction to Public Health Careers and Information	1
PUBH 201	Global Perspectives of Public Health	3
PUBH 202	Social Determinants of Health	3
PUBH 205	Writing for Public Health Audiences	3
PUBH 211	Biostatistics for Population Health	3
PUBH 222	Epidemiology for Public Health	3
PUBH 233	The US Healthcare System: Structures and Incentives	3
PUBH 241	Biological Basis of Public Health	3
Total Hours		25

## Health Services Management and Leadership Major Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in Health Services Management and Leadership Major Requirements.		
PUBH 230	Introduction to Health Administration	3
PUBH 258	Terminology and Communication for Health Professionals	3
PUBH 311	Health Research Data Management and Reporting	3
PUBH 331	Introduction to Health Policy	3
PUBH 439	Financials Tools for Health Administration	3

PUBH 464	Ethical, Legal and Financial Issues in Healthcare	3
Select one of the following:		3
PUBH 260	Principles of Patient Navigation	
PUBH 325	Introduction to Injury Prevention	
PUBH 334	Emergency Preparedness for Public Health	
PUBH 337	Climate Change and Public Health	
PUBH 427	Introduction to Outbreak Investigation	
Required Field Experience and Capstone Courses		
Minimum grade of C- is required.		
PUBH 400	Field Placement Preparation Seminar	1
PUBH 482	Health Management Internship	6
PUBH 489	School of Public Health Undergraduate Capstone	2
Total Hours		30

## MHA Health Administration Program Requirements

Code	Title	Hours
Minimum GPA of 3.0 is required.		
PUBH 540	Health Systems Leadership	3
HPML 502	U.S. Healthcare Organization and Delivery	3
HPML 510	Health Economics	3
HPML 520	Health Administration and Operations Management	3
HPML 622	Analytic Methods for Health Policy, Management, and Leadership	3
HPML 523	Healthcare Finance	3
HPML 626	Internship	3
HPML 650	Professional Issues in Health Administration: Health Policy	1
HPML 652	Professional Issues in Health Administration: Law and Ethics	1
HPML 653	Professional Issues in Health Administration: Talent and Culture	1
HPML 654	Professional Issues in Health Administration: Health Information and Management Systems	1
HPML 555	Health Services Project Management	3
HPML 556	Managerial Epidemiology & Strategy	3
HPML 659	Comprehensive Experience in Healthcare Management	3
HPML 582	Managing Quality Improvement in Healthcare	3
Seminar		4
HPML 596	Graduate Seminar	
Elective		3
Foundational Public Health Knowledge		
Total Hours		44

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
PUBH 191		1 PUBH 201	3
PUBH 101		3 PUBH 202	3
ENGL 101 (GEF 1)		3 GEF 3	3
General Education/ Minor/General Electives		9 General Education/ Minor/General Electives	6
		16	15

### Second Year

Fall	Hours	Spring	Hours
PUBH 200		1 PUBH 205	3
PUBH 211		3 PUBH 222	3
PUBH 233		3 ENGL 102 (GEF 1)	3

General Education/ Minor/General Electives		9 General Education/ Minor/General Electives		6	
		16		15	
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
PUBH 230		3 PUBH 258		3	
PUBH 241		3 PUBH 311		3	
PUBH 331		3 PUBH 400		1	
PUBH 464		3 PUBH 439		3	
General Education/ Minor/General Electives		3 PUBH Elective		3	
		General Education/ Minor/General Electives		3	
		15		16	
<b>Fourth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
HPML 582		3 PUBH 540		3 HPML 626	3
HPML 510		3 HPML 556		3	
HPML 520		3 HPML 523		3	
HPML 596		1 HPML 596		1	
PUBH 482		6 HPML 555		3	
		PUBH 489		2	
		16		15	3
<b>Fifth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
HPML 622		3 HPML 653		1	
HPML 650		1 HPML 654		1	
HPML 652		1 HPML 659		3	
Elective		3 HPML 596		1	
HPML 596		1 Elective		3	
		9		9	

Total credit hours: 145

## Major Learning Outcomes

### HEALTH ADMINISTRATION

#### COMMUNICATION AND RELATIONSHIP MANAGEMENT

1. Interpersonal Communication: Students will build collaborative and productive relationships.
2. Relationship Management: Students will demonstrate negotiation and conflict resolution skills.
3. Writing Skills: Students will prepare effective business communications.
4. Presentation Skills: Students will demonstrate professional oral communication and presentation skills.

#### LEADERSHIP SKILLS

1. Leading & Managing Others: Students will hold self and others accountable for team and/or organizational goal attainment.
2. Change Management: Students will show the ability to promote and manage change.
3. Honest Self-Assessment: Students will exhibit self-awareness through active reflection and self-assessment.
4. Systems Thinking: Students can assess the potential impacts and consequences of decisions in a broad variety of situations.
5. Problem-Solving & Decision-Making: Students are able to apply evidence-based techniques to health services decisions.

#### PROFESSIONALISM

1. Personal & Professional Ethics: Students will exhibit honesty, integrity, and ethical behavior.
2. Personal Responsibility: Students will fulfill their commitments and demonstrate accountability.

3. Professional & Community Contribution: Students demonstrate a commitment to community engagement and service.
4. Working in Teams: Students will demonstrate the capacity to work in and lead teams.

## KNOWLEDGE OF THE HEALTHCARE ENVIRONMENT

1. Health Services Issues & Trends: Students can examine important issues in health services, including circumstances causing major changes and reform in U.S. health systems and services
2. Health Services Legal Principles: Students are able to discuss and analyze health-related legal principles, including compliance standards, regulations, and risk management
3. Health Policy: Students are able to articulate the impact of health policies on the delivery of health services.
4. Public & Population Health: Students understand and explain the major factors in population health status.

## BUSINESS AND ANALYTICAL SKILLS

1. Financial Management: Students are able to compile, analyze, and interpret financial information for health services decision making.
2. Human Resources: Students will apply methods and techniques related to the management of health services organizations, employees and professional staff.
3. Organizational Dynamics & Governance: Students can articulate the roles, responsibilities, structures, and influence of governing bodies in health services organizations.
4. Strategic Planning: Based on environmental analysis, development of strategic alternatives, and discernment of a competitive strategy, students will formulate an evidence-based business strategy appropriate for health services and systems.
5. Marketing: Students will analyze and assess markets, market segmentation, strategy, change, and innovation related to health systems and services.
6. Information Management: Students will demonstrate proficient technology skills and understanding of information technology in health services environments.
7. Quality/Performance Improvement: Students will discern relevant problems and apply principles and concepts of quality/performance improvement of health services and systems.
8. Data Analytics: Students can analyze and interpret quantitative information.
9. Planning and Managing Projects: Students will design, plan, implement and assess health services projects, including developing appropriate timelines related to performance, structure and outcomes.
10. Health Economic Analysis and Application: Students will analyze and apply health economics theories and concepts to decision making.

# Industrial Hygiene, M.S.

## Degree Offered

- Master of Science

## Nature of the Program

The industrial hygiene program is designed for students with undergraduate training in the areas of engineering, chemistry, biology, medical sciences, animal sciences or the physical sciences who have an interest in occupational and environmental health and safety.

Through this program, working professionals and full time students can obtain education in industrial hygiene with the overall goal of providing the technical competence to anticipate, recognize, evaluate and control occupational health hazards. This degree is structured to encourage participatory, collaborative and applied problem-solving strategies to address modern day occupational health issues.

## Program Educational Outcomes

In order to meet the Program Educational Objectives of the Industrial Hygiene program, students must be able to meet the following educational outcomes at the time of graduation:

1. Practice Industrial Hygiene and to initiate and develop leadership roles in business, industry and/or government.
  2. Continue professional development, and life-long learning.
  3. Interact in society and business in a professional, ethical manner to promote occupational and environmental safety and health.
  4. Be proficient in written and oral communication and to utilize people-oriented skills in individual and team environments
  5. Apply the knowledge and analytical skills from Industrial Hygiene to be proficient in his or her chosen field or further professional or doctoral studies.
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## FACULTY

### DIRECTOR

- Sergio Caporali Filho - PhD (West Virginia University)  
Professor, Occupational and Environmental Health Sciences

## Admissions

Applicants to graduate programs in the industrial hygiene program are required to provide the following:

- Applicants must have earned a grade point average (GPA) of 3.0 or better (out of a possible 4.0)
- International applicants must submit proof of English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)
- A completed application submitted to the WVU Admissions Office
- Official transcripts of all previous college course work
- ABET-ANSAC prerequisite course requirements:
  - sixty-three credit hours of approved science, mathematics, and other technical courses. Of these, at least fifteen credit hours must be junior or senior level.
  - Specific pre/corequisite course requirements include two semesters of general/inorganic chemistry and two semesters of physics.
  - On an individual basis, the faculty may identify additional pre/corequisite coursework, often including organic chemistry and biology. Applicants will be advised about their specific requirements at the time of admission.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8419

## Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required in all courses		
A minimum of 60% of courses must be from 500 level or above		
<b>Course Requirements *</b>		
BIOS 601	Applied Biostatistics 1	4
PUBH 511	Epidemiology for Public Health Practice	3
OEHS 520	Industrial Hygiene	3
OEHS 521	Industrial Hygiene Laboratory	1
OEHS 622	Public Health Toxicology	3
OEHS 623	Occupational Injury Prevention	3
OEHS 627	Physical Hazards Measurement and Control	3
OEHS 528	Industrial Ventilation Design	3
OEHS 635	Industrial Hygiene Air Sampling and Analysis	3
OEHS 645	Air Sampling and Analysis Laboratory	1
OEHS 647	Physical Hazards Measurement and Control Laboratory	1
OEHS 648	Industrial Ventilation and Respiratory Protection Laboratory	1
OEHS 665	Worksite Evaluation	1
<b>Complete one of the following options:</b>		<b>6</b>
<b>Thesis Option (6 Hours)</b>		
OEHS 697	Research	
Written Proposal/Oral Presentation		
Thesis		
Final Oral or Written Examination		
<b>Coursework Option (6 Hours)</b>		
OEHS 641	Occupational Safety and Health Awareness Seminar	
OEHS 642	Exposure Assessment Seminar	
OEHS 643	OSHA Standards Seminar	

OEHS 685

Internship

Final oral or written examination

Foundations of Public Health Course: SOLE offered course that students need to complete during their program

Online short course : Basic Course in the Protection of Human Research Subjects - Biomedical Focus <https://www.citiprogram.org/default.asp>

Total Hours

36

\*

Students who do not hold a baccalaureate degree in industrial hygiene may be required to take a set of undergraduate courses above and beyond the minimum coursework requirements. Students must complete those courses and earn at least a "C" in each before completing the 18<sup>th</sup> credit hour in the industrial hygiene curriculum.

## Final Examination

M.S. students following the thesis option must prepare a written research proposal. The proposal must be approved by the student's AEC at least one semester prior to the final oral examination.

All students, regardless of option, are required to pass a final oral or written examination, administered by their AEC, covering the thesis and/or related course material.

## Major Learning Outcomes

### INDUSTRIAL HYGIENE

- An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to industrial hygiene
- An ability to formulate or design a system, process, procedure, or program to meet desired needs
- An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions
- An ability to communicate effectively with a range of audiences
- An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

## Occupational and Environmental Health Sciences, Ph.D.

### Degrees Offered

- Doctor of Philosophy

### Nature of the Program

#### PH.D. IN PUBLIC HEALTH SCIENCES (OCCUPATIONAL AND ENVIRONMENTAL HEALTH SCIENCES MAJOR)

The Ph.D. in Public Health Sciences, Occupational and Environmental Health Major, is a degree for scientist-practitioners in the area of prevention of premature mortality, morbidity and disability resulting from occupational and environmental exposures, communicable and chronic disease, and injury. This degree emphasizes both evidence-based primary prevention of disease and injury, as well as health promotion research and practice. Students completing this degree will have the necessary theoretical knowledge and critical understanding of occupational and environmental health problems, including analytical and methodological research skills, to investigate, evaluate and find solutions to public health challenges. To this end, students should expect rigorous course work and training typical of a Ph.D. program.

The Department of Occupational and Environmental Sciences has a close collaboration with the National Institute of Occupational Safety and Health (NIOSH), which shares our Health Sciences campus in Morgantown. Collaborating NIOSH faculty add important enrichment and mentorship potential for the interested student.

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## FACULTY

### CHAIR

- Weimin Gao - PhD (University of Pittsburgh)

## PROFESSORS

- Sergio Caporali Filho - PhD (West Virginia University)
- Lan Guo - PhD (West Virginia University)
- Christopher Martin - MD (Memorial University of Newfoundland)

## ASSOCIATE PROFESSORS

- Robert Gerbo - MD (West Virginia University)
- Chuanfang Jin - MD (Shanxi Medical University)

## CLINICAL ASSOCIATE PROFESSOR

- Michael McCawley - PhD (New York University)

## ASSISTANT PROFESSORS

- Travis Knuckles - PhD (North Carolina State University)
- Jennifer Lultschik - MD (University of Toronto Faculty of Medicine)

## LECTURER

- Doug Boyer - PhD (West Virginia University)

## EMERITUS

- Rachel T. Abraham - MD, MPH (Emory University)
- Alan Ducatman - MD, MSc (City University of New York)

## Admissions

If you are ready to apply to the West Virginia University School of Public Health, the admissions team is here to assist you.

## DOCTOR OF PHILOSOPHY (PH.D.) IN PUBLIC HEALTH SCIENCES (OCCUPATIONAL AND ENVIRONMENTAL HEALTH SCIENCES MAJOR)

### ADMISSION GUIDELINES

- A Master's degree in Public Health or a closely related field is strongly preferred. Exceptional applicants with a Bachelor's degree in a relevant field may also be considered.
- A minimum GPA of 3.0 is required, 3.5 is preferred.
- The following GRE scores are preferred: Verbal 150; Quantitative 155; and Writing 3.5. Submission of GRE scores are optional. Applicants may submit GRE scores if they feel that scores enhance their application.
- International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/information-for/international-students/>)

### APPLICATION PROCESS

Applying to the Ph.D. program is a two-step process in which prospective students first submit an application through the national SOPHAS service, <http://www.sophas.org/>. If you are accepted into the PhD program by the School, the next step is for you to complete a WVU Graduate Application, <https://graduateadmissions.wvu.edu/>.

The SOPHAS application requires:

- Official test scores
- Official transcripts from all US institutions attended
- A Personal Statement
- 3 Letters of Recommendation
- Current CV/Resume

Applicants must indicate their first choice of Major and may indicate a second choice (you are allowed a maximum of two choices).

There is a SOPHAS application fee. However, SOPHAS grants fee waivers based upon financial need for McNair Scholars, Gates Millennium Scholars, as well as for AmeriCorps and Peace Corps Volunteers.

TIPS for completing the SOPHAS application:



- **APPLY EARLY!** Allow up to 4 weeks for SOPHAS to verify your transcripts and test scores and send them to the Universities to which you have applied. *Your application may not be reviewed if it does not contain verified transcripts and test scores.*
- *If opting to submit your GRE scores, **be sure to use the college code 0157 for the WVU School of Public Health.** This code **MUST** be used so that verified scores are sent by SOPHAS to the WVU School of Public Health for review.*
- Submit your application once you have provided the required information. **DO NOT** wait for SOPHAS to receive transcripts, recommendations or test scores prior to submitting your application.

### Personal Statement

The Personal Statement is a critical piece of the application. The content of the Statement and the applicant's writing skills will be evaluated in the admissions decision. The Statement should address the following in no more than 1000 words:

- What is it about Public Health that interests you?
- What is it about your selected major, specifically, that interests you?
- What are your career goals?
- What topics or areas of research do you wish to pursue and why? If you have identified a potential dissertation topic, briefly describe that as well.
- Which faculty members in the SPH do you see as being potential mentors to help you succeed in your area of interest?

Applicants should also include any additional information about their interests, background, prior experience, or special circumstances that may be helpful to the SPH Admissions Committee.

### Letters of Recommendation

Three letters of recommendation are required. At least two of these should be from people who can attest to your academic abilities.

### Deadlines

**Please refer to SOPHAS for the current deadline.** Applications received after this deadline will not be considered. All admissions are for the Fall semester. We do not admit students into the Ph.D. program in the Spring or Summer semesters.

### Review process

All completed and verified SOPHAS applications are first reviewed by the Admissions Committees of the major to which an applicant has applied (EPID, OEHS, or SBHS). Candidates that are recommended for admission at this level, are put forth to the SPH Doctoral Admissions Committee, which makes the final decisions on admissions and funding.

### Advanced Standing for Applicants with a Master's Degree

Students who enter the Ph.D. program with an MPH or approved Master's degree are eligible for *Advanced Standing*. This allows students to complete an abbreviated course of study that takes between 2 and 3 years to complete, depending on the student's past course work and current interests.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

PhD Major Code: 8410

## Doctor of Philosophy

### MAJOR REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required.		
BIOS 603	Applied Biostatistics 2	3
BMS 700	Scientific Integrity	1
BMS 720	Scientific Writing	2-3
or PUBH 701	Public Health Grant Writing	
OEHS 520	Industrial Hygiene	3
OEHS 622	Public Health Toxicology	3
OEHS 625	Advanced Toxicology	3
OEHS 734	Aerosols and Health	3
OEHS 796	Graduate Seminar (Taken two times for 1 credit each)	2
PUBH 510	Contemporary Foundations of Public Health Practice	2

PUBH 511	Epidemiology for Public Health Practice	3
PUBH 512	Research Translation and Evaluation in Public Health Practice	3
PUBH 790	Teaching Practicum (Two 1-hour experiences)	2
PUBH 796	Graduate Seminar (Taken two times for 1 credit each)	2
PUBH 797	Research (Two 1-hour research rotations)	2
Electives		12
Qualifying Examination - written and oral components		
Dissertation Proposal		
Dissertation Research (minimum credit number shown)		27
PUBH 797	Research	
Dissertation Defense		
Total Hours		73

## PROGRAM REQUIREMENTS FOR STUDENTS ENTERING WITH ADVANCED STANDING

Students entering the OEHS PhD program that are admitted with advanced standing (that already hold strongly relevant Master's degrees) will work with the departmental PhD advisor for a recommended course of study. This includes initiating a selection of course credits that can be transferred (600 level and above, graded B or above, passed in the last 5 years) and/or waived that ultimately will be reviewed and approved by the PhD Program Director in consultation with the PhD Advisory Committee. Under typical circumstances a student with a recent MPH degree or similar, can expect to transfer and/or waive up to 20 credits or roughly one year of course work.

## ELECTIVES

Courses may be selected from among the many offerings of the Department, the School, or the University's many course offerings. These courses must be discussed with and approved by the student's advisor.

## TEACHING PRACTICUMS

Students will complete two (1 credit) teaching practicum (PUBH 790) during which they will spend time in a mentored relationship with a faculty member, assisting with the administration and teaching of a course. These may be graduate or undergraduate level courses. Students who have a strong interest in teaching should also consider taking C&I 789 Teaching in Higher Education (3 credits). This is a general methods course involving instructional concepts and strategies for present/prospective faculty in higher education.

*\*Full-time HSC-funded stipend students are expected to participate in the SPH teaching mission to a greater degree.*

## QUALIFYING EXAM

The qualifying examination is the capstone experience for the OEHS PhD program. Successful completion of the examination signifies competence in the field of occupational and environmental health sciences and indicates readiness to engage in independent research. Following completion of the majority of the PhD coursework, students are then eligible to take the qualifying examination, which consists of two components, a written exam and an oral defense as follows:

Written exam: The written exam consists of questions related to occupational and environmental health sciences generally as well as those pertinent to the student's research focus.

Oral defense: The oral component consists of a defense of student's answers to the written exam and includes additional questions that further test the student's understanding of key concepts in occupational and environmental health sciences and knowledge specific to the student's research focus. The oral defense of the written exam must be attempted within two academic weeks of completing the written exam. *Note: Students are not eligible to begin their dissertation, or sign up for dissertation credits, until they have successfully completed both components of the qualifying examination.*

## RESEARCH

The research component of the OEHS PhD program consists of both a dissertation (27 credits, minimum) and completion of two research rotations (2 credits).

Research Rotations: Students will complete two research rotations during their first year, meeting and working with research faculty with similar interests to the student's in order to identify potential mentors for their dissertation research.

Dissertation: Students will complete a dissertation in which they design and conduct an original work of research. First, students will develop a proposal for an original research project. This proposal will be presented and defended orally before the student's dissertation committee. Upon successful completion of the proposal defense, students are admitted to PhD candidacy and may then complete their dissertation research. There are two options for the dissertation format, a traditional book format or a three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with their committee chairperson. Regardless of the format selected, students must have a minimum of one first-authored

publication based on their dissertation topic area, at least under review in a peer-reviewed journal before they can defend their dissertation. While the required publication may come from one of the student's three dissertation articles if using the JAF, this is not mandatory. Upon completion of the written dissertation, the student will present and defend their work before the dissertation committee. *Note: The dissertation defense is open to all members of the WVU community and the public.*

**University Doctoral Degree Requirements:** For further details on WVU's requirements for Doctoral programs please visit the following website: [http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree\\_regulations/](http://catalog.wvu.edu/graduate/advisingcoursesdegrees/degree_regulations/).

## PLAN OF STUDY

Upon matriculating into the PhD program, students should contact the OEHS PhD Program Coordinator, or their advisor if already identified, to discuss the course requirements and to develop a plan of study (POS) to meet their individual needs. Below is a suggested POS with the minimum requirements for students entering the program with a BA/BS. *Note: Research credits show below reflect the minimum requirements. Students may enroll in additional research credits as necessary to achieve the degree competencies.*

### First Year

Fall	Hours	Spring	Hours
BMS 700		1 BIOS 603	3
PUBH 510		2 PUBH 797	1
PUBH 511		3 OEHS 622	3
PUBH 512		3 Elective 1	3
PUBH 796		1 BMS 720 or PUBH 701	2-3
OEHS 520		3	
		13	12

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
PUBH 790		1 OEHS 734		3 Qualifying Exam	
PUBH 796		1 OEHS 796		1	
PUBH 797		1 PUBH 790		1	
OEHS 625		3 Elective 3		3	
Elective 2		3 Elective 4		3	
		9		11	0

### Third Year

Fall	Hours	Spring	Hours
OEHS 796		1 PUBH 797	10
PUBH 797		8	
Dissertation Proposal			
		9	10

### Fourth Year

Fall	Hours
PUBH 797	9
Dissertation Defense	
<hr/>	
	9

Total credit hours: 73

## DOCTOR OF PHILOSOPHY

### Program Competencies

- Develop effective strategies for teaching in higher education
- Review and synthesize pertinent literature and formulate focused research questions that address identified knowledge gaps
- Design and conduct original research that uniquely contributes to the public health scientific knowledge
- Disseminate research findings through appropriate peer-reviewed publications and presentations, and to other public health community audiences

### Major Competencies

- Analyze issues and problems in occupational and environmental health and safety using critical evaluation, applied research methodology, and statistical methods

- Characterize the human health effects of major environmental and occupational hazards, both acute and chronic, including: air pollution, contamination of drinking water, and physical hazards
- Analyze sources, pathways, and routes of exposure to environmental and occupational hazards, identify populations at high risk of exposure, and communicate that risk effectively
- Create programs that protect the environment using proven technologies and novel approaches

# Population Health, M.S.

## Degree Offered

- Master of Science

## Nature of the Program

The Master of Science in Population Health program is a 30-credit, fully online program that prepares students for a variety of population-oriented leadership, clinical, and research-oriented positions in both healthcare and public health organizations. Specifically, the program is built around a core of public health and health services courses that provide foundational knowledge in public health and health systems, epidemiology and biostatistical principles, health systems leadership, systems thinking, and capacity building for intervention and change. The program emphasizes prevention, collaboration, and innovation to fit the educational opportunities of a variety of professionals, including:

- Healthcare leaders working to enhance the impact and efficiency of their organizations through more patient-centered, value-based and socially informed care approaches
- Clinical providers seeking to improve health outcomes among those they serve
- Public health leaders looking for new tools to identify and address health issues in their states and communities
- Public health and health services researchers and scientists interested in outcomes-focused, practice-based applications to improve health and well-being

The Master of Science in Population Health program prepares students for a variety of population-oriented leadership, clinical, and research-oriented positions in both healthcare and public health organizations. Additionally, this program prepares graduates for employment and advancement opportunities in the following sectors:

- Hospital and Health care systems
- Non-profit community health organizations
- Federal, state, and local government agencies
- Assisted care facilities (e.g., nursing homes)

## Admissions

The following admission standards have been set for the proposed MS in Population Health program:

- Baccalaureate or advanced degree from a regionally accredited college or university with a minimum GPA of 2.75
- International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)
- Resume or CV
- Three letters of recommendation
- Personal statement
- WVU applicants in good academic standing - as defined by their respective programs - who completed (or are currently enrolled in) a research or professional doctoral degree will be exempt from the above admissions requirements.

## Admissions Requirements 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

PhD Major Code: 8410

## Master of Science

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required.		
PUBH 604	Impact of Cultural Competence in Healthcare	3
PUBH 511	Epidemiology for Public Health Practice	3
PUBH 512	Research Translation and Evaluation in Public Health Practice	3

PUBH 520	Building and Sustaining Public Health Capacity	2
PUBH 540	Health Systems Leadership	3
PUBH 541	Systems Thinking in Public Health Practice	2
PUBH 659	Public Health Foundations	3
PUBH 684	Population Health Capstone	2
<b>Track/Emphasis Electives</b>		<b>9</b>
Population Health Management		
HPML 520	Health Administration and Operations Management	
HPML 555	Health Services Project Management	
HPML 556	Managerial Epidemiology & Strategy	
Population Health Analysis		
EPID 611	Concepts and Methods of Epidemiology	
BIOS 603	Applied Biostatistics 2	
BIOS 663	Introduction to Meta-Analysis	
Occupational Medicine		
OEHS 520	Industrial Hygiene	
OEHS 622	Public Health Toxicology	
OEHS 623	Occupational Injury Prevention	
OEHS 665	Worksite Evaluation	
Public Health/General Preventative Medicine		
BIOS 603	Applied Biostatistics 2	
PUBH 613	Public Health Program Evaluation	
SBHS 611	Community Assessment	
SBHS 620	Implementing and Managing Public Health Programs	

Total Hours

30

## Major Learning Outcomes

### POPULATION HEALTH

The Master of Science in Population Health program at West Virginia University will prepare students for a variety of population-oriented leadership, clinical, and research-oriented positions in both healthcare and public health organizations. The design of the curriculum will reflect the program's belief that both healthcare and public health must take more broader and more intentional perspective of how to identify and address pressing health issues while working for the health of the public. This includes concepts and skills that cover social determinants of health, the nature and process of public health, population health analytics, and population health management, as well as an emphasis management and leadership skills. Students will learn under a comprehensive, competency-driven curriculum constructed to address contemporary and emerging trends.

Educational Goals and Objectives:

- Identify determinants of population health that impact health outcomes in a community.
- Describe methods for assessing the health needs of a population.
- Demonstrate how to collect, analyze and use data to inform decisions and improve health outcomes of targeted populations.
- Communicate effectively about population health issues to constituencies both within and outside of the health system.
- Apply population health principles and concepts to develop and implement healthcare and/or public health strategies.
- Integrate clinical care and public health practice around an identified community need.

## Public Health, M.P.H.

### Degrees Offered

- Master of Public Health (MPH)

## Nature of the Program

The WVU Master of Public Health (MPH) degree is a multidisciplinary professional degree focused on the application of science, research and theoretical knowledge toward the prevention of disease and improving health and well-being. MPH graduates possess a broad array of skills needed to address challenges affecting communities, including engaging and working with diverse people across sectors, educating the public about best practices in health, and advocating for policy- and systems-level changes that impacts entire populations. The MPH program teaches students to develop and implement evidence-based solutions to complex health issues. Graduates leave our program prepared to work in a variety of public health settings such as health departments, clinics, and federal agencies.

## Areas of Emphasis

### APPLIED EPIDEMIOLOGY AND BIOSTATISTICS

The MPH degree with an emphasis in Applied Epidemiology & Biostatistics is designed for those who wish to acquire knowledge and skills necessary for epidemiologic and biostatistical practice and research. The purpose of the degree program is to:

- Introduce core principles and concepts of epidemiology and biostatistics,
- Develop proficiency in standard data management and biostatistical analysis
- Apply epidemiologic and biostatistical concepts to address practical public health concerns

This degree is focused on workforce development and training the next generation of public health professionals. The WVU MPH program is most appropriate for students interested in applied epidemiology and biostatistics. After graduating students will be able to assist in developing epidemiologic studies and apply biostatistical analyses to a range of health scenarios. A diverse faculty create opportunities for students to gain knowledge and experience applying coursework to study injury, substance misuse, infectious diseases, chronic diseases, and more. The culmination of these abilities make our WVU MPH graduates competitive for fellowships, PhD programs, or employment within industry, hospitals, academic institutions, or global, federal, state, or local agencies. Examples of jobs include hospital infection control, public health department epidemiologist, CDC Fellowships, and data analyst at pharmaceutical or insurance agencies.

Where applicable, the program builds on the existing Applied Biostatistics Certificate and community partnership, like CDC NIOSH or the WV Clinical and Translational Sciences Institute which are located on campus. These experiences provide additional opportunities for students enhance their comprehensive core skillsets with more advanced applications in epidemiology and biostatistics.

### APPLIED EPIDEMIOLOGY & BIOSTATISTICS MAJOR COMPETENCIES

In addition to the standard MPH Foundational Competencies required of all MPH students, our major in Applied Epidemiology & Biostatistics also prepares students to meet six competencies specific to the major. These include:

1. Manage data structures efficiently using standard statistical software.
2. Analyze public health problems through epidemiological and biostatistical lenses.
3. Apply basic multivariable statistical techniques commonly used in clinical and public health settings.
4. Derive appropriate inferences from epidemiological and biostatistical data.
5. Develop written and oral presentations based on sound statistical analyses and epidemiological principles for both substantive investigators and members of the community.

### PUBLIC HEALTH PRACTICE AND LEADERSHIP

The MPH degree with an emphasis in Public Health Practice and Leadership (PHPL) is focused on examining social and political systems that influence the health status of populations and then learning how to influence and/or design, implement, and manage broad, system-level instruments to improve population health outcomes. These instruments might include programs in public health agencies, not-for-profit organizations, or healthcare provider settings, or policies at the local, state, national, or international governmental levels.

The MPH emphasis in PHPL has a dual emphasis on acquiring both theoretical knowledge and practical skills. Thus, this degree is ideal for recent graduates or early- and mid-career public health professionals seeking to develop or advance their careers in a variety of health care settings. Additionally, the professional practice component of the program has been designed to place students in public health settings and apply their newly acquired knowledge and skills to address real-world problems.

Upon completion of the MPH degree with an emphasis in PHPL, students will be prepared to continue developing their careers as leaders, managers, public health professionals, policy analysts, program evaluators, advocates, or health program managers in a variety of public health, government, health care, or other professional settings. In addition, our students will be prepared to continue their graduate education at the doctoral level.

### PUBLIC HEALTH PRACTICE AND LEADERSHIP AREA OF EMPHASIS COMPETENCIES

In addition to the standard MPH Foundational Competencies required of all MPH students, our emphasis in Public Health Practice and Leadership also prepares students to meet 5 competencies specific to the emphasis. These include:

1. Develop skills to influence the effective production and implementation of health policy.
2. Assess structures and processes for effective health services management.
3. Employ processes and applications that positively effect both individuals and group goals.
4. Develop analytic and statistical skills for application to health service issues.
5. Appraise theory and skills in policy, management, and leadership to examine and influence real world health issues.

## SOCIAL AND BEHAVIORAL SCIENCES

The MPH degree with an emphasis in Social and Behavioral Sciences (SBHS) addresses the behavioral, social, and environmental factors related to individual and population health and health disparities over the life span. Research and practice in this track contributes to the development, administration, and evaluation of programs and policies in public health to promote and sustain healthy environments and lives for individuals and populations.

A student who graduates with an MPH degree with an emphasis in Social and Behavioral Science from WVU will be qualified to work and provide leadership in public health and research settings at national, state or local levels, or work in the public or private sector on health promotion program implementation and evaluation efforts.

## SOCIAL AND BEHAVIORAL SCIENCES AREA OF EMPHASIS COMPETENCIES

In addition to the standard MPH Foundational Competencies required of all MPH students, our emphasis in Social and Behavioral Sciences also prepares students to meet competencies specific to the major. These include:

1. Demonstrate community engagement principles when addressing public health problems.
2. Appraise qualitative data used for evaluating factors associated with improving public health.
3. Appraise quantitative data used for evaluating factors associated with improving public health.
4. Implement social behavioral theories & frameworks designed to describe public health problems and improve public health interventions.
5. Recommend interventions likely to improve public health.
6. Organize interventions, including the assessment, planning, implementation, and evaluation of public health interventions.
7. Synthesize social and behavioral sciences principles to design an evaluation plan of a public health program.

## Admissions

Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0

International graduate students must meet WVU's minimum score requirement for English language proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).

## APPLICATION PROCESS

Our CEPH accredited Master of Public Health program participates in the Schools of Public Health Application Service (SOPHAS), <http://www.sophas.org/>. The MPH Admissions process has two steps. (1) All MPH applications must be submitted through the national SOPHAS service and (2) applicants must also submit a WVU Graduate application, <https://graduateadmissions.wvu.edu/>.

In addition to the application, applicants must submit to SOPHAS a statement of purpose and objectives, three letters of reference, a current resume/ curriculum vitae, and all university transcripts. SOPHAS requires original transcripts from ALL U.S. and International institutions attended (even Study Abroad).

There is a SOPHAS application fee. Applicants must indicate their first choice of MPH major and may also indicate a second choice. A maximum of two choices is allowed.

E-submit your application as soon as the applicant entered information is complete. Do NOT wait for SOPHAS to receive transcripts, recommendations or test scores.

Plan Ahead! Allow up to 4 weeks for SOPHAS to verify grades, process, and mail your application to your designated institutions after your documents have been received.

SOPHAS grants fee waivers based upon financial need for Peace Corps Volunteers, McNair Scholars, Gates Millennium Scholars Program, AmeriCorps, U.S., and International applicants.

Once the department has reviewed the SOPHAS application, students will receive a communication from the WVU School of Public Health regarding their recommendation for acceptance and instructions to complete the WVU graduate application and pay the application fee.

International Students must meet WVU's minimum score requirement for English Language Proficiency (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>).



Major Code: 8402

## Major Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required.		
Students must earn a minimum grade of "C-" in all PUBH and emphasis coursework.		
PUBH 510	Contemporary Foundations of Public Health Practice	2
PUBH 511	Epidemiology for Public Health Practice	3
PUBH 512	Research Translation and Evaluation in Public Health Practice	3
PUBH 613	Public Health Program Evaluation	3
PUBH 520	Building and Sustaining Public Health Capacity	2
PUBH 521	Public Health Prevention and Intervention	3
PUBH 629	MPH Capstone	1
PUBH 630	MPH Field Practicum	3
PUBH 540	Health Systems Leadership	3
PUBH 541	Systems Thinking in Public Health Practice	2
PUBH 696	Graduate Seminar	1
General Elective		3
Approved Elective Courses available from MPH Director and/or MPH Advisor		
<b>Required Area of Emphasis</b>		<b>15</b>
Applied Epidemiology and Biostatistics		
Public Health Practice and Leadership		
Social and Behavioral Sciences		
Total Hours		44

1. All students in the WVU SPH MPH program are required to maintain a portfolio that demonstrates their ability to meet the competencies associated with the MPH Foundational Courses, the Area of Emphasis Courses, and to apply a selection of those competencies in an approved practice-based setting(s). This portfolio must be submitted for review at the end of each academic year, as well as reviewed and approved prior to the successful completion of the program.
2. The MPH degree will be awarded based on successful completion of all academic requirements and demonstrated achievement of competencies via the student portfolio system and class-based evaluations of competency attainment.

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours	Summer	Hours	
PUBH 510		2 PUBH 511		3 PUBH 630		3
PUBH 512		3 PUBH 520		2		
PUBH 521		3 PUBH 540		3		
PUBH 541		2 PUBH 696		1		
		General Elective		3		
		10		12		3

### Second Year

Fall	Hours	Spring	Hours	
AOE Courses		6 PUBH 613		3
AOE Elective		3 PUBH 629		1
		AOE Courses		6
		9		10

Total credit hours: 44

Note: With approval from the MPH Program Director and the Director of Practice-Based Learning, PUBH 630: MPH Field Practicum can be taken anytime during Year 2. Students must select at least six credit hours for electives.



## Areas of Emphasis

- Applied Epidemiology and Biostatistics (p. 929)
- Public Health Practice and Leadership (p. 929)
- Social and Behavioral Sciences (p. 929)

### Applied Epidemiology and Biostatistics Area of Emphasis

Code	Title	Hours
BIOS 603	Applied Biostatistics 2	3
BIOS 611	Data Management and Reporting	3
EPID 611	Concepts and Methods of Epidemiology	3
EPID 612	Applied Epidemiology for Public Health	3
Elective		3
Approved elective courses available from MPH Director and/or MPH Advisor		
Total Hours		15

\*

Those seeking this emphasis must take BIOS 601 as a substitute for PUBH 612.

### Public Health Practice and Leadership Area of Emphasis

Code	Title	Hours
<b>Policy</b>		<b>3</b>
Select one of the following:		
HPML 510	Health Economics	
HPML 601	Foundations of Health Policy	
<b>Management and Leadership</b>		<b>3</b>
Select one of the following:		
HPML 520	Health Administration and Operations Management	
HPML 555	Health Services Project Management	
HPML 582	Managing Quality Improvement in Healthcare	
<b>Managerial Analysis and Decision-Making</b>		<b>3</b>
Select one of the following:		
HPML 556	Managerial Epidemiology & Strategy	
HPML 622	Analytic Methods for Health Policy, Management, and Leadership	
<b>Electives</b>		<b>6</b>
Approved elective courses available from MPH Director and/or MPH Advisor		
Total Hours		15

### Social and Behavioral Science Area of Emphasis

Code	Title	Hours
SBHS 611	Community Assessment	3
SBHS 617	Community Engagement and Advocacy in Public Health	2
SBHS 619	Intervention Planning & Design	3
SBHS 620	Implementing and Managing Public Health Programs	3
SBHS 621	Grant Writing for Public Health Practice	1
Elective		3
Approved elective courses available from MPH Director and/or MPH Advisor		
Total Hours		15

## Accelerated Program

In order to be admitted to this ABM program, applicants must:

- be enrolled in the Bachelor of Science in Public Health (BSPH) program.
- have a minimum GPA of 3.5.
- complete a minimum of 60 credit-hours, but not more than 92 credit-hours, as prescribed in the BSPH Plan of Study.
- Transfer students (internal or external) are not eligible for the ABM program at this time.
- earn a minimum grade of "B+" in PUBH 205: Writing for Public Health Audiences.
- schedule one meeting with their WVU School of Public Health undergraduate advisor to ensure they are eligible to apply for the program.
- not be enrolled in a dual degree or certificate program.
- not have any documented infractions with the WVU Office of Student Conduct or any external law enforcement agencies.

## Degree Requirements

Code	Title	Hours
A cumulative GPA of 2.5 is required for the Bachelor of Science in Public Health.		
University Requirements		51
School Core Requirements		25
Public Health Major Requirements		25
MPH Public Health Program Requirements		44
Total Hours		145

## University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6 and 7		25
PUBH 191	First-Year Seminar	1
General Electives		25
Total Hours		51

## School Core Requirements

Code	Title	Hours
PUBH 101	Introduction to Public and Community Health	3
PUBH 200	Introduction to Public Health Careers and Information	1
PUBH 201	Global Perspectives of Public Health	3
PUBH 202	Social Determinants of Health	3
PUBH 205	Writing for Public Health Audiences	3
PUBH 211	Biostatistics for Population Health	3
PUBH 222	Epidemiology for Public Health	3
PUBH 233	The US Healthcare System: Structures and Incentives	3
PUBH 241	Biological Basis of Public Health	3
Total Hours		25

## Public Health Major Requirements

Code	Title	Hours
A minimum GPA of 2.5 is required in all Public Health Major Requirements.		
<b>Discipline-Specific Requirements</b>		
PUBH 243	Issues in Environmental Health	3
PUBH 331	Introduction to Health Policy	3
PUBH 352	Introduction to Social and Behavioral Science and Practice	3
PUBH 353	Mastering Health and Wellness	3
Select one of the following:		3

PUBH 311	Health Research Data Management and Reporting	
PUBH 423	Introduction to Modern Epidemiologic Research	
PUBH 454	Introduction to Public Health Research Methods	
<b>Public Health Electives</b>		<b>3</b>
All remaining PUBH Courses (excluding PUBH 486) *		
<b>Culminating Experience Coursework</b>		
PUBH 400	Field Placement Preparation Seminar	1
PUBH 489	School of Public Health Undergraduate Capstone (minimum grade of C-)	2
PUBH 481	Public Health Field Experience	4
Total Hours		25

## MPH Program Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required.		
Students must earn a minimum grade of "C-" in all PUBH and emphasis coursework.		
PUBH 510	Contemporary Foundations of Public Health Practice	2
PUBH 511	Epidemiology for Public Health Practice	3
PUBH 512	Research Translation and Evaluation in Public Health Practice	3
PUBH 613	Public Health Program Evaluation	3
PUBH 520	Building and Sustaining Public Health Capacity	2
PUBH 521	Public Health Prevention and Intervention	3
PUBH 629	MPH Capstone	1
PUBH 630	MPH Field Practicum	3
PUBH 540	Health Systems Leadership	3
PUBH 541	Systems Thinking in Public Health Practice	2
PUBH 596	Graduate Seminar	1
<b>General Elective</b>		<b>3</b>
Approved Elective Courses available from MPH Director and/or MPH Advisor		
<b>Required Area of Emphasis</b>		<b>15</b>
Applied Epidemiology and Biostatistics		
Public Health Practice and Leadership		
Social and Behavioral Sciences		
Total Hours		44

## Suggested Plan of Study

### First Year

Fall	Hours	Spring	Hours
PUBH 191		1 ENGL 102 (GEF 1)	3
PUBH 101		3 BIOL 101 & 101L (GEF 2)	4
ENGL 101 (GEF 1)		3 PUBH 201	3
GEF 4		3 PUBH 202	3
GEF 5		3 GEF 7	3
GEF 6		3	
		16	16

### Second Year

Fall	Hours	Spring	Hours
PUBH 241		3 PUBH 211	3
PUBH 205		3 PUBH 233	3
PUBH 200		1 PUBH 331	3
PUBH 243		3 PUBH 353	3
GEF 3		3 General Elective	3

General Elective	3				
	16			15	
<b>Third Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
PUBH 222		3 PUBH 481		4	
PUBH 352		3 PUBH 489		2	
PUBH 400		1 PUBH 311 or 454		3	
PUBH Elective		3 General Electives		6	
General Electives	6				
	16			15	
<b>Fourth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer</b>	<b>Hours</b>
PUBH 510		2 PUBH 511		3 PUBH 630	3
PUBH 512		3 PUBH 540		3	
PUBH 521		3 PUBH 595		1	
PUBH 541		2 PUBH 520		2	
General Elective		3 General Elective		4	
	13			13	3
<b>Fifth Year</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
AOE Course		3 PUBH 629		1	
AOE Course		3 PUBH 613		3	
AOE Course		3 AOE Course		3	
General Elective		3 AOE Course		3	
	12			10	

Total credit hours: 145

## Major Learning Outcomes

### PUBLIC HEALTH

Foundational Public Health Knowledge and MPH Foundational Competencies (Learning Outcomes) are determined by the School's accrediting body, the Council on Education for Public Health (CEPH). Competencies for Areas of Emphasis (which CEPH refers to as concentrations) are set by the program faculty and leadership.

#### MPH Foundational Public Health Knowledge

There are 12 elements of Foundational Public Health Knowledge in the MPH program:

1. Explain public health history, philosophy and values
2. Identify the core functions of public health and the 10 Essential Services\*
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge
7. Explain effects of environmental factors on a population's health
8. Explain biological and genetic factors that affect a population's health
9. Explain behavioral and psychological factors that affect a population's health
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
11. Explain how globalization affects global burdens of disease
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)

#### MPH Foundational Competencies (Learning Outcomes)

The 22 MPH Foundational Competencies are organized into eight (8) domains:

Evidence-Based Approached to Public Health

1. Apply epidemiological methods to the breadth of settings and situations in public health practice
2. Select quantitative and qualitative data collection methods appropriate for a given public health context
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
4. Interpret results of data analysis for public health research, policy or practice

Public Health & Health Care Systems

1. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
2. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

Planning & Management to Promote Health

1. Assess population needs, assets and capacities that affect communities' health
2. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
3. Design a population-based policy, program, project or intervention
4. Explain basic principles and tools of budget and resource management
5. Select methods to evaluate public health programs

Policy in Public Health

1. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
2. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
3. Advocate for political, social or economic policies and programs that will improve health in diverse populations
4. Evaluate policies for their impact on public health and health equity

Leadership

1. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
2. Apply negotiation and mediation skills to address organizational or community challenges

Communication

1. Select communication strategies for different audiences and sectors
2. Communicate audience-appropriate public health content, both in writing and through oral presentation
3. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice

1. Perform effectively on interprofessional teams

Systems Thinking

1. Apply systems thinking tools to a public health issue

**Area of Emphasis Competencies (Learning Outcomes):**Applied Epidemiology & Biostatistics emphasis

1. Manage data structures efficiently using standard statistical software.
2. Analyze public health problems through epidemiological and biostatistical lenses.
3. Apply basic multivariable statistical techniques commonly used in clinical and public health settings.
4. Derive appropriate inferences from epidemiological and biostatistical data.
5. Develop written and oral presentations based on sound statistical analyses and epidemiological principles for both substantive investigators and members of the community.

Public Health Practice & Leadership emphasis

1. Develop skills to influence the effective production and implementation of health policy.
2. Assess structures and processes for effective health services management.

3. Employ processes and applications that positively effect both individuals and group goals.
4. Develop analytic, statistical, and economic skills for application to health service issues.
5. Appraise theory and skills in policy, management, and leadership to examine and influence real world health issues.

#### Social & Behavioral Sciences emphasis

1. Demonstrate community engagement principles when addressing public health problems.
2. Appraise qualitative data used for evaluating factors associated with improving public health.
3. Appraise quantitative data used for evaluating factors associated with improving public health.
4. Implement social behavioral theories & frameworks designed to describe public health problems and improve public health interventions.
5. Recommend interventions likely to improve public health.
6. Organize interventions, including the assessment, planning, implementation, and evaluation of public health interventions.
7. Synthesize social and behavioral sciences principles to design an evaluation plan of a public health program.

## Social and Behavioral Sciences, Ph.D.

### Degrees Offered

- Doctor of Philosophy

### Nature of the Program

#### PH.D. IN PUBLIC HEALTH SCIENCES (SOCIAL AND BEHAVIORAL SCIENCES MAJOR)

The mission of the Ph.D. in Public Health Sciences, Social and Behavioral Sciences Major, is to provide state of the art doctoral education in the theory and application of social and behavioral science to a select group of highly qualified and committed students desiring to transform public health. Our program trains students using a research intensive curriculum led by a distinguished faculty at the cutting edge of public health science. This program emphasizes both evidence-based, theory-driven primary prevention of disease and injury and health promotion research and practice. Graduates will complete their degrees with a competitive record of research achievement, ready to embark on high-impact research careers.

The curriculum is designed so that students receive a methodologically-intense training and one-on-one research experience with faculty in Social and Behavioral Sciences, typically over a three- to four-year period. The first years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to Social and Behavioral Sciences. During the latter years of the program, students are engaged in their dissertation research while given the freedom to further diversify their training by choosing electives.

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## FACULTY

### CHAIR

- Keith Zullig, Professor - Ph.D. (University of South Carolina)

### PROFESSORS

- Geri Dino - Ph.D. (Kansas State University)
- Peter Giacobbi - Ph.D. (University of Tennessee)
- Ranjita Misra - Ph.D. (Old Dominion University)

### ASSOCIATE PROFESSORS

- Christiaan Abildso - Ph.D. (West Virginia University)
- Danielle Davidov - Ph.D. (West Virginia University)
- Alfgeir Kristjansson - Ph.D. (Karolinska Institute)

### ASSISTANT PROFESSORS

- Elizabeth Claydon - Ph.D. (West Virginia University)

### TEACHING ASSISTANT PROFESSOR

- Audra Hamrick - MA (West Virginia University)
- Toni Morris - Ed.D. (West Virginia University)

## ADJUNCT PROFESSORS

- Ahmed Aboraya - M.D. (Cairo University)
- Lesley Cottrell - Ph.D. (West Virginia University)
- Samuel Zizzi - Ed.D. (West Virginia University)

## ADJUNCT ASSOCIATE PROFESSORS

- Cindy Fitch - Ph.D. (Case Western Reserve University)
- Janie Leary - Ph.D. (West Virginia University)
- Melissa Olfert - Ph.D. (Loma Linda University)

## ADJUNCT ASSISTANT PROFESSORS

- John Blosnich - Ph.D. (West Virginia University)
- Michael Brumage - M.D., MPH (West Virginia University)
- Molly Matthews - Ewald - Ph.D. (West Virginia University)
- Frances Peterson-Burch - Ph.D., RN, BSN (University of Pittsburgh)
- Thomas Sims - M.A. (Georgia State University)
- Kimberly Williams - Ph.D. (McMaster University)

## RESEARCH ASSISTANT PROFESSORS

- Adam Baus - Ph.D. (West Virginia University)
- Traci Jarrett - Ph.D. (West Virginia University)
- Samantha Shawley-Brzoska - Ph.D. (West Virginia University)

## FACULTY EMERITI

- William Reger-Nash - Ed.D. (West Virginia University)
- Pete Shaffron - Ed.D. (West Virginia University)
- Kenneth Simon - Ed.D. (Columbia University)
- Nancy O'Hara Tompkins - Ph.D. (University of Maryland)

## Admissions

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you.

## DOCTOR OF PHILOSOPHY (PH.D.) IN PUBLIC HEALTH SCIENCES (SOCIAL AND BEHAVIORAL SCIENCES MAJOR)

### ADMISSION GUIDELINES

- A Master's degree in Public Health or a closely related field is strongly preferred. Exceptional applicants with a Bachelor's degree in a relevant field may also be considered.
- A minimum GPA of 3.0 is required, 3.5 is preferred.
- The following GRE scores are preferred: Verbal 150; Quantitative 155; and Writing 3.5. Submission of GRE scores are optional. Applicants may submit GRE scores if they feel that scores enhance their application.
- International students must meet WVU's minimum score requirements for English language proficiency. (<https://graduateadmissions.wvu.edu/how-to-apply/apply-for-2023-2024/international-graduate-applicant/>)

### APPLICATION PROCESS

Applying to the Ph.D. program is a two-step process in which prospective students first submit an application through the national SOPHAS service, <http://www.sophas.org/>. If you are accepted into the Ph.D. program by the School, the next step is for you to complete a WVU Graduate Application, <https://graduateadmissions.wvu.edu/>.

The SOPHAS application requires:

- Official test scores
- Official transcripts from all US institutions attended
- A Personal Statement

- 3 Letters of Recommendation
- Current CV/Resume

Applicants must indicate their first choice of Major and may indicate a second choice (you are allowed a maximum of two choices).

There is a SOPHAS application fee. However, SOPHAS grants fee waivers based upon financial need for McNair Scholars, Gates Millennium Scholars, as well as for AmeriCorps and Peace Corps Volunteers.

TIPS for completing the SOPHAS application:

- **APPLY EARLY!** Allow up to 4 weeks for SOPHAS to verify your transcripts and test scores and send them to the Universities to which you have applied. Your application may not be reviewed if it does not contain verified transcripts and test scores.
- If opting to submit your GRE scores, **be sure to use the college code 0157 for the WVU School of Public Health.** This code **MUST** be used so that verified scores are sent by SOPHAS to the WVU School of Public Health for review.
- Submit your application once you have provided the required information. **DO NOT** wait for SOPHAS to receive transcripts, recommendations or test scores prior to submitting your application.

### Personal Statement

The Personal Statement is a critical piece of the application. The content of the Statement and the applicant's writing skills will be evaluated in the admissions decision. The Statement should address the following in no more than 1000 words:

- What is it about Public Health that interests you?
- What is it about your selected major, specifically, that interests you?
- What are your career goals?
- What topics or areas of research do you wish to pursue and why? If you have identified a potential dissertation topic, briefly describe that as well.
- Which faculty members in the SPH do you see as being potential mentors to help you succeed in your area of interest?

Applicants should also include any additional information about their interests, background, prior experience, or special circumstances that may be helpful to the SPH Doctoral Admissions Committee.

### Letters of Recommendation

Three letters of recommendation are required. At least two of these should be from people who can attest to your academic abilities.

### Deadlines

**Please refer to SOPHAS for the current deadline.** New applications received after this deadline will not be reviewed. All admissions are for the Fall semester. We do not admit students into the Ph.D. program in the Spring or Summer semesters.

### Review Process

All completed and verified SOPHAS applications are first reviewed by the Admissions Committees of the major to which an applicant has applied (EPID, OEHS, or SBHS). Candidates that are recommended for admission at this level, are put forth to the SPH Doctoral Admissions Committee, which makes the final decisions on admissions and funding.

### Advanced Standing for Applicants with an Approved Master's Degree

Students who enter the Ph.D. program with an MPH or approved Master's degree are eligible for *Advanced Standing*. This allows students to complete an abbreviated course of study that takes between 2 and 3 years to complete, depending on the student's past course work and current interests.

## Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

PhD Major Code: 8409

## Doctor of Philosophy

### MAJOR REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required.		
BIOS 603	Applied Biostatistics 2	3
BIOS 604	Applied Biostatistics 3	3



BMS 700	Scientific Integrity (and Ethics)	1
PUBH 510	Contemporary Foundations of Public Health Practice	2
PUBH 511	Epidemiology for Public Health Practice	3
PUBH 512	Research Translation and Evaluation in Public Health Practice	3
PUBH 701	Public Health Grant Writing	3
PUBH 790	Teaching Practicum (Two 1-hour experiences)	2
PUBH 796	Graduate Seminar (Taken 2 times for 1 credit)	2
PUBH 797	Research (Two 1-hour research rotations)	2
SBHS 715	Intervention Design	3
SBHS 760	Survey Research Methods	3
SBHS 761	Qualitative Research Methods (Offered only during even years)	3
SBHS 763	Advanced Evaluation Public Health (Offered only during odd years)	3
Electives		12
Qualifying Examination - written and oral components		
Dissertation Proposal		
Dissertation Research (minimum credit number shown)		27
PUBH 797	Research	
Dissertation Defense		
Total Hours		75

## PROGRAM REQUIREMENTS FOR STUDENTS ENTERING WITH ADVANCED STANDING

Students entering the SBHS PhD program that are admitted with advanced standing (that already hold strongly relevant Master's degrees) will work with the departmental PhD advisor for a recommended course of study. This includes initiating a selection of course credits that can be transferred (600 level and above, graded B or above, passed in the last 5 years) and/or waived that ultimately will be reviewed and approved by the PhD Program Director in consultation with the PhD Advisory Committee. Under typical circumstances a student with a recent MPH degree or similar, can expect to transfer and/or waive up to 20 credits or roughly one year of course work.

## ELECTIVES

Courses may be selected from among the department's, School of Public Health's, or university's many course offerings. This will allow students to develop an area of focus. These courses will be discussed and approved with the faculty advisor.

## TEACHING PRACTICUMS

Students will complete two (1 credit) teaching practicums (PUBH 790) during which they will spend time in a mentored relationship with a faculty member, assisting with the administration and teaching of a course. These may be graduate or undergraduate level courses. Students who have a strong interest in teaching should also consider taking C&I 789 Teaching in Higher Education (3 credits). This is a general methods course involving instructional concepts and strategies for present/prospective faculty in higher education.

*\*Full-time HSC-funded stipend students are expected to participate in the SPH teaching mission to a greater degree.*

## QUALIFYING EXAMINATION

The Qualifying Examination is the capstone experience for Ph.D. program coursework. Successful completion of the examination signifies competence in the field of public health sciences and indicates readiness to engage in independent research. Following completion of the majority of the PhD coursework, students are then eligible to take the qualifying examination, which consists of two components, a written exam and an oral defense as follows:

**Written exam:** The written exam consists of questions related to social and behavioral sciences generally as well as those pertinent to the student's research focus.

**Oral defense:** The oral component consists of a defense of student's answers to the written exam and includes additional questions that further test the student's understanding of key concepts in social and behavioral sciences and knowledge specific to the student's research focus. The oral defense of the written exam must be attempted within two academic weeks of completing the written exam. *Note: Students are not eligible to begin their dissertation, or sign up for dissertation credits, until they have successfully completed both components of the qualifying examination.*

## RESEARCH

The research component of the SBHS PhD program consists of both a dissertation (27 credits, minimum) and completion of two research rotations (2 credits).

**Research Rotations:** Students will participate in two research rotations in their first year, meeting and working with research faculty with similar interests in order to develop mentorship for dissertation research.

**Dissertation:** Students will complete a dissertation in which they design and conduct an original work of research. First, students will develop a proposal for an original research project. This proposal will be presented and defended orally before the student's dissertation committee. Upon successful completion of the proposal defense, students are admitted to PhD candidacy and may then complete their dissertation research. There are two options for the dissertation format, a traditional book format or a three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with their committee chairperson. Regardless of the format selected, students must have a minimum of one first-authored publication based on their dissertation topic area, at least under review in a peer-reviewed journal before they can defend their dissertation. While the required publication may come from one of the student's three dissertation articles if using the JAF, this is not mandatory. Upon completion of the written dissertation, the student will present and defend their work before the dissertation committee. *Note: The dissertation defense is open to all members of the WVU community and the public.*

**University Doctoral Degree Requirements:** For further details on WVU's requirements for Doctoral programs please visit the following website: [http://catalog.wvu.edu/graduate/advising/courses/degrees/degree\\_regulations/](http://catalog.wvu.edu/graduate/advising/courses/degrees/degree_regulations/).

## PLAN OF STUDY

Upon matriculating into the PhD program, students should contact the SBHS PhD Program Coordinator, or their advisor if already identified, to discuss the course requirements and to develop a plan of study (POS) to meet their individual needs. Below is a suggested POS with the minimum requirements for students entering the program with a BA/BS. *Note: Research credits show below reflect the minimum requirements. Students may enroll in additional research credits as necessary to achieve the degree competencies.*

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours	Spring	Hours
PUBH 510		2 BIOS 603	3
PUBH 511		3 PUBH 797	1
PUBH 512		3 SBHS 763	3
PUBH 796		1 SBHS 715	3
BMS 700		1	
		10	10

### Second Year

Fall	Hours	Spring	Hours	Summer	Hours
BIOS 604		3 PUBH 701		3 Qualifying Exam	
PUBH 790		1 PUBH 790		1	
PUBH 796		1 SBHS 760		3	
PUBH 797		1 SBHS 761		3	
Elective 1		3 Elective 3		3	
Elective 2		3			
		12		13	0

### Third Year

Fall	Hours	Spring	Hours
PUBH 797		7 PUBH 797	10
Elective 4		3	
Dissertation Proposal			
		10	10

### Fourth Year

Fall	Hours
PUBH 797	10
Dissertation Defense	
	10

Total credit hours: 75

## DOCTOR OF PHILOSOPHY

### Program Competencies

- Develop effective strategies for teaching in higher education
- Review and synthesize pertinent literature and formulate focused research questions that address identified knowledge gaps
- Design and conduct original research that uniquely contributes to the public health scientific knowledge
- Disseminate research findings through appropriate peer-reviewed publications and presentations, and to other public health community audiences

**Major Competencies**

- Display broad knowledge and application of relevant public health social and behavioral theories to health promotion and disease prevention strategies
- Demonstrate rigorous understanding of methodological and statistical principles that enhance research in the public health sciences
- Create comprehensive translational intervention and evaluation plans in research or practice settings to inform policy or practice.

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