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General Information - West Virginia University

West Virginia University (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. WVU and its divisional campuses enroll approximately 32,000 students, who represent all 55 counties of West Virginia, 50 states and the District of Columbia, and nearly 100 other countries. West Virginia University’s educational programs are accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (http://www.ncahlc.org/component/com_directory/Action,ShowBasic/instid,1677). Many West Virginia University programs hold specialized accreditation.

WVU’s main campus in Morgantown, WV, provides high-quality programs of instruction through 15 colleges and schools and offers over 190 degree programs at the baccalaureate, master’s, doctoral, and professional levels. WVU’s Morgantown facilities are built on more than 1,000 acres in Morgantown and include several buildings on the National Register of Historic Places. The Robert C. Byrd Health Sciences Center has a campus in Morgantown, as well as campuses in Martinsburg and Charleston, WV.

WVU also has two divisional campuses. Potomac State College of West Virginia University, situated in West Virginia’s Eastern Panhandle in Keyser, offers associate and baccalaureate degree programs and serves both residential and commuting students. The West Virginia University Institute of Technology is located between Charleston and Beckley in Montgomery, WV, and serves the region and the state by offering baccalaureate degree programs.

The WVU Extension Service has an office with a faculty presence in all of West Virginia’s 55 counties. WVU operates experimental farms and forests throughout the state, in addition to the state 4-H Camp and Lifelong Learning Center at Jackson’s Mill near Weston, WV (http://jacksonsmill.ext.wvu.edu).

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

MISSION

In this section:

• Mission of West Virginia University
• Commitment to Diversity, Equality, and Inclusion
• Office of Accessibility Services

The Mission of West Virginia University

As a land-grant institution in the 21st century, West Virginia University will deliver high-quality education, excel in discovery and innovation, model a culture of diversity and inclusion, promote health and vitality, and build pathways for the exchange of knowledge and opportunity between the state, the nation, and the world.

INSTRUCTION

The University has 15 colleges and schools that offer over 190 degree programs at the baccalaureate, master’s, doctoral, and professional levels, as well as numerous certificate programs.

RESEARCH AND SCHOLARSHIP

As West Virginia’s flagship research institution, WVU undertakes scholarly activity that addresses the challenges most critical to today’s world and the practice of multidisciplinary research. WVU is classified as a Research University (High Research Activity) by the Carnegie Foundation for the Advancement of Teaching.

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, initiatives and centers, and through four structures that engage external constituencies and support public service.
Economic Development

The Office of Research and Economic Development assists WVU researchers in advancing their results and putting that knowledge to work improving lives. The research enterprise of West Virginia University is diverse, richly talented, progressive, and focused on the goal of making people’s lives better in the highest tradition of an American land-grant institution of higher education.

Well-being and Quality of Life

The Robert C. Byrd Health Sciences Center advances the health of West Virginia’s residents and address health challenges that face the state and the nation. In addition to the Health Sciences Center in Morgantown, the Charleston Division of the WVU School of Medicine is located in the state capital and the Eastern Division of the HSC in Martinsburg provides community-based education in health sciences in the nine-county eastern panhandle of West Virginia.

Outreach

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 faculty presence in all of West Virginia’s 55 counties, staffed by faculty county agents.

The educational programs and initiatives of the WVU Extension Service 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 resources; and (4) community, workforce, and economic development.

Commitment to Diversity, Equality, and Inclusion

West Virginia University is committed to ensuring that all persons, including women, people of color, persons with disabilities, veterans, and persons of different religions, sexual orientations, ages, and international, ethnic, and economic backgrounds have the opportunity to benefit from the programs and services the University offers. The University helps students, faculty, and staff study and work in a climate of academic freedom and social responsibility, and develop the skills, knowledge, and self-esteem necessary to contribute positively as world citizens.

In keeping with this commitment, members of the academic community are expected to demonstrate civility and mutual respect for all persons, 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 West Virginia University may file a complaint with the Division of Diversity, Equity, and Inclusion (http://diversity.wvu.edu).

Office of Accessibility Services

The Office of Accessibility Services (http://accessibilityservices.wvu.edu) is dedicated to helping students achieve their academic goals regardless of any physical, learning, psychological, sensory, or other documented disability. West Virginia University’s process for providing disability-related accommodations follows guidelines of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, and current case law.

COMMITMENT TO ASSESSMENT

The West Virginia University Assessment Council works with the WVU Morgantown campus, the West Virginia University Institute of Technology, and Potomac State College to engage in continuous improvement to enhance student learning. Assessment Council goals include strengthening the effectiveness of assessment programs at all levels; helping to create an institutional culture of assessment; aligning assessment with the WVU mission and strategic plan; and serving as an institutional clearinghouse for assessment best practices from around the country.

GOVERNANCE AND ADMINISTRATION

In this section:

- Governor of West Virginia
- West Virginia Higher Education Policy Commission
- West Virginia University Board of Governors
- West Virginia University Administration
  - Deans
Governor of West Virginia
• Earl Ray Tomblin, Governor

West Virginia Higher Education Policy Commission
• Paul L. Hill, Chancellor, Charleston
• Bruce Berry, Chair, Morgantown
• Jenny Allen, Vice Chair, Shepherdstown
• Kathy G. Eddy, Secretary, Parkersburg
• Michael J. Farrell, Huntington
• Kay H. Goodwin, Ex-Officio, Cabinet Secretary, Department of Education and the Arts, Charleston
• David Hendrickson, Charleston
• John Leon, Fairmont
• Clarence Pennington, Ex-Officio, Chair, WV Council for Community and Technical College Education, Martinsburg
• James B. Phares, Ex-Officio, State Superintendent of Schools, Charleston
• Gary G. White, Logan

West Virginia University Board of Governors
• James W. Dailey II, Chair, Martinsburg
• Thomas V. Flaherty, Vice Chair, Charleston
• Ellen S. Cappellanti, Secretary, Charleston
• James Robert “Rob” Alsop, Charleston
• David B. Alvarez, Bridgeport
• Ryan Campione, Student Representative, Morgantown
• Lisa M. DiBartolomeo, Faculty Representative, Morgantown
• Robert K. Griffith, Faculty Representative, Morgantown
• J. Thomas Jones, Morgantown
• Raymond J. Lane, Menlo Park, CA
• Diane Lewis, Morgantown
• Dixie Martinelli, Classified Staff Representative, Morgantown
• William O. Nutting, Wheeling
• Andrew A. Payne III, Charleston
  • Edward L. Robinson, Charleston
• J. Robert “JR” Rogers, Hurricane
• William D. Wilmoth, Wheeling

*Current as of March, 2014, for the 2014-2015 academic year.

The WVU Board of Governors is the governing body of WVU. The Higher Education Policy Commission in West Virginia is responsible for developing, establishing, and overseeing the implementation of a public policy agenda for the state’s four-year colleges and universities.

West Virginia University is an Equal Opportunity/Affirmative Action Institution. The University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color, or national origin 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 director, Affirmative Action Office/Equal Employment Opportunity Programs, West Virginia University.— Office of the President.

West Virginia University Administration
• E. Gordon Gee, President
• Michele G. Wheatly, Provost and Vice President for Academic Affairs
• Christopher C. Colenda, Chancellor for Health Sciences

Deans
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• College of Business and Economics, José V. Sartarelli
• College of Creative Arts, Paul K. Kreider
• College of Education and Human Services, Lynne Schrum
• College of Law, Joyce McConnell
• College of Physical Activity and Sport Sciences, Dana D. Brooks
• Davis College of Agriculture, Natural Resources, and Design, Dan Robison
• Dean of Students, G. Corey Farris
• Eberly College of Arts and Sciences, Robert H. Jones
• Honors College, Keith Garbutt
• Reed College of Media, Maryanne Reed
• School of Dentistry, David A. Felton
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• School of Nursing, Tara Hulsey
• School of Pharmacy, Patricia A. Chase
• School of Public Health, Jeffrey Coben (Interim)
• University College, Elizabeth A. Dooley
• University Libraries, Jon Cawthorne

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• Jame Abraham, Bonnie Wells Wilson Distinguished Professor and Eminent Scholar
• Daniel Alkon, Toyota Chair for Neurodegenerative Disease Research
• James Anderson, Davis Michael Professor of Forestry and Natural Resources
• Gerald G. Ashdown, James H. “Buck” and June M. Harless Professor of Law
• Karl Barth, Samples Professorship of Civil and Environmental Engineering
• Robert M. Bastress, John W. Fisher II Professor of Law
• Chris Bise, Robert E. Murray Chair for the Department of Mining
• Robert E. Blobaum, Eberly Family Distinguished Professor of History
• Melanie Booth-Butterfield, Peggy Rardin McConnell Chair of Speech Communications
• Laura Brady, Eberly Distinguished Professor of Outstanding Teaching
• James E. Brick, Dr. Edmund B. Flink Chair of Internal Medicine
• Jim Brown, K-Mart Corporation Chair of Marketing
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• Tim Carr, Marshall S. Miller Energy Professor of Geology
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• Judie F. Charlton, Jane McDermott Shott Chair of Opthalmology
• Patricia Chase, Gates E. Wigner Dean for the School of Pharmacy
• Nigel N. Clark, George B. Berry Chair of Engineering
• Roger Congleton, BB&T Chair of Economics
• Robert Dailey, Davis-Michael Professor of Animal and Veterinarian Sciences
• Walter Dekeseredy, Anne Deane Carlson Endowed Chair of Social Sciences
• Lisa DiBartolomeo, Armand E. and Mary W. Singer Professor in the Humanities
• Charles R. DiSalvo, Woodrow A. Potesta Professor of Law
• Joanne R. Duffy, West Virginia University Hospital (WVUH) Evidence-Based Practice Research Professorship in Nursing
• James Ebel, Harrison/Omnicom Professorship in Integrated Marketing Communications
• Barry A. Edelstein, Eberly Family Distinguished Professor of Clinical Psychology
• James Elkins, Arthur S. Dayton Professor Law
• Eloise Elliott, The Ware Family Distinguished Professorship
• Sanford Emery, RTF Cline Chair in Orthopedic Surgery
• Eve Faulkes, J. Bernard Schultz Endowed Professor Art
• Ali Feliachi, Electric Power Systems Chair
• John W. Fisher, II, William J. Maier, Jr. Dean Emeritus
• Paula F. Fitzgerald, Nathan Haddad Professor of Business Administration
• Kenneth Fones-Wolf, The Stuart and Joyce Robbins Chair in History
• Mathis P. Frick, O. F. Gabriele Chair of Radiology
• James J. Friedberg, Hale J. and Roscoe P. Posten Professor of Law
• Hota Gangarao, Wadsworth Professorship
• Keith Garbutt, Eberly Family Professor for Outstanding Teaching
• Laura Gibson, Alexander B. Osborn Distinguished Professor in Hematological Malignancies Research
• Ronald L. Gross, Jane McDermott Shott Chair of Ophthalmology
• Rakesh K. Gupta, George and Carolyn Berry Chair
• Ludwig Gutmann, Hazel Ruby McQuain Chair of Neurological Research
• Joseph Hagan, Barnette Professor of Political Science
• Trevor M. Harris, Eberly Family Professor of Geography
• Keith Heasley, Charles T. Holland Professor of Mining Engineering
• JoAnn Hornsby, Interim Hazel Ruby McQuain Arthritis/Rheumatic Disease Chair
• Glen P. Jackson, Ming Hsieh Teaching Professor of Forensic and Investigative Science
• Abnash Jain, Abnash C. Jain Distinguished Professorship in Cardiology
• Thomas Kammer, Eberly College Centennial Professor of Geology
• Vlad Kecojevic, Massey Foundation Professor of Mining Engineering
• Kennon A. Lattal, Eberly College Centennial Professor of Psychology
• Richard D. Layne, Grace Kinney Mead Chair of Geriatrics
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• Diana Martinei, Widmeyer Professorship in Public Relations
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• Michael Mays, Eberly Distinguished Professor of Outstanding Teaching
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• Daniel Panaccione, Davis Michael Professor of Plant and Soil Sciences
• John Parker, N. Leroy Lapp Professorship of Pulmonary and Critical Care Medicine
• Syd S. Peng, Charles E. Lawall Chair in Mining Engineering
• William P. Petros, Mylan Chair of Pharmacology
• Jason Phillips, Eberly Family Professor of Civil War Studies
• Christopher Plein, Eberly Family Professor for Outstanding Public Service
• Joseph Prudomme, Christopher Cline Chair in Orthopedic Surgery
• Lois Raimondo, Shott Chair of Journalism
• Scot Remick, Laurence and Jean DeLynn Chair of Oncology
• Richard A. Riley, Louis F. Tanner Distinguished Professor of Public Accounting
• Terry L. Rose, Ernest L. Hogan Chair of Life Insurance
• Greg Rosencrance, Patricia T. Ayash Distinguished Professorship/Internal Medicine Charleston Div.
• J. Michael Ruppert, Jo and Ben Statler Eminent Scholar and Chair, Breast Cancer Research
• Mary Ann Samyn, The Ruth and Russell Bolton Teaching Professorship
• Earl Scime, Eberly Family Distinguished Professor of Physics
• Kenneth Showalter, C. Eugene Bennett Chair of Chemistry
• David Siderovski, E. J. Van Liere Medicine Professorship
Graduate Information

- Timothy Sweet, Eberly Professor of American Literature
- Harry Turtle, Fred T. Tattersall Distinguished Chair in Finance
- Richard Turton, Russell and Ruth Bolton WVU Professorship for Outstanding Teaching
- Michael Vernon, Sanger Chair of Family Planning and Reproductive Physiology
- Kung Wang, Eberly Family Professorship of Chemistry
- Stephen Wetmore, Romeo Lim and Maria Lim Chair of Otolaryngology
- Joshua Blackmer Williamson, Mabel DeVries Tanner Endowed Professor of Theatre and Dance
- Brian D. Woerner, Stephanie and Raymond J. Lane Endowed Professor
- John Zaniewski, Asphalt Technology Professorship
- C. Q. Zhang, Eberly Family Professorship of Mathematics
- Forest Bowman, Jackson and Kelly Professor of Law, Emeritus
- Linda M. Carson, Ware Distinguished Professor, Emerita
- Franklin D. Cleckley, Arthur B. Hodges Professor of Law, Emeritus
- Bernard R. Cooper, Claude W. Benedum Professor of Physics, Emeritus
- Robert DiClerico, Eberly Family Professor Outstanding Teaching, Emeritus
- Hayne W. Reese, Centennial Professor of Psychology, Emeritus
- Patricia Rice, Eberly Family Professor for Outstanding Teaching, Emerita
- Mohindar Seehra, Eberly Professor in Physics, Emeritus
- Donley Studlar, Eberly Family Professor of Political Science, Emeritus

Academic and Professional Standards

In this section:

ACADEMIC RIGHTS, PENALTIES & APPEAL:

- Academic Rights
- Application of Policy to Students
- Academic Requirements & Consequences of Failure to Meet Requirements
- Appeals

ACADEMIC DISHONESTY:

- Academic Integrity and Dishonesty
- Academic Dishonesty Defined
- Penalties for Academic Dishonesty
- Procedures for Academic Dishonesty

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- Statement on Intellectual Property
RIGHTS, PENALTIES, AND APPEAL

In this section:
- Academic Rights
- Application of Policy to Students
- Academic Requirements & Consequences of Failure to Meet Requirements
- Appeals

Academic Rights, Penalties, and Appeal Procedures

A student, by voluntarily accepting admission to West Virginia University or enrolling in a class or course of study offered by West Virginia University, accepts the academic requirements and criteria of the institution. 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.

Any question of interpretation regarding Student Rights and Responsibilities shall be referred to the Provost and Vice President of Academic Affairs or his or her designee or the Chancellor/Vice President for Health Sciences or his or her designee (Associate Provost for Undergraduate or Graduate Academic Affairs) 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 Policy 31.

Academic Rights

Each student at West Virginia University shall have the following academic rights:

1. Right to have his/her performance evaluated solely upon performance in the coursework as measured against academic standards. The student shall not be evaluated prejudicially, capriciously, or arbitrarily. The student shall not be graded, nor shall his/her performance be evaluated, on the basis of his/her race, age, disability, veteran status, religion, sexual orientation, color, national origin, or other protected status.
2. Right to appeal any academic penalty or sanction.
3. Right to access a copy of the college or University catalog or program brochure in which all current program requirements and standards are described (e.g. required courses, total credit requirements, time in residence requirements, special programs 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.

APPLICATION OF POLICY TO STUDENTS

Students are expected to adhere to academic requirements and standards in all academic settings, classrooms, laboratories, clinics, and at any other activities that are part of academic requirements. Students who fail to meet the academic requirements or standards, including those for academic dishonesty, may be subject to one or more of the penalties described below.

Academic Requirements & Consequences of Failure to Meet Requirements

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.

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

1. A lower final grade, failure of the course or exclusion from further participation in class (including laboratories or clinical experiences). A lower grade or failure of the course can be imposed by the instructor. Exclusion from further participation from class requires consultation with the College Dean and the Associate Provost for Undergraduate or Graduate Affairs.
2. The grade of unforgivable failure (UF). The course instructor can recommend the grade of UF; the UF penalty can only be imposed by the dean of the college or the dean’s designee upon recommendation from the instructor. The UF appears in a student’s transcript (permanent record) and is included in GPA calculations.
3. Academic probation at the program or college level for failure to meet program requirements and academic standards. Students placed on probation shall be notified in writing by the department chair or college administrator, including the reason for the probation, the length of the probation, and the requirements for removing or continuing the probation.
4. Academic dismissal (program dismissal), which 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 program at the institution" (BOG Policy 15, page 3).

Academic Units shall determine and specify the conditions under which a grade of unforgivable failure (UF), academic probation while in the program, and academic dismissal from programs are imposed as penalties. A student may appeal any academic penalty by following the procedures below.

**Appeals**

Students may appeal any academic penalty or sanction imposed by an instructor, the institution, or its constituent academic units.

Appeals may include but are not limited to:

- Appeals of grade penalty. Grades for individual course assignments can only be appealed when the final grade is issued (see additional information below);
- Appeals of exclusion from class;
- Appeals of imposition of academic probation;
- Appeals of dismissal from undergraduate programs;
- Appeals of dismissal from graduate programs;
- Appeals of dismissal from professional degree programs;
- Appeals of dismissal from the institution; and
- Appeals of final grade, including the grade of unforgivable failure (UF) if determined by a violation other than academic dishonesty. **[Students have the right to appeal final course grades which they believe reflect a capricious, arbitrary, or prejudiced academic evaluation, or reflect discrimination based on race, sex, age, handicap, veteran status, religion or creed, sexual orientation, color, or national origin. The grade appealed shall remain in effect until the appeal procedure is completed or the problem resolved.]**

The College Dean or his/her designee is the final level of appeal for grade penalties, exclusion from class, final course grades, and academic probation within program or college. The Office of the Provost is the final level of appeal for dismissal from the program, not including suspension and probation imposed by the university upon the student for failure to maintain minimum academic requirements (GPA).

**APPEAL PROCEDURES FOR ACADEMIC PENALTIES EXCLUDING APPEAL OF ACADEMIC DISHONESTY**

All appeals must be filed within 30 business days of the penalty. For final grade appeals, the appeal must be filed within **30 business days** of the final grade posting to the student’s record.

**STEP 1: LEVEL ONE**

1. Student receives written notice of one of or a combination of the following: (a) final grade; (b) failure to meet or maintain academic standard; (c) methods, if any, by which the student may correct the failure; and (d) nature of the penalty. If the penalty is academic dishonesty, instructors should follow the Academic Dishonesty procedure as provided in the catalog. Academic dishonesty is addressed under WVU Board of Governors Policy 31, concurrent with Policy 15.

2. The student informally meets with the instructor or program/unit leader who assigned the penalty, to resolve the issue. The course instructor or program/unit leader reviews the evidence provided by the student, makes a decision to uphold or overturn the penalty, and informs the student within five business days. If the student is dissatisfied with the decision or outcome from his/her meeting with the instructor or program/unit leader, the student must file a formal appeal (Step 2). If the student is satisfied with the outcome or penalty, the case is closed.

**Special Notes**

If the course instructor or program/unit leader is not available, or the nature of the complaint makes the discussion with the instructor and unit leader uncomfortable, the student may proceed to Step 2 within **ten business days** after contacting the instructor.

Appeals related to programmatic level infractions (such as failure to meet program academic standards, requirements or professional behavior) should be filed to the Department Chair.

Final grade appeals during the summer, when faculty members are not available, may be initially filed with the Department Chair (Level Two).

**STEP 2: LEVEL TWO:**

1. Within five business days of the instructor’s or program/unit leader’s decision, the student formally appeals (in writing) the decision to uphold penalty or outcome from the meeting with instructor or program/unit leader (listed in Step 1 above) to the Department Chair (or designee). In this appeal, the student must provide all documentation and evidence forming the basis of the appeal. When a student appeals a final grade, the course instructor must provide all criteria for determining grades.
2. The chair or unit leader reviews the appeal, makes a decision to uphold or rescind the penalty, and informs the student and instructor or program/unit leader of the decision within five business days.

3. If the appeal is resolved, the case is closed. If the student is dissatisfied, he or she may proceed to Step 3.

**STEP 3: LEVEL THREE:**

1. The student formally appeals (in writing) the penalty to the College Dean (or designee) within five business days of the Department Chair’s decision.

2. The Dean reviews the case, refers the case to the unit’s Academic Review Committee, or appoints a representative committee that consists of three or more faculty members, including at least one member from outside of the instructor’s department, for a recommendation within ten business days.

3. The Dean, as the President’s designee:

   Reviews the committee’s recommendation, makes a final decision, and informs the student, the instructor, and the Department Chair within ten business days. The case is closed.

   If the decision is dismissal from the program or from the University, the student may appeal to the Provost’s designee (Associate Provost for Undergraduate or Graduate Academic Affairs) (Step 4: Level Four).

**STEP 4: LEVEL FOUR:**

1. The student formally appeals to the Provost’s designee within five business days of the decision from the Dean. The student will be required to supply evidence and establish grounds for the appeal.

2. The Provost’s designee reviews the case and makes a final decision within thirty (30) days of his/her receipt of such appeal, except where adherence to such time period would be impracticable, in which case such time period shall be extended as warranted by particular circumstances.

**ACADEMIC DISHONESTY**

In this section:

- Academic Integrity and Dishonesty
- Academic Dishonesty Defined
- Penalties for Academic Dishonesty
- Procedures for Academic Dishonesty

**Academic Integrity and Dishonesty**

Students of West Virginia University 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 will not be tolerated.

**Academic Dishonesty Defined**

The term "academic dishonesty" means plagiarism; cheating and dishonest practices in connection with examinations, papers, and/or projects; and forgery, misrepresentation, or fraud as it relates to academic or educational matters.

1. The term “plagiarism” means the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment, including, but not limited to, the unacknowledged use of materials prepared by another individual engaged in the selling of term papers or other academic materials.

2. The terms “cheating and dishonest practices in connection with examinations, papers, and/or projects” means (i) giving or receiving of any unauthorized assistance in taking quizzes, tests, examinations, or any other assignment for a grade; (ii) depending upon the aid of sources beyond those authorized by the instructor in quizzes, tests, examinations, writing papers, preparing reports, solving problems, or carrying out other assignments; (iii) the acquisition or use, without permission, of tests or other academic material belonging to a member of the University faculty or staff; or (iv) engaging in any behavior specifically prohibited by a faculty member in the course syllabus or class discussion.

3. The terms “forgery, misrepresentation, or fraud as it relates to academic or educational matters” means (i) wrongfully altering, or causing to be altered, the record of any grade or other educational record; (ii) use of University documents or instruments of identification with the intent to defraud; (iii) presenting false data or information or intentionally misrepresenting one’s records for admission, registration, or withdrawal from the University or from a University course; (iv) knowingly presenting false data or information or intentionally misrepresenting one’s records for personal gain; (v) knowingly furnishing the results of research projects or experiments for the inclusion in another’s work without proper citation; or (vi) knowingly furnishing false statements in any University academic proceeding.
Penalties for Academic Dishonesty

Cases of academic dishonesty shall be concurrently subject to academic penalties listed in WVU Board of Governors Policy 15 (http://bog.wvu.edu/r/download/158325) and the disciplinary penalties in Policy 31 (http://bog.wvu.edu/r/download/158326).

ACADEMIC PENALTIES FOR A CHARGE OF ACADEMIC DISHONESTY

The instructor may impose the following academic penalties:

• A lower grade or failing project/paper/test grade
• A lower final grade
• Failure of the course

In addition to the above penalties, the instructor may also recommend to the department chair and college dean penalties the college dean may impose.

The college dean may impose the following academic penalties:

• Exclusion from further participation in class (including laboratories or clinical experiences)
• Grade of unforgivable failure (UF)
• Exclusion from an academic program*
• Academic probation within a program*
• Academic dismissal from a program*

*These sanctions may be enforced if the academic dishonesty occurs in a course in the student’s major college.

DISCIPLINARY PENALTIES

Disciplinary penalties may include the following:

• Expulsion: Permanent separation of the student from the University. Permanent notification will appear on the student’s transcript.
• Suspension: Separation of the student from the University for a specified period of time. Permanent notification will appear on the student’s transcript.
• Probation: A written reprimand for prohibited conduct that specifies a designated probationary period of time and includes the probability of more sever disciplinary sanctions if, he/she/ commits academic dishonesty.

Procedures for Academic Dishonesty

Upon discovering academic dishonesty, and/or to begin the process of issuing a penalty, the following steps must be followed:

STEP 1: INSTRUCTOR LEVEL

1. The instructor notifies the student in writing of the academic dishonesty charge and impending penalty within five (5) business days of discovering the infraction.
2. The instructor meets with the student to discuss the academic dishonesty charge, assigned penalty and to review all relevant materials.
3. The instructor shall fill out the Academic Dishonesty Form (http://studentlife.wvu.edu/r/download/99267) found on the Office of Student Conduct website (http://studentlife.wvu.edu/office_of_student_conduct). A student must sign the Academic Dishonesty Form and indicate whether he/she accepts or rejects responsibility for both the charge and the penalty. The instructor will send signed copies to the department chair, college dean, and the Office of Student Conduct. If student accepts responsibility of both the charge and penalty, the case is closed. If the students does not accept responsibility of the academic dishonesty charge and/or penalty, he/she may appeal to the department chair (Step 2 below).
4. If the penalty is unforgivable failure (UF), and if the student accepts both the charge and penalty, the instructor shall recommend to the college dean to impose the UF on the student’s permanent records. Case is closed.

STEP 2: DEPARTMENT CHAIR LEVEL

1. The student appeals in writing and provides supporting documents to the department chair within five (5) business days of his/her meeting with course instructor.
2. The department chair will assess all evidence and or meet with impacted parties for additional information. The chair shall make a final determination within ten (10) business days, fill out the Academic Dishonesty Form, and have the student sign. Copies of the signed Academic Dishonesty Form shall be distributed to the student, instructor, the college dean, and the Office of Student Conduct. If the student is not satisfied with the resolution reached during the meeting with the department chair, he/she may proceed to step 3 below.
3. If the penalty is unforgivable failure (UF), and if the student accepts both the charge and penalty, the department chair shall recommend to the college dean to impose the UF on the student’s permanent records. Case is closed.

STEP 3: OFFICE OF STUDENT CONDUCT (UNIVERSITY LEVEL)

1. The student appeals in writing and provides supporting documents to the Office of Student Conduct.
2. The Office of Student Conduct, "Conduct Process" will apply. (See West Virginia University Campus Student Code)

3. Student Conduct Board shall review all evidence and determine the outcome. If the recommendation is a penalty of unforgivable failure (UF), the Student Conduct Board shall contact the respective college dean to impose the penalty on the student's permanent records. Case is closed.

GRADUATE ACADEMIC PROBATION, SUSPENSION, AND DISMISSAL POLICY AND APPEAL

In this section:

• Probation
• Suspension and Dismissal
• Reinstatement After Suspension
• Appeal of Suspension or Dismissal

Probation

Graduate students may be placed on probation by the dean of their college or school by failing to maintain acceptable grades in their courses or in their performance in other areas such as research progress or professional behavior. Graduate students with a cumulative grade point average (GPA) below 2.75 may be subject to probation by the dean of their college or school. Individual academic units may designate a higher GPA or other academic standards required for students to remain in good standing.

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 sanction as well as delineate academic or other benchmarks for the student to attain in order to have the probation sanction removed. Students may request review of the sanction of probation by the academic official who imposed it at any point in a semester. 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 and the student may continue on probation or be suspended or dismissed by the academic unit.

Suspension and Dismissal

Students failing to maintain satisfactory academic standing, progress toward their degree, or professional behavior as delineated by the letter of probation may be suspended or dismissed from their degree program. Suspension or dismissal from a program normally follows a sanction of probation in cases where students have been counseled regarding academic stipulations and fail to attain those stipulations. Typically, students are suspended or 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 suspension or dismissal from their program. However, students can be suspended or dismissed from their program without a prior probation period in the case of serious violations of academic or professional standards, with approval of the school or college dean and the Associate Provost for Graduate Academic Affairs. If the program recommends dismissal from the University the case is referred to the Office of Student Conduct and Student Conduct processes apply.

Suspension from a program means that a student will not be permitted to register for classes offered by the program or participate in other program activities until the student has been officially reinstated. The normal period of suspension is a minimum of one academic semester but will not exceed one calendar year. A student who has been suspended for academic deficiencies and who takes courses at other institutions during the period of suspension cannot automatically transfer such credit toward a degree at WVU upon readmission. Students are not eligible for readmission if they earn lower than a 2.75 at other institutions while on suspension from WVU. After one semester of satisfactory performance at WVU, and on request of the student's program, the appropriate transfer credit will be entered into the student's record.

Dismissal from a program can result from repeated failure to make academic progress, failure to meet probationary terms set forth in writing by the student's program, violations of written standards provided by the student's program, or serious violations of professional standards. A student who is dismissed from a program will not be permitted to register for classes offered by the program or participate in other program activities. A student who is dismissed from the University will not be permitted to register for any classes offered by the University for academic credit. After five calendar years from the effective date of dismissal, any student who has been dismissed shall, upon written application, be considered for reinstatement to the University with the terms of reinstatement to be established by the college or school willing to reinstate the student. Failure to meet these terms will result in permanent academic dismissal.

Reinstatement After Suspension

During the semester immediately following the effective date of suspension, suspended students may petition in writing for reinstatement. The college or school petitioned shall establish the terms of reinstatement for successful student petitions. After one calendar year from the effective date of suspension, any student who has been suspended once shall, upon written application, be reinstated to the University and to the college or school in which the student was previously enrolled, unless the student petitions for admission to another college or school. A suspended student who is reinstated under the provisions above will be placed on academic probation. Each college or school shall have the right to establish requirements or
performance expectations. After the second or any subsequent suspension, a student may be reinstated to the University provided that a college or
school agrees to reinstate the student. After a student has been reinstated, he or she must apply for readmission through the Office of Admissions.

**Appeal of Suspension or Dismissal**

See the Academic Rights, Penalties, and Appeal information in the Academic and Professional Standards section.

**Research Integrity**

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. Information on
policies and procedures, guidelines, educational programs, and monitoring and accountability in these areas is provided at oric.research.wvu.edu.

Any graduate student who conducts research using animals must have a protocol approved by the Animal Care and Use Committee before starting the
research. Information and procedures are available at oric.research.wvu.edu/animal.

Any graduate student who conducts research involving human subjects must have the approval of the Institutional Review Board for the Protection of
Human Subjects before starting the research. Information and procedures are available at oric.research.wvu.edu/human-research-protections-program-
and-the-irb.

All members of the University community are obligated to report observed, suspected, or apparent misconduct in research. Reports should be made to
the University’s research integrity officer through the link to Online Research Problem Reporting at oric.research.wvu.edu.

**Intellectual Property**

The Office of Technology Transfer is responsible for the protection and commercialization of intellectual property for all WVU organizations. Faculty
members and other researchers, including graduate students, are the primary source of intellectual property, either through the invention of new
products or processes, or through know-how and expertise in certain fields. Intellectual property can be protected through patents, copyrights,
trademarks, and trade secrets. Commercialization occurs primarily through licenses of patents and/or know-how to existing companies, and, in some
cases, through the creation of a joint venture or even a start-up company. Policies, forms, and other useful information about intellectual property and
technology transfer activities at WVU is available at techtransfer.research.wvu.edu.

**Admissions**

**In this section:**

**APPLICATION:**

- General Information
- Robert C. Byrd Health Sciences Center
- Initial Inquiry
- Transfer Students
- Adding or Changing Programs
- Minimum Admission Standards
- Standardized Tests
- Admission Denial
- Non-Degree Applicants

**CLASSIFICATIONS:**

- Regular Graduate Students
- Provisional Graduate Students
- Non-Degree Graduate Students
- Reclassification of Provisional Graduate Students
- Other Reclassifications

**INTERNATIONAL:**

- International Student Admission
APPLICATION

In this section:

• General Information
• Robert C. Byrd Health Sciences Center
• Initial Inquiry
• Transfer Students
• Adding or Changing Programs
• Minimum Admission Standards
• Standardized Tests
• Admission Denial
• Non-Degree Applicants

General Information

Applications and required fees are submitted to the Office of Graduate Admissions at grad.wvu.edu/admissions and, once complete, are forwarded to departments for review and decisions. Final admission cannot be approved until the complete prior academic record and certification of the student’s bachelor’s degree have been received and evaluated by the Office of Admissions. A student who wishes to take courses after completing a degree at WVU must submit a new application and pay the nonrefundable service fee. Any applicant who fails to enroll within a year after acceptance must reapply.

Students who wish to enroll in graduate courses (including online and off-campus courses) must be admitted to West Virginia University as a regular, provisional, or non-degree graduate student. Each program has specific admission requirements that should be carefully reviewed prior to applying. Each program requires separate admission. Degree students who have not been enrolled for two or more years must reapply for admission.

Robert C. Byrd Health Sciences Center

The graduate application for all programs including Health Sciences is available at: https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=wvugrad.

Those wishing to pursue professional degrees in Medicine (MD), Dentistry (DDS), Pharmacy (PharmD), Physical Therapy (DPT) and Law (JD) should refer to each program's website for admission requirements and application instructions.

Initial Inquiry

Prospective graduate students are urged to initially contact individual programs regarding opportunities to pursue graduate study in the program of interest. In addition to obtaining information online or through the mail, students should contact graduate program directors or individual faculty members to ascertain the potential for graduate study in particular academic and research areas. For a list of available degree and certificate programs, websites, and contacts, see the list of “Degree Programs” in this catalog and at majors.wvu.edu. Information relevant to the application process can be found at grad.wvu.edu/admissions with additional information regarding the program of interest to be found on the individual program's website.

Transfer Students

A student wishing to transfer to WVU from another accredited institution should follow the same application procedures as those specified for new graduate students.

Adding or Changing Programs

A current WVU graduate student who wishes to be admitted to an additional or to a different graduate program must contact the program to determine the procedure for applying for admission. In most cases, the student must apply to the program through the regular admissions process.

When a student changes from one program to another within the University, the faculty of the new program determines if any credit earned under the guidance of the prior program may be applied to the new program.

Minimum Admission Standards

The University Graduate Council establishes the minimum standards for admission to graduate study detailed in the “Classifications” section. Beyond this point, however, faculty members in a given graduate program control who is to be admitted to graduate study under their supervision. While a student may be admitted to the University to enroll in advanced coursework as a non-degree student, only program faculty may grant permission for the pursuit of a graduate degree.
Standardized Tests

Many programs at WVU require graduate record examination (such as the GRE or GMAT) scores from all applicants, but in no program is an examination score the sole criterion for admission. Some programs require both the general and the appropriate advanced tests before considering an applicant for admission. Other programs require different tests. Specific admission requirements are found in the admissions section of each program description within the Graduate Catalog (catalog.wvu.edu/graduate/) and at majors.wvu.edu. If GRE or GMAT tests are required, the applicant should request the Educational Testing Service to forward scores to the WVU Office of Graduate Admissions. (The code identifying WVU to the GRE is 5904.) In addition, applicants are encouraged to upload a machine-reproduced copy of their GRE or GMAT 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 graduate program coordinator. It should be noted that meeting the minimum requirements for admission into a graduate program does not ensure admission. Many programs, due to resource limitations, restrict the number of admissions by selecting the top candidates among the qualified applicants. An applicant may appeal to the program for reconsideration if he or she can document factual errors in processing the application or if the decision was deemed arbitrary, capricious, or discriminatory in nature.

If the matter is not resolved satisfactorily within thirty calendar days of the receipt of the appeal by the program, 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 twenty calendar days of the receipt of the appeal and is final.

Non-Degree Applicants

Students not wishing to pursue an advanced degree may apply for admission as non-degree graduate students through the Office of Admissions: admissions.wvu.edu/.

CLASSIFICATIONS

In this section:

• Regular Graduate Students
• Provisional Graduate Students
• Non-Degree Graduate Students
• Reclassification of Provisional Graduate Students
• Other Reclassifications

Regular Graduate Students

Regular graduate students are degree-seeking students who meet all the criteria for regular admission to a program of their choice. The student must have earned a baccalaureate degree from an accredited college or university, must have had a grade point average of 2.75 or higher on a 4.0 scale, must have met all the criteria established by the degree program, and must be under no requirements to make up deficiencies.

Provisional Graduate Students

A student may be admitted as a provisional graduate student by a program when the student has earned a baccalaureate degree from an accredited college or university, but does not meet the criteria for regular admission. The student may have incomplete credentials, deficiencies to make up, or an undergraduate scholastic record that shows promise but is below the 2.75 grade point average required for regular admission. The letter of admission from the graduate program must specify the requirements that must be met for the graduate student to be re-classified as a regular graduate student.

Non-Degree Graduate Students

A non-degree graduate student is a student not admitted to a program. Admission as a non-degree student does not guarantee admission to any course or program. The reasons for non-degree admission may be late application, incomplete credentials, scholarship deficiencies, or lack of a degree objective. Although a non-degree student has not been admitted to a graduate program, a program may allow a non-degree student to enroll in its courses. To be admitted as a non-degree student, a student must present evidence of a baccalaureate degree from an accredited college or university and a 2.5 grade point average. The student must also earn a 2.5 grade point average on the first twelve credit hours of coursework taken at WVU and then maintain this average as long as they are enrolled as a non-degree student. To be eligible to enter a degree program as a regular graduate student, the student must have earned a 2.75 or higher grade point average on all coursework taken since admission as a non-degree graduate student.

These standards are the minimum standards established by the University. Individual academic units or graduate programs may establish higher standards.
Reclassification of Provisional Graduate Students

A provisional graduate student may be reclassified as a regular graduate student when the student meets the requirements specified in the letter of admission from the student’s program. The requirements must at minimum include earning a grade point average of 2.75 or higher on all coursework and, if appropriate, satisfactory performance in ESL (English as a Second Language) courses. Individual degree programs may set higher grade point average requirements.

A unit must review the student’s record and make a final decision on the student’s admission no later than at completion of eighteen credit hours. All credit hours taken since admission as a provisional graduate student or those to be applied to a degree count in the eighteen credit-hour limit, i.e., undergraduate or graduate credit, P/F, S/U, graded courses, and transfer credit.

A student who has met the provisions of admission and achieved the required grade point average and other requirements may be reclassified as a regular graduate student. A student who fails to meet the provisions of admission or who fails to achieve the required grade point average will be suspended, but may be reinstated in order to transfer to another program or to non-degree status. The academic unit must notify the student and the Office of Admissions of its decision to admit or suspend the student.

The Office of Admissions will prohibit the registration of all provisional graduate students who have reached the maximum of eighteen credit hours. Registration will not be permitted until the student is reclassified as a regular graduate student, a provisional graduate student in a different program, or a non-degree graduate student. An exception may be granted by an academic dean. A student may be admitted as a provisional graduate student more than once, but not by the same graduate program.

Other Reclassifications

Regular and provisional students may become non-degree graduate students by choice. This includes students who fail to meet admission or academic standards or who withdraw voluntarily. A regular or provisional graduate student who is dismissed from a program for academic or other reasons will be reclassified as a non-degree graduate student.

INTERNATIONAL

West Virginia University is authorized under federal law to enroll non-immigrant foreign nationals as students. International students wishing to enroll for graduate work at WVU must comply with the academic requirements for admission and with certain additional academic and nonacademic requirements.

International applicants should forward a letter of inquiry, to the department they want to enter, one year before they wish to begin study in the United States. The University receives a large number of applications from international students. For this reason and because of the time required for the student to make visa and financial arrangements, April 1 has been established as a deadline for guaranteed consideration for fall admission. International students applying for admission to West Virginia University must submit the following:

- A completed international student admission application.
- Application fee.
- The official results of the Test of English as a Foreign Language (TOEFL). The minimum TOEFL scores needed for admission to WVU are: Internet-based = 79; paper-based = 550.
- The official results of the International English Language Testing System (IELTS), sent directly to WVU by the testing service, are also accepted for admission. A score of 6.5 on the IELTS is required.
- Original or certified copies of the applicant’s official academic record in the original language of issue. Applicants who have studied in the United States are required to have the institutions send an official transcript directly to WVU.
- Original or certified copy of all certificates or diplomas in the original language of issue.
- Official English translations of the academic record and certificates/diplomas.
- A copy of current passport or visa.

Details regarding application requirements for international graduate students can be found at admissions.wvu.edu/admissions/toefl/graduate-students. Incomplete applications cannot be guaranteed consideration for the desired semester. Applicants are encouraged to contact the academic program of interest for information about requirements other than those listed above.

International students seeking financial support as graduate teaching assistants (GTAs) are required to pass the WVU SPEAK test (see English Language Proficiency and Graduate Teaching Assistants).
Advising, Enrollment & Evaluation

In this section:

ADVISING:
- Advisors
- Plan of Study
- Advising of Non-Degree Students
- Yearly Evaluation

ENROLLMENT:
- Credit Loads and Limits
- Minimum Enrollment
- Non-Degree Students
- Auditors
- Attendance Policy
- Withdrawal Policy

GRADES:
- Grades in Graduate Courses
- Grading System
- Satisfactory/Unsatisfactory-Pass/Fail
- Grade Point Average
- Incompletes
- Repeated Courses
- Official Transcripts

Advising

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 is assigned an advisor at the time of admission or shortly thereafter. 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. In most programs the plan of study should be in place no later than the end of the student’s first semester.

Plan of Study

All graduate students must have a plan of study, which is a formal agreement between the student and their program faculty regarding the conditions the student must meet to earn the desired degree. The plan of study usually lists required courses and activities and describes the timeline for these requirements. The plan 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.

Advising of Non-Degree Students

Each dean establishes a mechanism to advise non-degree graduate students who intend to take the majority of their coursework in the dean’s college or school. Such mechanisms may include designating a faculty or staff member at an advising office or center to advise non-degree students. Non-degree students with an interest in programs in two colleges or schools may be assigned to either by the Office of Admissions. It is expected that the student will take responsibility for understanding the policies of each unit and facilitate any needed communication between advisors.
Yearly Evaluation

All graduate students who enrolled in at least one credit during the academic year are 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.

ENROLLMENT

In this section:

• Credit Loads and Limits
• Minimum Enrollment
• Non-Degree Students
• Auditors
• Attendance Policy
• Withdrawal Policy

Credit Loads and Limits

Nine credit hours is the minimum load to be considered a full-time graduate student in the fall and spring terms and six credit hours is the minimum load to be considered a full-time graduate student in the summer term. Courses taken under the audit option are counted toward attaining full-time enrollment status. Graduate students are not permitted to take more than sixteen hours in a fall or spring term or more than twelve hours in a summer term without approval by their college or school and by the Office of Graduate Education and Life. Requests for more than eighteen hours in a fall or spring semester or fifteen hours in the summer, or from students with a grade point average below 3.25 will not normally be approved.

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Minimum Enrollment

In any term during which a graduate student is using University libraries or research facilities, consulting with graduate committee members, or completing a thesis or dissertation (including the thesis or dissertation defense and submission of the ETD), the student must enroll for at least one hour of graduate credit. Students who take courses intermittently may be excused from such continuous enrollment if they are not using University facilities or consulting with faculty while they are not enrolled. However, 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. By pursuing a degree, such persons by definition are utilizing University services, facilities, and other resources, including faculty expertise; this situation continues in cases where students have completed all required coursework and are working on a thesis or dissertation. Candidates for graduate degrees who fail to maintain continuity of enrollment may be dropped from candidacy.

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

Non-Degree Students

Non-degree students are normally those taking classes for enrichment purposes, public school teachers taking classes for certification renewal, or students taking classes as prerequisites for admission to degree programs. Non-degree students may enroll in any course in the University for which they have the prerequisites and permission from the academic unit. However, some departments that cannot accommodate non-degree students may restrict enrollments to majors only or require permits.

A non-degree graduate student may accumulate unlimited graduate credit hours. If the 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 to the degree. Under no circumstances may a non-degree student apply more than twelve hours of previously earned credit toward a degree.

Auditors

An auditor may register for courses and must pay full fees but does not receive credit for the course. A student who audits a course must let one semester pass before enrolling in the course for credit. A student may change his or her status from audit to grade or grade to audit only during the registration period. Attendance requirements for auditors are determined by the instructor of the course. The instructor may direct the Office of the University Registrar to remove an auditor from a class list or grade report if attendance requirements are not met.

Attendance Policy

IMPORTANCE OF CLASS ATTENDANCE

At West Virginia University, class attendance contributes significantly to academic success. Students who attend classes regularly tend to earn higher grades and have higher passing rates in courses. Excessive absences may jeopardize students’ grades or even their ability to continue in their courses.
There is a strong correlation between regular class attendance and academic success. Faculty are strongly encouraged to require attendance in all 100-level classes. (*)

ATTENDANCE POLICIES

Instructors must set attendance policies that are appropriate for the goals and instructional strategies of their courses. Instructors may include attendance records in determining the final course grade. All attendance policies that affect students’ grades must be announced in writing within the first week of class. Moreover, instructors are responsible for keeping accurate enrollment records, and for keeping accurate attendance records when attendance is used in grading. Attendance policies thought to violate the statement on student attendance should first be discussed with the instructor, then with the department chair, and finally the college dean, if necessary.

CLASS ABSENCES

Students who are absent from class for any reason are responsible for all missed work and for contacting their instructors promptly, unless the instructors’ policies require otherwise. However, instructors cannot require documentation of student illness from any medical provider as part of an attendance policy, since medical conditions are confidential and frequently not verifiable.

MAKE-UP EXAMINATIONS

Students absent from regularly scheduled examinations because of authorized University activities will have the opportunity to take them at an alternate time. Such make-up examinations should be of comparable difficulty to the original examination. Students in courses with regularly scheduled evening examinations shall have the opportunity to make up these examinations if they miss them in order to attend a regularly scheduled class that meets at the same time. Such make-up examinations should be of comparable difficulty to the original examination. Attendance at a regularly scheduled evening examination will not excuse a student from a regularly scheduled class that meets at the same time as the examination.

DAYS OF SPECIAL CONCERN

Instructors are urged not to schedule examinations or field trips on “Days of Special Concern” that are identified in the Schedule of Courses.

Withdrawal Policy

There are two types of withdrawals: withdrawal from individual courses for which a student has registered and a complete withdrawal from the University. Deadlines for withdrawals for each semester are available at: http://registrar.wvu.edu/current_students/withdrawal_policies. If students follow all established University procedures and withdraw before the published deadline, they will receive a W on their transcript. The grade point average is not affected in any way by this mark. If formal withdrawal procedures are not executed by the student, a failing grade/s will be recorded. It is the student’s responsibility to see that all forms are properly executed and delivered to the appropriate authorities for recording.

WITHDRAWAL/DROP FROM INDIVIDUAL CLASSES

Students may drop individual classes within a term based on established deadlines. These deadlines are posted on the Office of the University Registrar’s website. Students, with the help of their academic advisors, are responsible for determining:

• If their course load would be reduced below the minimum requirement set by their program
• If their course load would be reduced below the minimum hours required to qualify for a graduate assistantship, financial aid, or international full-time student status
• If the course to be dropped is a co-requisite for another course the student is taking or a prerequisite for a course required the following semester.

The student may be required to drop the co-requisite course or asked to take a substitute course the following semester.

WITHDRAWAL FROM ALL CLASSES FOR THE TERM

Students may withdraw from WVU for the term in which they are enrolled at anytime before the last day of classes of the term on which regular classes are scheduled to meet. Students will receive grades of W in all classes for that term.

PROCEDURES

1. To withdraw from all classes through the last day to drop a class with a W, a student would log on to their MIX account and drop their classes through STAR.
2. To withdraw from the term after the last day to drop a class with a W, a student must submit a request to the Office of the University Registrar. Instructions for submitting this request (in person or by email, mail, or fax) are found on the Office of the University Registrar’s website (http://registrar.wvu.edu/current_students/withdrawal_policies).

Important Notice: Financial aid recipients who withdraw from all classes before sixty percent of the term is completed may be required to return a portion of any financial aid that was received for the term. Students who do not receive at least one passing grade for classes in a term must provide documentation which verifies continued participation in educational activities. If documentation cannot be provided, those students are considered to have informally withdrawn from WVU prior to sixty percent of the term and may be required to return a portion of any financial aid which was received. This review and return of financial aid is done in accordance with federal regulations.
RE-ENROLLMENT AFTER WITHDRAWAL

After a student withdraws from WVU in two consecutive semesters (excluding summer sessions), a student may not register for further work without approval of the dean of the college or school in which the student wants to register. Enrollment is subject to conditions set by that dean. In the case of a general studies major, the student must seek approval from the director of the University College.

GRADES

In this section:

• Grades in Graduate Courses
• Grading System
• Satisfactory/Unsatisfactory-Pass/Fail
• Grade Point Average
• Incompletes
• Repeated Courses
• Official Transcripts

Grades in Graduate Courses

Letter grades are assigned in many graduate courses. Grades of C or below are considered substandard. Some programs allow credit for courses in which a grade of C is earned; others do not.

Grading System

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent (Given only to students of superior ability and attainment)</td>
</tr>
<tr>
<td>B</td>
<td>Good (Given only to students who are well above average but not in the highest group.)</td>
</tr>
<tr>
<td>C</td>
<td>Fair (Average for undergraduate students.)</td>
</tr>
<tr>
<td>D</td>
<td>Poor but passing (Cannot be counted for graduate credit.)</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal from a course before the date specified in the University calendar.</td>
</tr>
<tr>
<td>P</td>
<td>Pass (See Pass/Fail grading below)</td>
</tr>
<tr>
<td>X</td>
<td>Auditor, no grade and no credit.</td>
</tr>
<tr>
<td>CR</td>
<td>Credit but no grade</td>
</tr>
<tr>
<td>PR</td>
<td>Progress; final grade to be issued at end of second semester (HSC)</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>H</td>
<td>Honors course (Professional school courses only)</td>
</tr>
<tr>
<td>IF</td>
<td>Incomplete grade not removed by next regular term (Computed as an F.)</td>
</tr>
<tr>
<td>UF</td>
<td>Unforgivable F (Not eligible for D/F repeat policy.)</td>
</tr>
</tbody>
</table>

Note: Grades that are not reported by faculty at the end of a term will be designated with an NR on the official transcript. Grades that are not reported will become an F at the conclusion of the next semester if a final grade is not submitted.

Satisfactory/Unsatisfactory - Pass/Fail Grading

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

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

Grade Point Average

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.
The grade point average is computed on all work for which a student registers, with the following exceptions:

- Courses with a grade of W, P, S, and X carry no grade value. The grade of incomplete (I) initially carries no grade value.
- When a student receives the grade of I and the incomplete grade is later removed, the grade point average is calculated on the basis of the new grade. If the I grade is not removed within the next semester, the grade is treated as an F (failure).
- If a student is working toward teacher certification, he or she is responsible for every registration in a course in which the grade of A, B, C, D, F, P, X or I is received.

GRADE POINT AVERAGE

All academic units of the University have minimum standards of scholastic quality that must be met or exceeded. Grade point average (GPA) is computed on grades earned in courses taken at WVU and institutions in the West Virginia system of higher education; beginning in January 2012, grades earned in baccalaureate-level college work attempted at other accredited institutions are also included in the calculation of the overall GPA. To be eligible to receive a baccalaureate, a student must have a GPA of at least 2.0 at the time of graduation. Some degree programs require a higher grade point average overall or in the major courses. GPA is based on all work for which a student received a letter grade other than W, and P. See D/F Repeat Policy. The grade point average for honors consideration for a baccalaureate is based on baccalaureate-level college work attempted at WVU as well as other accredited institutions.

Students are responsible for knowing their grade point standing and can obtain the necessary information from their advisor or the dean of their college or school. GPA is determined according to the method described in the section on grade points.

GPA CALCULATION

1. Students need to know how to calculate their overall and semester grade point averages. The following example shows how to do it. Assume you are registered for 16 hours and receive the following grades in these courses:
   - A. English 101 – B
   - B. Mathematics 126 - A
   - C. Geology 101 - C
   - D. Political Science 101 - B
   - E. Spanish 101 - D
   - F. Psychology 201 - P

2. Course, Credits, Grade, Value, Credits x Value, Grade Points Earned
   - A. English 101, 3, B, 3, 3 x 3 = 9
   - B. Geology 101, 3, C, 2, 3 x 2 = 6
   - C. Spanish 101, 3, D, 1, 3 x 1 = 3
   - D. Mathematics 126, 3, A, 4, 3 x 4 =12
   - E. Political Sci. 101, 3, B, 3, 3 x 3 = 9
   - F. Psychology 201, 1, P, 0, 1 x 0 = 0

3. Multiply the credit by the grade value to get the grade points earned for each course

4. Add the total grade points, in this case, 39.

5. Divide the total grade points earned by the total credit hours with a grade value. Remember that P grades have no grade value, so in this case, there are 15 credit hours for the GPA calculation: 39 divided by 15 = grade point average of 2.6.

Incompletes

The grade of “I” is given when the instructor believes that the coursework is unavoidably incomplete or that a supplementary examination is justifiable. Before any graduate degree can be awarded, the grade of “I” must be removed either by finishing the incomplete or by having it recorded as a permanent incomplete. Only the instructor who recorded the “I” or, if the instructor is no longer at WVU, the chairperson of the unit in which the course was given, may initiate either of these actions. When a student receives a grade of incomplete and later removes that grade, the grade point average is recalculated on the basis of the new grade. If a student does not remove the “I” grade within the next semester, the grade of “I” is treated as an
“IF” (failure). The dean or designee of the appropriate college or school may allow a student to postpone removal of the “I” grade if a delay can be justified.

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Repeated Courses

Courses repeated that cannot be taken again for credit follow this procedure:

1. The original grade is included in determining the overall GPA. It 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

Students can order official transcripts through their MIX account at any time or go to http://registrar.wvu.edu/transcripts. All orders require a valid e-mail address and a credit/debit card which will be charged by e-Pay West Virginia once the transcript request has been entered and a confirmation number is provided.

Before ordering a transcript, students should log on to their MIX account to ensure that all grades and degree(s) have been posted. Transcript requests are processed immediately. They are not held for posting of final grades and/or degrees.

All financial obligations to West Virginia University must be cleared before transcripts can be released. Transcripts may not be picked up by another party unless the student has given written authorization with the request. The designated person will be expected to show a picture I.D. before obtaining the transcript.

A West Virginia University transcript is a complete record of a student’s enrollment at WVU. This includes all undergraduate, graduate, and professional courses. Partial transcripts are not available.

Academic Calendar

FALL 2014

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, August 14</td>
<td>New Student Orientation</td>
</tr>
<tr>
<td>Friday, August 15</td>
<td>General Registration</td>
</tr>
<tr>
<td>Monday, August 18</td>
<td>On-Campus First Day of Classes</td>
</tr>
<tr>
<td>Friday, August 22</td>
<td>Last Day to Register, Add New Courses, Make Section Changes, Change Pass/Fail and Audit</td>
</tr>
<tr>
<td>Monday, September 1</td>
<td>Labor Day Recess: University Closed</td>
</tr>
<tr>
<td>Thursday, September 25</td>
<td>Rosh Hashanah (Day of Special Concern)</td>
</tr>
<tr>
<td>Friday, October 3</td>
<td>Last Day to Apply for December Graduation</td>
</tr>
<tr>
<td>Friday, October 3</td>
<td>Mid-Semester</td>
</tr>
<tr>
<td>Saturday, October 4</td>
<td>Yom Kippur (Day of Special Concern)</td>
</tr>
<tr>
<td>Friday, October 10 by noon</td>
<td>Mid-Semester Reports Due</td>
</tr>
<tr>
<td>Monday, October 13 thru Tuesday, October 14</td>
<td>Fall Break Recess</td>
</tr>
<tr>
<td>Friday, October 24</td>
<td>Last Day to Drop a Class</td>
</tr>
<tr>
<td>Tuesday, November 4</td>
<td>General Election Day: University Closed</td>
</tr>
<tr>
<td>Tuesday, November 11</td>
<td>Veterans Day (Day of Special Concern)</td>
</tr>
<tr>
<td>Wednesday, November 12</td>
<td>Birth of Baha’u’llah (Day of Special Concern)</td>
</tr>
<tr>
<td>Saturday, November 22 thru Sunday, November 30</td>
<td>Fall Recess</td>
</tr>
<tr>
<td>Sunday, December 7</td>
<td>December Convocation</td>
</tr>
<tr>
<td>Monday, December 8</td>
<td>Last Day to Withdraw from the University</td>
</tr>
<tr>
<td>Tuesday, December 9</td>
<td>Last Day of Classes</td>
</tr>
<tr>
<td>Wednesday, December 10</td>
<td>Prep Day for Finals</td>
</tr>
<tr>
<td>Thursday, December 11 thru Wednesday, December 17</td>
<td>Final Exam Week</td>
</tr>
<tr>
<td>Thursday, December 18</td>
<td>Winter Recess Begins</td>
</tr>
</tbody>
</table>
Friday, December 19  
December Convocation

Friday, December 26  
Degree Conferring Date

## SPRING 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, January 8</td>
<td>New Student Orientation</td>
</tr>
<tr>
<td>Friday, January 9</td>
<td>General Registration</td>
</tr>
<tr>
<td>Monday, January 12</td>
<td>On-Campus First Day of Classes</td>
</tr>
<tr>
<td>Friday, January 16</td>
<td>Last Day to Register, Add New Courses, Make Section Changes, Change Pass/Fail and Audit</td>
</tr>
<tr>
<td>Monday, January 19</td>
<td>Martin Luther King’s Birthday Recess: University Closed</td>
</tr>
<tr>
<td>Thursday, February 19</td>
<td>Chinese New Year (Day of Special Concern)</td>
</tr>
<tr>
<td>Friday, February 27</td>
<td>Mid-Semester</td>
</tr>
<tr>
<td>Friday, March 6 by noon</td>
<td>Mid-Semester Reports Due</td>
</tr>
<tr>
<td>Friday, March 6</td>
<td>Last Day to Apply for May Graduation</td>
</tr>
<tr>
<td>Friday, March 20</td>
<td>Last Day to Drop a Class</td>
</tr>
<tr>
<td>Saturday, March 21</td>
<td>Naw-Ruz (Day of Special Concern)</td>
</tr>
<tr>
<td>Saturday, March 21 thru Sunday, March 29</td>
<td>Spring Recess</td>
</tr>
<tr>
<td>Friday, April 3</td>
<td>Friday Before Easter Recess: University Closed</td>
</tr>
<tr>
<td>Saturday, April 4</td>
<td>Passover (Day of Special Concern)</td>
</tr>
<tr>
<td>Tuesday, April 21</td>
<td>Feast of Rivdan (Day of Special Concern)</td>
</tr>
<tr>
<td>Thursday, April 30</td>
<td>Last Day to Withdraw from the University</td>
</tr>
<tr>
<td>Friday, May 1</td>
<td>Last Day of Classes</td>
</tr>
<tr>
<td>Monday, May 4 thru Saturday, May 9</td>
<td>Final Exam Week</td>
</tr>
<tr>
<td>Friday, May 15 thru Sunday, May 17</td>
<td>Commencement</td>
</tr>
<tr>
<td>Saturday, May 16</td>
<td>Alumni Day</td>
</tr>
</tbody>
</table>

## 12-Week Summer Session 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, May 18</td>
<td>Registration</td>
</tr>
<tr>
<td>Monday, May 18</td>
<td>On-Campus First Day of Classes</td>
</tr>
<tr>
<td>Monday, May 25</td>
<td>Memorial Day Recess: University Closed</td>
</tr>
<tr>
<td>Friday, June 26</td>
<td>Final Exam for First Six-Week Session</td>
</tr>
<tr>
<td>Friday, July 3</td>
<td>Independence Day Recess: University Closed</td>
</tr>
<tr>
<td>Friday, August 7</td>
<td>Final Exam for Second Six-Week Session and 12-Week Session</td>
</tr>
<tr>
<td>Friday, August 14</td>
<td>Degree Conferring Date (No Ceremonies)</td>
</tr>
</tbody>
</table>

## Degree Regulations

Information in the "Degree Regulations" section applies to all master’s degrees and to all other research doctoral degrees (Ph.D., Ed. D. etc.). Professional doctoral degrees have separate guidelines.

### In this section:

**TIME LIMITS:**
- Master’s Degree
- Doctoral Degree

**COMMITTEES:**
- General Requirements for All Graduate Committees
- Master’s Thesis Committees
- Doctoral Dissertation Committees
REQUIREMENTS:
• Master's Degree Requirements
• Doctoral Degree Requirements
• Foreign Language Competency
• Multiple Graduate Degrees
• Previous Courses and Credits
• GPA Standards
• Graduation

THESES & DISSERTATIONS:
• Theses and Dissertations
• Defense
• Submission

TIME LIMITS
In this section:
• Master's Degree
• Doctoral Degree

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 degree requirements must be satisfactorily completed within a period of eight years immediately preceding the conferring of the degree. Courses completed in the same term as degree conferral (fall, spring, summer) 8 years previously are considered to fall within the 8-year limit. 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, for example, be required to complete specific activities (such as repeating all or some of the course or completing a set of readings). The instructor then assesses the student's knowledge of course material (through such means as a written or oral examination, a paper, a project, or some other assessment) and determines 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 describing the revalidation process and supporting the revalidation 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. The rationale for this limit is to insure that students earning a doctoral degree have current knowledge (no more than five years old) in their field. In the event a student fails to complete the doctorate within five years after admission to candidacy (calculated from the beginning of the academic term following admission to candidacy), an extension may be requested. The extension may be requested before or after the candidacy period expires, but only after the student repeats the program’s examination for admission to candidacy or an alternate procedure (approved by the student’s 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 insure 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 student’s 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. Include information about any leaves of absence approved for the student.
• A description of the procedures followed to insure the student’s academic competence and up-to-date knowledge in the field of study (repetition of the admission to 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.
• Evidence of endorsement of the request from the student’s advisory committee and the office of the dean.

COMMITTEES
In this section:
• General Requirements for All Graduate Committees
• Master’s Thesis Committees
• Doctoral Dissertation Committees

General Requirements for All Graduate Committees
The majority of the members of any graduate thesis or dissertation committee must be regular members of the graduate faculty, including the chair of the committee. No more than one person may be a nonmember of the graduate faculty. No family member may serve on the graduate committee of his or her relative. All graduate thesis and dissertation committees are subject to the approval of the chairperson or designee of the department/division 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 status of a member of the committee is downgraded. 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 are subject to the rules of individual programs. It is recommended that such committees include a majority of graduate faculty members (regular or associate).

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.

Doctoral Dissertation Committees
Doctoral dissertation committees consist of no fewer than five members. At least one member of the committee must be from a department other than the one in which the student is seeking a degree.

REQUIREMENTS
In this section:
• Master’s Degree Requirements
• Doctoral Degree Requirements
• Foreign Language Competency
• Multiple Graduate Degrees
• Previous Courses and Credits
• GPA Standards
• Graduation

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. credits. 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 on the accumulation of credit hours. The three requirements of the degree are admission to candidacy, residency, and completion and defense of a dissertation. The program of doctoral 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.
ADMISSION TO DOCTORAL CANDIDACY

Admission to graduate study and enrollment in graduate courses do not in themselves 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 different label in different programs) and by meeting other requirements specified by the program. The doctoral student’s competency is generally assessed and verified through a candidacy examination in a reasonable period of time after acceptance into a 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 too long a period of time (refer to the section on time limits for the doctoral degree).

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 insure 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 members vote to fail the student, all or part of the candidacy examination must be repeated. Academic tradition does not allow a candidacy examination to 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 insure 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 approved by the college or school dean or designee.

Foreign Language Competency

Competence in one or more foreign languages may be a requirement in some graduate degree programs. The faculty in the program specifies the language or languages and the level of competence to be demonstrated. Students should contact their graduate program coordinator or chair for more information.

Multiple Graduate Degrees

University policy permits students to obtain more than one graduate degree. Except in the case of some approved dual master’s degree programs, a separate application is required for each program. Each application must be accompanied by payment of a nonrefundable application fee.

A student desiring to obtain more than one graduate degree with the same degree conferral date may simultaneously apply up to twelve credit hours to more than one graduate degree program. Individual graduate units may allow a smaller maximum number of shared credit hours to be applied to their program as a general rule and may determine which courses and credits may or may not be applied to their program by an individual student. The student must complete all specific program requirements for each degree.

A student desiring to obtain a subsequent graduate degree after conferral of another WVU graduate degree may apply up to twelve credit hours earned prior to the conferral of the prior degree to the subsequent degree. Individual graduate units may allow a smaller maximum number of prior credit hours to be applied to their program as a general rule and may determine which courses and credits may or may not be applied to their program by an individual student. The student must complete all specific program requirements for the subsequent graduate degree.

Previous Courses and Credits

Graduate programs may accept up to 12 credits from another institution as transfer graduate credit by requesting that the Office of the Registrar post the transfer credits to the student’s record. Individual graduate units may have lower limits. Non-degree graduate students are not permitted to transfer credit to WVU from another institution.

Up to 15 credits of graduate course work completed at WVU through the senior petition process (see the Undergraduate Catalog) may be applied to graduate program requirements.

Individual graduate units may allow a smaller maximum number of previously earned credit hours to be applied to their program as a general rule and may determine which courses and credits may or may not be applied to their program by an individual student.

GPA Standards

A minimum GPA of 2.75 is required for graduation. Individual academic units may designate a higher GPA or other academic standards required for students to graduate.
Graduation

Students anticipating completion of all degree requirements by the end of a term must complete an Application for Graduation (see registrar.wvu.edu/current_students) by the posted deadline for that term. The candidate must 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.

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

THESES & DISSERTATIONS

In this section:

• Theses and Dissertations
• Defense
• Submission

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 candidate’s individual investigation and must embody a definite contribution to knowledge. Regulations concerning the constitution of thesis and dissertation committees are in the section on graduate committees.

Defense

After the thesis or dissertation committee has tentatively approved the student’s written thesis or dissertation, the final defense can be scheduled. This defense is usually held in the term in which all other requirements for the degree are to be met. At the option 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 three weeks before the defense date. All dissertation defenses are open to the public and the university community.

The student cannot be considered as having satisfactorily passed their defense if there is more than one unfavorable vote among members of the committee. Results of each defense must be reported to the college or school dean or designee within twenty-four hours. If the defense is not passed, a repeat of the defense may not be scheduled without approval by the college or school dean or designee.

The student and all committee members are expected to be physically present for a defense. In extraordinary circumstances, and only with the approval of the college or school dean or designee, an individual may attend by audio or videoconference (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 substitute for one of the committee members during the defense, provided that the original committee member was not the chair. There can be no substitute for the chair. Only one substitute is allowed, and the request for a substitute must be made in writing to the dean or designee prior to the examination. The request for a substitute 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 status 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 shuttle sheet; 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.

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. Information about formatting, submission, and approval of electronic theses and dissertations is available at thesis.wvu.edu.

FERPA

In this section:

• Notice to Students Regarding FERPA
• Designation of Directory Information
• Designation of Limited Use Directory Information
• Withholding Directory Information
• Parent/Guest Access to Online Student Records

Notice to Students Regarding FERPA

Students at West Virginia University and its divisional campuses ("WVU" or "University") benefit from the Family Educational Rights and Privacy Act of 1974. This Act, with which West Virginia University intends to comply fully, was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. A more detailed explanation of rights afforded to students by FERPA can be found at: http://ferpa.wvu.edu/policy.

Designation of Directory Information

WVU designates the following categories of student information as public or "Directory Information." This information may be disclosed at West Virginia University’s discretion for any purpose:

• 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 (i.e., freshman)
• Enrollment Status (i.e., 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”)

Accordingly, this information will not be provided to external parties not contractually affiliated with the University. Use and disclosure of this information shall be limited to (1) 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; (2) those officials within the University who have access, consistent with the Family Educational Rights and Privacy Act, to such information and only in conjunction with an official institutional purpose.

Withholding Directory Information

Currently enrolled students, using the official West Virginia University Confidentiality form, may withhold disclosure of Directory Information under the Family Educational Rights and Privacy Act of 1974. To withhold disclosure, written notification must be received in the Office of the University Registrar at West Virginia University, PO Box 6878, Morgantown, WV 26506. Official forms requesting the withholding of Directory Information are available in the Office of the Registrar. Such requests will be processed as soon as is practicable upon receipt. The failure on the part of any student to specifically request, on the official form, the withholding of Directory Information indicates individual approval for disclosure. Additionally, a request to withhold Directory Information shall have no effect on previous disclosures, if any, made by WVU before the receipt of a request to withhold Directory Information; nor will a student’s request to withhold Directory Information revoke an otherwise valid written FERPA release already on file with the University.

Parent/Guest Access to Online Student Records

The Parent/Guest Portal is now the exclusive method by which a University student may grant a third-party access to his or her records. Now, information that is protected from disclosure pursuant to the Family Educational Rights and Privacy Act (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. Due to the protection of students’ rights under FERPA, a student may restrict the information that a parent or guest is able to access and revoke access at any time. For more information on the Parent/Guest Portal, please visit: http://parent-guest.portal.wvu.edu/.

For FERPA updates and more information on West Virginia University’s FERPA policy, please visit: http://ferpa.wvu.edu or contact Legal Affairs at: 304.293.5841.

Financial Aid

In this section:

APPLY FOR AID:
- Application Process
- Aid Offer Notification
- Employment Opportunities

POLICIES:
- Satisfactory Academic Progress
- Consequences of Withdrawal

FELLOWSHIPS & ASSISTANTSHIPS:
- Information and Policies on Fellowships and Assistantships

APPLY FOR AID

In this section:
- Application Process
- Aid Offer Notification
- Employment Opportunities

Each year, two out of three WVU students qualify for some type of financial aid, totaling over $400 million. To receive an offer of aid, you must be admitted to WVU as a degree seeking student. If you feel you need financial assistance, apply—and apply early. The application process is free and easy.

Application Process

To apply for financial aid, first apply for a US Department of Education student PIN and a parent PIN (if you are considered a dependent student for financial aid purposes) at www.pin.ed.gov (http://www.pin.ed.gov). You will use the PIN to sign your online Free Application for Federal Student Aid (FAFSA), review your processed information, correct FAFSA data, and conduct other important business directly with the US Department of Education. Save the PIN you are issued because you will need it for future transactions.

Complete the FAFSA at www.fafsa.gov (http://www.fafsa.gov) and include WVU’s school code – 003827 – on your application. Submit the FAFSA prior to March 1 for full consideration. If you prefer to complete a paper FAFSA, you can request one by calling the Federal Student Aid Information Center at 800-433-3243. The FAFSA is completed annually. You must renew the FAFSA to receive consideration for aid.

Aid Offer Notification

WVU will receive your information electronically if you included our school code on your FAFSA. After your FAFSA is reviewed for accuracy, an award notification will be sent. First time freshman will be notified through paper letter. All other students are notified via their MIX email account. Your MIX email account is the major mode of communication for the University. Therefore, it is imperative that you check your MIX email account regularly.

Employment Opportunities

The Office of Student Employment can assist students in securing on-campus and off campus job opportunities. For assistance go to http://studentemployment.wvu.edu or call 304-293-9270.
POLICIES

In this section:
- Satisfactory Academic Progress
- Consequences of Withdrawal

Satisfactory Academic Progress

Students who wish to receive funds administered by the Financial Aid Office must make measurable academic progress toward completion of an eligible degree. Regulations require evaluation both quantitative (required GPA) and qualitative (successful completion of a % of all attempted hours) as well as degree completion within 150% of the number of hours required for the degree (undergraduates only).

Undergraduates must complete at least 67% of all attempted hours with the following GPA:
- 1-28 attempted hours - 1.4 GPA
- 29-58 attempted hours - 1.7 GPA
- 59-88 attempted hours - 1.9 GPA
- 89 or more attempted hours - 2.0 GPA

Graduate students must complete at least 70% of all attempted hours with a 2.75 GPA.

Professional students must complete at least 70% of all attempted hours with the following GPA:
- Law (JD): 2.2 GPA
- Pharmacy (PharmD): 2.5 GPA
- Dentistry (DDS): 2.0 GPA
- Medicine (MD): no GPA determined
- Physical Therapy (DPT): 3.0 GPA

The complete Satisfactory Academic Progress policy is available online at financialaid.wvu.edu.

Consequences of Withdrawal

If a student receives financial aid and withdraws, the student will be subject to the Refund and Repayment Policy. Federal regulations require that WVU calculate eligibility for students who completely withdraw or are dismissed before completing the enrollment period. Students who receive all unsatisfactory grades (defined as at least one “F” and no passing grades) at the end of the grading period will be considered unofficially withdrawn at the semester mid-point unless documentation is available that demonstrates continued class participation. Application of this policy may result in the necessity for a student to return financial aid funds to various Title IV federal aid programs.

A student earns Title IV federal aid based upon the length of time the student remains enrolled during the enrollment period. Students who withdraw on or before completing more than 60% of the semester may be required to return a portion of federal financial assistance. The determination of 60% of the term is computed by dividing the total number of calendar days in the term into the number of calendar days completed as of the date of withdrawal. Scheduled breaks of five consecutive days or more are excluded. The percentage of Title IV assistance which the student has earned is equal to this percentage of the term completed. If the withdrawal occurs after more than 60% of the term is completed, the percentage earned is considered to be 100%.

If more Title IV aid was disbursed than was earned by the student, WVU is required to return the less of (1) the unearned aid percentage of institutional charges or (2) the unearned aid percentage applied to the total Title IV aid received. The student must return unearned aid for which s/he is responsible after subtracting the amount the school will return. Funds are returned in the following order:

1. Unsubsidized Direct Stafford Loan
2. Perkins Loan
3. Direct PLUS (Graduate Student)

The return of financial aid may result in unpaid charges to WVU for tuition/fees and room/board. WVU will bill the student for any balance due. Students who owe a repayment to any federal financial aid program are no longer eligible for financial aid at any post-secondary institution. Eligibility may be regained after repayment is satisfied.

If less Title IV aid was disbursed than was earned by the student, the student is entitled to a post-withdrawal disbursement within thirty days of withdrawal.
Additional Information

For more information on applying and maintaining financial aid eligibility while enrolled at WVU, visit our website at financialaid.wvu.edu.

FELLOWSHIPS AND ASSISTANTSHIPS

For information and policies about fellowships and graduate assistantships (including application procedures, terms of employment, policies on remuneration, English language proficiency requirements, and consequences of withdrawal), visit the Office of Graduate Education and Life website at grad.wvu.edu.

Programs, Courses & Credits

In this section:

PROGRAMS:
- Official Program Designations
- Programs Offered by WVU
- Academic Certificate Matriculation and Award Policy
- Graduate Certificate Programs
- Approved Dual Master’s Degree Programs
- Academic Innovation

PROGRAMS

In this section:
- Official Program Designations
- Programs Offered by WVU
- Academic Certificate Matriculation and Award Policy
- Graduate Certificate Programs
- Approved Dual Master’s Degree Programs
- Academic Innovation

Official Program Designations

- **Degree program**: A degree program is an area of study approved as such by the institution and the Board of Governors (BOG) and listed on the official inventory of degree programs (e.g., English, social work, physical education, foreign languages). The 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, is represented by the official degree designation (e.g., B.A.—bachelor of arts, B.S.—bachelor of science, etc.)

- **Major**: A major is a field of study within an approved degree program, having its own curriculum. A degree program may have more than one major.

- **Area of Emphasis**: An area of emphasis is a specific subject area within an approved degree program and major. Normally, a minimum of 12 credit hours and no more than 18 credit hours are expected for an area of emphasis within a baccalaureate degree program. Normally, a minimum of 6 and no more than 12 credit hours would be expected for an area of emphasis within a graduate degree program.

- **Minor**: A minor is an area of study outside of the major that encourages students to pursue a secondary field. Students may not earn a minor in the same field as their major. Requirements for a minor are set by the academic unit offering the minor and must include at least 15 hours of coursework, with a minimum of 9 hours at the upper division level (course numbers 300 or above). Minors are only available to students earning a baccalaureate degree students.

- **Certificate program**: A certificate program is a coherent, specialized curriculum designed for students in search of a specific body of knowledge for personal/career development or professional continuing education. Normally, a minimum of 12 and no more than 21 credit hours constitute a certificate program at the baccalaureate or graduate level.

Programs Offered by WVU

By College

- Agriculture, Natural Resources, and Design - Davis College of
- Arts & Sciences - Eberly College of
- Business and Economics
• Creative Arts
• Dentistry - School of
• Education and Human Services
• Engineering and Mineral Resources - Benjamin M. Statler College of
• Law - College of
• Media - Reed College of
• Medicine - School of
• Nursing - School of
• Pharmacy - School of
• Physical Activity and Sport Sciences
• Public Health - School of
• University College

## COLLEGE OF BUSINESS AND ECONOMICS

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<thead>
<tr>
<th>Program</th>
<th>Bachelor's</th>
<th>Master's</th>
<th>Doctoral/Professional</th>
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<tbody>
<tr>
<td>Accounting</td>
<td>B.S.B.Ad.</td>
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<tr>
<td>Business Administration</td>
<td></td>
<td>M.B.A.</td>
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<tr>
<td>Business Administration - AOE: Accounting</td>
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<td>Ph.D.</td>
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<tr>
<td>Business Administration - AOE: Finance</td>
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<td>M.B.A.</td>
<td>Ph.D.</td>
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<tr>
<td>Business Administration - AOE: Marketing</td>
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<td>Ph.D.</td>
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<tr>
<td>Business Administration - AOE: Management</td>
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<td>Ph.D.</td>
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<tr>
<td>Business Management - AOE: Hospitality</td>
<td>B.S.B.Ad.</td>
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<tr>
<td>Business Management - AOE: International</td>
<td>B.S.B.Ad.</td>
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<tr>
<td>Business Management - AOE: Small Business</td>
<td>B.S.B.Ad.</td>
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<tr>
<td>Business Management - AOE: Supply Chain</td>
<td>B.S.B.Ad.</td>
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<tr>
<td>Economics</td>
<td>B.S.</td>
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<tr>
<td>Economics - AOE: International Economics</td>
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<td>Ph.D.</td>
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<tr>
<td>Economics - AOE: Financial Economics</td>
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<td>Ph.D.</td>
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<td>Economics - AOE: Monetary Economics</td>
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<td>Economics - AOE: Public Economics</td>
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<tr>
<td>Economics - AOE: Regional &amp; Urban Economics</td>
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<tr>
<td>Economics - AOE: Resource Economics</td>
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<tr>
<td>Finance</td>
<td>B.S.B.Ad.</td>
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<td>M.S.</td>
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<td>Finance - AOE: Energy</td>
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<td>M.S.</td>
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<tr>
<td>General Business</td>
<td>B.S.B.Ad.</td>
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<tr>
<td>Hospitality &amp; Tourism Management</td>
<td>B.S.B.Ad.</td>
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<td>Industrial Relations</td>
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<td>M.S.</td>
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<tr>
<td>Management Information Systems</td>
<td>B.S.B.Ad.</td>
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### COLLEGE OF CREATIVE ARTS

<table>
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<tr>
<th>Program</th>
<th>Bachelor's</th>
<th>Master's</th>
<th>Doctoral/Professional</th>
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</thead>
<tbody>
<tr>
<td>Art - AOE: Art Education</td>
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<td>M.A.</td>
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<tr>
<td>Art - AOE: Art History</td>
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<td>M.A.</td>
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<tr>
<td>Art - AOE: Studio Art</td>
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<td>M.A.</td>
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<tr>
<td>Art History</td>
<td>B.A.</td>
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<tr>
<td>Art and Design - AOE: Certification K-12</td>
<td>B.F.A.</td>
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<tr>
<td>Art and Design - AOE: Ceramics</td>
<td>B.F.A.</td>
<td>M.F.A.</td>
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<tr>
<td>Art and Design - AOE: Graphic Design</td>
<td>B.F.A.</td>
<td>M.F.A.</td>
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<tr>
<td>Art and Design - AOE: Intermedia/Photography</td>
<td>B.F.A.</td>
<td>M.F.A.</td>
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<tr>
<td>Art and Design - AOE: Painting</td>
<td>B.F.A.</td>
<td>M.F.A.</td>
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<tr>
<td>Art and Design - AOE: Printmaking</td>
<td>B.F.A.</td>
<td>M.F.A.</td>
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<tr>
<td>Art and Design - AOE: Sculpture</td>
<td>B.F.A.</td>
<td>M.F.A.</td>
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<tr>
<td>Music</td>
<td>B.A.</td>
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<tr>
<td>Music - AOE: Collaborative Piano</td>
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<td>M.M.</td>
<td>Ph.D./D.M.A.</td>
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<tr>
<td>Music - AOE: Music Composition</td>
<td>B.M.</td>
<td>M.M.</td>
<td>Ph.D./D.M.A.</td>
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<tr>
<td>Music - AOE: Music Education</td>
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<td>Ph.D./D.M.A.</td>
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<tr>
<td>Music - AOE: Music Education: Vocal, General, Instrumental</td>
<td>B.M.</td>
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<tr>
<td>Music - AOE: Music History</td>
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<td>M.M.</td>
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<tr>
<td>Music - AOE: Music Theory</td>
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<td>M.M.</td>
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<tr>
<td>Music - AOE: Performance: Conducting</td>
<td>M.M.</td>
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<td>Ph.D./D.M.A.</td>
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<tr>
<td>Music - AOE: Performance: Guitar, Band or Orchestra Instruments</td>
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<tr>
<td>Music - AOE: Performance: Jazz(Pedagogy)</td>
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<td>M.M.</td>
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<td>Music - AOE: Performance: Jazz Studies</td>
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<tr>
<td>Music - AOE: Performance: Piano( Coaching/ Accompanying)</td>
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<td>Music - AOE: Performance: Piano(Jazz)</td>
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<tr>
<td>Music - AOE: Performance: Piano(Pedagogy)</td>
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<td>M.M.</td>
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<tr>
<td>Music - AOE: Performance: Piano(Traditional)</td>
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<tr>
<td>Music - AOE: Performance: Piano, Voice, Band, or Orchestra Instruments</td>
<td>B.M.</td>
<td>M.M.</td>
<td>Ph.D./D.M.A.</td>
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<tr>
<td>Music - AOE: Performance: Woodwinds</td>
<td>B.M.</td>
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<tr>
<td>Music - AOE: Performance: Voice</td>
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<td>Multidisciplinary Studies</td>
<td>B.M.D.S.</td>
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<td>Theatre - Theatre</td>
<td>B.A.</td>
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<tr>
<td>Theatre - Dance</td>
<td>B.A.</td>
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<tr>
<td>Theatre - AOE: Acting</td>
<td>B.F.A.</td>
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**BENJAMIN M. STATLER COLLEGE OF ENGINEERING AND MINERAL RESOURCES**

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## COLLEGE OF EDUCATION AND HUMAN SERVICES

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**Special Education - Multicategorical**
Special Education - AOE: Multicategorical Special Education K-6  
M.A.

Special Education - Multicategorical  
Special Education - AOE: Multicategorical Special Education 5-Adult  
M.A.

Special Education - Severe/Multiple Disabilities - AOE: Severe Disabilities K-Adult  
M.A.

Speech-Language Pathology - Speech Pathology  
M.S.

**Speech Pathology and Audiology**  
B.S.

**COLLEGE OF LAW**

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<td>Law - Law - AOE: Public Interest Law</td>
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<td>Law - Energy Law &amp; Sustainable Development</td>
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**COLLEGE OF PHYSICAL ACTIVITY AND SPORTS SCIENCE**

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### DAVIS COLLEGE OF AGRICULTURE, FORESTRY, AND CONSUMER SCIENCES

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**EBERLY COLLEGE OF ARTS AND SCIENCES**

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**REED COLLEGE OF MEDIA**

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**SCHOOL OF DENTISTRY**

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<td>Dentistry - AOE: Specific Clinical Interest</td>
<td></td>
<td></td>
<td>D.D.S.</td>
</tr>
</tbody>
</table>
### SCHOOL OF MEDICINE

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry and Molecular Biology</td>
<td></td>
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<tr>
<td>Biomedical Sciences</td>
<td></td>
<td>M.S.</td>
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<tr>
<td>Cancer Cell Biology</td>
<td></td>
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<td>Ph.D.</td>
</tr>
<tr>
<td>Cellular and Integrative Physiology</td>
<td></td>
<td></td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Clinical and Translational Science</td>
<td></td>
<td>M.S.</td>
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<tr>
<td>Exercise Physiology</td>
<td></td>
<td>M.S.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Exercise Physiology - AOE: Aquatic Therapy</td>
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<td>B.S.</td>
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</tr>
<tr>
<td>Exercise Physiology - AOE: Health Professions</td>
<td></td>
<td>B.S.</td>
<td></td>
</tr>
<tr>
<td>Health Sciences</td>
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<td>M.S.</td>
<td></td>
</tr>
<tr>
<td>Immunology and Medical Microbiology</td>
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<td>B.S.</td>
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<tr>
<td>Immunology and Microbial Pathogenesis</td>
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<td>Ph.D.</td>
</tr>
<tr>
<td>Pathologist’s Assistant</td>
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<td>M.H.S.</td>
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</tr>
<tr>
<td>Medical Laboratory Science - AOE: Family Nurse Practitioner</td>
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<td>M.S.N.</td>
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</tr>
<tr>
<td>Medical Laboratory Science - AOE: Geriatric Nurse Practitioner</td>
<td></td>
<td>M.S.N.</td>
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</tr>
<tr>
<td>Medical Laboratory Science - AOE: Neonatal Nurse Practitioner</td>
<td></td>
<td>M.S.N.</td>
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</tr>
<tr>
<td>Medical Laboratory Science - AOE: Nursing Leadership</td>
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<td>M.S.N.</td>
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</tr>
<tr>
<td>Medical Laboratory Science - AOE: Pediatric Nurse Practitioner</td>
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<td>M.S.N.</td>
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</tr>
<tr>
<td>Medical Laboratory Science - AOE: Women’s Health Nurse Practitioner</td>
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</table>

### SCHOOL OF NURSING

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>B.S.N.</td>
<td>M.S.N.</td>
<td>D.N.P., Ph.D.</td>
</tr>
<tr>
<td>Nursing - Nursing RN</td>
<td>B.S.N.</td>
<td>M.S.N.</td>
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<tr>
<td>Nursing - AOE: Family Nurse Practitioner</td>
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<td>M.S.N.</td>
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<tr>
<td>Nursing - AOE: Geriatric Nurse Practitioner</td>
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<td>M.S.N.</td>
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<tr>
<td>Nursing - AOE: Neonatal Nurse Practitioner</td>
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<td>M.S.N.</td>
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<tr>
<td>Nursing - AOE: Nursing Leadership</td>
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<td>M.S.N.</td>
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<tr>
<td>Nursing - AOE: Pediatric Nurse Practitioner</td>
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<td>M.S.N.</td>
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<tr>
<td>Nursing - AOE: Women’s Health Nurse Practitioner</td>
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<td>M.S.N.</td>
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</tbody>
</table>

### SCHOOL OF PHARMACY

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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<tbody>
<tr>
<td>Pharmaceutical and Pharmacological Sciences</td>
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<td>Ph.D.</td>
</tr>
<tr>
<td>Pharmacy - AOE: Clinical Pharmacy Practice</td>
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<td>Pharm.D.</td>
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<tr>
<td>Pharmacy - AOE: Pharmacy Research</td>
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<td>Pharm.D.</td>
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</tbody>
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### SCHOOL OF PUBLIC HEALTH

<table>
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<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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</thead>
<tbody>
<tr>
<td>Community Health Promotion - School Health Education</td>
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<td>M.S.</td>
<td></td>
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<tr>
<td>Public Health – Biostatistics</td>
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<td>M.P.H.</td>
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</tr>
<tr>
<td>Public Health – Epidemiology</td>
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<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>Public Health – Health Policy – AOE: Worksite Wellness</td>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>Public Health – Occupational and Environmental Health Sciences – AOE: Worksite Wellness</td>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>Public Health - AOE: Public Health Practice</td>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>Public Health – Social and Behavioral Sciences – AOE: Worksite Wellness</td>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>Public Health – Social and Behavioral Sciences – AOE: Public Health Practice</td>
<td></td>
<td>M.P.H.</td>
<td></td>
</tr>
<tr>
<td>Public Health Sciences – Social &amp; Behavioral Science – AOE: Worksite Wellness</td>
<td></td>
<td>Ph.D.</td>
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</tr>
<tr>
<td>Public Health Sciences – Occupational &amp; Environmental Health Sciences – AOE: Worksite Wellness</td>
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<td>Ph.D.</td>
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</tr>
<tr>
<td>Public Health Sciences - Epidemiology</td>
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<td>Ph.D.</td>
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</tr>
<tr>
<td>Public Health Sciences - Biostatistics</td>
<td></td>
<td>Ph.D.</td>
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### UNIVERSITY COLLEGE

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry</td>
<td>B.S.</td>
<td></td>
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<tr>
<td>Multidisciplinary Studies – Multidisciplinary Studies</td>
<td>B.M.D.S.</td>
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<tr>
<td>Multidisciplinary Studies – Human Performance &amp; Health</td>
<td>B.A.</td>
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<tr>
<td>Regents BA - AOE: Advertising/Public Relations</td>
<td>R.B.A.</td>
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<tr>
<td>Regents BA - AOE: American History</td>
<td>R.B.A.</td>
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<tr>
<td>Regents BA - AOE: Anthropology</td>
<td>R.B.A.</td>
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<tr>
<td>Regents BA - AOE: Art History</td>
<td>R.B.A.</td>
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<tr>
<td>Regents BA - AOE: Business Administration</td>
<td>R.B.A.</td>
<td></td>
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</tr>
<tr>
<td>Regents BA - AOE: Child Development</td>
<td>R.B.A.</td>
<td></td>
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</tr>
<tr>
<td>Regents BA - AOE: Communication Studies</td>
<td>R.B.A.</td>
<td></td>
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</tr>
<tr>
<td>Regents BA - AOE: Creative Writing</td>
<td>R.B.A.</td>
<td></td>
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</tr>
<tr>
<td>Regents BA - AOE: Crime &amp; Social Control</td>
<td>R.B.A.</td>
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<tr>
<td>Regents BA - AOE: Economics</td>
<td>R.B.A.</td>
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<tr>
<td>Regents BA - AOE: Foreign Literature in Translation</td>
<td>R.B.A.</td>
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<tr>
<td>Regents BA - AOE: French</td>
<td>R.B.A.</td>
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<tr>
<td>Regents BA - AOE: Geography</td>
<td>R.B.A.</td>
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</tbody>
</table>
Graduate Information

- Regents BA - AOE: Geology R.B.A.
- Regents BA - AOE: German R.B.A.
- Regents BA - AOE: GIS & Remote Sensing R.B.A.
- Regents BA - AOE: History R.B.A.
- Regents BA - AOE: International Studies-Asia R.B.A.
- Regents BA - AOE: International Studies-Development Studies R.B.A.
- Regents BA - AOE: International Studies-Europe R.B.A.
- Regents BA - AOE: International Studies-The America's R.B.A.
- Regents BA - AOE: Linguistics R.B.A.
- Regents BA - AOE: Literature R.B.A.
- Regents BA - AOE: Philosophy R.B.A.
- Regents BA - AOE: Political Science-General R.B.A.
- Regents BA - AOE: Political Science-International & World Affairs R.B.A.
- Regents BA - AOE: Political Science-Law & Legal Studies R.B.A.
- Regents BA - AOE: Professional Writing R.B.A.
- Regents BA - AOE: Psychology R.B.A.
- Regents BA - AOE: Religious Studies R.B.A.
- Regents BA - AOE: Russian R.B.A.
- Regents BA - AOE: Sociology R.B.A.
- Regents BA - AOE: Spanish R.B.A.
- Regents BA - AOE: Women's Studies R.B.A.

Academic Certificate Matriculation and Award Policy

Students pursuing an academic certificate must meet residency requirements. All certificate requirements must be completed at WVU following admission to the certificate program, with the following exceptions:

- No more than 6 credits earned as part of a prior WVU degree, earned from a different institution, or earned at WVU prior to admission to the certificate can be applied to certificate requirements. Applicability of credits earned from a different institution to certificate requirements is the decision of the program offering the certificate.
- No more than 6 of the credit hours applied to a certificate program may also be applied to another certificate or degree requirements.

Additionally, academic certificates at the undergraduate level may only be awarded simultaneously with a baccalaureate degree.* Academic certificates at the graduate and professional levels may be awarded either simultaneously with a graduate or professional degree or independently of any degree program. Completion of an academic certificate will be noted on students’ transcripts.

*Certain pre-existing undergraduate certificates in the College of Education and Human Services may be awarded independent of a degree program.

Graduate Certificate Programs

Academic Affairs

- University Teaching

Arts & Sciences - Eberly College of

- Applied Statistics
- Cultural Resource Management
• Integrated Mental and Behavioral Health
• Gerontology
• Health Care Administration
• Nonprofit Management
• Women’s and Gender Studies

**Business and Economics - College of**

• Forensic Accounting and Fraud Examination

**Education and Human Sciences - College of**

• Interdisciplinary Certificate in Disability Studies
• Public School Administration - Instructional Supervisor Preparation
• Public School Administration - Principle Preparation
• Public School Administration - Superintendent Preparation

**Engineering and Mineral Resources - Benjamin M. Statler College of**

• Computer Forensics
• Information Assurance and Biometrics
• Interactive Technologies and Serious Gaming
• Software Engineering

**Media - Reed College of**

• Digital Marketing Communications
• Integrated Marketing Communications

**Medicine - School of**

• Clinical and Translational Science
• Emergency Medicine

**Nursing - School of**

• Post-MSN Certificate FNP
• Post-MSN Certificate GNP
• Post-MSN Certificate Leadership
• Post-MSN Certificate NNP
• Post-MSN Certificate PNP
• Post-MSN Certificate WHNP

**Public Health - School of**

• Applied Biostatistics
• Women’s Health

**Approved Dual Master’s Degree Programs**

West Virginia University offers several approved dual master’s degree programs. Approved dual degree programs are programs in which certain courses or credits are accepted for credit by each program. Total coursework credit requirements for the dual degrees must be at least 75% of the summation of the separate degree programs. Students in such programs must also successfully complete any specific program requirements. Individual graduate units may require higher percentages of credit to be earned under their direction. Students should contact the individual units regarding admission and academic requirements and regulations for these approved dual degree programs.

**Academic Innovation**

WVU Academic Innovation (http://academicinnovation.wvu.edu) coordinates online and off-campus programming through WVU Online and Extended Campus (http://online.wvu.edu). The unit also includes Summer Sessions (http://summer.wvu.edu), Teaching and Learning Commons (http://tlcommons.wvu.edu), Faculty and Graduate Advancement (http://tlcommons.wvu.edu/GraduateAcademy), iDesign (http://idesign.wvu.edu), and K12 initiatives (http://k12.wvu.edu). The Summer Sessions Office (http://summer.wvu.edu) provides guidance for students who wish to take summer courses. The Teaching and Learning Commons (http://tlcommons.wvu.edu) (TLC) provides teaching support and resources for faculty, graduate students, and
postdoctoral fellows. TLC staff provides training for instructors to enhance their teaching skills to deepen student learning. The Teaching and Learning Commons (http://tlcommons.wvu.edu) also offers the Graduate Academy (http://tlcommons.wvu.edu/GraduateAcademy) for graduate students and postdocs to develop a range of core skills for their future careers. The K12 Initiatives (http://k12.wvu.edu) unit provides ACCESS classes in high schools and works closely with K12 teachers to develop digital content for schools.

WVU Online and Extended Campus (http://online.wvu.edu) provides seamless access to academic courses and student services. Depending on the program, courses can be delivered completely online, online with some campus visits (a blended format), off-campus at locations in the State of West Virginia, or online with practicums or internships within a student’s home base.

The most current list of programs can be found here (http://online.wvu.edu/degrees). Students should carefully review the information provided by individual programs.

COURSES

In this section:

• Schedule of Courses
• Plan for Numbering Courses
• Catalog Abbreviations
• Graduate Level Common Course Numbers and Descriptions
• Graduate Course Descriptions

Schedule of Courses

Before the opening of each term, a Schedule of Courses is posted to http://courses.wvu.edu/ announcing the courses that will be offered by the colleges and schools of WVU.

Plan for Numbering Courses

For convenience, each course of study is designated by the name of the department in which it is given and by the number of that course. The plan for numbering courses is as follows:

Courses 1–99 Developmental and community college certificate courses (does not require WVU Faculty Senate approval) and undergraduate professional development courses (courses that are designed for professional development and require students to possess a high school diploma but the course would not count toward graduation).

Courses 100 Freshman/Lower Division: Intended primarily for freshmen, although upper-division students may take them if needed to complete degree requirements.

Courses 200 Sophomore/Lower Division: Intended primarily for sophomores. These courses may have 100 or 200-level prerequisites.

Courses 300 Juniors/Upper Division: Intended primarily for juniors. These courses may have extensive prerequisites or be limited to specific majors.

Courses 400 Seniors/Upper Division: Intended primarily for seniors and selected graduate students. These courses are typically limited to advanced undergraduates within a particular major or degree program and selected graduate students. No more than forty percent of the credits counted for meeting requirements for a graduate degree can be at the 400 level.

Courses 500 Undergraduate Seniors Division and Master’s Level: Courses intended for advanced undergraduate and graduate students. Undergraduates in any class carrying a 500-level course number must receive approval.

Courses 600 Master’s Level: Courses intended for master’s degree students (no undergraduates permitted).

Courses 700 Master’s and Doctoral Degree Level: Courses intended for doctoral students and advanced master’s students (no undergraduates permitted).

Courses 900 Professional Development: Courses intended for professional development and require students to possess a bachelor’s degree. These courses do not count toward graduation and are not applicable towards a graduate degree. Grading is S/U only.

Note: Graduate degree credit-hour requirements must include at least sixty percent at the 500–level and above.

Catalog Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>a course given in the first (fall) semester</td>
</tr>
<tr>
<td>II</td>
<td>a course given in the second (spring) semester</td>
</tr>
</tbody>
</table>
Graduate Level Common Course Numbers and Descriptions

590/690/790. Teaching Practicum. I, II, S. 1-3 hr. PR: Consent. Supervised practice in college teaching of ________ (Subject matter determined by department/division/college/school offering the course).

Note: This course is intended to insure that graduate assistants are adequately prepared and supervised when they are given college teaching responsibility. It also provides a mechanism for students not on assistantships to gain teaching experience. (Grading will be Normal.)

591/691/791. Advanced Topics. I, II, S. 1-6 hr. PR: Consent. Investigation in advanced topics that are not covered in regularly scheduled courses.

592/692/792. Directed Study. I, II, S. 1-6 hr. Directed study, reading, and/or research.

593/693/793. Special Topics. I, II, S. 1-6 hr. A study of contemporary topics selected from recent developments in the field.

594/694/794. Seminar. I, II, S. 1-6 hr. Special seminars arranged for advanced graduate students.

595/695. Independent Study. I, II, S. 1-6 hr. Faculty-supervised study of topics not available through regular course offerings.

696/796. Graduate Seminar. I, II, S. 1 hr. PR: Consent. Each graduate student will present at least one seminar to the assembled faculty and graduate student body of his or her program.


698/798. Thesis or Dissertation. 2-4 hr. PR: Consent. This is an optional course for programs that believe that this level of control and supervision is needed during the writing of student reports, theses, or dissertations. (Grading is Normal.)

699/799. Graduate Colloquium. I, II, S. 1-9 hr. PR: Consent. For graduate students not seeking coursework credit but who wish to meet residency requirements, use the University’s facilities, and participate in its academic and cultural programs. Note: Graduate students who are not actively involved in coursework or research are entitled, through enrollment in their department’s 699/799 Graduate Colloquium, to consult with graduate faculty, participate in both formal and informal academic activities sponsored by their program, and retain all of the rights and privileges of duly enrolled students. Grading is normal; colloquium credit may not be counted against credit requirements for masters programs. Registration for one credit of 699/799 graduate colloquium satisfies the University requirement of registration in the semester in which graduation occurs.

Graduate Course Descriptions (http://catalog.wvu.edu/graduate/advisingcoursesdegrees/Graduate_Course_Descriptions.pdf)
CREDIT HOURS

In this section:
- Course Credit Limitations
- Credit Hour Definition

Course Credit Limitations

Credit toward a graduate degree may be obtained only for courses listed in the graduate catalog and numbered 400–799. No more than forty percent of course credits counted toward any graduate degree may be at the 400-level. No residence credit is allowed for special field assignments or other work taken off the WVU campus without prior approval. 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 may not count toward a graduate degree.

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 of guided instruction within the classroom. An hour of preparation, or related activity outside of the classroom, is equivalent to sixty minutes.

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 or the equivalent amount of work over a different amount of time such as during the summer sessions, which may vary in duration. One credit hour in other academic activities, as established by the institution, including laboratory work, internships, practicums, studio work, study abroad, experiential learning opportunities, online learning, and other academic work must include an equivalent amount of required work listed in the preceding paragraph and is outlined in more detail below.

ONLINE CLASSROOM LEARNING

One credit hour of online learning is equivalent to fifteen hours of direct instruction and thirty hours of 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 and approved to meet best practices in online learning. Student work includes activities like readings and supplemental home work. 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

In experiential learning, including opportunities representing laboratory/lecture courses, undergraduate research (with or without laboratory), professional development internships, and service learning, a total of three hours of classroom and preparation time per week over a period of fifteen weeks for one credit hour or the equivalent amount of work over a shorter period of time is required. Courses must incorporate adequate opportunities to document student progress and student completion of the stated learning objectives for each experience.

STUDY ABROAD

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 representing 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 preparation 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 contact hours based on the focus and discipline of the experience. Practicums (teaching and research), field experience, undergraduate and graduate research and laboratory rotations and credit, and independent studies offer a range of contact. One credit hour is equivalent to fifteen contact hours of guided instruction (e.g., student progress meetings, assessment) 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 fifteen 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.
Tuition, Fees & Residency

In this section:

COST:
- Cost of an Academic Year’s Work
- Tuition and Fees
- Identification Card

RESIDENCY:
- Residency Classification

COMMON MARKET:
- Academic Common Market
- Southern Regional Education Board (SREB) Academic Common Market

REGULATIONS:
- Tuition and Fee Regulations
- Refund of Tuition and Fees
- Non-Sufficient Funds Check Policy

COST

In this section:
- Cost of an Academic Year’s Work
- Tuition and Fees
- Identification Card

Cost of an Academic Year’s Work

The WVU Financial Aid Office provides an estimate of the total cost of attendance for an academic year at financialaid.wvu.edu/tuition-cost-information/cost-of-attendance. This estimate includes tuition and fees, books and supplies, off-campus room and board, transportation, and personal expenses in amounts designed to provide a modest, but adequate, lifestyle for students. Many students attending WVU obtain graduate assistantships offered by academic and non-academic units across campus. In addition to a waiver of University tuition, graduate assistantships also provide stipends that range in value according to the college, program, or work to be undertaken. Information about graduate assistantships is available at grad.wvu.edu.

Tuition and Fees

Tuition and fee structures vary by residency classification and academic program at WVU. Current tuition and fee costs can be found at financialservices.wvu.edu/home/wvu-tuition-and-fees. Students are charged for University tuition, College/School tuition, and University fees. In some cases, students are charged different rates for Extended Learning courses or programs. Senior citizens of West Virginia (age 65 and older) who meet WVU residency requirements may take courses at WVU for reduced tuition and fees. All West Virginia University tuition and fees are subject to change without notice.

Identification Card

Students registered for the current semester are eligible for an identification card (Mountaineer Card). The Mountaineer Card gives access to certain activities and privileges depending on fees assessed. Students assessed on-campus fees have free access to the Student Recreation Center, the PRT, and athletic events, and may ride the local bus system (MountainLine) by using their ID card. On- and off-campus students have access to the WVU Libraries. Students taking Extended Learning classes may opt to pay the on-campus fees to participate in the other activities. WVU reserves the right to refuse issuance of an identification card and misuse may result in confiscation of the card. For more information about the Mountaineer Card visit wvucard.wvu.edu/.

RESIDENCY

Residency policy is established by the WV Higher Education Policy Commission Series 25, which is posted at admissions.wvu.edu/admissions/residency/hep-25. The WVU Office of Admissions assigns students a residency classification for admission, tuition, and fee purposes. Students who are
legal 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. Further information on residency classification is at admissions.wvu.edu/admissions/residency.

**Academic Common Market**

West Virginia provides its residents the opportunity, through the Academic Common Market (ACM) and through other contract programs, to pursue academic majors or programs not available within the state. The contract programs and the ACM permit West Virginians to enter out-of-state institutions at reduced tuition rates. The ACM provides access to numerous undergraduate and graduate programs. The programs are restricted to West Virginia residents who have been accepted for admission to one of the specific programs at the designated out-of-state institutions. Through reciprocal agreements, WVU allows residents of states within the ACM to enroll in undergraduate and graduate programs on an in-state tuition basis. Further information may be obtained from the Associate Provost for Undergraduate Academic Affairs, Stewart Hall, West Virginia University, P.O. Box 6203, Morgantown, WV 26506-6203, or you may visit the SREB Academic Common Market site for eligible programs: http://www.sreb.org/page/1304/academic_common_market.html. Application must be made through the higher education authority of the state of residence. West Virginia residents should apply through the West Virginia Higher Education Policy Commission, 1018 Kanawha Boulevard East, Charleston, WV 25301. For more information see their brochure at: https://www.wvhepc.org/academic/ACM_Brochure.pdf.

Regional contract programs have been established for study in optometry, podiatry, and veterinary medicine. Visit: http://home.sreb.org/acm/rcp/StateInfo.aspx?state=52 for additional information.

**SREB Academic Common Market**

Through the Southern Regional Education Board (SREB) Academic Common Market, WVU allows students from SREB member states to enroll in certain WVU programs at in-state tuition rates. Typically these degree programs are not available to students in their home state. In addition to West Virginia, SREB member states are Alabama, Arkansas, Delaware, Florida (graduate only), Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina (graduate only), Oklahoma, South Carolina, Tennessee, Texas (graduate only), and Virginia. Please refer to the SREB website (http://www.sreb.org/page/1304/academic_common_market.html) for the most current information about programs offered to residents of your state.

**REGULATIONS**

**In this section:**

• Tuition and Fee Regulations
• Refund of Tuition and Fees
• Non-Sufficient Funds Check Policy

**Tuition and Fee Regulations**

All tuition and fees are payable to the Office of Student Accounts prior to the first day of each term. Exceptions and late fee charges are explained at studentaccounts.wvu.edu/billing/late_fee_policy. Students can review their charges, waivers, scholarships, and payments online through the STAR Information System, which can be accessed from MIX at www.mix.wvu.edu. Payments can also be made from the same website. Payments of tuition, fees, and other charges by check, draft, or money order are subject to WVU’s Non-Sufficient Funds Check Policy available at adminfin.wvu.edu/policies/finance/financial-services/wvu-co-14-policy. A service charge is collected on each check returned unpaid by the bank upon which it was drawn.

Arrangements can be made with the Office of Student Accounts for payment from officially accepted scholarships, loan funds, grants, or contracts. Students holding graduate assistantships normally are provided with a waiver of University tuition but must pay College/School tuition and University fees. Students holding fellowships may receive waivers or scholarships to cover tuition and fees according to the provisions of the fellowship. Waivers and scholarships will be applied to students’ accounts.

WVU places restrictions on students who have outstanding debts to the University. The restriction may include, but is not limited to, the withholding of a student’s registration, diploma, or transcript. No degree is conferred and no transcripts are issued to any student before payment is made of all tuition, fees, and other indebtedness to any unit of the University.

**Refund of Tuition and Fees**

Current information on refunds can be found at studentaccounts.wvu.edu/refunds.

**Non-Sufficient Funds Check Policy**

Payments of tuition, fees, and other charges by check, draft, or money order are subject to WVU’s Non-Sufficient Funds Check Policy available at adminfin.wvu.edu/policies/finance/financial-services/wvu-co-14-policy. A service charge is collected on each check returned unpaid by the bank upon which it was drawn.
Davis College of Agriculture, Natural Resources, and Design

Degrees Offered

DIVISION OF ANIMAL AND NUTRITIONAL SCIENCES
• Master of Science in Animal and Nutritional Sciences
• Master of Science in Reproductive Physiology
• Doctor of Philosophy in Agricultural Sciences
• Doctor of Philosophy in Reproductive Physiology

DIVISION OF DESIGN AND MERCHANDISING
• Master of Science in Design and Merchandising

DIVISION OF FORESTRY AND NATURAL RESOURCES
• Master of Science in Forestry
• Master of Science in Recreation, Parks, and Tourism Resources
• Master of Science in Wildlife and Fisheries Resources
• Doctor of Philosophy in Forest Resources Sciences

DIVISION OF PLANT AND SOIL SCIENCES
• Master of Science in Genetics and Developmental Biology
• Master of Science in Plant and Soil Sciences
• Doctor of Philosophy in Agricultural Sciences
• Doctor of Philosophy in Genetics and Developmental Biology
• Interdisciplinary Programs
• Master of Agriculture, Forestry, and Consumer Sciences
• Master of Science in Genetics and Developmental Biology
• Master of Science in Reproductive Physiology
• Doctor of Philosophy in Agricultural Sciences, Animal and Food Science, Plant and Soil Sciences
• Doctor of Philosophy in Genetics and Developmental Biology
• Doctor of Philosophy in Reproductive Physiology

DIVISION OF RESOURCE MANAGEMENT
• Master of Science in Agricultural and Extension Education
• Master of Science in Agricultural and Resource Economics
• Master of Landscape Architecture
• Doctor of Philosophy in Resource Management and Sustainable Development

The Davis College of Agriculture, Natural Resources, and Design is comprised of five divisions: Animal and Nutritional Sciences, Design and Merchandising, Forestry and Natural Resources, Plant and Soil Sciences, and Resource Management. The college’s faculty and staff are located in four buildings on the Evansdale campus; on farms administered by the Davis College of Agriculture, Natural Resources, and Design in Kearneysville, Morgantown, Reedsville, Union, and Wardensville; and at the West Virginia University Forest on nearby Chestnut Ridge.

Students study many different subjects concerned with human behavior, plants, animals, trees, and microorganisms. Curricula in the college stress the life sciences, applied and basic research, and economic and social relationships among people as they live and work in a wide variety of settings. Courses offered in the college give students a comprehensive understanding of the natural environment and resources from which we produce our food, fiber, wood, energy, and leisure activities.

The Davis College of Agriculture, Natural Resources, and Design’s research is conducted in the West Virginia Agricultural and Forestry Experiment Station. Research proposals are generated, evaluated, approved, and funded through the Experiment Station. The university controls extensive lands, which are administered by the college, with specific areas set aside for research and teaching purposes in livestock, poultry, forestry, wildlife management, organic production, horticulture, agronomy, entomology, and soils. Graduate students in the Davis College benefit both from a variety of educational and research settings and from extensive opportunities for hands-on learning.
ADMINISTRATION

DEAN
- Daniel J. Robison - Ph.D. (University of Wisconsin-Madison)
  Director, West Virginia Agricultural and Forestry Experiment Station

ASSOCIATE DEAN FOR ACADEMIC AFFAIRS
- Dennis K. Smith - Ph.D. (Pennsylvania State University)

ASSOCIATE DEAN FOR RESEARCH AND OUTREACH
- Tim T. Phipps - Ph.D. (University of California)
  Associate Director, West Virginia Agricultural and Forestry Experiment Station

General Admission Requirements and Information

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).
- 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 students have the additional requirement to submit a minimum score of 550 on the paper TOEFL examination or 213 on the electronic TOEFL examination if their native language is not English.
- 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.

Master's Programs
The Davis College of Agriculture, Natural Resources, and Design offers thirteen degree programs at the master's level. Students can choose from the following majors for a master's degree: agricultural and extension education; agricultural and resource economics; agronomy; animal and nutritional sciences; design and merchandising; entomology; applied and environmental microbiology; horticulture; forestry; landscape architecture; plant pathology; recreation, parks, and tourism resources; or wildlife and fisheries resources. In addition, students may choose to pursue a master of science in the interdisciplinary programs in genetics and developmental biology or reproductive physiology or the master of agriculture, forestry, and consumer sciences.

For additional information concerning any of the graduate programs in the college, contact:

Associate Dean of Academic Affairs
Davis College of Agriculture, Natural Resources, and Design
P.O. Box 6108
West Virginia University, Morgantown, WV 26506-6108
Doctoral Programs

The Davis College of Agriculture, Natural Resources, and Design currently offers five doctoral programs:

- **Ph.D. in Agricultural Sciences** – Doctoral students may major in animal and food sciences or plant and soil sciences.

- **Ph.D. in Forest Resources Science** – Doctoral students may choose from the following areas of emphases: forest resource management; recreation, parks, and tourism resources; wildlife and fisheries management; or wood science and technology.

- **Ph.D. in Resource Management and Sustainable Development** – Doctoral students may choose from the following majors: agricultural and extension education, human and community development, natural resource economics, or resource management.

- **Ph.D. in Genetics and Developmental Biology** – Doctoral students may select areas of study related to human, plant, and animal genetics or developmental biology in this interdisciplinary program.

- **Ph.D. in Reproductive Physiology** – Doctoral students may select courses in biochemistry, developmental embryology, endocrinology, pharmacology, physiology, reproductive physiology, and statistics in this interdisciplinary program.

Division of Animal and Nutritional Sciences

Matthew E. Wilson, Interim Division Director of Animal and Nutritional Sciences
e-mail: matt.wilson@mail.wvu.edu

Degrees Offered

- Master of Science in Animal & Nutritional Sciences
- Master of Science and Doctor of Philosophy in Reproductive Physiology
- Doctor of Philosophy in Agricultural Sciences

The master of science in animal and nutritional sciences in the Davis College of Agriculture, Natural Resources, and Design allows maximum flexibility in courses and research problems. Students may major in animal & nutritional sciences, animal physiology, or nutrition & food science. They may work with beef and dairy cattle, sheep, swine, poultry, or laboratory animals or with issues in human health and nutrition. Research problems in farm animals, laboratory animals, and 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. The division offers the registered dietetic certification (RD) preparation internship program as a component of the masters of science degree program in animal and nutritional sciences. Prerequisite 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. Meeting the above requirements shall not guarantee the applicant admission because each professor will accept only the number of students that can be supervised adequately with available facilities, time, and funds. Students interested in a Ph.D. should apply for admission to the doctoral program in agricultural sciences or reproductive physiology.

FACULTY

INTERIM DIRECTOR

- Matthew E. Wilson - Ph.D. (Iowa State University)
  Professor - Reproductive Physiology

PROFESSORS

- Kenneth P. Blemings - Ph.D. (University of Wisconsin)
  Assistant Director - Academic Programs, Nutritional Biochemistry
- Robert A. Dailey - Ph.D. (University of Wisconsin)
  Reproductive Physiology
- E. Keith Inskeep - Ph.D. (University of Wisconsin)
  Reproductive Physiology
- Jacek Jaczynski - Ph.D (Oregon State University)
  Food safety
- Jeryl C. Jones - D.V.M., Ph.D. (Auburn University)
  Veterinary Radiology
- P. Brett Kenney - Ph.D. (Kansas State University)
  Animal Science and Meat Science
- Hillar Klandorf - Ph.D. (British Council for National Academic Awards)
Physiology
• Joseph S. Moritz - Ph.D. (Kansas State University)
  Nutrition and feed manufacture
• Phillip I. Osborne - Ph.D. (Clemson University)
  Extension Specialist - Livestock Marketing and Production

ASSOCIATE PROFESSOR
• Eugene E. Felton - Ph.D. (University of Missouri)
  Ruminant Nutrition
• Marlon Knights - Ph.D. (West Virginia University)
  Reproductive Physiology and Animal Production
• Marie Krause - Ph.D. (University of Wisconsin-Madison)
  Dairy Science Nutrition
• Kristen E. Mataki - Ph.D. (Virginia Tech)
  Food Science and Human Nutrition
• Susan N. Partington - Ph.D., R.D. (University of Wisconsin)
  Human Nutrition and Foods
• Kenneth J. Semmens - Ph.D. (Auburn University)
  Aquaculture
• Janet C. L. Tou - Ph.D. (University of Toronto, Canada)
  Human Nutrition and Foods
• Jianbo Yao - Ph.D. (McGill University)
  Molecular Biology - Genetics

ASSISTANT PROFESSOR
• Kimberly M. Barnes - Ph.D. (University of Nebraska)
  Animal Science-Biochemistry
• Scott A. Bowdridge - Ph.D. (Virginia Tech)
  Food Animal Production, Parasite Immunology
• Melissa Marra - Ph.D. (Florida International University)
  Human Nutrition and Foods
• Joseph W. McFadden - Ph.D. (Virginia Tech)
  Nutritional Biochemistry
• Melissa D. Olfert - Dr.P.H., M.S., R.D. (Loma Linda University)
  Human Nutrition and Foods
• Kevin Shaffer - Ph.D. (West Virginia University)
  Extension Specialist - Ruminant Nutrition and Feed Efficiency

CLINICAL ASSOCIATE PROFESSOR
• Margaret A. Minch - D.V.M. (Ohio State University)
  Veterinary Medicine

TEACHING ASSISTANT PROFESSOR
• Megan Govindan - M.P.H., M.S., R.D. (West Virginia University)
  Human Nutrition and Foods
• Crystal E. Smith - M.Agr., PAS (The Pennsylvania State University)
  Equine Management

ADJUNCT FACULTY
• Guendoline Brown - Ph.D. (Utah State University)
  Nutrition and Health
• Robert L. Cochrane - Ph.D. (University of Wisconsin)
  Reproductive Physiology
• Jesse Fallon - D.V.M. (Virginia Tech)
  Veterinary Medicine
• Ann Hubbs - Ph.D., D.V.M. (Texas A & M University)
  Veterinary Medicine
• Eric K. Johnson - Ph.D. (University of Wisconsin)
  Mechanical and Aerospace Engineering
• Barbara Jean Meade - D.V.M., Ph.D., M.D. (West Virginia University)
  Veterinary Sciences
• Dale W. Porter - Ph.D. (West Virginia University)
  Toxicology
• Caird E. Rexroad III - Ph.D. (Texas A & M University)
  Genetics
• George R. Seiler - D.V.M. (Florida State University)
  Veterinary Sciences
• Alfred H. Stiller - Ph.D. (University of Cincinnati)
  Chemistry
• Richard Z. Woodworth - M.S. (West Virginia University)
  Agriculture

EMERITUS FACULTY
• William E. Collins - Ph.D. (University of Wisconsin)
  Reproductive Physiology
• Leslie Dozsa - D.V.M. (College Veterinary Medicine, Budapest)
  Veterinary Medicine
• Betty J. Forbes - R.D., L.D., M.A. (West Virginia University)
  Normal, Community, and Clinical Nutrition
• Mary K. Head - R.D., Ph.D. (Purdue University)
  Human Nutrition and Foods
• Paul E. Lewis - Ph.D. (West Virginia University)
  Reproductive Physiology
• William H. Hoover - Ph.D. (Penn State University)
  Animal Nutrition
• M. Zafar Alam Nomani - Ph.D. (Rutgers University)
  Nutrition
• Ronald A. Peterson - Ph.D. (Michigan State University)
  Nutritional Physiology of Poultry
• Edward C. Prigge - Ph.D. (University of Maine)
  Animal Nutrition
• Paul M. Smith - M.S. (West Virginia University)
  Dairy Foods
• Wayne R. Wagner - Ph.D. (Colorado State University)
  Extension Specialist - Animal Breeding and Genetics
• John Warren - Ph.D. (University of Maryland)
  Reproductive Physiology

AFFILIATED FACULTY
• Heather J. Billings - Ph.D. (University of Michigan)
  Associate Professor - Neuroendocrinology and Anatomy
• Melanie J. Clemmer - Ph.D. (West Virginia University)
  Assistant Professor - Assisted Reproductive Technology
• Mitchell S. Finkel - M.D. (University of Maryland)
  Professor - Prenatal Stress on Cardiac Endocrinology
• Cindy W. Fitch - Ph.D. (Case Western Reserve University)
  Professor - Human Nutrition
• Stanley Hileman - Ph.D. (University of Kentucky)
  Associate Professor - Neuroendocrine and Nutritional Effects on Reproduction
• Ida Holaskova - Ph.D. (West Virginia University)
  Assistant Professor - Reproductive Immunology
• Rajesh K. Naz - Ph.D. (All India Institute of Medical Sciences)
  Professor - Male Physiology and Immunology
• Litha Sivanandan - Ph.D. (University of Georgia)
Assistant Professor - Extension Specialist, Food Science  
• Michael W. Vernon - Ph.D. (University of Florida)  
  Professor - Reproductive Endocrinology and Assisted Reproductive Technology  
• Jean M. Woloshuk - Ed.D. (West Virginia University)  
  Professor - Extension Specialist

Agricultural Sciences

Matthew E. Wilson, Interim Division Director of Animal and Nutritional Sciences  
e-mail: matt.wilson@mail.wvu.edu

Barton S. Baker, Division Director of Plant and Soil Sciences  
e-mail: bbaker2@wvu.edu

Degree Offered

• Doctor of Philosophy in Agricultural Sciences

The Davis College of Agriculture, Natural Resources, and Design offers graduate studies leading to the degree of doctor of philosophy in agricultural sciences. The doctoral program offers two majors: animal and food sciences or plant and soil sciences. 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 ten areas of emphases: agricultural biochemistry, animal nutrition, animal physiology, production management, crops agronomy, entomology, applied and environmental microbiology, horticulture, plant pathology, and soil sciences.

Admissions

Prospective students initiate application for admission on forms available from the WVU Office of Admissions. The completed forms should be returned to the Office of Admissions, accompanied by payment of the nonrefundable special service fee. An official transcript from all colleges attended in the course of an applicant’s master’s and undergraduate degrees must be part of the application for admission. Applicants must hold a master’s or its equivalent to be eligible for admission into the program.

The following admission and performance standards are normally required in the doctor of philosophy in agriculture sciences program:

• An applicant must possess a master’s degree and hold a grade point average (GPA) of 3.0 or above (on a 4.0 scale) in postgraduate courses.
• The graduate record examination is required for the major in plant and soil sciences but not for the major in animal and food sciences.
• A student whose native language is not English must have obtained a minimum score of 79 on the TOEFL examination.
• An applicant must provide three letters of reference.
• A one or two-page letter of intent from the student describing his/her research and professional aspirations is required.

Students who do not meet the requirements, but have special qualifications or circumstances, may be admitted as provisional graduate students if approved by the Graduate Faculty Committee, division director, and doctoral program coordinator.

After a student is admitted into the doctoral program, the appropriate division director will appoint a major professor in the appropriate field of study. Doctoral students will conduct research in support of projects approved by the West Virginia Agricultural and Forestry Experiment Station (WVAFES) or externally funded grants. The major professor, in consultation with the student and the division director, 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 his or her 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; the chairman and at least two committee members must be regular members of the college’s graduate faculty.

Curriculum Requirements for Ph.D. in Agricultural Sciences

Core Courses

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.

Core courses for students in the doctoral program in agricultural sciences will be in the following areas:

• A minimum of six credit-hours must be completed in biology or earth sciences (excluding courses within a student’s major field of study).
• A minimum of six credit-hours must be completed in biochemistry or advanced chemistry (400 level or above), depending on the student’s research concentration.
• A two-semester sequence (minimum of six credits) must be completed in graduate-level statistics plus a course in experimental design, or a two-semester sequence (minimum of six credits) must be completed in graduate-level statistics plus one semester (minimum of three credits) of computer science beyond the introductory level.
• One seminar must be presented during each year or part of year in residence. A final dissertation research seminar will be presented as a college or university-wide seminar.
• Oral and written comprehensive (qualifying) examinations will be administered by the student’s graduate committee before the end of the second year following admission to the program. Satisfactory completion of the comprehensive examinations and core course requirements will admit the student to candidacy for the Ph.D.

Each candidate for the Ph.D. will be expected to meet the following general requirements:

• A minimum of three semesters in residence
• Successful completion of coursework requirements with a grade point average of 3.0 or higher
• Successful completion of comprehensive examinations prepared and evaluated by the student’s graduate committee (Oral and written qualifying exams will be taken before the end of the second year following admission to the program.)
• A dissertation (The dissertation research must be applied toward an approved experiment station project or an approved independently funded research project.)
• Successful oral defense of the dissertation

Although not required, presentation of research results at meetings of a professional society and submission of manuscripts for publication are encouraged.

Animal and Nutritional Science
Matthew E. Wilson, Interim Division Director of Animal and Nutritional Sciences
e-mail: matt.wilson@mail.wvu.edu

Degrees Offered
• Master of Science in Animal and Nutritional Sciences
• Doctor of Philosophy in Agricultural Sciences

Curriculum Requirements for M.S. in Animal and Nutritional Sciences

PREREQUISITES
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 composite graduate record examination score of 1,000 or better will be considered as a basis for admission. Meeting the above requirements shall not guarantee the applicant admission since each professor will accept only the number of students that can be supervised adequately with available facilities, time, and funds. Students interested in a Ph.D. should apply for admission to the doctoral program in agricultural sciences or reproductive physiology.

DEGREE DESCRIPTION
The master of science in animal and nutritional sciences in the Davis College of Agriculture, Natural Resources and Design allows maximum flexibility in courses and research problems. Students may major in either animal physiology and biochemistry or nutrition and food sciences. They may work with beef and dairy cattle; sheep, swine, poultry, or laboratory animals; and with issues in human health and nutrition. Research problems in farm animals, laboratory animals, and 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.

The division offers the registered dietetic certification (RD) preparation internship program as a component of the masters of science degree program in animal and nutritional sciences (see below). For additional information, contact Dr. Matthew Wilson at (304) 293-2631 or matt.wilson@mail.wvu.edu.

Graduate Dietetic Internship
The WVU Graduate Dietetic Internship is a two-year combined master’s/ internship in dietetics program for individuals who have completed at least a bachelor’s degree as well as the Commission on Accreditation for Dietetic Education (CADE) coursework requirements. The dietetic internship provides the supervised practice experience that is required to be eligible to write the registration examination for dietitians. The combined program offers interns the opportunity to complete a Master of Science degree in addition to required supervised practice component. There is a thesis as well as a non-thesis
option. The program provides interns with 1200 hours of supervised practice experience. For additional information, contact Dr. Melissa Olfert at (304) 293-1918 or Melissa.Olfert@mail.wvu.edu.

Curriculum Requirements for Ph.D. in Agricultural Sciences
Students entering this program may select research and classes to emphasize areas of interest appropriate to the Division of Animal & Nutritional Sciences. Areas include agricultural biochemistry, animal nutrition, animal physiology, and human nutrition and food sciences. For more information, contact Dr. Matthew Wilson at (304) 293-2831 or matt.wilson@mail.wvu.edu.

Reproductive Physiology
E. Keith Inskeep, Chairperson of the Interdisciplinary Faculty
e-mail: einskeep@wvu.edu

Degrees Offered
- Master of Science in Reproductive Physiology
- Doctor of Philosophy in Reproductive Physiology

FACULTY

PROFESSORS
- Robert A. Dailey - Ph.D. (University of Wisconsin)
  Folliculogenesis, Hypothalamic-Pituitary Function, Reproductive Management, Reproductive Immunology
- Mitchell S. Finkel - M.D. (University of Maryland)
  Prenatal Stress on Cardiac Endocrinology
- Jorge A. Flores - Ph.D. (The George Washington University)
  Luteal Function and Regression
- E. Keith Inskeep - Ph.D. (University of Wisconsin)
  Ovarian Function and Out-of-Season Breeding in Sheep
- Robert L. Goodman - Ph.D. (University of Pittsburgh)
  Neuroendocrine Control of Ovarian Function
- Hillar Klandorf - Ph.D. (British Council for National Academic Awards)
  General and Poultry Endocrinology
- Michael G. Mawhinney - Ph.D. (West Virginia University)
  Endocrine Pharmacology and Metabolism of Male Sex Accessory Tissues
- Rajesh K. Naz - Ph.D. (All India Institute of Medical Sciences)
  Male Physiology and Immunology
- Michael W. Vernon - Ph.D. (University of Florida)
  Reproductive Endocrinology and Assisted Reproductive Technology
- Matthew E. Wilson - Ph.D. (Iowa State University)
  Placental Function, Progesterone Catabolism, Embryonic Development
- Jianbo Yao - Ph.D. (McGill University)
  Molecular Genetics of Ovarian Function in Mammals and Fish

ADJUNCT PROFESSOR
- Robert L. Cochrane - Ph.D. (University of Wisconsin)
  Reproduction in Laboratory and Fur Animals

ASSOCIATE PROFESSORS
- Heather J. Billings - Ph.D. (University of Michigan)
  Neuroendocrinology and Anatomy
- Stan Hileman - Ph.D. (University of Kentucky)
  Neuroendocrine and Nutritional Effects on Reproduction
- Marlon Knights - Ph.D. (West Virginia University)
  Seasonality of Reproduction in Small Ruminants
ASSISTANT PROFESSORS

• Melanie J. Clemmer - Ph.D. (West Virginia University)
  Assisted Reproductive Technology

• Ida Holaskova - Ph.D. (West Virginia University)
  Reproductive Immunology

Curriculum Requirements for M.S. in Reproductive Physiology

The graduate program in reproductive physiology, leading to a master's degree, is interdisciplinary, with faculty located in the Departments of Animal and Nutritional Sciences; Biology, Obstetrics, and Gynecology; Physiology and Pharmacology; and Internal Medicine. Requirements for admission include completion of the following prerequisites with a grade of C or better in each: calculus, genetics, organic chemistry, physics, and vertebrate embryology. The Graduate Record Examination is not required. Only a limited number of students are accepted each year.

RESEARCH

Research topics include studies of control of fertility, function and regression of the corpus luteum, aging of the oocyte, seasonal and other environmental factors in reproduction, control of steroidogenesis, control of estrus and ovulation, new methods of artificial insemination, ovarian follicular development, novel ovarian genes, endocrine functions of polypeptides, embryonic and fetal mortality, neuroendocrine control of gonadotropic hormone secretion, neuroendocrine regulation of puberty and anestrus, effects of nutrition on reproductive function, effects of pre-natal stress on cardiac function, and immunology of reproduction. The focus of research is both basic and applied and is almost entirely with farmed animals, including poultry and fish.

COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANPH 424</td>
<td>Physiology of Reproduction</td>
<td>3</td>
</tr>
<tr>
<td>ANPH 796</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>A&amp;VS 699</td>
<td>Graduate Colloquium</td>
<td>1-6</td>
</tr>
<tr>
<td>ANPH 697</td>
<td>Research</td>
<td>1-15</td>
</tr>
</tbody>
</table>

Other graduate classes based on student emphasis and advisory committee recommendations.

Total Hours: 6-25

The program draws on courses offered in various departments and includes courses in endocrinology, advanced reproductive physiology, biochemistry, physiology, statistics, and developmental embryology selected by the student in consultation with his or her graduate committee. Students present seminars and participate in journal clubs each semester, but only 1 hour of each and 6 hours of research can count toward the 30-hour minimum.

Curriculum Requirements for Ph.D. in Reproductive Physiology

The graduate program in reproductive physiology, leading to a doctoral degree, is interdisciplinary, with faculty located in the Departments of Animal and Nutritional Sciences; Biology, Obstetrics, and Gynecology; and Physiology and Pharmacology Internal Medicine. Requirements for admission include completion of the following prerequisites with a grade of C or better in each: calculus, genetics, organic chemistry, physics, and vertebrate embryology. The Graduate Record Examination is not required. Foreign languages are not required for a degree in reproductive physiology. Only a limited number of students are accepted each year.

RESEARCH

Research topics include studies of control of fertility, function and regression of the corpus luteum, aging of the oocyte, seasonal and other environmental factors in reproduction, control of steroidogenesis, control of estrus and ovulation, prenatal mortality, ovarian follicular development, novel ovarian genes, endocrine functions of polypeptides, embryonic and fetal mortality, neuroendocrine control of gonadotropic hormone secretion, neuroendocrine regulation of puberty, anestrus, effect of nutrition on reproductive function, and immunology of reproduction. The focus of research is both basic and applied and is almost entirely with farmed animals, including poultry and fish.

COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ANPH 726</td>
<td>Endocrinology of Reproduction</td>
<td>4</td>
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<tr>
<td>ANPH 796</td>
<td>Graduate Seminar</td>
<td>1</td>
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<td>A&amp;VS 699</td>
<td>Graduate Colloquium</td>
<td>1-6</td>
</tr>
<tr>
<td>ANPH 797</td>
<td>Research</td>
<td>1-15</td>
</tr>
</tbody>
</table>

Other graduate classes dependent on student background, focus and advisory committee recommendations.

Total Hours: 7-26
The program draws on courses offered in various departments and includes courses in endocrinology, advanced reproductive physiology, biochemistry, physiology, statistics, and developmental embryology. Students present seminars and participate in journal clubs each semester. Individual plans of study are developed by the student and his or her graduate advisory committee.

Division of Forestry and Natural Resources

Joseph McNeel, Division Director of Forestry and Natural Resources
email: joseph.mcneel@mail.wvu.edu

Degrees Offered

• Master of Science in Recreation, Parks, & Tourism Resources
• Master of Science in Wildlife & Fisheries Resources
• Master of Science in Forestry with two Areas of Emphasis: Forest Resource Management or Wood Science & Technology
• Doctor of Philosophy in Forest Resources Science with four Areas of Emphasis: Forest Resource Management; Recreation, Parks, & Tourism Resources; Wildlife & Fisheries Resources; and Wood Science & Technology

The Division of Forestry and Natural Resources offers three master of science degree programs in recreation, parks and tourism resources, wildlife and fisheries resources, and forestry. 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. A student seeking admission to work toward the degree of doctor of philosophy in forest resources science in the Davis College of Agriculture, Natural Resources, and Design 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.

FACULTY

DIRECTOR

• Joseph F. McNeel - Ph.D. (Virginia Tech)
  Professor, Forest Engineering, Forest Operations

PROGRAM COORDINATORS

• John R. Brooks - Ph.D. (University of Georgia)
  Forest Resource Management, Professor, Forest Biometrics
• James T. Anderson - Ph.D. (Texas Tech)
  Wildlife and Fisheries Resources, Professor, Fisheries and Aquatic Ecology, Fish Management, Tropics Ecology
• David A. Smaldone - Ph.D. (University of Idaho)
  Recreation, Parks, and Tourism; Associate Professor, Environmental Interpretation and Education
• David DeVallance - Ph.D. (Oregon State University)
  Wood Science and Technology, Associate Professor, Biocomposites, Bioenergy, and Material Processing

PROFESSORS

• James T. Anderson - Ph.D. (Texas Tech University)
  Wildlife and Fisheries, Wildlife Ecology and Management
• Benjamin E. Dawson-Andoh - Ph.D. (University of British Columbia)
  Wood Science, Wood Chemistry, Wood Preservation
• John W. Edwards - Ph.D. (Clemson University)
  Wildlife and Fisheries, Endangered Species Ecology and Management, Forest Wildlife/Habitat Relationships
• Kyle J. Hartman - Ph.D. (University of Maryland)
  Wildlife and Fisheries, Fisheries and Aquatic Ecology, Fish Management, Trophic Ecology
• David W. McGill - Ph.D. (Pennsylvania State University)
  Forest Resources Management, Extension Specialist, Forest Resources, Non-industrial Private Forestry
• J.Todd Petty - Ph.D. (University of Georgia)
  Wildlife and Fisheries, Fisheries and Stream Ecology
• Steven W. Selin - Ph.D. (University of Oregon)
  Recreation, Parks, and Tourism; Human Dimensions of Natural Resources, Collaborative Stewardship
• Robert C. Whitmore - Ph.D. (Brigham Young University)
  Wildlife and Fisheries, Wildlife Management, Avian Ecology, Quantitative Ecology
ASSOCIATE PROFESSORS
• Kathryn G. Arano - Ph.D. (Mississippi State University)
  Forest Resources Management, Forest Economics
• Robert C. Burns - Ph.D. (Pennsylvania State University)
  Recreation, Parks, and Tourism; Leisure Studies
• Jinyang Deng - Ph.D. (University of Alberta)
  Recreation, Parks, and Tourism; Recreation and Leisure Studies

ASSISTANT PROFESSORS
• Gregory A. Dahle - Ph.D. (Rutgers University)
  Forest Resources Management, Arboriculture
• David B. DeVallance - Ph.D. (Oregon State University)
  Wood Science, Sustainable Product Development
• Kudzayi Maumbe - Ph.D. (Michigan State University)
  Recreation, Parks, and Tourism; Tourism Marketing
• Gloria S. Oporto - Ph.D. (University of Maine - Orono)
  Wood Science, Wood-based Composites and Bioproducts
• Kaushlendra Singh - Ph.D. (University of Georgia)
  Wood Science, Biofuel and Bioenergy Production
• Benjamin D. Spong - Ph.D. (Oregon State University)
  Wood Science, Extension Specialist, Forest Operations
• Anthony C. Tomkowski - M.S.F. (West Virginia University)
  Forest Resources Management, Forestry, Fisheries, Forest Water Quality
• Amy B. Welsh - Ph.D. (University of California - Davis)
  Wildlife and Fisheries, Ecology, Conservation Genetics
• Nicolas P. Zegre - Ph.D. (Oregon State University)
  Forest Resources Management, Forest Hydrology
• Mo Zhou - Ph.D. (University of Wisconsin)
  Forest Resources Management, Forest Economics

RESEARCH ASSISTANT PROFESSORS
• Todd E. Katzner - Ph.D. (Arizona State University)
  Wildlife and Fisheries Resources, Extension Specialist
• Stuart A. Moss - Ph.D. (West Virginia University)
  Forest Resources Management, Forest Business Management
• James S. Rentch - Ph.D. (West Virginia University)
  Forest Resources Management, Forest Ecology and Management

TEACHING ASSISTANT PROFESSOR
• George T. Merovich - Ph.D. (University of Arizona)
  Wildlife and Fisheries, Fisheries and Aquatic Ecology, Quantitative Ecology

ADJUNCT FACULTY
• Kelly Bricker - Ph.D. (Pennsylvania State University)
  Recreation, Parks, and Tourism
• Adam E. Duerr - Ph.D. (University of Vermont)
  Wildlife and Fisheries
• Nathan J. Harlan - M.A. (Geneva College)
  Recreation, Parks, and Tourism
• Patricia M. Mazik - Ph.D. (Memphis State University)
  Wildlife Fisheries
• Gary Miller - Ph.D. (Virginia Tech)
  Forest Resources Management
• Margaret Pings - M.S. (West Virginia University)
  Recreation, Parks, and Tourism
• Steven J. Storck - Ph.D. (West Virginia University)
  Recreation, Parks, and Tourism
Admission Requirements for M.S.

Admission requirements for applicants are similar to the requirements for admission to the Davis College of Agriculture, Natural Resources, and Design. The Master of Science degree is offered in four programs: forestry (forest resources management or wood science and technology emphasis), wildlife and fisheries resources; and recreation, parks, and tourism resources. In nearly every case, the program of study will require two years of on-campus residence.

Degrees Offered:

- Master of Science in Forestry with two Areas of Emphasis in Forest Resources Management and Wood Science and Technology
- Master of Science in Recreation, Parks, and Tourism Resources
- Master of Science in Wildlife and Fisheries Resources
Additional Program

**Peace Corps Master's International Program:** The Division of Forestry and Natural Resources is also an active participant in the Peace Corps Master’s International program. The vision of the WVU-PCMI is to prepare graduate students with the advanced coursework, research experience, and professional guidance needed to succeed in Peace Corps service and in careers related to environmental science and policy, forestry and natural resource management, and sustainable development. For more information go to: http://peacecorps.davis.wvu.edu/.

**Curriculum Requirements for Ph.D.**

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 and natural resources science. In addition to coursework and the dissertation, the candidate is required to pass a qualifying examination and a final examination.

**Doctor of Philosophy in Forest Resources Science**

**Degree Offered**

- Doctor of Philosophy in Forest Resources Science with four Areas of Emphasis: Forest Resource Management; Recreation, Parks, and Tourism Resources; Wildlife and Fisheries Resources; and Wood Science and Technology

**Admissions**

A student seeking admission to work toward the degree of doctor of philosophy in forest resources science in the Davis College of Agriculture, Natural Resources, and Design may choose as the 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.

**Curriculum Requirements for Ph.D. in Forest Resources Science**

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.

**Master of Science in Forestry**

**Degree Offered**

- Master of Science in Forestry with two Areas of Emphasis in Forest Resources Management and Wood Science and Technology

**Admissions**

Students seeking admission for the degree of master of science in forestry 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 bioenergy, biocomposites, forest biometry, forest ecology, forest economics, forest hydrology, forest management, forest operations, silviculture, sustainable construction, or forest products marketing. The candidate must complete thirty hours of approved study, six hours which shall constitute a thesis, or thirty-six hours of approved study without a thesis but including a three-hour problem paper. For details regarding the Forest Resources Management Program, go to: http://forestresources.wvu.edu/. For details regarding the Wood Science and Technology Program, go to: http://woodscience.wvu.edu/.
Curriculum Requirements for M.S. in Forestry

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 master of science in forestry has a non-thesis option. For this option, the candidate must complete thirty-six hours of approved study, eight hours of which shall consist of an applied problem as approved by the candidate's graduate committee. 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.

Master of Science in Recreation, Parks and Tourism Resources

Degrees Offered

• Master of Science in Recreation, Parks, and Tourism Resources

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.

• Doctor of Philosophy in Forest Resources Science

The Division of Forestry and Natural Resources also offers a program option leading to the degree of doctor of philosophy in forest resources science. Students who choose this option have the opportunity to choose one of the following as their major field of study: forest resources management; recreation, parks, and tourism resources; wood science and technology; wildlife and fisheries resources. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

Admissions

Students seeking admission for the degree of Master of Science 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. The candidate must complete thirty hours of approved study, six hours of which shall constitute a thesis, or thirty-six semester hours without a thesis but including a three credit-hour problem paper. For more information, go to: http://recreation.wvu.edu/.

Curriculum Requirements for M.S. in Recreation, Parks, and Tourism Resources

The Division of Forestry and Natural Resources in the Davis College of Agriculture, Natural Resources, and Design 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 emphasize 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 a thesis. 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. This program ordinarily requires two years of residence.

Cultural Resource Management Certificate

The Eberly College of Arts and Sciences also offers an interdisciplinary graduate-level fifteen-hour certificate in cultural resource management (CRM) that is coordinated by the Department of History. Most CRM students earn the graduate certificate in conjunction with a M.A. in history; public administration; recreation, parks, and tourism; geography; design; art history; or one of several other related graduate degree programs. The requirements for the CRM certificate consists of twelve credit hours of coursework and a three-hour internship or an individual research project (HIST 620). All CRM students must successfully complete HIST 600. Students who are currently admitted to, or enrolled in, a graduate degree program must register their intent to earn the CRM certificate with the CRM coordinator during the semester prior to their internship. Students who wish to pursue the graduate certificate independent of a graduate degree program must be admitted as non-degree graduate students prior to registering their intent to earn the CRM certificate. Each student is expected to maintain an average GPA of 3.0.
Master of Science in Wildlife and Fisheries Resources

Degrees Offered

• Master of Science in Wildlife and Fisheries Resources

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 forest resources 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

Students seeking admission for the degree of Master of Science 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 in either wildlife or fisheries resources in their studies. The candidate must complete thirty hours of approved study, six hours which shall constitute a thesis, or thirty-six hours of approved study without a thesis but including a three-hour problem paper. For more information, go to: http://wildlife.wvu.edu/.

Curriculum Requirements for M.S. in Wildlife & Fisheries Resources

Graduate studies in wildlife and fisheries resources in the Division of Forestry and Natural Resources lead to the master of science degree. Students may elect either thirty semester hours of approved study, including a six-hour thesis, or thirty-six hours of approved study without a thesis, but including a three-hour problem paper.

Division of Plant and Soil Sciences

Matthew Jenks, Division Director of Plant and Soil Sciences
email: majenks@mail.wvu.edu

Degrees Offered

• Master of Science and Doctor of Philosophy in Genetics & Developmental Biology
• Master of Science in Plant & Soil Sciences
• Doctor of Philosophy in Agricultural Sciences

The Davis College of Agriculture, Natural Resources, and Design offers graduate studies leading to the degree of doctor of philosophy in agricultural sciences. The doctoral program offers two majors: animal & food sciences and plant & soil sciences. 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 ten areas of emphasis: agricultural biochemistry, animal nutrition, animal physiology, production management, crops agronomy, entomology, applied & environmental microbiology, horticulture, plant pathology, and soil sciences.

FACULTY
DIRECTOR
• Matthew A. Jenks - Ph.D.
  Purdue University

PROFESSORS
• Barton S. Baker - Ph.D. (West Virginia University)
  Agronomy, Forage Crops
• Alan R. Biggs - Ph.D. (The Pennsylvania State University)
  Plant Pathology, Tree Fruits
• Gary K. Bissonnette - Ph.D. (Montana State University)
  Applied and Environmental Microbiology, Aquatic Microbiology
• William L. MacDonald - Ph.D. (Iowa State University)
  Plant Pathology, Forest and Shade Tree Diseases
• Louis M. McDonald - Ph.D. (University of Kentucky)
  Soil Science, Soil Chemistry
• Joseph B. Morton - Ph.D. (Montana State University)
  Plant Pathology, Mycorrhizal Interactions, Field Crop Diseases
• Daniel Panaccione - Ph.D. (Purdue State University)
  Plant Pathology, Mycology, Mycotoxins, Molecular Biology
• Alan J. Sexstone - Ph.D. (Michigan State)
  Applied and Environmental Microbiology, Soil Microbiology
• Jeffrey Skousen - Ph.D. (Texas A&M University)
  Soil Science, Land Reclamation, Soil and Water Conservation, Watershed Restoration

ASSOCIATE PROFESSORS
• James B. Kotcon - Ph.D. (University of Wisconsin)
  Plant Pathology, Agroecology, Nematology, Organic Farming Practices
• Yong-Lak Park - Ph.D. (Iowa State University)
• Eugenia M. Pena-Yewtuhiw - Ph.D. (University of Kentucky)
  Soil Science
• James A. Thompson - Ph.D. (University of Minnesota)
  Soil Science, Pedology, and Land Use
• Sven Verlinden - Ph.D. (Purdue University)
  Horticulture, Post Harvest Physiology, Molecular Biology

ASSISTANT PROFESSORS
• Vagner A. Benedito - Ph.D. (Wageningen University, The Netherlands)
  Genetics and Developmental Biology; Plant Geonomics, Functional Genetics, and Plant Physiology
• Thomas Griggs - Ph.D. (Texas Tech University)
  Agronomy, Field and Forage Crops
• Nicole Waterland - Ph.D. (Ohio State University)
  Horticulture, Flower Senescence

ADJUNCT PROFESSORS
• Michael Glenn
• Lee Kass
• Stephen Miller
• Tong-Man Ong
• Thomas van der Swet
• Paul Ziemkiewicz

FACULTY EMERITI
• James W. Amrine, Jr.
• Robert E. Anderson
• John A. Balasko
• John F. Baniecki
• Bradford C. Bearce
• James L. Brooks
• William B. Bryan
• Linda Butler
• Mannon E. Gallegly, Jr.
• Henry W. Hogmire
• L. Morris Ingle
• Robert F. Keefer
• Joginder Nath
• John C. Sencindiver
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 2.75 (3.0 for acceptance as a regular graduate student).
- 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 have the additional requirement to submit a TOEFL examination if their native language is not English. Interviews are encouraged but not required.

Curriculum Requirements for M.S.

The M.S. in Plant and Soil Sciences is offered with thesis or non-thesis options. Students entering this program may select research and classes in the following areas of emphases: agronomy, entomology, applied and environmental microbiology, horticulture, plant pathology, and soil sciences. The requirements of this options are described below.

THESIS OPTION

Students enrolled in the M.S. in plant and soil sciences thesis option must complete STAT 511, STAT 512, and three semesters of seminar in their area of emphasis. Other class requirements will be determined by the student's graduate committee and made a part of the student's plan of study. This degree requires a minimum of thirty graduate credit hours, six of which may be research.

Each student in the thesis option must develop a plan of study, conduct original research, and prepare a thesis. The plan of study which is to be developed within the first year of study must contain the courses to be taken plus an outline of the research to be conducted. The thesis must be satisfactorily defended in an oral examination given by the student's graduate committee.

NON-THESIS OPTION

Students enrolled in the M.S. in plant and soil sciences non-thesis option must complete a graduate course in statistics (minimum 3 hr), a graduate course in chemistry or biochemistry (minimum 3 hr), 15 hours of discipline-oriented courses, and three semesters of seminar in their area of emphasis. The specific courses taken to meet these requirements will be determined in consultation with the student's graduate committee and made a part of the student's plan of study. In addition students will complete a teaching practicum (2 hr) and a vocational experience involving a problem report, internship, or independent study (3 hr). The student must complete an oral examination at the end of their coursework and vocational experience. This degree requires a minimum of thirty-six graduate credit hours, six of which may be research.

Curriculum Requirements for Ph.D.

Core Courses

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.

Core courses for students in the doctoral program in agricultural sciences will be in the following areas:

- A minimum of six credit-hours must be completed in biology or earth sciences (excluding courses within a student's major field of study).
- A minimum of six credit-hours must be completed in biochemistry or advanced chemistry (400 level or above), depending on the student's research concentration.
- A two-semester sequence (minimum of six credits) must be completed in graduate-level statistics plus a course in experimental design, or a two-semester sequence (minimum of six credits) must be completed in graduate-level statistics plus one semester (minimum of three credits) of computer science beyond the introductory level.
• One seminar must be presented during each year or part of year in residence. A final dissertation research seminar will be presented as a college or university-wide seminar.
• Oral and written comprehensive (qualifying) examinations will be administered by the student’s graduate committee before the end of the second year following admission to the program. Satisfactory completion of the comprehensive examinations and core course requirements will admit the student to candidacy for the Ph.D.

Each candidate for the Ph.D. will be expected to meet the following general requirements:

• A minimum of three semesters in residence
• Successful completion of coursework requirements with a grade point average of 3.0 or higher
• Successful completion of comprehensive examinations prepared and evaluated by the student's graduate committee (Oral and written qualifying exams will be taken before the end of the second year following admission to the program.)
• A dissertation (The dissertation research must be applied toward an approved experiment station project or an approved independently funded research project.)
• Successful oral defense of the dissertation

Although not required, presentation of research results at meetings of a professional society and submission of manuscripts for publication are encouraged.

Genetics and Development Biology

Matthew Jenks, Division Director and Graduate Program Coordinator of Plant and Soil Sciences
email: majenks@mail.wvu.edu

Degrees Offered

• Master of Science in Genetics and Developmental Biology
• Doctor of Philosophy in Genetics and Developmental Biology

Admissions

To be considered for admission in the program, the student must possess a baccalaureate degree from an accredited college or university, and the student must have a grade point average of at least a 2.75 (on a 4.0 scale), an average of 3.0 or higher for the last sixty credit hours, or an average of 3.0 or higher in all courses in sciences and mathematics.

GRE AND NEW MCAT

The student must submit the scores of the Graduate Record Examination (GRE) or the New Medical College Admission Test (New MCAT). The student must provide three letters of reference from persons acquainted with the applicant’s professional work, experiences, or academic work, and also submit a written statement of 500 words or more indicating the applicant's goals and objectives relative to receiving a graduate degree.

Basic training in mathematics, physics, chemistry, and biology is required for admission. Students lacking prerequisites may be accepted in a provisional status but must fulfill them before graduation. Applications for graduate study should be sent in as early in the year as possible, but no later than April 1 for entry the following August; however, applications are accepted year-round for admission to the program in the following semester. Official transcripts of baccalaureate and/or master's degrees must be sent directly to the WVU Office of Admissions. Application forms can be received from the WVU Office of Admissions, P.O. Box 6009, Morgantown, WV 26506-6009. For further information, write to the department chair.

Curriculum Requirements for M.S. in Genetics and Developmental Biology

AREAS OF EMPHASIS

The master of science and doctor of philosophy degrees are 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, cytogenetics, developmental genetics, immunogenetics, mutagenesis, toxicology, human genetics, plant genetics, population and quantitative genetics, and animal breeding

Developmental Biology – Molecular aspects of development, experimental morphogenesis, teratology, regeneration, descriptive embryology, and life cycles of animals and plants

The student may also minor in one or more other scientific fields.
REQUIREMENTS

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.

PROGRAM OBJECTIVE

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.

Curriculum Requirements for Ph.D. in Genetics and Developmental Biology

AREAS OF EMPHASIS

The master of science and doctor of philosophy degrees are 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, cytogenetics, developmental genetics, immunogenetics, mutagenesis, toxicology, human genetics, plant genetics, population and quantitative genetics, and animal breeding

Developmental Biology – Molecular aspects of development, experimental morphogenesis, teratology, regeneration, descriptive embryology, and life cycles of animals and plants.

The student may also minor in one or more other scientific fields.

REQUIREMENTS

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.

PROGRAM OBJECTIVE

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.

Plant and Soil Science

Matthew Jenks, Division Director and Graduate Program Coordinator of Plant and Soil Sciences
email: majenks@mail.wvu.edu

Degree Offered

• Master of Science in Plant and Soil Sciences

AREA OF EMPHASIS

The master of science 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 science. Students interested in the Ph.D. in these disciplines should apply to the doctoral program in agricultural 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 2.75 (3.0 for acceptance as a regular graduate student).
• 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 have the additional requirement to submit a minimum score of 213 on the computer based TOEFL examination if their native language is not English. Interviews are encouraged but not required.

Students enrolled in the M.S. in plant and soil sciences must complete STAT 511, STAT 512, and three semesters of seminar in their area of emphasis. Other class requirements will be determined by the student's graduate committee and made a part of the student's plan of study. This degree requires a minimum of thirty graduate credit hours, six of which may be research.

Each student must develop a plan of study, conduct original research, and prepare a thesis. The plan of study which is to be developed within the first year of study must contain the courses to be taken plus an outline of the research to be conducted. The thesis must be satisfactorily defended in an oral examination given by the student's graduate committee.

Curriculum Requirements for M.S. in Plant and Soil Science

PROGRAM OBJECTIVE

The objective of the M.S. in plant and soil sciences is to provide 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, plant pathologists, and/or soil scientists. These disciplines are critical to maintaining agriculture and forest productivity, solving environmental problems, and promoting economic development in the state.

Curriculum Requirements for Ph.D. in Plant and Soil Sciences

CORE COURSES

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.

Core courses for students in the doctoral program in agricultural sciences will be in the following areas:

- A minimum of six credit-hours must be completed in biology or earth sciences (excluding courses within a student's major field of study).
- A minimum of six credit-hours must be completed in biochemistry or advanced chemistry (400 level or above), depending on the student's research concentration.
- A two-semester sequence (minimum of six credits) must be completed in graduate-level statistics plus a course in experimental design, or a two-semester sequence (minimum of six credits) must be completed in graduate-level statistics plus one semester (minimum of three credits) of computer science beyond the introductory level.
- One seminar must be presented during each year or part of year in residence. A final dissertation research seminar will be presented as a college or university-wide seminar.
- Oral and written comprehensive (qualifying) examinations will be administered by the student's graduate committee before the end of the second year following admission to the program. Satisfactory completion of the comprehensive examinations and core course requirements will admit the student to candidacy for the Ph.D.

Each candidate for the Ph.D. will be expected to meet the following general requirements:

- A minimum of three semesters in residence
- Successful completion of coursework requirements with a grade point average of 3.0 or higher
- Successful completion of comprehensive examinations prepared and evaluated by the student's graduate committee (Oral and written qualifying exams will be taken before the end of the second year following admission to the program.)
- A dissertation (The dissertation research must be applied toward an approved experiment station project or an approved independently funded research project.)
- Successful oral defense of the dissertation
Division of Resource Management

Kerry Odell, Interim Division Director of Resource Management
email: kerry.odell@mail.wvu.edu

Alan R. Collins, Assistant Division Director and Graduate Program Coordinator of Resource Management
email: alan.collins@mail.wvu.edu

Degrees Offered

- Master of Science in Agricultural and Extension Education
- Master of Science in Agricultural and Resource Economics
- Master of Landscape Architecture
- Doctor of Philosophy in Resource Management and Sustainable Development with four Areas of Emphasis: Natural Resource Economics; Agricultural and Extension Education; Resource Management; and Human and Community Development (offered in cooperation with the Division of Design and Merchandising)

The Division of Resource Management’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 Division of Resource Management offers curricula in agricultural and extension education, landscape architecture, and agricultural and resource economics. 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.

Students in agricultural and resource economics graduate programs benefit from the fifteen faculty members in the division plus the availability of three computer laboratories in our building and by the presence of the Natural Resource Analysis Center (NRAC). NRAC is a multidisciplinary research and teaching facility in the Division of Resource Management that provides research, teaching, and service in environmental and natural resource issues with a geo-spatial context.

Other valuable resources at WVU include the Regional Research Institute along with faculty in the Division of Design & Merchandising and Department of Economics. The RRI sponsors programs and activities that advance our knowledge of processes of regional socio-economic change with an emphasis on lagging regions. Ours are global interests, but we especially encourage research relevant to West Virginia and Appalachia. The RRI is located on the downtown campus of West Virginia University. Founded in 1965, the RRI has an internationally recognized reputation as a center of excellence in regional research.

Faculty members in the Division of Design & Merchandising offer expertise in interior design, business administration, architecture, fashion design and merchandising, and various fields related to Sustainable Design. Economics faculty members teach Ph.D.-level theory and econometrics courses along with coursework for fields in Regional and Public Economics.

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

FACULTY

DIRECTOR
- Kerry Odell - Ph.D. (Ohio State University)
  Interim Director

ASSISTANT DIRECTOR AND GRADUATE PROGRAM COORDINATOR
- Alan R. Collins - Ph.D. (Oregon State University)

PROFESSORS
- Harry N. Boone, Jr. - Ph.D. (Ohio State University)
  Computing Technology, Teaching Methods, Social Science Research
• Alan R. Collins - Ph.D. (Oregon State University)
  Resource Economics
• Michael J. Dougherty - Ph.D. (Virginia Technical)
  Environmental Design and Planning
• Gerard E. D’Souza - Ph.D. (Mississippi State University)
  Production Economics, Finance
• Jerald J. Fletcher - Ph.D. (University of California, Davis)
  Energy, Environmental and Resource Economics
• Stacy A. Gartin - Ph.D. (Ohio State University)
  Communications, Program Planning, Leadership Development, Teaching Methods
• Tesfa Gebremedhin - Ph.D. (Oklahoma State University)
  Farm Management, Agribusiness
• Tim T. Phipps - Ph.D. (University of California)
  Resource Economics, Agricultural Policy
• Peter V. Schaeffer - Ph.D. (University of Southern California)
  Regional Science, Applied Microeconomics
• Dennis K. Smith - Ph.D. (Pennsylvania State University)
  Rural Development, Agribusiness Management

ASSOCIATE PROFESSOR
• Deborah A. Boone - Ph.D. (Ohio State University)
  Extension Education, Leadership Development, Program Evaluation and Development
• Cheryl Brown - Ph.D. (University of California, Berkeley)
  Agricultural Policy, Resource Economics, Agribusiness
• Michael Hasenmyer - M.L.A. (North Carolina State University)
  Virtual simulation and design education
• Fonda Holehouse - J.D. (West Virginia University)
  Environmental and Enterprise Development and Law
• Donald J. Lacombe - Ph.D. (Florida State University)
  Spatial Econometrics, Public Choice, and Industrial Organization
• Kerry S. Odell - Ph.D. (Ohio State University)
  Research Methodology, Microcomputer Applications, Teaching Methods
• Mark Sperow - Ph.D. (Colorado State University)
  Production and Resource Economics
• Michael P. Strager - Ph.D. (West Virginia University)
  Spatial Analysis, Decision Support
• Charles B. Yuill - M.L.A. (University of Massachusetts)
  Computer Applications, Site Analysis

ASSISTANT PROFESSOR
• J. Wesley Burnett - Ph.D. (University of Georgia)
  Resource, Environmental, and Energy Economics
• Peter Butler - M.L.A. (Iowa State)
  Cultural Landscape Planning and Interpretation, Community Design
• Hodjat Ghadimi - Ph.D. (Ohio State University)
  Sustainable Development
• Ashley Kyber - M.S. (Clemson University), M.F.A. (Cranbrook)
  Community Design Landscape/Public Art, Environmental/Green Design
• Carrie Moore - M.Na (Lincoln University), R.M. (New Zealand), & E.E. (Universitat for Bodenkultur, Austria)
  Environmental Psychology, Natural Resource Management
• Lisa Orr - M.L.A. (University of California, Berkeley)
  Vernacular and Cultural Landscape Analysis and Theory, Landscape Architectural Graphics and Representation
• Doolarie Singh-Knights - Ph.D. (West Virginia University)
  Natural Resource Economics

PROFESSORS EMERITI
• Donald R. Armstrong - M.L.A. (Louisiana State)
Admissions

The following admission and performance standards, in addition to university and college requirements, are normally required to qualify for acceptance as a regular student to the Ph.D. program in Resource Management and Sustainable Development:

- A master's degree and a grade point average (GPA) of 3.0 or higher (on a 4.0 scale) in graduate courses is normally required for the AGEE, RM, and HCD areas. Applicants for the NRE area that are not prepared to take the Ph.D. sequence in microeconomic theory, mathematical economics, and econometrics will be admitted to the M.S. program in agricultural and resource economics.
- A minimum combined score of 300 for the verbal and quantitative sections of the Graduate Record Examination (GRE).
- Three letters of reference from individuals who can attest to the applicant's potential for academic success and/or relevant career-related experiences should be sent directly to the graduate program coordinator in Division of Resource Management.
- A current resume or curriculum vita.
- Coursework in intermediate microeconomics theory, statistics, and calculus for those seeking admittance into the RM or NRE areas.
- Four years of career-related experience for those seeking admittance into the AGEE area.
- Other supporting materials you wish to have considered with your application.

Applications are reviewed by the Graduate Admission Committee, the graduate program coordinator, and the Division Director who jointly make the admission decision. Applicants who do not meet the requirements but have special qualifications or circumstances may be admitted as provisional graduate students.

Curriculum Requirements for Ph.D.

Division of Resource Management Programs that offer Doctoral Degrees

The Ph.D. in Resource Management and Sustainable Development Areas of Emphasis:

- Natural Resource Economics (NRE)
- Agricultural and Extension Education (AGEE)
- Resource Management (RM)
- Human and Community Development (HCD)

The objective of this degree program is to provide doctoral students the opportunity to study and conduct research with faculty in areas of excellence in the Division of Resource Management along with the Division of Design and Merchandising in the Davis College of Agriculture, Natural Resources and Design. Within these areas of emphasis, specialization is limited only by the range of expertise of the graduate faculty and specific major requirements. Students entering the program will complete a common core consisting of research methods, graduate seminars, and teaching practicum. Beyond the core each area of emphasis has specific requirements for additional specialization.

Students entering the NRE area of emphasis may focus on natural resource and environmental economics or economic development. The AGEE area prepares students for leadership responsibilities in teacher education, educational administration, program development and evaluation, and research as it pertains to agriculture and extension. The RM and HCD areas both have an interdisciplinary focus. The RM area is designed primarily for students with a master’s degree in the sciences or engineering, consists of an applied economics foundation developed jointly by the student and the graduate advisory committee. Students choosing the HCD area may focus their studies and research in the areas of education and human resources
development, social and cultural improvement of the community, governmental issues and policy, economic growth and impact, or areas associated with the students' professional goals developed in consultation with their graduate advisory committee. HCD area of emphasis is offered in cooperation with the Division of Design and Merchandising.

All doctoral students must satisfactorily complete a set of common core courses in research methods, a teaching practicum, and graduate seminars for a total of at least nine credit hours. Course requirements may be waived if the student has received equivalent training in prior coursework. Coursework pertaining to the student’s major and additional specialization will be determined by the student’s graduate advisory committee and the major requirements.

Students take written and oral qualifying examinations after the completion of the core and field courses. Upon satisfactory completion of the qualifying examinations and field of specialization requirements, the student will be eligible for admittance to candidacy for the Ph.D. in Resource Management and Sustainable Development. Each candidate for the Ph.D. degree must meet the following general requirements:

• Successful completion of written and oral qualifying examinations and examinations in a minimum of two fields of specialization. A master’s degree may serve as one field exam, subject to approval by the Graduate Committee.
• Dissertation research on an approved research project leading to the successful completion and oral defense of a dissertation.

The faculty expects that doctoral students present the results of their research at professional meetings and submit articles based on their research to refereed scholarly journals.

Agricultural and Extension Education

Harry N. Boone, Jr., Graduate Program Coordinator
e-mail: Harry.Boone@mail.wvu.edu

Degrees Offered

• Master of Science in Agricultural and Extension Education
• Doctor of Philosophy

There are two graduate options available in Agricultural and Extension Education. Individuals desiring advanced study in teaching agriculture in public schools, communication and leadership, or 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.

Curriculum Requirements for M.S. in Agricultural and Extension Education

The Agricultural and Extension Education faculty offer master’s programs for persons desiring advanced study in teaching agriculture in public schools, communications and leadership, or extension education. 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 he or she plans to obtain certification to teach. Students in the curriculum take graduate courses in both technical and professional education. Programs are planned to ensure that candidates develop competence in the following areas:

• Communications and leadership
• Design, operation, and philosophy of agricultural and extension education programs
• Research and evaluation processes (In addition, students pursuing programs that emphasize agricultural and extension education will be expected to develop an understanding of teaching/learning processes.)

All graduate courses offered toward the degree must be approved by the student’s graduate committee. A thesis is required as part of the thirty credit-hour graduation requirement.

Curriculum Requirements for Ph.D.

The agricultural and extension education faculty offers a Ph.D. with a major in Agricultural and Extension Education (AGEE) or Human and Community Development (HCD) as part of the Ph.D. program in resource management and sustainable development.

Beyond the core, AGEE majors take four courses covering research design, data analysis, program development, and program evaluation. Additional courses in teaching and learning theory, educational psychology, supervision, administration and leadership, and statistics are recommended. Students will have two fields of specialization consisting of a minimum of twelve to fifteen semester hours of coursework each, not counting research.

Beyond the core, HCD majors take four courses covering research design, data analysis, program development, and program evaluation. Additional courses related to qualitative research, policy, administration, and the philosophical, theoretical, and empirical foundations related to human community
growth and sustainability are recommended. Students will have two fields or specialization consisting of a minimum of twelve to fifteen semester hours of coursework each.

**Agricultural and Resource Economics**

Alan R. Collins, Graduate Program Coordinator  
e-mail: Alan.Collins@mail.wvu.edu

**Degrees Offered**

- Master of Science in Agricultural and Resource Economics  
- Doctor of Philosophy

The faculty in Agricultural and Resource Economics (ARE) offer a master’s and a doctoral degree. The master’s degree can serve as either a professional degree beyond a bachelor’s degree, or it can prepare a candidate for studies at the doctoral level.

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.

**Curriculum Requirements for M.S. in Agricultural and Resource Economics**

The Agricultural and Resource Economics faculty offer a master’s program for persons desiring advanced study in agricultural, environmental, natural resource, energy, and local and regional economic development. Candidates for the master of science 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. Graduate programs are planned to ensure that candidates develop competence in the following:

- Communicating economic policy issues  
- Theoretical and analytical skills to analyze and evaluate economic policies  
- Research to develop economic policy proposals

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.

**THESIS OPTION**

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.

**COURSEWORK OPTION**

A minimum of thirty-six credit hours of approved coursework to provide proficiency in economics, resource, and agricultural and resource economics. Courses in closely related areas may be included if approved by the student’s graduate committee. The student must satisfactorily complete a written and oral examination administered by the student’s graduate committee.

**Curriculum Requirements for Ph.D. in Resource Management and Sustainable Development**

The Agricultural and Resource Economics faculty offer a Ph.D. in Resource Management and Sustainable Development with tracks available in Natural Resource Economics (NRE), Resource Management (RM), and Human and Community Development (HCD). The HCD track is offered in cooperation with faculty in the Division of Design and Merchandising. Admission prerequisites for each track are available online in the graduate program handbook.

All doctoral students in the Division of Resource Management take a set of common core courses in research methods, teaching practicum, and graduate seminar for a total of at least nine credit hours.
BEYOND THE CORE:

- NRE students take courses in advanced microeconomic theory, mathematical economics, econometrics, and quantitative methods. Two fields of specialization are required.
- RM students take courses covering microeconomic theory, policy analysis, natural resource and environmental economics, and econometrics/statistics. There are two fields of specialization (one must be in spatial econometrics and analysis) required, each with a minimum of nine hours.
- HCD students must take at least eighteen credit hours of coursework in theory, methods, and application. Two fields of specialization are required, each consisting of a minimum of nine credit hours of coursework.

An examination is required for each field of specialization. Students with a master’s degree may petition their graduate committee to accept this degree as meeting the requirements for one field examination.

Landscape Architecture

Charles B. Yuill, Graduate Program Coordinator
email: charlie.yuill@mail.wvu.edu

Degree Offered

- Master of Landscape Architecture (MLA)

The MLA (Master of Landscape Architecture) is a professional master’s level program offered by the Landscape Architecture Program in the Division of Resource Management. The Program provides two tracks for students who wish to pursue graduate education in landscape architecture and environmental design. The program provides for a three-year course of study for students without a design-related undergraduate degree who wish to pursue graduate studies in landscape architecture. That track provides one year of leveling courses, so students may then pursue advanced studies in their remaining two years. Students pursuing the three-year MLA are then able to engage in the profession of landscape architecture as practicing professionals.

The program also provides a two-year course of study for students entering the program with an undergraduate design degree in landscape architecture or a related field such as architecture. The program provides opportunities to engage in landscape architectural design as well as the potential to engage in specializations such as community planning and design, environmental restoration, and environmental informatics focusing on GIS-based planning and design methods. With both the two-year and three-year programs, the student concludes their studies by completing either an applied capstone project or a thesis.

Curriculum Requirements for MLA in Landscape Architecture

The landscape architecture faculty offers the master of landscape architecture (MLA) as a professional degree leading to the practice of landscape architecture. Candidates for the MLA may enter the program with a BSLA, BALA, or a related design degree and pursue a thirty-eight credit hour course of study culminating in the preparation of either a master’s thesis or terminal project. For these students, the MLA will serve as a post-professional degree providing the opportunity for advanced or specialized studies in particular areas of landscape architecture. Students entering the program with a BS or BA in a non-design discipline are required to complete up to an additional twenty-eight credits of leveling courses prior to entering the second year of a three-year course of study with the thirty-eight credit hour course of study to be completed in years two and three. The number of leveling courses that any student may be required to take will be dependent on the student’s academic background and will be determined in collaboration with the student’s academic advisor. For these students, the MLA will serve as the first professional degree that is required for entry into the profession of landscape architecture. Studies for these students will also culminate in the preparation of a master’s thesis or terminal project.

The master of landscape architecture program provides opportunities for both foundation and advanced training in the core areas of landscape architecture, including site and environmental design, land use planning, construction methods and materials, landscape management, and plant materials and planting design. It is anticipated that many students, particularly those pursuing the post-professional degree, will take interdisciplinary approaches to their studies as well as use them in practice. There are twelve credit hours of electives in the curriculum. These would allow the student to tailor a series of courses in areas of focus such as community planning and design, environmental restoration, or environmental and natural resource analysis methods including geographic information systems and remote sensing.

COURSEWORK

A total of thirty-eight credit hours are required for the post-professional MLA 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.
Eberly College of Arts and Sciences

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-two 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. In 2012, the faculty of the college produced over 500 publications and received over 230 grants and contracts. In recent years, arts and sciences faculty have generated over $15,000,000 annually in external support for research and instruction.

Degrees Offered

Graduate programs leading to a master’s degree are available in biology, chemistry, communication studies, English, foreign languages, forensic science, geography, geology, history, legal studies, liberal arts, mathematics, physics, psychology, public administration, social work, sociology and anthropology, and statistics. Each program prepares students for further study or for productive roles in professional environments. Information concerning graduate programs in the Eberly College of Arts and Sciences may be obtained by contacting the Associate Dean for Research, Graduate Studies, and Outreach, Eberly College of Arts and Sciences, 201 Woodburn Hall, West Virginia University, P.O. Box 6286, Morgantown, WV 26505-6286; telephone (304) 293-4611.

• 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, Master of Fine Arts, Doctor of Philosophy in English
• Master of Arts in Foreign Languages
• Master of Science in Forensic Science
• Master of Arts, Doctor of Philosophy in Geography
• Master of Science, Doctor of Philosophy in Geology
• Master of Arts in History and 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 Philosophy in Political Science
• Master of Science, Doctor of Philosophy in Psychology
• Master of Public Administration
• Master of Social Work
• Master of Arts in Sociology and Anthropology
• Master of Science in Statistics, Doctor of Philosophy in Computational Statistics
• Master of Professional Studies in Applied Statistics

The Eberly College of Arts and Sciences offers doctoral programs in biology, chemistry, communication studies, English, geography, geology, history, mathematics, physics, political science, psychology, and statistics. Available research or teaching concentrations are 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
• 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
• Statistics—statistical machine learning, computational statistics, statistical theory
ADMINISTRATION

DEAN
• Robert H. Jones - Ph.D. (SUNY College)

ASSOCIATE DEANS
• Joan S. Gorham - Ed.D. (Northern Illinois University)
  Academic Affairs
• Valerie Lastinger - Ph.D.
  Interim, Undergraduate Studies
• Asuntina S. Levelle - J.D.
  Finance
• Tracy Morris - Ph.D. (University of Mississippi)
  Research, Graduate Studies, and Outreach
• Michael Perone - Ph.D. (University of Wisconsin)
  Faculty

ASSISTANT DEAN
• Katie Stores - Ph.D. (West Virginia University)
  Research

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: biochemistry and molecular biology, bioinformatics, genetics, genomics and evolutionary biology, biology education, cell and developmental biology, ecology, forensic biology, neurobiology, behavior and physiology, and plant sciences.

FACULTY

CHAIRPERSON
• Richard B. Thomas - Ph.D. (Clemson University)

PROFESSORS
• Ashok Bidwai - Ph.D. (Utah State University)
  Biochemical and Molecular Genetic Analysis of Protein Kinases
• Jonathan R. Cumming - Ph.D. (Cornell University)
  Plant Physiology, Rhizosphere Ecology
• Jorge A. Flores - Ph.D. (George Washington University)
  Endocrinology of Reproduction, Signal Transduction
• James B. McGraw - Ph.D. (Duke University)
  Plant Ecology, Plant Population Biology, Conservation Biology
• Richard B. Thomas - Ph.D. (Clemson University)
  Physiological Plant Ecology, Global Environmental Change

ASSOCIATE PROFESSOR
• Jim Belanger - Ph.D. (University of Toronto)
  Neural Basis of Behavior, Adaptive Behavior, Comparative Physiology
• Clifton P. Bishop - Ph.D. (University of Virginia)
  Developmental and Molecular Biology of Drosophila
• Kevin C. Daly - Ph.D. (University of Arizona)
  Psychophysics and Neurophysiology of Manduca Sexta
• Stephen DiFazio - Ph.D. (Oregon State University)
  Plant Genomics, Ecological Genetics
• Sarah M. Farris - Ph.D. (University of Illinois)
  Nervous System Evolution and Development, Entomology
• William T. Peterjohn - Ph.D. (Duke University)
  Biogeochemistry, Ecosystem Ecology

ASSISTANT PROFESSOR
• Andrew Dacks - Ph.D. (University of Arizona)
  Neural Basis of Behavior States, Nervous System Evolution
• Jennifer Gallagher - Ph.D. (Yale University)
  Molecular Mechanisms of Genetic Variation
• Jennifer Hawkins - Ph.D. (Iowa State University)
  Plant Comparative Genomics, Molecular Evolution, Regulation of Gene Expression
• Gary Marsat - Ph.D. (McGill University)
  Sensory Processing of Communication Signals; Systems Neuroscience and Computational Neuroscience
• Rita V. M. Rio - Ph.D. (Yale University)
  Microbial Symbiosis, Functional Genomics, Vector-borne Diseases
• Shuo Wei - Ph.D. (University of Miami, Florida)
  Molecular and Cellular Mechanisms of Early Vertebrate Development; Protease Biochemistry
• Michelle D. Withers - Ph.D. (University of Arizona)
  Biology Education: Scientific Teaching

CLINICAL ASSOCIATE PROFESSOR
• Donna Ford-Werntz - Ph.D. (Washington University, St. Louis)
  Plant Systematics

Master of Science

PREREQUISITES AND REQUIREMENTS

Applicants for the master of science program in biology must show, at the minimum, the equivalent of a bachelor’s degree from an accredited institution; an undergraduate grade point average of 3.0; a forty-fifth percentile ranking for the verbal, quantitative, and analytical sections of the Graduate Record Examination; and an adequate science and mathematics background (normally one year of mathematics, one year of physics, and two years of chemistry). Certain international applicants must have a TOEFL score greater than 250 for the computer-based exam, which is roughly equivalent to more than 600–603 for the paper-based test and roughly equivalent to more than 100 for the internet-based test.

Applicants are requested to submit a one to two-page essay describing past research experience and expectations for career goals. Three letters of recommendation from individuals familiar with the applicant’s academic performance are required as well as official transcripts from all colleges or universities attended. Prior to admission, a member of the faculty must agree to provisionally serve as the student’s faculty advisor. The Department of Biology’s Graduate Committee reviews the applicant’s records and makes the admission decisions.

The WVU general requirements for the master of science are outlined elsewhere in the graduate catalog. Students in the biology M.S. program may apply up to six hours of research credit toward the thirty-hour requirement; the remaining twenty-four hours of credit must be earned in graduate courses that reflect a diversified exposure to biology. The establishment of an advisory committee and the generation of a program of study are explained in detail in the department’s Graduate Student Handbook. A final oral examination is administered by the advisory committee after the program of study has been completed and the thesis has been submitted.
Doctor of Philosophy

PROGRAM

The program for the degree of doctor of philosophy reflects a flexible, research-oriented approach geared to develop the interests, capabilities, and potentials of mature students. Applicants must have met all the entrance requirements listed above for the master of science program, but a fiftieth percentile ranking or higher in the verbal quantitative and analytical section of the Graduate Record Examination is expected. Acceptance into the Ph.D. program is by vote of the Graduate Committee of the Department of Biology. This committee ensures that all entrance requirements are met or that provisions have been made to remedy the deficiencies, and that facilities and personnel are adequate to support the program to a successful conclusion.

Each student admitted to the Ph.D. program works under the close supervision of a faculty research advisor and an advisory committee; details on the composition and establishment of an advisory committee are available in the department’s Graduate Student Handbook. Students must have a program of study formulated and approved by the end of the second semester of entering the Ph.D. program; all deficiencies must have been removed earlier. Significant deviations from an established program of study require approval from the advisory committee and the Graduate Committee.

EXAMINATIONS AND DISSERTATION PROPOSAL

The advisory committee is responsible for overseeing the progress of the student and for administering and judging performance in the required examinations. The advisory committee ensures that all of the Department of Biology, Eberly College of Arts and Sciences, and University requirements are met during the course of the student’s program of study. The program of study outlines the coursework to be taken in support of the proposed research.

Students must successfully complete a preliminary exam with written and oral components before being promoted to candidacy for the Ph.D. The preliminary exam is given no later than the end of the third semester in residence. All doctoral students must also write and defend a research proposal (the proposal exam) no later than the end of the fourth semester in residence.

CANDIDACY

Successful passage of the preliminary examination leads to promotion to candidacy. Because the qualifying examination attests to the academic competence of the student who will become an independent researcher or practitioner, the examination cannot precede the conferring of the degree by an extended period. Consequently, doctoral candidates are allowed no more than five years in which to complete remaining degree requirements (http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#Doctoral_Coursework). The expected time to completion of the Ph.D. degree is four-five years; however, all requirements for a graduate degree must be completed within a period of eight years, starting with the initial enrollment after the most recent degree. The final examination consists of the submission of a completed and acceptable written dissertation and an oral dissertation defense. A formal departmental seminar covering the dissertation research must be presented before graduation.

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, biological, 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.

Prerequisites

Applicants for graduate studies in chemistry must have a bachelor’s degree as a minimum requirement. Applicants must have a major or concentration in chemistry and an appropriate background in physics and mathematics. All entering graduate students in chemistry are required to take departmental guidance examinations in the major areas of chemistry. These examinations, at the undergraduate level, are administered before registration and serve to guide the faculty in recommending a course program for the beginning graduate student. Deficiencies revealed by the departmental guidance examinations need to be corrected in a manner prescribed by the faculty.
FACULTY

CHAIR
• Kung K. Wang - Ph.D. (Purdue University)
  Eberly Distinguished Professor of Chemistry, Organic Chemistry, Stereoselective Synthesis, Natural Products

ASSOCIATE CHAIR
• Jeffrey L. Petersen - Ph.D. (University of Wisconsin-Madison)
  Physical Inorganic Chemistry, Electrophillic Transition Metal Complexes, X-ray Crystallography

PROFESSORS
• Harry O. Finklea - Ph.D. (California Institute of Technology)
  Analytical/Physical Chemistry, Electron Transfer Kinetics, Solid Oxide Fuel Cells, Gas Phase Sensors
• Terry Gullion - Ph.D. (William and Mary)
  Physical Chemistry, Solid State NMR, Biological Materials, Polymers
• Charles Jaffe - Ph.D. (University of Colorado)
  Theoretical Chemistry, Molecular Dynamics, Chaotic Systems
• Fred L. King - Ph.D. (University of Virginia)
  Analytical Chemistry, Mass Spectrometry, Trace Elements, Gas-phase Chemistry
• John H. Penn - Ph.D. (University of Wisconsin-Madison)
  Chemical Education, Online Instruction Methods in Organic Chemistry
• Kenneth Showalter - Ph.D. (University of Colorado)
  Bennett Distinguished Professor, Physical Chemistry, Chemical Kinetics, Multistability and Oscillating Systems
• Bjorn C. Soderberg - Ph.D. (Royal Institute of Technology, Sweden)
  Organic Synthesis Using Transition Metals

ASSOCIATE PROFESSOR
• Suzanne Bell - Ph.D. (New Mexico State University)
  Analytical Chemistry, Forensic Science
• Lisa Holland - Ph.D. (University of North Carolina-Chapel Hill)
  Micro-separations, High Throughput Drug Screening
• Michelle Richards-Babb - Ph.D. (Lehigh University)
  Chemical Education
• X. Michael Shi - Ph.D. (University of Maryland)
  Organic Synthesis, Bioorganic Chemistry
• Ronald B. Smart - Ph.D. (University of Michigan)
  Environmental Analytical Chemistry, Electrochemistry, Trace Metals, Coal Chemistry
• Alan M. Stolzenberg - Ph.D. (Stanford University)
  Inorganic Chemistry, Bioinorganic Chemistry, Organometallic Chemistry

ASSISTANT PROFESSOR
• Jonathan Boyd - Ph.D. (Texas Tech University)
  Analytical Biochemistry and Toxicology
• Fabien Goulay - Ph.D. (University of Rennes, France)
  Physical Chemistry, Laser Spectroscopy
• Jessica Hoover - Ph.D. (University of Washington)
  Organometallic Chemistry, Catalysis
• Justin Legleiter - Ph.D. (Carnegie Mellon University)
  Biophysical Chemistry, Atomic Force Microscopy
• Blake Mertz - Ph.D. (Iowa State University)
  Computational Biophysics and Chemistry
• Brian Popp - Ph.D. (University of Wisconsin-Madison)
  Organic and Organometallic Chemistry, Catalysis
• Stephen Valentine - Ph.D. (Indiana University)
  Mass Spectrometric Analysis of Biomolecules
Master of Science

The principal requirements of the Chemistry M.S. program are divided into three general categories, including coursework, research, and thesis defense. Coursework is in the major areas of chemistry and includes emphasis in the chosen research area. A research project is chosen in the area of the student’s interest and in consultation with the faculty. The thesis defense shows the ability of the student to defend scientific conclusions based on their research project.

Thesis/Credits

The WVU general requirements for the master of science degree are outlined elsewhere in this catalog. Graduate students in the M.S. program in chemistry are required to submit a research thesis. They may apply up to six hours of research credit toward the thirty-hour requirement. The remaining twenty-four hours of credit must be earned in the basic graduate courses which reflect a diversified exposure to chemistry; no more than ten hours may be elected outside the department, and coursework taken at the 500 to 700-level must include at least three three-credit-hour courses distributed in at least two areas outside the student’s major area of research. Students are required to enroll in the departmental seminar program and are required to attend special lectures and seminars offered by visiting scientists. A final oral examination is administered after completion and submission of the thesis.

Doctor of Philosophy

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.

Research

Research, which is the major theme of graduate studies, may be initiated as early as the student and faculty feel appropriate for the individual. Normally, a student will begin laboratory work no later than the second semester. 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.

Candidacy

Candidacy examinations contain written and oral portions. The written examinations are of the cumulative type and are offered eight times a year. After notification of successful completion of the written cumulative exams, the student will present and defend an original research proposal. The proposal must demonstrate originality and independence on the part of the student. This proposal is presented in writing to the student’s research committee and defended before that group and any other interested faculty members.

Communication Studies

Degrees Offered

• Master of Arts
• Doctor of Philosophy

Nature of 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.

FACULTY

CHAIR
• Matthew M. Martin - Ph.D. (Kent State University)

PROFESSORS
• Melanie Booth-Butterfield - Ph.D. (University of Missouri)
McConnell Chair in Speech Communication, Health and Interpersonal Communication
• Rebecca M. Chory - Ph.D. (Michigan State University)
  Organizational Communication, Mass Communication, Research Methods
• Joan S. Gorham - Ph.D. (Northern Illinois University)
  Associate Dean, Instructional, Intercultural, and Mass Media
• Matthew M. Martin - Ph.D. (Kent State University)
  Chairperson, Interpersonal, Instructional, Communication Traits
• Scott A. Myers - Ph.D. (Kent State University)
  Group, Instructional, Interpersonal
• Keith Weber - Ed.D. (West Virginia University)
  Communication Campaigns, Quantitative Methods, Instructional Communication

ASSOCIATE PROFESSOR
• Maria Brann - Ph.D. (University of Kentucky)
  Health, Interpersonal and Qualitative Research Methods
• Megan Dillow - Ph.D. (Pennsylvania State University)
  Interpersonal Communication, Communication Theory, Relational Communication
• Alan Goodboy - Ph.D. (West Virginia University)
  Instructional Communication, Interpersonal Communication, Quantitative Methods
• Brian R. Patterson - Ph.D. (University of Oklahoma)
  Developmental Communications, Communication Theory
• Andrea Weber - Ed.D. (West Virginia University)
  Communication Assessment, Leadership, Communication Ethics

ASSISTANT PROFESSOR
• Nicholas Bowman - Ph.D. (Michigan State University)
  Communication Technology, Media Psychology, Mass Communication, Media Effects, Entertainment and Emotion
• Elizabeth Cohen - Ph.D. (Georgia State University)
  Media Psychology, Entertainment Education, New Media, Health and Risk Communication
• Christy Rittenour - Ph.D. (University of Nebraska)
  Family, Life-span, Interpersonal

PROFESSOR EMERITA
• Virginia P. Richmond - Ph.D. (University of Nebraska)

APPLYING FOR ADMISSION TO THE PROGRAM

To apply for admission to the Ph.D. program, applicants must submit the following materials:

1. The application for admission to graduate school at West Virginia University.
2. Scores on the Graduate Record Examination (GRE). Applicants should have a minimum combined score of 1,000 on the verbal and quantitative components of the GRE and a minimum score of 4.0 on the analytical component of the GRE. Scores should not be older than five years at the time of application.
3. Scores on the Test of English as a Foreign Language Examination (TOEFL) (for international students only whose native language is not English). Scores will be accepted from any of three versions (i.e., internet-based test, computer-based test, paper-based test). Applicants should score in the ninetieth percentile of the test version taken.
4. All official undergraduate and graduate transcripts. Transcripts must be mailed directly from the registrar of the college and/or university attended. Applicants should have a minimum undergraduate GPA of 2.75 and a minimum graduate GPA of 3.30.
5. A vita. The vita should include all formal education, any teaching or professional work experience, and any research projects conducted to date.
6. A statement of interest. The statement of interest is a three to four-page, typed document in which applicants identify the following:
   • their reasons for pursuing a Ph.D. in communication studies
   • their reasons for wanting to attain their Ph.D. degree in communication studies at West Virginia University
   • their 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 their own educational and career goals
   • why attaining the Ph.D. degree in communication studies specifically from West Virginia University is vital to the achievement of their career goals
7. Three letters of recommendation from individuals familiar with the applicant’s academic progress and potential. These letters of recommendation should address whether the applicant has the ability to succeed in the Ph.D. program in communication studies at West Virginia University as both a Ph.D. student and as a graduate teaching assistant.

8. A sole-authored sample of scholarly writing 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.

9. Any additional supporting evidence. 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.

The transcripts, vita, statement of interest, recommendation letters, scholarly writing example, and supporting evidence should be mailed directly to:

On-Campus Graduate Coordinator
Department of Communication Studies
P.O. Box 6293
West Virginia University
Morgantown, WV 26506-6293

Nature of the Program

The Department of Communication Studies offers work leading to the degree of master of arts with a concentration in communication theory and research. 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

Requirements

In addition to the general WVU requirements, the graduate student in communication studies must meet departmental requirements. These include successful completion of both the minimum number of required graduate hours as set forth in Program A, B, or C (listed below) with a grade of B or above in each class and the maintenance of a minimum grade point average of 3.0. Classes graded P, S, or marked CR may not be counted toward a degree.

Applicants for admission must specify the program they wish to pursue. Program A is open only to full-time students. Programs B and C are open to both part-time and full-time students.

Program A

All students planning to continue graduate study past the M.A. level are encouraged to enter program A. The following are required for Program A:

• At least thirty-six hours of graduate credit, thirty of which must be in the Department of Communication Studies (A maximum of six hours of thesis credit will be allowed.)
• Completion of COMM 700 and COMM 701
• A thesis
• An oral examination on the thesis

Program B

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. The following are required for Program B:

• A minimum of thirty-six hours of coursework, thirty of which must be in the Department of Communication Studies
• Successful completion of written and oral comprehensive examinations (The oral examination may be waived with the approval of the student’s examination committee and the Departmental Coordinator of Graduate Studies.)

Program C

All students planning a professional career in elementary or secondary 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, on-campus study, or a combination. The following are required for Program C:
• A minimum of thirty-six hours of coursework, thirty of which must be in the Department of Communication Studies
• Successful completion of written and oral comprehensive examinations (The oral examination may be waived with the approval of the student’s examination committee and the Departmental Coordinator of Graduate Studies.)

**Doctor of Philosophy**

The Ph.D. program in Communication Studies is a fifty-four hour program (including dissertation hours) which affords students the opportunity to focus on numerous domains of communication, including computer-mediated communication, health communication, instructional communication, interpersonal communication, organizational communication, and strategic communication. Students will be awarded the Ph.D. upon completing fifty-four graduate credit hours, passing comprehensive exams, writing a dissertation proposal, and writing and defending a dissertation. Students are required to complete the following:

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 600</td>
<td>Communication in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>COMM 602</td>
<td>Interpersonal Comm:Theory/Rsrch</td>
<td>3</td>
</tr>
<tr>
<td>COMM 606</td>
<td>Theory/Rsrch-Organizational Comm</td>
<td>3</td>
</tr>
<tr>
<td>COMM 700</td>
<td>Survey of Human Comm Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Core COMM courses at the 700 level, this may include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 702</td>
<td>Advanced Interpersonal Comm</td>
</tr>
<tr>
<td>COMM 706</td>
<td>Advanced Organizational Comm</td>
</tr>
<tr>
<td>COMM 719</td>
<td>Advanced Instructional Comm</td>
</tr>
</tbody>
</table>

Research methods beyond COMM 701                  6
Additional COMM courses                           9
Dissertation research *                           18
Total Hours                                       54

*(i.e. COMM 797 Research)*

A GPA of 3.0 is required for graduation and any grade lower than B does not count toward the fifty-four hours. Students who receive more than six hours of Cs may not be permitted to remain in the program.

Upon admission to the program, students are advised by the Coordinator of On-Campus Graduate Studies. Working with the coordinator, students devise their schedule for their first semester. During the first semester, in conjunction with the coordinator, students select an advisor. This advisor serves as the chair of each student’s comprehensive examination and dissertation committees. Working with their advisor, students then select four other committee members, at least one of which, but no more than two, must be graduate faculty members external to the Department of Communication Studies.

Upon completion of the thirty-six hours of coursework, students take a comprehensive examination. The comprehensive examination consists of three sections on which students will be tested on two of the domains of communication emphasis and research methods. The written examination will be followed by an oral examination approximately two weeks later.

Once the written and oral comprehensive examinations have been successfully defended (as determined by the committee), students write a dissertation proposal and submit the proposal to their committee. Once the proposal has been approved, students write and defend their dissertation. The dissertation defense is open to the public.

**English**

**Degrees Offered**

• Master of Arts
• Master of Arts in Professional Writing and Editing
• Master of Fine Arts
• Doctor of Philosophy

**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.

FACULTY

CHAIR

• James Harms - M.F.A. (Indiana University)

PH.D. PROGRAM SUPERVISOR

• Adam Komisaruk - Ph.D. (University of California, Los Angeles)

M.A. PROGRAM SUPERVISOR

• Adam Komisaruk - Ph.D. (University of California, Los Angeles)

M.F.A. PROGRAM SUPERVISOR

• Mary Ann Samyn - M.F.A. (University of Virginia)

M.A. P.W.E. PROGRAM SUPERVISOR

• Brian Ballentine - Ph.D. (Case Western University)
PROFESSORS

• Dennis Allen - Ph.D. (University of Minnesota)
  Critical Theory, Prose Fiction, Popular Culture

• Rudolph P. Almasy - Ph.D. (University of Minnesota)
  Renaissance and Reformation Studies

• 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

• James Harms - M.F.A. (Indiana University)
  Creative Writing: Poetry, Contemporary Poetry

• Kirk Hazen - Ph.D. (University of North Carolina-Chapel Hill)
  Linguistics, Sociolinguistics

• Kevin Oderman - Ph.D. (University of California, Santa Barbara)
  American Poetry, American Literature, Creative Writing: Essay

• 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

• Sandy Baldwin - Ph.D. (New York University)
  Literature and Media Technology, 20th-century American Literature, Critical Theory

• Brian Ballentine - Ph.D. (Case Western Reserve University)
  Technical and Professional Writing, Digital Literacy

• Gwen Bergner - Ph.D. (Princeton University)
  African-American and Multi-ethnic Literatures, Post-colonial Studies

• Cari Carpenter - Ph.D. (University of Michigan)
  19th-century American Literature, Native American Literature

• Ryan Claycomb - Ph.D. (University of Maryland)
  20th-century British Literature, Drama

• Anna Shannon Elfenbein - Ph.D. (University of Nebraska)
  American Literature, Women's Studies, Film

• Lara Farina - Ph.D. (Fordham University)
  Medieval Literature and Culture, Gender Studies

• Marilyn Francus - Ph.D. (Columbia University)
  Restoration and 18th-century Literature and Culture, Women's Studies, Satire, History of the Novel

• 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, New Media Studies, Distance Learning

• Rosemary Hathaway - Ph.D. (Ohio State University)
  Folklore, English Education, 20th-century American Literature

• Ellesa High - Ph.D. (Ohio University)
  American Indian literature, Creative Writing: Fiction and Nonfiction, Appalachian Studies

• Adam Komisaruk - Ph.D. (University of California, Los Angeles)
  Romanticism and 18th-century British Literature

• John Lamb - Ph.D. (New York University)
  Assistant Editor of Victorian Poetry, Victorian Literature and Culture, Victorian Historiography

• Kathleen O'Hearn Ryan - Ph.D. (University of Massachusetts-Amherst)
  20th-century American Literature

• Nathalie Singh-Corcoran - Ph.D. (University of Arizona)
  Writing Center Theory and Practice, Writing Assessment

• Ethel Morgan Smith - M.A. (Hollins College)
  Creative Writing: Fiction and Nonfiction Essay; African-American Literature
• Lisa Weinman - Ph.D. (New York University)
  19th and 20th-century British and Irish Literature and Culture

ASSISTANT PROFESSORS

• Piers Brown - Ph.D. (University of Toronto)
  Early Modern British Studies, Poetics, History of the Book

• Lowell Duckert - Ph.D. (George Washington University)
  Early Modern British Studies, Literature and Environment

• John Jones - Ph.D. (University of Texas)
  Composition and Rhetoric, Digital Literacy

• Sarah Neville - Ph.D. (University of New Brunswick)
  Early Modern British Studies, History of the Book

• Tom Sura - Ph.D. (Purdue University)
  Composition and Rhetoric, Writing Program Administration

• Glenn Taylor - M.F.A. (Texas State University)
  Creative Writing: Fiction

PROFESSORS EMERITI

• Timothy Dow Adams
• Gail Galloway Adams
• Patrick Conner - Ph.D. (University of Maryland)

Admissions

MA IN ENGLISH

To be admitted to the Department of English as prospective candidates for the degree of master of arts, students are expected to have completed work comparable to the department’s undergraduate requirement for English majors (but with records distinctly above the average), and to present as part of their applications their scores on the verbal and analytic sections of the Graduate Record Examination General Aptitude Test and, if non-native speakers of English, their TOEFL scores. Past experience has shown that successful graduate students usually score at least the sixtieth percentile on the verbal section of the GRE. Students also must provide three letters of reference and a sample of their academic writing.

PROFESSIONAL WRITING AND EDITING

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. Applications must be supported by a portfolio of written work and three letters of recommendation. The GRE analytical writing test, taken within the last five years, is recommended; successful candidates will typically present a score of five or above. 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. Non-native English speakers must present TOEFL scores of at least 600 for the written exam or equivalent scores for the online version.

CREATIVE WRITING

Prospective candidates for the degree of master of fine arts are normally expected to have completed a bachelor’s degree in English. Admission to the program is based primarily on the excellence of a substantial writing sample in fiction, nonfiction, or poetry (ten to twenty pages of poetry; twenty to thirty pages of prose). Also required are Graduate Record Examination scores, three letters of recommendation, and a personal statement. Non-native speakers of English must present TOEFL scores. Past experience has shown that successful graduate students usually score above the sixtieth percentile on the verbal section of the GRE.

PHD IN ENGLISH

Applicants for admission to the program will be judged on the bases of academic record, three recommendations from former teachers, a statement of purpose outlining their academic and professional goals, a sample of their academic writing, and Graduate Record Examination General Aptitude Test scores. Non-native speakers of English must also present their TOEFL scores.

Master of Arts

NON-THESIS OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 609</td>
<td>College Composition Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 680</td>
<td>Introduction-Literary Research</td>
<td>3</td>
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</table>
or ENGL 682 Recent Literary Criticism

American Literature:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 646</td>
<td>American Literature To 1865</td>
</tr>
<tr>
<td>ENGL 647</td>
<td>American Literature 1865-1915</td>
</tr>
<tr>
<td>ENGL 648</td>
<td>Am Literature 1915-Present</td>
</tr>
<tr>
<td>ENGL 741</td>
<td>Seminar: American Studies</td>
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British Literature:

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<tr>
<td>ENGL 623</td>
<td>Old English 1</td>
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<td>ENGL 624</td>
<td>Old English 2</td>
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<tr>
<td>ENGL 661</td>
<td>Medieval Literature</td>
</tr>
<tr>
<td>ENGL 663</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>ENGL 664</td>
<td>Renaissance Literature</td>
</tr>
<tr>
<td>ENGL 666</td>
<td>Restoration &amp; 18th Century Lit</td>
</tr>
<tr>
<td>ENGL 668</td>
<td>Romantic Literature</td>
</tr>
<tr>
<td>ENGL 669</td>
<td>Victorian Literature</td>
</tr>
<tr>
<td>ENGL 671</td>
<td>20th Century British Lit</td>
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<td>ENGL 761</td>
<td>Seminar Medieval Studies</td>
</tr>
<tr>
<td>ENGL 764</td>
<td>Sem: Renaissanc Stdys 1500-1660</td>
</tr>
<tr>
<td>ENGL 766</td>
<td>Sem: Restoration/18 Century Stdys</td>
</tr>
<tr>
<td>ENGL 768</td>
<td>Sem: British Romanticism</td>
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<td>ENGL 769</td>
<td>Sem: Victorian Studies</td>
</tr>
<tr>
<td>ENGL 771</td>
<td>Sem: 20th-Cent British Studies</td>
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Pre-1800 Literature:

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<tr>
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<td>ENGL 624</td>
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<tr>
<td>ENGL 661</td>
<td>Medieval Literature</td>
</tr>
<tr>
<td>ENGL 663</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>ENGL 664</td>
<td>Renaissance Literature</td>
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<tr>
<td>ENGL 666</td>
<td>Restoration &amp; 18th Century Lit</td>
</tr>
<tr>
<td>ENGL 693</td>
<td>SPTP: American Film Melodrama</td>
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<td>ENGL 761</td>
<td>Seminar Medieval Studies</td>
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<td>ENGL 764</td>
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<td>ENGL 766</td>
<td>Sem: Restoration/18 Century Stdys</td>
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Post 1800 Literature:

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<td>ENGL 647</td>
<td>American Literature 1865-1915</td>
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<td>ENGL 648</td>
<td>Am Literature 1915-Present</td>
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<td>ENGL 669</td>
<td>Victorian Literature</td>
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<td>ENGL 769</td>
<td>Sem: Victorian Studies</td>
</tr>
<tr>
<td>ENGL 771</td>
<td>Sem: 20th-Cent British Studies</td>
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</table>

Electives 6
Seminar Requirement 6
Total Hours 30

**Course Requirements**

M.A. candidates selecting the non-thesis option must successfully complete thirty hours of coursework in English, according to the following distribution and breadth requirements, and must fulfill the foreign language requirement. Students may take three hours of coursework in another department, subject to the approval of the Graduate Program Committee.

**Distribution Requirements**

- ENGL 609 (Required of all graduate teaching assistants in their first semester in residence; students who do not hold an assistantship will substitute three additional hours of elective.)
- Foundation course: either ENGL 680 or ENGL 682
• Electives: eighteen hours of 600-level courses or 700-level seminars in English (excluding ENGL 790) (A maximum of three hours of Independent Study [ENGL 695 or ENGL 795] may be counted toward the elective hours.)
• Seminars: six hours of 700-level seminars (excluding ENGL 790 Teaching Practicum)

**Breadth Requirements**
At least one course from among the electives and seminars must be substantially devoted to pre-1800 texts; at least one must be substantially devoted to post-1800 texts. At least one course must be in American literature; at least one must be in British literature.

**Thesis Option**

**Course Requirements**
M.A. candidates selecting the thesis option must successfully complete thirty hours of coursework in English, according to the following distribution and breadth requirements, and must fulfill the foreign language requirement. Students may take three hours of coursework in other departments subject to the approval of Graduate Program Committee.

**Distribution Requirements**
- ENGL 609 (Required of all graduate teaching assistants in their first semester in residence; students who do not hold an assistantship will substitute three additional hours of elective.)
- Foundation course: either ENGL 680 or ENGL 682
- Electives: twelve hours of 600-level courses or 700-level seminars in English (excluding ENGL 790) (A maximum of three hours of Independent Study [ENGL 695 or ENGL 795] may be counted toward the elective hours.)
- Seminars: six hours of 700-level seminars (excluding ENGL 790)
- Thesis: six hours of ENGL 698 Thesis

**Breadth Requirements**
At least one course from among the electives and seminars must be substantially devoted to pre-1800 texts; at least one must be substantially devoted to post-1800 texts. At least one course must be in American literature; at least one must be in British literature.

**Foreign Language Requirement**
The foreign language requirement for the M.A. is satisfied by successfully completing (receiving an A or B in the last course) a second-year level of foreign language study at an accredited college or university (or its international equivalent) within the last five years or by passing (with a B or better) the examination administered by the Department of Foreign Languages for “credit by exam” for the fourth semester course of a language sequence. Exams are available in French, German, Spanish, or Latin.

**Master of Arts in Professional Writing and Editing**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 601</td>
<td>Studies-Composition/Rhetoric</td>
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<tr>
<td>ENGL 602</td>
<td>Editing</td>
<td>3</td>
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<tr>
<td>ENGL 605</td>
<td>Professional Writing Theory</td>
<td>3</td>
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<td>ENGL 609</td>
<td>College Composition Pedagogy</td>
<td>3</td>
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<tr>
<td>ENGL 610</td>
<td>Professional Writing Internship</td>
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<td>ENGL 698</td>
<td>Thesis</td>
<td>3-6</td>
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</table>

**Internship or Thesis Option:**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 601</td>
<td>Studies-Composition/Rhetoric</td>
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</tr>
<tr>
<td>ENGL 602</td>
<td>Editing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 605</td>
<td>Professional Writing Theory</td>
<td>3</td>
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<td>ENGL 609</td>
<td>College Composition Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 610</td>
<td>Professional Writing Internship</td>
<td>3-6</td>
</tr>
<tr>
<td>ENGL 698</td>
<td>Thesis</td>
<td>3-6</td>
</tr>
</tbody>
</table>

**General Distribution**

- Electives: 9
- Total Hours: 30-33

**Course Requirements**
The M.A. in PWE requires thirty hours of coursework distributed in four areas: foundations of professional writing and editing (nine hours), electives in professional writing and editing (six hours), general distribution (nine–twelve hours), and practical experience (three–six hours). Students must work with an advisor to file an approved plan of study by the end of their first semester of study. Students may choose either the thesis or the non-thesis option (see below under Practical Experience).

**Foundations of Professional Writing and Editing**
The following three classes are required of every student: ENGL 601, ENGL 602, and ENGL 605.

**Professional Writing and Editing Electives**
In consultation with the advisor, students will individualize their plan of study by choosing two 600-level courses that develop a specific focus within the general field of professional writing and editing.

**General Distribution**
Students must complete nine–twelve hours of general English studies. Courses will include literature, writing, and/or linguistics courses offered by the Department of English and 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 professional writing electives requirements.

**Practical Experience**

Students must choose one of the following two summative experiences: ENGL 610 (three hours) or ENGL 698 (three hours). The directed study option is a workplace internship. The thesis option is recommended for students who anticipate advanced study at the doctoral level.

**Language Requirement**

The M.A. in PWE requires that students demonstrate proficiency in foreign language, statistics, or computer programming in one of following ways:

- Completing a 204 (Intermediate II) or 200 (Intensive Intermediate) language course in a modern foreign language with a grade of B or above or completion of the Graduate Student Foreign Language Exam administered by the Department of World Languages, Literatures, and Linguistics
- 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
- 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 201 Applied Statistical Modeling with a grade of B or above
- Completing CS 110 Introduction-Computer Science and its accompanying one credit hour lab with a grade of B or above

A student should state in the plan of study the means by which he or she plans to satisfy the language requirement. Graduate students who take undergraduate courses at WVU should note that course grades will be calculated into their GPA.

**Master of Fine Arts**

<table>
<thead>
<tr>
<th>Creative Writing Workshops:</th>
<th>15</th>
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<tbody>
<tr>
<td>ENGL 618</td>
<td>Grad Writing Workshop: Poetry</td>
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<td>ENGL 618A</td>
<td>Grad Writing Workshop: Fiction</td>
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<tr>
<td>ENGL 618B</td>
<td>Grad Writing Wrksp:Non-Fiction</td>
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<td>ENGL 609</td>
<td>College Composition Pedagogy</td>
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<table>
<thead>
<tr>
<th>Non Creative Writing English Courses</th>
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<tbody>
<tr>
<td>ENGL 698</td>
<td>Thesis</td>
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<table>
<thead>
<tr>
<th>Electives</th>
<th>6</th>
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</thead>
<tbody>
<tr>
<td>Total Hours</td>
<td>45</td>
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</tbody>
</table>

**Course Requirements and Thesis**

M.F.A. students must successfully complete forty-five hours, distributed as follows: fifteen hours of creative writing workshops (including one workshop in another genre, twelve hours of graduate-level English courses (non-creative writing), three hours of writing pedagogy, nine thesis hours, and six hours to be determined in consultation with the creative writing faculty. Only classes passed with a grade of B or better count toward the degree. The student is required to submit a book-length manuscript (ideally forty-eight pages in poetry, 150 pages in fiction or nonfiction) suitable for publication on its own, that has been approved by a thesis advisor and two additional thesis committee members. Final approval is granted following an oral defense of the thesis. The core of the program is the workshop, where students submit their own writing for discussion and critique. This writing will make up the bulk of the thesis, which will be completed under the close supervision of the thesis advisor and two additional thesis committee members. The non-creative writing courses will be the same as those taken by Ph.D. and M.A. students. There is no foreign language requirement.

**Doctor of Philosophy**

<table>
<thead>
<tr>
<th>English Coursework</th>
<th>15-21</th>
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<tbody>
<tr>
<td>ENGL 782</td>
<td>Current Directions-Lit Study</td>
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<table>
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<tr>
<th>Teaching Practicum</th>
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<tbody>
<tr>
<td>ENGL 790</td>
<td>Teaching Practicum</td>
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</table>

<table>
<thead>
<tr>
<th>Seminar Courses</th>
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</thead>
<tbody>
<tr>
<td>Dissertation Credit</td>
<td>12</td>
</tr>
</tbody>
</table>

| ENGL 798           | Dissertation |

| Total Hours        | 39-45 |
Course Requirements and Examinations
During the first year in residence, students must enroll in ENGL 799 and pass the preliminary qualifying examination. Thirty hours of coursework must be taken prior to the examination for formal admission to candidacy. Of these thirty hours, nine hours must be in 700-level seminars, one of which must be ENGL 782. All doctoral candidates must take ENGL 680 and ENGL 609 unless they have previously taken equivalent courses. A maximum of six hours of ENGL 695 or ENGL 795 can be counted toward the thirty hours of coursework. Students are required to teach one three-hour composition course and one three-hour literature course while in residence and to register concurrently for ENGL 790; this requirement may be waived pending departmental approval for candidates who have substantial prior teaching experience. ENGL 790 does not count toward the thirty required hours of coursework. Students may take up to twelve hours of coursework in another department, subject to the approval of the Graduate Program Committee.

Language Requirement
The foreign language requirement is the same as for the M.A. program and must be completed prior to taking the examination for formal admission to candidacy.

Doctoral Dissertation
After completing coursework, passing the examination for formal admission to candidacy, and fulfilling the language and teaching requirements, the student, under the direction of the dissertation committee chairperson, writes a prospectus of the final project. The prospectus must be approved by the dissertation committee. The dissertation, meant to be an original contribution to scholarship in its field, should be able to be completed in one year. The final examination (oral defense of the dissertation) is open to the public.

Forensic and Investigative Science

Degrees Offered
- Master of Science

Nature of the Program
The Forensic and Investigative Science Program offers graduate studies leading to a Master of Science degree. The degree is rigorous, quantitative, and science-based. Students are required to complete an approved thesis. Coursework focuses on advanced forensic science classes including pattern evidence, trace evidence, forensic chemistry, DNA analysis, and laboratory management. The Master of Science Program is fully accredited by FEPAC.

FACULTY

DIRECTOR
- Keith Morris - Ph.D. (University of Port Elizabeth)
  Impression Evidence, Evidence Interpretation

ASSOCIATE PROFESSORS
- Suzanne Bell - Ph.D. (New Mexico State University)
  Forensic Chemistry
- Glen Jackson - Ph.D. (West Virginia University)
  Forensic Chemistry

ASSISTANT PROFESSOR
- Jacqueline Speir - Ph.D. (Rochester Institute of Technology)
  Forensic Informatics

CLINICAL ASSISTANT PROFESSOR
- Patrick Buzzini - Ph.D. (University of Lausanne)
  Trace Evidence

TEACHING ASSISTANT PROFESSOR
- Tina Moroose - M.S. (Marshall University)
  Graduate Studies Coordinator, Forensic Biology

LECTURERS
- Rachel Mohr - PhD (Texas A&M)
  Forensic Entomology
- Casper Venter - M.S. (North West University)
  Forensic Drug Chemistry
Prerequisites

Applicants for graduate studies in forensic science must have a bachelors degree in natural science, forensic science, or equivalent and an overall grade point average of at least 3.0. A GRE score of 300 on the new scoring system or 1000 on the old system is required. All applicants must have completed the following courses: one year of fundamentals of chemistry (inclusive of laboratories), one year of organic chemistry (inclusive of laboratories), one year of biology (inclusive of laboratories), one year of physics (inclusive of laboratories), and one year of calculus.

Program Requirements

The WVU general requirements for the master of science degree are outlined elsewhere in this catalog. Graduate students in the M.S. program in Forensic and Investigative Science are required to submit a research thesis. Students must apply a minimum of six hours of research credit toward the forty-hour degree requirement. Of the remaining credit hours, twenty-four hours must be earned in the required core courses, at least six credit hours in approved electives, and four credit hours in graduate seminar. Failure to make satisfactory progress in the Program will be grounds for probation, suspension, or dismissal. In addition, all students must successfully complete a cumulative examination. Each student will be given a maximum of three attempts to complete the cumulative examination. Any semester in which a student enrolls for a course, they must also enroll for FIS 696 Graduate Seminar irrespective of the number of times they have taken this class.

GPA Requirements

During graduate study, a minimum grade point average of 3.0 must be maintained in all required courses. A student who fails to maintain the required average at the completion of any semester will be placed on probationary status and allowed one academic year (two semesters) to attain the required average. If unsuccessful, the student will be dropped from enrollment in the graduate program. Any student who receives a grade lower than a "C" will also be placed on probation. A second grade below "C" in the same course will result in the student being dropped from the program.

Thesis Research

All students should identify a faculty mentor and research topic as soon as possible. In order to register for FIS 697 Research, the student must have successfully completed his or her thesis proposal defense. Each student is responsible to ensure that, with the assistance of the Graduate Studies Coordinator, his or her committee is correctly constituted. Normally, a student will begin laboratory work in the third semester. Upon successful completion of the research, the candidate will present his or her results in a thesis and at the appropriate time defend the work in a final oral examination according to the rules of the College and University.

DEGREE REQUIREMENTS

Degree Requirements
A minimum GPA of 3.0 is required in all courses.
Major Requirements

<table>
<thead>
<tr>
<th>MAJOR REQUIREMENTS</th>
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</thead>
<tbody>
<tr>
<td><strong>Major Requirements</strong></td>
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<tr>
<td>FIS 501</td>
<td>Foundations of Criminalistics</td>
</tr>
<tr>
<td>FIS 502</td>
<td>Forensic Laboratory Management</td>
</tr>
<tr>
<td>FIS 602</td>
<td>Forensic Informatics</td>
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<tr>
<td>FIS 614</td>
<td>Trace Evidence Examination</td>
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<td>FIS 620</td>
<td>Forensic Casework Practicum</td>
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<td>FIS 632</td>
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<tr>
<td><strong>Total Hours</strong></td>
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</tbody>
</table>
Approved Electives can include any 400 level Biology, Chemistry, or Forensic and Investigative Science course as well as FIS 604, FIS 610, FIS 615 or any 700 level Pharmacy course.

Geography

Degrees Offered

• Master of Arts
• Doctor of Philosophy

Nature of the Program

The graduate program in geography at West Virginia University provides students with the opportunity to study for a master of arts or a doctor of philosophy degree with an area of emphasis in one or more of the following fields:

• Geographic information science
• Environmental geography
• Human geography

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. Students who wish to focus their research on a particular region are encouraged to do so. 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 Studies, and the Center for Black Culture and Research.

Computing Facilities

The geography program has extensive computing facilities housed in a new 98,000 square foot building dedicated exclusively to geography and geology. The new building has five computer laboratories dedicated to teaching and research. The department has ESRI ArcGIS, ERDAS Imagine, and ENVI site licenses. In addition, the department supports SAS, SAS-Graph, JMP, Surface III, Oracle, and extensive database and statistical packages. 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
• J. Steven Kite - Ph.D. (University of Wisconsin)

ASSOCIATE CHAIR FOR GEOGRAPHY
• Amy Hessl - Ph.D. (University of Arizona)

PROFESSORS
• Gregory A. Elmes - Ph.D. (Pennsylvania State University)
  GISc, Spatial Modeling, Crime Mapping
• Trevor M. Harris - Ph.D. (University of Hull)
  Eberly Professor, GISc, Virtual Reality and GIS, Participatory GIS, Spatial Humanities
• Randall Jackson - Ph.D. (University of Illinois)
  Director of Regional Research Institute, Regional Economic Geography, Regional Economic Health and Performance, Regional Science
• Ann M. Oberhauser - Ph.D. (Clark University)
  Director of Women’s Studies, Economic Geography, Regional Development, Gender Geography, Political Economy, Appalachia
• Timothy A. Warner - Ph.D. (Purdue University)
  Remote Sensing

PROFESSOR EMERITUS
• Kenneth C. Martis - Ph.D. (University of Michigan)
  Political and Electoral Geography, Historical Geography
ASSOCIATE PROFESSORS

- Amy Hessl - Ph.D. (University of Arizona)
  Biogeography, Forest Ecosystems
- J. Steven Kite - Ph.D. (University of Wisconsin-Madison)
  Geomorphology, Quaternary Studies, Geoarchaeology
- Brent McCusker - Ph.D. (Michigan State University)
  Uneven Development, Political Ecology, Africa

ASSOCIATE PROFESSOR EMERITUS

- Robert Q. Hanham - Ph.D. (Ohio State University)
  Political Economy of Uneven Development, Labor Geography

ASSISTANT PROFESSORS

- Jamison Conley - Ph.D. (Pennsylvania State University)
  GISc, Geocomputation, Medical Geography
- Karen Culcasi - Ph.D. (Syracuse University)
  Geopolitics, Identity, Middle East, Cartography
- Eungi Lee - Ph.D. (University of Colorado)
  Climatology, Vegetation-atmosphere Interactions, Asian Monsoon
- Brenden McNeil - Ph.D. (Syracuse University)
  GIS, Remote Sensing, Ecosystem Ecology
- Jeremia Njeru - Ph.D. (University of Wisconsin-Milwaukee)
  Urban Development and Environmental Change, Urban Political Ecology
- Bradley Wilson - Ph.D. (Rutgers University)
  Social Movements, Globalization, Environmental Justice, Latin America

CLINICAL ASSISTANT PROFESSOR

- Rick Landenberger - PhD. (West Virginia University)
  Remote Sensing, Ecology, Educational Outreach

POST DOCTORAL RESEARCHERS

- Jonathan Hall - Ph.D. (Ohio State University)
  Ecology, Biogeography
- Maria Alejandra Perez - Ph.D. (University of Michigan)
  Human Geography, Science and Society

Admission/Application Requirements

Master of arts applicants must submit GRE scores, a personal two-page statement defining the applicant’s interest in geography and career intentions, and two letters of recommendation from people who are familiar with the student’s undergraduate training. Ph.D. applicants should send three letters of recommendation, GRE scores, and a personal two-page statement defining the applicant’s interest in geography and career intentions. This material should be forwarded directly to:

Coordinator of the Geography Graduate Program
West Virginia University 330 Brooks Hall
P.O. Box 6300
Morgantown, WV 26506

Priority will be given to applications for fall admission and teaching assistantships received by January 15. To apply for fall admission without financial assistance, application material should preferably be received by April 1.

International students should submit their materials at least three months in advance of all deadlines. Prospective students must have an overall undergraduate GPA of 3.0 and a 3.0 GPA for undergraduate geography courses. Prospective doctoral students should have a cumulative GPA of at least 3.3. Students with degrees in other disciplines are encouraged to apply although they may be asked to make up deficiencies in geography during the first year in the program.

Research Assistantships

Research assistantships must be applied for through the faculty member whose research is providing the funding. The geography faculty are engaged in numerous funded research projects, many of which provide graduate students with opportunities for obtaining research skills and experience as well
as employment and tuition aid. Furthermore, the professional contacts made in the course of faculty research frequently provide graduate students with opportunities for career development.

Master of Arts

The M.A. degree program in geography was designated a program of excellence by the West Virginia University Board of Governors in 1998, 2003, and 2008. This award is given to superlative degree programs in recognition of their contribution to higher education in West Virginia and national recognition.

Degree Requirements

The program is designed so that full-time students should satisfy all program requirements within two years. Students are expected to be well-grounded in one or more of the program's three areas of specialization (environmental geography, geographic information science, and space, place, and development). Students will be awarded an M.A. after fulfilling the following requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 601</td>
<td>Geographic Traditions</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 594</td>
<td>SEM: Geographical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 603</td>
<td>Qualitative Research-Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 701</td>
<td>Advanced Research Methods</td>
<td></td>
</tr>
<tr>
<td>GEOG 600</td>
<td>Geography Research Colloquium</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 600</td>
<td>Geography Research Colloquium</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 780</td>
<td>Non-Thesis Project</td>
<td>3-6</td>
</tr>
<tr>
<td>GEOG 797</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>Additional Hours</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>30-33</td>
</tr>
</tbody>
</table>

- Obtain thirty hours of graduate credit
- Complete the course GEOG 601
- Complete either GEOG 603 or GEOG 701
- Complete GEOG 600 for four semesters (four credit hours)
- Complete nine hours of geography graduate courses (400 level and above) but excluding GEOG 689–695 and GEOG 697–699 (Note: With the approval of the graduate committee, courses from other programs may also be used to fulfill this requirement.)

A. Thesis Option

Complete and successfully defend a written research thesis (GEOG 697, six credit hours)

B. Professional Masters Option

Complete a one-semester project (three credit hours) and an additional graduate course (400 level and above, three credit hours, but excluding 691 and 791 courses)

The First Year for all M.A. Students

Each incoming student is interviewed before the fall semester to identify the student’s interests and any academic deficiencies that require remedial work before graduate studies continue. All students are initially supervised by the Graduate Committee.

Once the student develops a more clearly defined research interest, no later than the middle of the spring semester, the student should request a faculty member to be their advisor. The student should discuss with the advisor whether to pursue the thesis or professional master’s option. The student and the advisor together select an advisory committee. A minimum of two of the three committee members (including the advisor) must be geography faculty members at WVU. Students may change advisor or committee members after consultation with the advisor and the Graduate Committee. The progress of every student is reviewed toward the end of the spring semester. In cases where a student is performing significantly below expectations, the student may be required to leave the program.

The M.A. Thesis Option

The M.A. thesis is an independent research project undertaken by the student. The thesis research should adhere to the following:

- Demonstrate knowledge of the literature in the student’s chosen field
• Use data and methods appropriate to the research
• Draw conclusions from the research endeavor

M.A. thesis option students develop a thesis proposal toward the end of the first year and during the first summer. The first step is to develop a written thesis proposal. This must be completed to the satisfaction of the student’s advisor and thesis committee no later than October 1 of the student’s second year. This is followed by an oral presentation to all students and faculty in the geography program no later than October 31 (unless there are scheduling conflicts). Presentations must be advertised within the department. Students should aim to complete the thesis proposal process well before the October deadline in order to ensure progress towards graduation the following semester. Students not able to meet this schedule should seek a meeting with their advisor to resolve the issue prior to the deadline dates.

The defense of the thesis takes place when the advisor and the committee agree that a defendable copy of the thesis is complete. The defense date must be advertised at least two weeks in advance. Only in exceptional circumstances will the thesis committee waive the two-week requirement for advertising thesis proposals and defenses. The thesis examination is graded on a pass/provisional pass/fail basis. To pass the examination, there can be no more than one unsatisfactory grade from the committee members. A student who fails may submit another thesis or a revised version upon the approval of the student’s committee. No student may be re-examined more than once. A student who is given a provisional pass will generally be required to make minor revisions or corrections to the thesis.

Thesis proposals and defenses are not normally scheduled between June 15 and August 15.

The Professional Master’s Option

Overview
The professional master’s option consists of an additional graduate course and a three-credit-hour project (GEOG 780). The professional master’s option 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 thesis project has strict deadlines and must be completed in one semester and after the completion of GEOG 601 and either GEOG 603 or GEOG 701.

Deadlines and Timetable
Students planning on selecting the professional masters’ option must make a written request to the Geography Graduate Committee no later than two weeks before the start of the semester in which the project is undertaken. The request should be endorsed by the student’s advisor. Only after the written request has been received will the geography graduate director issue a permit for the course. It is strongly recommended that the project topic be selected prior to the beginning of the semester.

A written project plan is to be submitted to the advisor and committee no later than three weeks after the start of the semester. The project plan includes an objective, methods, and timetable. No public presentation of the proposal is required.

The student is required to have meetings with the advisor and the committee in weeks seven and eleven to present progress reports.

The project must be completed and successfully defended by the end of the semester in which the project was undertaken. If the student completes the project, passes the defense, and submits the project to the library by the end of the semester, the student will be given a grade of S (satisfactory) for the GEOG 780 course.

If the student completes the project and fails the defense or if the project is not completed and defended by the end of the semester, the student will be given a grade of U for the GEOG 780 course.

Students who receive a grade of U may reapply to do a different project the following semester. Students cannot reapply more than once.

The Graduate Committee may grant an extension to the one semester deadline under exceptional circumstances.

Project Topic and Defense
The choice of a project topic is to be determined by close interaction and agreement between the student, advisor, and committee. The project may comprise a wide range of activities, but is usually either (a) an applied problem-solving exercise with minimal literature review, (b) an empirical test of an idea from the literature with minimal literature review, or (c) a literature review or development of a conceptual idea using the literature.

The project is defended in a public presentation at the end of the project semester, but no later than the university deadline for a thesis defense. The defense time and location must be published in the department no less than two weeks in advance. The standard for passing will be that the majority of the advisory committee (two or more of the three members) evaluate the work as substantially meeting the goals identified in the written research plan.
Most projects are expected to be in written form (fifteen to twenty pages). Other forms of presentation may be acceptable such as maps, software, video, land-use plan, image classification, field-trip guide, work of art, etc.; however, a written document explaining the project is still required.

**Doctor of Philosophy**

Prospective doctor of philosophy students must have a master’s degree. Students with degrees in other disciplines are encouraged to apply, but they may be asked to make up deficiencies in geography during their first year in the program. Incoming geography students may also be asked to make up deficiencies if any are found during the student’s entry interview with faculty. This interview is immediately prior to the first semester of the program.

Students are expected to be well-grounded both in one of the program’s areas of emphases and in the history and philosophy of geography. Students will be awarded a Ph.D. after obtaining twenty-eight hours of graduate credit, completing certain required courses, passing comprehensive examinations, and writing a dissertation. These steps are discussed in more detail below.

**Coursework**

The courses GEOG 600 and either GEOG 701 or GEOG 603 (three hours) are required as well as three general electives and two method electives. An additional eleven hours of other courses, which may include seminars and directed study courses, must also be completed. A limited number of the required courses may be waived if the student has already completed an equivalent course and can demonstrate proficiency with the material.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>GEOG 600</td>
<td>Geography Research Colloquium</td>
<td>3</td>
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<td>GEOG 603</td>
<td>Qualitative Research-Geography</td>
<td>3</td>
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<tr>
<td>GEOG 607</td>
<td>Environmental Field Geography</td>
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<tr>
<td>GEOG 612</td>
<td>Gender, Society and Space</td>
<td></td>
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<tr>
<td>GEOG 615</td>
<td>Development Geography</td>
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<tr>
<td>GEOG 621</td>
<td>Advanced FluvialGeomorphology</td>
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<tr>
<td>GEOG 694</td>
<td>Seminar</td>
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<tr>
<td>GEOG 701</td>
<td>Advanced Research Methods</td>
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</tr>
<tr>
<td>GEOG 701</td>
<td>Advanced Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 753</td>
<td>Exploratory Spatial Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 667</td>
<td>Geography of Fire</td>
<td></td>
</tr>
<tr>
<td>GEOG 612</td>
<td>Gender, Society and Space</td>
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<tr>
<td>GEOG 600</td>
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</tbody>
</table>

Coursework:

Methods Course:

- GEOG 603: Qualitative Research-Geography
- GEOG 701: Advanced Research Methods

Geography Courses:

- GEOG 407: Environmental Field Geography
- GEOG 452: GIS: Applications
- GEOG 453: GIS: Design and Implementation
- GEOG 485: Methods Geographic Research
- GEOG 550: Geographic Information Science
- GEOG 603: Qualitative Research-Geography
- GEOG 630: Sem: Land Use and Cover Change
- GEOG 651: GIS: Technical Issues
- GEOG 655: Remote Sensing Principles
- GEOG 701: Advanced Research Methods
- GEOG 753: Exploratory Spatial Data Analy

Seminar Course:

- GEOG 607: Geography of Fire
- GEOG 612: Gender, Society and Space
- GEOG 615: Development Geography
- GEOG 621: Advanced Fluvial Geomorphology
- GEOG 694: Seminar
- GEOG 753: Exploratory Spatial Data Analy

Colloquium:

- GEOG 600: Geography Research Colloquium

Total Hours: 22

**Examinations and Dissertation**

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 areas of specialization and the student’s dissertation research topic. 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.

**Assistantships**

The Geography Graduate Program has a number of teaching and research assistantships available each year, which are allocated to qualified students on a competitive basis. These awards include a full university tuition waiver. Teaching assistantships are awarded annually and for no more than four semesters for M.A. students and six semesters for Ph.D. students. Ph.D. teaching assistants who meet all comprehensive exam and dissertation proposal deadlines, have made excellent progress towards the completion of their dissertation research, and have applied for at least one external
research grant may request an additional year of funding. Assistantships are reconfirmed each year based on performance in the previous year with respect to both assistantship duties and academic progress. Additionally, meritorious tuition waivers are offered on a competitive basis to outstanding students who do not receive assistantships. Requests for teaching assistantships and tuition waivers should be sent directly to the Coordinator of Graduate Studies in Geography by January 1. International students should submit their materials at least three months in advance of this deadline.

Geology

Degrees Offered

• Master of Science
• Doctor of Philosophy

Nature of the Program

The graduate program in geology at WVU provides study opportunities in the following areas:

• Hydrogeology and environmental geology with strengths in flow and contaminant-transport modeling, mine reclamation, shallow geophysics, floods, and debris flows
• Basin analysis and sedimentary geology with strengths in seismic modeling, basin structures, deposystem analysis, sequence stratigraphy, biostratigraphy, paleoecology, diagenesis, and plate tectonics
• Energy geology and geophysics with strengths in the development and production of oil, gas, and coal; the computational analysis of hydrocarbon systems; and environmental impacts of fossil fuel usages

Research Linkages Around Morgantown

The WV Geological and Economic Survey (WVGES), located five miles from Morgantown, makes available laboratory equipment, fossil collections, cataloged drill cuttings and core, and subsurface logs from deep wells in the region. WVGES also offers students work and thesis opportunities in coal resources and petroleum geology. Several survey geologists are adjunct faculty.

The National Energy Technology Laboratory (NETL) of the U.S. Department of Energy laboratory located in Morgantown carries out and funds research on fossil-fuel resources and environmental problems. NETL projects support geology faculty and graduate-student research.

Extensive mining in the Appalachian region provides an excellent opportunity for students to study the environmental effects of coal extraction. The WVU geology faculty collaborates with the National Mine Land Reclamation Center (NMLRC) based on the WVU Evansdale campus. The NMLRC is the main center for coordination of acid-mine drainage research in the United States. WVU Geology has instrumented groundwater research sites in the region for both training and research.

The department houses the Statewide GIS Technical Center, the central source for GIS resources in West Virginia. The tech center is responsible for scanning and digitization of USGS, DLGs, DOQs, and a host of other data products. The center provides technical-support services for the development and operation of GIS in West Virginia. A limited number of RA opportunities are available related to center activities.

Facilities

COMPUTER FACILITIES AND NETWORK

Research and teaching computing facilities in the department are outstanding and are centered around a Windows client-server network. The research cluster has access to more than ten terabytes of redundant networked storage based on a series of RAID servers as well as diverse networked printers, large-format plotters, large-format digitizers, and scanners. The teaching cluster provides interactive computing resources for 125 students on networked computers. Classroom demonstration facilities are available in every teaching lab. The research cluster includes many workstations with dual-format displays. All resources are regularly upgraded with a replacement period of one to two years. Clusters for the GEO workgroup are link to the WVGIS center and have gateway access to the university backbone. The entire building is networked. The department houses the GeoVirtual Lab which is centered around a four-walled immersive CAVE environment.

SOFTWARE RESOURCES

The department maintains software for instructional and research usage. A full range of common applications software is available on all network machines. In addition, statistical packages allow students to undertake detailed statistical analysis, whereas graphical analysis packages (TruFlite, Surfer, Geographic, RockWorks) enable users to render both 2-D and 3-D surfaces. GIS licenses include ARCGIS which is accessible to students for integration of complex geological and geophysical data. ERDAS IMAGINE provides a suite of image-processing tools for analyzing remotely sensed data. Dynamic Graphics EarthVision provides an interactive 3-D visualization environment. AutoCAD, Adobe Illustrator, and other graphics design packages allow accurate rendering of technical diagrams.

State-of-the-art geological and geophysical modeling and processing software are available for instructional and research use. Landmark Inc. GeoGraphix Discovery Suite, Seismic Micro Technology’s Kingdom Suite, and Schlumberger’s Petrel software provide state-of-the-art tools for analysis of seismic reflection data and geophysical logs. Seismic processing capability is provided through Landmark’s ProMax 2-D, 3-D, and VSP. We use
Sensors and Software’s EKKO View Deluxe software for processing and display of ground penetrating radar data. Interpex’s IXID software is available for forward and inverse modeling of resistivity and terrain conductivity data. Northwest Geophysical Associates’ GM-SYS software is used in the forward and inverse modeling of gravity and magnetic data. A host of Landmark products including Discovery Suite, Seisworks, Strat-works, and seismic modeling packages enhance geophysical and subsurface studies. We have recently improved our capability in integrated subsurface analysis through the addition of IHS Petra, Schlumberger’s Interactive Petrophysics for reservoir property analysis, and Petrel. The focus of these products is on collaborative work-flows that unite geophysics, geology, and reservoir engineering domains.

Software for groundwater simulation includes aquifer characterization packages (AQTESOLV), finite-difference flow and particle-tracking codes (MODFLOW2000, MODPATH3), solute-transport codes (MT3-D, MODFLOWT), and preprocessors (Groundwater Vistas). Streamflow-modeling capabilities include HEC-2 step-backwater and peak value flood frequency software.

For structural geology studies we use 2-D and 3-D move (Midland Valley) and TriShear (created by R. Almendinger) in addition to standard structural analysis software. Basin modeling and evaluation of the generation of hydrocarbons are carried out with the GENEX (Baisip-Franlab) software.

Laboratory And Field Instrumentation

GEOLOGICAL
The department has a rock-crushing room equipped with jaw crushe-r and disk grinder as well as laboratories devoted to geological sample preparation which include standard mineral separation equipment (Frantz magnetic separator, Gemeni table, and heavy liquids set-up).

GEOPHYSICAL
The department owns a Geonics very low frequency sensor, an EM34 terrain conductivity meter, a Bison Instruments 12 Channel Seismograph, and a Geometrics magnetometer. The geophysics facility also offers large format plotting on twenty-four to forty-two inch HP plotters. Additional survey equipment includes a Leitz Model 2100 Total Station Survey System and a two-station GPS Traveler. Wide spectrums of software resources (see above) enhance geophysical research.

GEOCHEMICAL
Department laboratories own a Philips PW1800 X-ray diffraction unit for solid-state mineral analyses and a Philips PW9550 energy dispersion spectrometer for elemental analyses. A complete suite of equipment is available for the analysis of organic-rich materials including a Leco sulfur analyzer, a Leco proximate analyzer for moisture, carbon, and ash content, a Leco CHN analyzer for coal and shale, a Leco calorimeter, and a Biorad FTIR with microscope attachment to do FTIR analysis of microscopic entities in rocks. Water analytical facilities include a Dionex 100 Ion Chromatograph and a Beckmen Autotitrator. Outside White Hall, Varian sequential ICP and Finnemat ICP-MS units for water analysis are available to geology faculty in the WV Water Research Institute.

HYDROGEOLOGICAL
Groundwater field equipment includes an array of Global Water vented pressure transducer/datalogger instruments, Grundfos 4” and Redi-Flo 2 pumps, Geotech peristaltic pumps and flow-through sampling cells, and analog well recorders as well as a variety of generators, sampling pumps, flumes, pH and conductivity meters, bailers, and current meters.

QUATERNARY GEOLOGY AND GEOMORPHOLOGY
Quaternary geology and geomorphology research is served by a particle-size analysis laboratory as well as field instrumentation such as Garmin and Trimble GPS units, laser levels, and a Leica TC400 electronic distance meter.

REMOTE SENSING
The Remote Sensing Laboratory has a comprehensive suite of computing and field equipment. The laboratory operates two portable full-range (0.4 to 2.5 micrometer) field spectroradiometers and an aerial small format photography system based on two Nikon cameras. The laboratory shares a digital ADAR infra-red aerial acquisition system with biology and resource management. The ADAR system can be deployed in both helicopters and fixed wing aircraft. Remote sensing software includes site licenses for ERDAS Imagine, ENVI/IDL, and ARC/INFO image analysis and GIS software.

FACULTY

CHAIR
• J. Steven Kite - Ph.D. (University of Wisconsin)

ASSOCIATE CHAIR FOR GEOLOGY
• Helen M. Lang - Ph.D. (University of Oregon)

PROFESSORS
• Robert E. Behling - Ph.D. (Ohio State University)
Earth Science Education and Geomorphology
- Timothy Carr - Ph.D. (University of Wisconsin-Madison)  
  Sedimentary and Petroleum Geology
- Joseph J. Donovan - Ph.D. (Pennsylvania State University)  
  Hydrogeology, Quaternary Paleochemistry
- Gregory A. Elmes - Ph.D. (Pennsylvania State University)  
  Geographic Information Science
- Trevor M. Harris - Ph.D. (University of Hull)  
  Eberly Professor, Geographic Information Science
- Thomas W. Kammer - Ph.D. (Indiana University)  
  Centennial Professor, Paleontology and Paleoecology
- Henry W. Rauch - Ph.D. (Pennsylvania State University)  
  Hydrogeology, Geochemistry, Carbon Sequestration
- John J. Renton - Ph.D. (West Virginia University)  
  Geochemistry, Earth Science Education
- Timothy A. Warner - Ph.D. (Purdue University)  
  Remote Sensing
- Thomas Wilson - Ph.D. (West Virginia University)  
  Geophysics

PROFESSORS EMERITI
- Alan C. Donaldson - Ph.D. (Pennsylvania State University)  
  Past Chair, Stratigraphy, Clastic Sedimentation
- Robert C. Shumaker - Ph.D. (Cornell University)  
  Structural Geology, Tectonics
- Richard A. Smosna - Ph.D. (University of Illinois)  
  Sedimentation, Stratigraphy, Carbonate Petrology

ASSOCIATE PROFESSORS
- Dengliang Gao - Ph.D. (Duke University)  
  Geophysics
- Amy Hessl - Ph.D. (University of Arizona)  
  Biogeography, Forest Ecosystems
- J. Steven Kite - Ph.D. (University of Wisconsin-Madison)  
  Geomorphology, Quaternary Studies, Geoarchaeology
- Helen M. Lang - Ph.D. (University of Oregon)  
  Mineralogy, Petrology
- Jaime Toro - Ph.D. (Stanford University)  
  Structural Geology, Tectonics
- Dorothy J. Vesper - Ph.D. (Pennsylvania State University)  
  Aqueous Geochemistry and Hydrogeology

ASSISTANT PROFESSORS
- Joseph Lebold - Ph.D. (West Virginia University)  
  Earth Science Education, Stratigraphy, Paleoecology
- Eungul Lee - Ph.D. (University of Colorado)  
  Climate, Regional Climate Modeling
- Brenden McNeil - Ph.D. (Syracuse University)  
  GIScience and Environmental Modeling
- Shikha Sharma - Ph.D. (University of Lucknow, India)  
  Isotope Geochemistry
- Amy Weislogel - Ph.D. (Stanford University)  
  Sedimentary Geology

CLINICAL ASSISTANT PROFESSOR
- Rick Landenberger - Ph.D. (West Virginia University)  
  Remote Sensing, Geoscience Education
Admission Procedures and Prerequisites

Applicants for graduate studies in geology must have as a minimum requirement a bachelor’s degree and an overall grade point average of at least 3.0. Acceptance by the Department of Geology and Geography is necessary before admission of any prospective student to the program. All candidates for a graduate degree in geology must submit scores in the general aptitude tests of the Graduate Record Examination. Applicants seeking admission and financial support for the fall semester should apply by February 1. For spring semester, apply by October 1. Write to the department for an application package or download it from the website (see above).

Students seeking admission to the master’s program or the Ph.D. program must complete the equivalents of all allied science and mathematics courses required for the B.S. in geology at WVU, plus the following geology courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>Planet Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 102</td>
<td>Planet Earth Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 103</td>
<td>Earth Through Time</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 104</td>
<td>Earth Through Time Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 284</td>
<td>Mineralogy</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 285</td>
<td>Introductory Petrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Stratigraphy and Sedimentation</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 341</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 404</td>
<td>Geology Field Camp</td>
<td>6</td>
</tr>
</tbody>
</table>

Similar courses from other universities or relevant experiences may be substituted if approved during admission review. A requirement may be waived by the committee if the student can demonstrate competence in that subject area.

GPA Requirements

During graduate study a minimum grade point average of 3.0 must be maintained in required formal courses in geology and cognate fields for the master’s degree and 3.3 for the Ph.D. A student who fails to maintain the required average at the completion of any semester will be placed on probationary status and allowed one academic year (two semesters) to attain the required average. If this is unsuccessful, the student will be dropped from enrollment in the graduate program.

Master of Science

Distribution Requirements

Students are required to take courses specified by their advisory committee, with whom they meet at the beginning of each semester. Students must take approved graduate courses from at least five different faculty from any department in the university.

Approved graduate courses in biology, chemistry, physics, computer science, mathematics, engineering, soil sciences, business, or law may be taken as outside courses by geology graduate students. Students are free to take as many courses as they choose outside the department as long as the coursework is approved by their advisory committee.

No later than the beginning of the second semester in residence, the prospective candidate must choose one of the options leading to the master of science (M.S.) degree in geology.

Research Option

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GEOL 697</td>
<td>Research</td>
<td>6</td>
</tr>
<tr>
<td>GEOL 699</td>
<td>Graduate Colloquium</td>
<td>2</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

This has been the traditional option for the master of science in geology. Students considering continued studies (doctor of philosophy) or seeking employment in an area of geological research should choose this option. A minimum of twenty-four formal course hours, six research hours (GEOL 697), and two hours of GEOL 699 are required for graduation. A thesis based on original research under direction of a research committee is also required. With consent of the candidate’s research committee, the field work need not be done while in residence at WVU.
Thirty-two hours are required to graduate: (Twenty-four hours course-based, six hours research, and two hours colloquium) including certain required courses specified by the advisor.

### Professional Studies Option

#### Geology Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 692</td>
<td>Directed Studies</td>
</tr>
<tr>
<td>GEOL 699</td>
<td>Graduate Colloquium</td>
</tr>
</tbody>
</table>

**Total Hours:** 41

### Professional Studies Option

This option is designed specifically for students seeking experience in preparing and presenting professional problems. Students choosing this option typically expect to seek professional employment in the profession using the master’s as their terminal degree. A minimum of thirty-three formal course hours, six directed study research hours (GEOL 692), and two hours of GEOL 699 are required for graduation. The research hours are in lieu of a thesis and are designed to simulate the work of professional geologists as they seek solutions to open-ended problems within a limited time frame. Experience in presentation of problems and solutions are an integral part of the program. Research hours may be earned in conjunction with off-campus experiences by consent of the candidate’s advisory committee.

Forty-one hours are required to graduate: thirty-three hours course-based, six hours research and two hours colloquium, including certain required courses specified by the advisory committee.

### Doctor of Philosophy

The candidate for the doctor of philosophy must complete a program of courses outlined by the candidate’s doctoral research committee. A candidacy preliminary examination must be successfully completed within one year after enrollment. The proposal defense and oral examination must also be successfully completed. Work on original research is to be presented in a dissertation and defended in an oral examination. Participation in two GEOL 796 Graduate Seminars is required. No other formal course requirements exist; these are chosen by the student in conjunction with his or her research committee.

### History

#### Degrees Offered

- Master of Arts
- Master of Arts with concentration in Public History
- Accelerated Master of Arts
- Atlantis Dual Degree Master of Arts
- Doctor of Philosophy

#### Nature of the Program

The Department of History offers graduate courses in the history of the United States, Appalachia/regional, Europe, Africa, Asia, Latin America, world history, and public history. Courses are designed to prepare students in historiography, research methods, and interpretation. 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.

### FACULTY

#### CHAIR

- Joseph Hodge - Ph.D. (Queen’s University at Kingston)
  Modern Britain, British Empire

#### ASSOCIATE CHAIR

- Kate Staples - Ph.D. (University of Minnesota)
  Medieval, Women, England

#### PROFESSORS

- Katherine Aaslestad - Ph.D. (University of Illinois)
  Modern Europe, Germany
- Robert E. Blobaum - Ph.D. (University of Nebraska)
Eberly Family Professor of History, Modern Central and Eastern Europe

- Elizabeth Fones-Wolf - Ph.D. (University of Massachusetts)
  20th-century U.S., Social and Economic
- Kenneth Fones-Wolf - Ph.D. (Temple University)
  Stuart and Joyce Robbins Distinguished Professor of History, Appalachian, Labor, Religion
  U.S. Labor, Appalachia, Immigration, Religion
- Jack Hammersmith - Ph.D. (University of Virginia)
  East Asia, Recent U.S., American Diplomatic
- Robert M. Maxon - Ph.D. (Syracuse University)
  Africa, East Africa, Colonial Kenya

ASSOCIATE PROFESSOR

- Joshua Arthurs - Ph.D. (University of Chicago)
  Modern Europe, Italy, Cultural
- Tyler Boulware - Ph.D. (University of South Carolina)
  Early U.S., Frontier, Native American
- Joseph Hodge - Ph.D. (Queen’s University at Kingston)
  Modern Britain, British Empire
- Brian Luskey - Ph.D. (Emory University)
  19th-century U.S, Social and Cultural
- Jason Phillips - Ph.D. (Rice University)
  Civil War, Reconstruction, Southern History, 19th-century U.S.
- James Siekmeier - Ph.D. (Cornell University)
  U.S. Diplomatic, Latin America
- Kathryn Staples - Ph.D. (University of Minnesota)
  Medieval, Women, England
- Mark B. Tauger - Ph.D. (UCLA)
  20th-century Russia/USSR, World/Comparative, Historiography
- Matthew A. Vester - Ph.D. (University of California)
  Early Modern Europe, Italy

ASSISTANT PROFESSOR

- Melissa Bingmann - Ph.D. (Arizona State University)
  Public History, 20th-century U.S.
- Ari Bryen - Ph.D. (University of Chicago)
  Ancient Greece and Rome
- Krystal Frazier - Ph.D. (Rutgers University)
  African American, Oral History
- Charles MacKay - Ph.D. (Florida State University)
  Modern Europe, French Revolution, Military
- Tamba E. M'bayo - Ph.D. (Michigan State University)
  West Africa, African Diaspora and Pan-Africanism
- Michele Stephens - Ph.D.
  Latin America, Indigenous Peoples of the Americas, Race and Gender
- Kimberly Welch - Ph.D. (University of Maryland)
  19th-century U.S., Women, Legal

LECTURERS

- Jenny Boulware - M.A. (University of South Carolina)
  U.S., Public History
- Carletta Bush - Ph.D. (WVU)
  West Virginia

EMERITI FACULTY

- William S. Arnett
  Associate Professor
- Barbara J. Howe
  Associate Professor
Master of Arts

The History Department offers both a regular M.A. and a M.A. with a concentration in public history. The regular M.A. offers two options: the Thesis Option or the Non-Thesis (Examination) Option. The specific features and requirements of each option are discussed below.

Admission

Students seeking admission to the regular master of arts program should have the equivalent of a bachelor’s degree in history. Applicants lacking this degree may be required to make up deficiencies. Application requirements include transcripts (a minimum of a 3.0 average in history courses is expected), three letters of recommendation, a statement of purpose, writing sample, résumé, and a combined score of 300 on the verbal and quantitative sections and 4.0 on the written section of the Graduate Record Examination General Aptitude Test (GRE).

Requirements

All students in the regular M.A. program are required to complete a minimum of thirty hours of coursework, which may include six hours of thesis research credit. No more than twelve hours (or forty percent) of the credits counted for meeting requirements can be at the 400 or 500-levels. All thirty hours may be in history, or students may select up to six hours outside of the department with the approval of the director of graduate studies. M.A. students must maintain a 3.0 grade point average to remain in good standing. The history coursework shall include a well-defined core area (United States, Europe, Africa, or an area approved by the director of graduate studies) of at least twelve hours, including one readings/research seminar sequence (HIST 701 and higher) and a minor area (United States, Europe, Africa, public history, Latin America, or an area approved by the director of graduate studies) of six hours with at least three hours at the 600-level or higher. Also required are the department’s historiography course (HIST 700) and enrollment of all full-time students in HIST 799. Credit for this last course does not count towards the degree. In addition, individual faculty may require their students to master one or more languages to demonstrate proficiency in particular research methods (quantitative analysis, paleography, GIS, etc.) or to develop other skills as necessary for their areas of study and thesis projects.

Students may elect to do either a thesis or non-thesis (examination) option. Thesis students will complete a substantial piece of original research in their field. Non-thesis students will gain breadth and depth in a field but will not focus on the production of original research as a primary goal of their degree program.

THESIS OPTION

Students who choose the thesis option are required to write a master’s thesis in consultation with their main faculty advisor. The thesis must be based on original research that demonstrates a critical engagement with 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.

NON-THESIS (EXAMINATION) OPTION

Students not wishing to pursue further graduate study in history may choose the non-thesis (examination) option. Students who choose the non-thesis option must take one readings/research seminar sequence (HIST 701 and higher) plus an additional readings seminar (HIST 701 and higher) as part of their thirty credit hours of coursework. They cannot count thesis research credits as part of their thirty credit hours of coursework. In addition, students who choose the non-thesis option are required to take an oral examination. The examination will be taken in the last semester of enrollment. The oral examination will be conducted by a committee of three faculty members with whom the student has completed coursework and must include the student’s major faculty adviser.

Atlantis Dual Degree Master of Arts

The department also participates, together with Collegium Civitas of Warsaw, Poland and the University of Tartu in Estonia, in a unique transatlantic multidisciplinary dual degree M.A. program in East-Central European area studies. Students from both sides of the Atlantic spend two academic semesters overseas and will complete relevant coursework at West Virginia University and one of the two European institutions. They also have the opportunity to acquire language training and gain valuable experience through professional internships.
Admission
Students apply for admission to the Atlantis program as they would for the regular M.A. in history. The statement of purpose should highlight relevant background and reasons for interest in the East-Central European region. Students should have an undergraduate degree in relevant disciplines and programs such as history, Slavic and East European studies, international studies, geography, and/or political science. Otherwise, they must meet the same criteria for admission as applicants to the regular M.A. program.

Requirements
Students will complete the equivalent of sixty U.S. credit hours: thirty hours in the history program at WVU, and thirty hours in the international relations program at Collegium Civitas or the Baltic studies program at the University of Tartu. Master’s theses will be defended at one of the two European institutions and WVU. The dual degrees, in history from WVU and in international relations or Baltic studies from one of the two European institutions, are awarded once credit hour and degree requirements are met at all three institutions.

Public History
The department offers a thirty-six hour master of arts with a concentration in public history and a Ph.D. minor field in public history. Public historians are trained to conduct historical research and interpret the past for a variety of audiences. They generally work in museums, heritage sites, historic preservation, and archives as consultants and for the federal government.

ADMISSION
Students apply for admission to the public history concentration as they would for the regular M.A. in history. The statement of purpose should highlight relevant background and reasons for interest in public history. Students in public history should have an undergraduate degree in history. Applicants lacking this degree may be required to make up deficiencies.

REQUIREMENTS
The public history program consists of thirty hours of coursework, of which no more than twelve hours may be at the 400 or 500-levels and the remainder at the 600 and higher level plus a six-hour internship (HIST 614).

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 614 Internship in Public History</td>
<td>6</td>
</tr>
<tr>
<td>HIST 750 Public History Methods</td>
<td>3</td>
</tr>
<tr>
<td>HIST 613 Local Hist Research Methodology</td>
<td>3</td>
</tr>
<tr>
<td>Readings/Research Seminar Hist 701 and higher</td>
<td>6</td>
</tr>
<tr>
<td>Two additional 600 or 700 level courses</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

HIST 750 and HIST 613 are required courses. Students must take one readings/research seminar sequence (HIST 701 and higher) and two additional 600 or 700-level courses. Relevant coursework may be taken in another discipline with the approval of the director of public history. There is no foreign language requirement for public history students. All full-time public history students are expected to enroll in HIST 799. Credit for this course does not count toward the degree.

Doctor of Philosophy

ADMISSION
Students seeking admission to the doctor of philosophy program should have the equivalent of a M.A. in history. Application requirements include a transcript (a minimum of a 3.0 average in graduate history courses is required), three letters of recommendation, and a combined score of 300 on the verbal and quantitative sections and a 4.0 on the written section of the Graduate Record Examination General Aptitude Test (GRE). Students should also include a statement of purpose, an example of their written work, and a résumé as a part of the application.

REQUIREMENTS
The Ph.D. degree program in history requires the following: (1) completion of two readings/research seminar sequences (700 and above) beyond those offered for the M.A., (2) enrollment in HIST 799 for all full-time students who have not yet taken their comprehensive examinations, (3) passing both parts of the Ph.D. comprehensive examination (oral and written) administered by a committee of faculty members (normally at the end of a full-time student’s second year of study), (4) preparation of a dissertation prospectus, which must be approved by the student’s dissertation committee, (5) preparation of a dissertation based on original investigation, and (6) successful defense of the dissertation in a final examination. In addition, individual faculty advisers may require their students to master one or more languages to demonstrate proficiency in particular research methods (quantitative analysis, paleography, GIS, etc.) or to develop other skills as necessary for their fields of study and dissertation projects.
FIELDS OF STUDY
A candidate must offer a program of study in four fields; at least three fields must be in history while the other may be in a related field with the approval of the director of graduate studies. Doctoral students must maintain a 3.0 grade point average to remain in good standing. Fields available in the department include, but are not limited to, Europe, United States, Africa, Latin America, and Appalachia/regional. Students may also take a minor field in East Asia, world history, or public history. At least one field must be in a geographic area outside the major field of concentration for dissertation work.

Dissertation work should normally be in United States history, European history, Appalachia/regional, or modern Africa. Students working in these areas, either at the M.A. or Ph.D. level, have the opportunity to study with adjunct professors and faculty from other departments and universities.

Cultural Resource Management Certificate
The Eberly College of Arts and Sciences also offers an interdisciplinary graduate-level fifteen-hour certificate in cultural resource management (CRM) that is coordinated by the Department of History. Most CRM students earn the graduate certificate in conjunction with an M.A. in history, public administration, recreation parks and tourism, geography, design, art history, or one of several other related graduate degree programs. The requirements for the CRM certificate consist of twelve credit hours of coursework and a three-hour internship or an individual research project (HIST 620). All CRM students must successfully complete HIST 600. Students who are currently admitted to or enrolled in a graduate degree program must register their intent to earn the CRM certificate with the CRM coordinator during the semester prior to their internship. Students who wish to pursue the graduate certificate independent of a graduate degree program must be admitted as non-degree graduate students prior to registering their intent to earn the CRM certificate. Each student is expected to maintain an average GPA of 3.0.

Legal Studies
Degree Offered
• Master of Legal Studies

Nature of the Program
West Virginia University’s Master of Legal Studies (MLS) program is part of the Department of Public Administration. The M.L.S. is a degree program designed to build greater public understanding of the law and the United States legal system, to provide graduates with the ability to apply knowledge and skills gained to performing their jobs more effectively and to provide private and public organizations the benefit of enhanced experience. It is a graduate program of study designed for professionals practicing in areas such as human relations, criminal justice, juvenile justice, journalism, social work, court administration, national security, probation and law enforcement, or regulatory agencies. It is neither a law degree nor a paralegal program.

The M.L.S. is offered entirely online (there are no on-campus courses) and operates through a cohort model with a new class of students admitted each January and August. Courses are offered each term (including summers). Students following the prescribed course of study should be able to finish the degree in six terms (two calendar years, including summers). Students progressing at a different pace may take longer and have up to eight years to complete the degree.

Prospective and current students should frequently check the program’s website at http://legalstudies.wvu.edu for up-to-date program information, forms, and other guidelines.

Degree Completion
According to university regulations, master’s students are permitted to continue in a program for a maximum of eight years under their original application. A student is generally not allowed to count any courses taken more than eight years prior to the conferring of a degree toward completion of that degree. Graduate students are expected to maintain continuous enrollment, excluding summer sessions unless permitted by the director. All graduate students must enroll for at least one credit hour during the semester (or summer) of graduation. No course in which the grades D, P (pass), F, or U (unsatisfactory) are earned can be counted toward a graduate degree, nor can courses taken under the audit option. Students in the Master of Legal Studies program must earn a 3.0 GPA to qualify for graduation.

FACULTY
CHAIR
• John C. Kilwein - Ph.D. (Ohio State University)
  Department of Public Administration

DIRECTOR
• Nancy L. Adams - Ph.D. (Fielding Institute)
Admission

In order to be considered for admission to the M.L.S. program, one must have completed a baccalaureate degree in any major with a cumulative GPA of at least 3.0 on a 4.0 scale. In addition, it is recommended that a prospective student have some work experience in an area broadly related to the field of legal studies. Applicants who do not possess a GPA of at least 3.0 may apply to the college for admission as a non-degree student in order to register for certain classes and to document academic ability. Acceptance as a non-degree student does not guarantee acceptance into the legal studies program.

To apply for acceptance into the M.L.S. program, one must apply to graduate school online at http://grad.wvu.edu. Official transcripts of all institutions previously attended must be sent to:

Office of Admissions
P.O. Box 6009
Morgantown, WV 26505-6009

Once the application to graduate school has been submitted, please have three references submitted online via the instructions at http://grad.wvu.edu. Provide the reference writers with the information on how to file a reference using this system. Reference writers should be persons who are able to write directly to the applicant’s ability to think critically; analyze situations, information, or data; to write clearly; and to apply one’s self in an academic program of study. At least one of these references should be an academic reference if possible.

Once the admissions application has been submitted, please submit the following directly to the Master of Legal Studies Program at P.O. Box 6322, Morgantown, WV 26506-6322:

1. A current resume or curriculum vitae
2. A one or two-page personal statement on the subject of why and how the Master of Legal Studies Degree Program will further the applicant’s career or special interests
3. Results of standardized graduate-level tests (i.e. GRE, LSAT, GMAT, or MCAT) or a petition of waiver for the standardized test requirement

A prospective student may apply for a waiver of the graduate test score requirement if he or she possesses an undergraduate degree and has five or more years of work experience in a field related to legal studies. The petition should be in the form of a letter requesting a waiver and describing previous work experience as well as how this work experience or the individual’s qualifications provide evidence of their ability to engage in graduate studies. This should be sent directly to the program along with the other materials listed above.

All application materials should be submitted no later than November 15 of each year for admission in the spring semester and by May 1 for admission in the fall semester. The Admissions Committee will render decisions during the month of November for spring admission and the month of June for fall admission.

Additional information and forms may be found on the program’s website at http://legalstudies.wvu.edu or by calling the program at (304) 293-7977.

DEGREE REQUIREMENTS

Degree Requirements
A GPA of 3.0 is required to graduate with the MLS degree.

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours</td>
<td>36</td>
</tr>
</tbody>
</table>

MAJOR REQUIREMENTS

Major Requirements
All students are required to take:

| LEGS 610 | Law and the Legal System |
| LEGS 620 | Researching the Law |
| LEGS 630 | Law and Society |
| LEGS 640 | Administrative Legal Process |
| LEGS 650 | The Legislative Process |
| LEGS 660 | Alternative Dispute Resolution |
| LEGS 700 | Research Capstone |
Elective Courses
Select five from the following: 15

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEGS 691</td>
<td>Advanced Topics</td>
</tr>
<tr>
<td>LEGS 710</td>
<td>Family Law</td>
</tr>
<tr>
<td>LEGS 720</td>
<td>Media and the Law</td>
</tr>
<tr>
<td>LEGS 730</td>
<td>Employment Law</td>
</tr>
<tr>
<td>LEGS 740</td>
<td>Commerce Law</td>
</tr>
<tr>
<td>LEGS 750</td>
<td>Criminal Law and Procedure</td>
</tr>
<tr>
<td>LEGS 760</td>
<td>Administrative Ethics</td>
</tr>
<tr>
<td>LEGS 770</td>
<td>Healthcare Law</td>
</tr>
<tr>
<td>LEGS 780</td>
<td>Constitutional Law</td>
</tr>
</tbody>
</table>

Total Hours 36

The Master of Legal Studies program requires thirty-six hours of coursework. This coursework is broken into three different areas: core courses (eighteen hours), elective courses (fifteen hours), and an applied research capstone project (three hours). The program provides a suggested plan of study for students to use as a guide regarding registration and course offerings.

Mathematics

Degrees Offered
- Master of Science
- Doctor of Philosophy

Programs
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 mathematics, applied mathematics, and mathematics for secondary educators. 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
Most 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 mathematics education faculty of the Department’s Institute for Mathematics Learning (IML). A small number of research assistantships are also available.

Applications from students requesting financial aid should be received no later than February 15 to ensure full consideration 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. Applications for admission (alone) can be considered at any time, subject to university processing deadlines. Other financial aid includes partial university tuition waivers and part-time positions assisting in the instructional computer labs. TOEFL scores are required for international students whose native language is not English, with a university requirement of a 550 minimum score for admission.

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.

EXAMINATIONS AND DISSERTATION
The student must pass a qualifying oral and written examination on the major and minor areas of study and present an approved dissertation prospectus. A minor examination is waived if the student has obtained at least a 3.5 GPA in the corresponding courses. If the qualifying examination results are unsatisfactory (U), the dissertation committee may reexamine the student once.
A Ph.D. candidate must complete a dissertation, representing at least twenty-four hours of 700-level research credit, under the supervision of a dissertation advisor. The research upon which the dissertation is based must conform to scholastic standards and constitute an original and publishable contribution to mathematics.

**COMBINATORIAL COMPUTING AND DISCRETE MATHEMATICS (C.C.D.M.)**

This is an option within the mathematics Ph.D. program, emphasizing interdisciplinary research at the intersection of computer science, statistics, and discrete mathematics. A minimum of thirty-three credit hours of coursework is required and includes designated core courses in discrete mathematics, statistics, and computer science. Students may undertake mathematics research of an interdisciplinary nature among these three areas.

**LANGUAGE REQUIREMENT**

Each Ph.D. student must demonstrate a reading knowledge of French, German, or Russian. The Graduate Programs Committee may approve the substitution of a different foreign language or a computer language for fulfillment of this requirement.

Further information may be obtained from the department’s website at http://www.math.wvu.edu or by contacting the graduate director at gradprog@math.wvu.edu. Details on program requirements can be found in the Department’s Graduate Handbook, available at http://www.math.wvu.edu/graduate_handbook.

**FACULTY**

**CHAIR**

- Edgar Fuller - Ph.D. (University of Georgia)

**PROFESSORS**

- Ian Christie - Ph.D. (University of Dundee)
  - Numerical Partial Differential Equations
- Krzysztof Ciesielski  
  - Analysis, Topology, Set Theory
- Harvey Diamond - Ph.D. (MIT)  
  - Approximation Theory, Applied Mathematics
- Harry Gingold - D.Sc. (Israel Institute of Technology)  
  - Differential Equations, Asymptotic Methods
- John Goldwasser  
  - Combinatorics, Graph Theory
- Henry W. Gould - M.A. (University of Virginia)  
  - Emeritus, Combinatorics, Number Theory, Special Functions
- Harumi Hattori - Ph.D. (Rensselaer Polytechnic Institute)  
  - Differential Equations, Continuum Mechanics
- Hong-Jian Lai  
  - Associate Chair, Graph Theory, Matroid Theory
- Dening Li  
  - Partial Differential Equations
- Laura Pyzdrowski - Ed.D. (West Virginia University)  
  - Mathematics Education, Instructional Technology
- Michael E. Mays - Ph.D. (Penn. State University)  
  - Director of the Institute for Mathematics Learning, Number Theory
- Sherman D. Riemenschneider - Ph.D. (Syracuse University)  
  - Emeritus, Approximation Theory, Wavelet Theory
- Jerzy Wojciechowski - Ph.D. (University of Cambridge)  
  - Combinatorics, Graph Theory
- Cun-Quan Zhang  
  - Graph Theory, Combinatorics

**ASSOCIATE PROFESSOR**

- Marjorie Darrah - Ph.D. (WVU)  
  - Educational Technology, Algorithm Development, K-12 Outreach
- Edgar Fuller - Ph.D. (University of Georgia)  
  - Geometric Knot Theory, Mathematics Education
• Gary H. Ganser  
  Applied Mathematics, Fluid Mechanics, Numerical Analysis
• Rong Luo  
  Discrete Mathematics
• David Miller - Ph.D. (Oklahoma State University)  
  Undergraduate Mathematics Education, Cognitive Science
• James E. Moseley  
  Partial Differential Equations, Modeling

ASSISTANT PROFESSOR
• Jessica Deshler - Ph.D. (University of New Mexico)  
  Undergraduate Mathematics Education
• Nicole Engelke-Infante  
  Undergraduate Mathematics Education
• Adam Halasz - Ph.D. (State University of New York at Stony Brook)  
  Mathematical Biology, Swarm Robotics
• Kevin Milans - Ph.D. (University of Illinois at Urbana Champaign)  
  Combinatorics, Graph Theory
• Vicki Sealey - Ph.D. (Arizona State University)  
  Mathematics Education
• Charis Tsikkou  
  Nonlinear PDE
• Adrian Tudorascu - Ph.D. (Carnegie Mellon University)  
  Partial Differential Equations

Master’s Admission Information
Admission to the M.S. program requires a WVU admission application and submission of applicable transcripts. International students must supply a passing TOEFL score or other acceptable evidence of English proficiency. Students seeking financial aid should also supply an assistantship application and three letters of recommendation. GRE scores are not required.

Programs are available for students to study applied mathematics, pure mathematics, industrial/applied mathematics, or mathematics for secondary educators. For regular admission to the M.S. program, students should have the equivalent of an undergraduate major in mathematics, including at least one semester of advanced calculus (Math 451 or equivalent) and courses in linear algebra and modern algebra. Students with deficiencies may be admitted provisionally; deficiencies are expected to be made up in the first year of study. A minimum of three semesters of calculus is normally required for such admission, but students can often complete their remaining calculus courses during the summer prior to full-time enrollment. 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.

ADVISORY COMMITTEE
Each student will be assigned an advisory committee consisting of at least three members of the graduate faculty. This committee 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 committee.

PROGRAMS
The student’s plan of study is developed in one of these programs: applied mathematics, pure mathematics, industrial/applied mathematics, or mathematics for secondary educators. 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. Depending upon the program selected, thirty to thirty-three 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/THESSES/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.
Ph.D. Admission Requirements

For regular admission, applicants for the Ph.D. program must have completed a graduate degree similar to the M.S. in mathematics outlined above. Students with an exceptionally strong undergraduate background may sometimes be admitted provisionally, with twelve–eighteen credit hours of additional coursework required.

The following materials should be submitted:

- A WVU admission application
- An application for financial support (optional)
- Official undergraduate and graduate transcripts
- Three letters of recommendation from individuals having experience with the applicant’s mathematical ability
- TOEFL or IELTS scores for students whose native language is not English

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. Students must pass examinations in two areas from among the four areas of algebra, real analysis, topology, and differential equations. For students in the CCDM option (see below), one of these area exams is replaced by an examination over the CCDM core curriculum.

Beyond any coursework taken to remove deficiencies while a provisional student, a minimum of twenty-four hours of approved coursework is required of all doctoral students, which must include a major area and two minor areas. Certain level and distribution requirements apply to a student’s program. In addition, doctoral students must enroll for one credit hour of graduate seminar each semester they are in residence.

Ph.D. students may choose the CCDM option, which requires a minimum of 33 credit hours of coursework and includes designated core courses in discrete mathematics, statistics, and computer science. Students may undertake mathematics research of an interdisciplinary nature among these three areas.

Dissertation Committee

After the above requirements are satisfied, 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.

DEGREE REQUIREMENTS

Degree Requirements
A minimum GPA of 3.0 is required in all courses.

Major Requirements

Area of Emphasis Requirements 21-33
Total Hours 21-33

MAJOR REQUIREMENTS

The coursework in mathematics is specific to each area of emphasis.

AREA OF EMPHASIS OPTIONS

Applied Mathematics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 543</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 451</td>
<td>Introduction-Real Analysis 1</td>
<td>3-6</td>
</tr>
<tr>
<td>&amp; MATH 452</td>
<td>and Introduction-Real Analysis 2</td>
<td></td>
</tr>
<tr>
<td>MATH 551</td>
<td>Real Variables 1</td>
<td></td>
</tr>
<tr>
<td>MATH 541</td>
<td>Modern Algebra 1</td>
<td></td>
</tr>
<tr>
<td>MATH 551</td>
<td>Real Variables 1</td>
<td></td>
</tr>
<tr>
<td>MATH 581</td>
<td>Topology 1</td>
<td></td>
</tr>
<tr>
<td>MATH 694</td>
<td>Sem:Professional Tools</td>
<td>1</td>
</tr>
<tr>
<td>Additional Electives (see list below)</td>
<td>17</td>
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</table>

Total Hours 30-33
### Pure Mathematics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 541</td>
<td>Modern Algebra 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 543</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 551</td>
<td>Real Variables 1</td>
<td>3</td>
</tr>
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<td>Topology 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 694</td>
<td>Sem:Professional Tools</td>
<td>1</td>
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</table>

Additional Electives (see list below) 18

Total Hours 31

### Mathematics for Secondary Education

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>MATH 543</td>
<td>Linear Algebra</td>
<td>3</td>
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</table>

Real Analysis Requirement 3-6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 451</td>
<td>Introduction-Real Analysis 1</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 452</td>
<td>and Introduction-Real Analysis 2</td>
<td></td>
</tr>
<tr>
<td>MATH 551</td>
<td>Real Variables 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 535</td>
<td>Foundations Of Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 541</td>
<td>Modern Algebra 1</td>
<td>3</td>
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</table>

Applied/Discrete Math Elective 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 521</td>
<td>Numerical Analysis</td>
<td></td>
</tr>
<tr>
<td>MATH 530</td>
<td>Intro Applied Mathematics</td>
<td></td>
</tr>
<tr>
<td>MATH 545</td>
<td>Number Theory 1</td>
<td></td>
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<tr>
<td>MATH 563</td>
<td>Mathematics Modeling</td>
<td></td>
</tr>
<tr>
<td>MATH 564</td>
<td>Intermediate Diff Equations</td>
<td></td>
</tr>
<tr>
<td>MATH 571</td>
<td>Combinatorial Analysis 1</td>
<td></td>
</tr>
<tr>
<td>MATH 573</td>
<td>Graph Theory</td>
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</tbody>
</table>

Algebra/Geometry Elective 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 534</td>
<td>Modern Algebra For Teachers 2</td>
<td></td>
</tr>
<tr>
<td>MATH 536</td>
<td>Transformation Geometry</td>
<td></td>
</tr>
<tr>
<td>MATH 641</td>
<td>Modern Algebra 2</td>
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</table>

Foundations of Probability/Statistics 3-6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>STAT 505</td>
<td>Foundations-Probability/Stat</td>
<td></td>
</tr>
<tr>
<td>or STAT 561</td>
<td>Theory of Statistics 1</td>
<td></td>
</tr>
<tr>
<td>STAT 511</td>
<td>Statistical Methods 1</td>
<td></td>
</tr>
<tr>
<td>&amp; STAT 512</td>
<td>and Statistical Methods 2</td>
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</table>

Total Hours 21-27

### Interdisciplinary Mathematics

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>MATH 521</td>
<td>Numerical Analysis</td>
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</tr>
<tr>
<td>MATH 543</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 563</td>
<td>Mathematics Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MATH 564</td>
<td>Intermediate Diff Equations</td>
<td>3</td>
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</tbody>
</table>

Real Analysis or Advanced Calculus 3-6

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 451</td>
<td>Introduction-Real Analysis 1</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 452</td>
<td>and Introduction-Real Analysis 2</td>
<td></td>
</tr>
<tr>
<td>MATH 551</td>
<td>Real Variables 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 567</td>
<td>Advanced Calculus</td>
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Complex Variables 3

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 456</td>
<td>Complex Variables</td>
<td></td>
</tr>
<tr>
<td>MATH 555</td>
<td>Complex Variables 1</td>
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</tr>
<tr>
<td>MATH 568</td>
<td>Advanced Calculus</td>
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</tr>
<tr>
<td>MATH 694</td>
<td>Sem:Professional Tools</td>
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</table>

Additional Course Requirement 9
### Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 452</td>
<td>Introduction-Real Analysis 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 522</td>
<td>Numerical Solution of PDE</td>
<td>3</td>
</tr>
<tr>
<td>MATH 541</td>
<td>Modern Algebra 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 543</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 545</td>
<td>Number Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 551</td>
<td>Real Variables 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 555</td>
<td>Complex Variables 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 567</td>
<td>Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 568</td>
<td>Advanced Calculus</td>
<td>3</td>
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<tr>
<td>MATH 571</td>
<td>Combinatorial Analysis 1</td>
<td>3</td>
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<tr>
<td>MATH 573</td>
<td>Graph Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 578</td>
<td>Applied Discrete Mathematics</td>
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<td>MATH 581</td>
<td>Topology 1</td>
<td>3</td>
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<tr>
<td>MATH 621</td>
<td>Computational Matrix Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 641</td>
<td>Modern Algebra 2</td>
<td>3</td>
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<tr>
<td>MATH 645</td>
<td>Number Theory 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 651</td>
<td>Real Variables 2</td>
<td>3</td>
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<tr>
<td>MATH 681</td>
<td>Topology 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 683</td>
<td>Set Theory And Applications</td>
<td>3</td>
</tr>
<tr>
<td>MATH 691</td>
<td>Advanced Topics</td>
<td>1-6</td>
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<tr>
<td>MATH 745</td>
<td>Analytic Number Theory 1</td>
<td>3</td>
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<tr>
<td>MATH 746</td>
<td>Analytic Number Theory 2</td>
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<td>MATH 747</td>
<td>Adv Topics in Modern Algebra</td>
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<td>MATH 751</td>
<td>Functional Analysis 1</td>
<td>3</td>
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<tr>
<td>MATH 752</td>
<td>Functional Analysis 2</td>
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<tr>
<td>MATH 757</td>
<td>Theory-Partl Dfrntl Equatns 1</td>
<td>3</td>
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<tr>
<td>MATH 758</td>
<td>Theory-Partl Dfrntl Equatns 2</td>
<td>3</td>
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<td>MATH 771</td>
<td>Matroid Theory 1</td>
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<tr>
<td>MATH 772</td>
<td>Matroid Theory 2</td>
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<tr>
<td>MATH 773</td>
<td>Advanced Topics-Graphic Theory</td>
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<td>MATH 783</td>
<td>Set Theory &amp; Applications</td>
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</tr>
<tr>
<td>MATH 791</td>
<td>ADTP:Rsrch-Undrgrd Math Ed 4</td>
<td>1-6</td>
</tr>
</tbody>
</table>

### Degree Requirements

**Degree Requirements**

A minimum GPA of 3.0 is required in all courses.

**Major Requirements**

**Total Hours**

### MAJOR REQUIREMENTS

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 694</td>
<td>Sem:Professional Tools</td>
<td>1</td>
</tr>
<tr>
<td>or MATH 696</td>
<td>Graduate Seminar</td>
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</table>

**Group A- Choose one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 641</td>
<td>Modern Algebra 2</td>
<td>3</td>
</tr>
<tr>
<td>&amp; MATH 747</td>
<td>and Adv Topics in Modern Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 745</td>
<td>Analytic Number Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>&amp; MATH 746</td>
<td>and Analytic Number Theory 2</td>
<td></td>
</tr>
</tbody>
</table>
### MATH 573 & MATH 773
Graph Theory and Advanced Topics-Graphic Theory

### MATH 683 & MATH 783
Set Theory And Applications and Set Theory & Applications

**Group B: Choose one of the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MATH 751 &amp; MATH 752</td>
<td>Functional Analysis 1 and Functional Analysis 2</td>
</tr>
<tr>
<td>MATH 757 &amp; MATH 758</td>
<td>Theory-Partl Diffntl Equatns 1 and Theory-Partl Diffntl Equatns 2</td>
</tr>
<tr>
<td>MATH 791 &amp; 791</td>
<td>ADTP:Rsrch-Undrgrd Math Ed 4 and ADTP:Rsrch-Undrgrd Math Ed 4</td>
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**Additional Math Minor or Major Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MATH 797</td>
<td>Research</td>
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<td>MATH 797</td>
<td>Research</td>
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**Total Hours**

<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>49-55</td>
</tr>
</tbody>
</table>

# Physics

## Degrees Offered

- Master of Science
- Doctor of Philosophy

## Nature of the Program

The graduate program is designed to provide a solid background in classical and modern physics, a broad understanding of major research fields, and concentrated research experience in one area. Applicants normally enter with a bachelor of science degree in physics. A student whose background is weak in a particular area is encouraged to register for the appropriate undergraduate course. The normal first-year courses include PHYS 611, PHYS 651, PHYS 631, and PHYS 633 plus possible electives. In the courses, no distinction is made between those students who intend a terminal M.S. degree and those who intend a Ph.D. degree. The minimum grade for credit in graduate courses is C, and a grade point average of 2.75 must be maintained.

## Entry Requirements

Applicants are expected to have a bachelor’s degree in physics with upper-division courses in electricity and magnetism, mechanics, quantum mechanics, thermodynamics, and mathematical methods. Students lacking some of these courses may be admitted provisionally and will be allowed to remedy the deficiencies by taking the appropriate undergraduate courses. Both the GRE General Test and the GRE Physics Subject Test are required. If English is not the student’s native language, TOEFL or IELTS scores are also required. The application deadline is February 15. Contact the department for additional information.

## Financial Aid

With rare exceptions, all students who are admitted receive financial support. 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.

### FACULTY

#### CHAIR
- David Lederman - Ph.D. (University of California - Santa Barbara)
  Robert L. Carroll Professor, Experimental Condensed Matter Physics

#### PROFESSORS
- Wathiq Abdul-Razzaq - Ph.D. (University of Illinois at Chicago)
  Physics Education
- Leonardo Golubovic - Ph.D. (University of Belgrade)
  Theoretical Condensed Matter Physics and Statistical Physics
- Mark E. Koepke - Ph.D. (University of Maryland)
  Plasma Physics, Experiment
• David Lederman - Ph.D. (University of California - Santa Barbara)
  Robert L. Carroll Professor, Experimental Condensed Matter Physics
• Earl E. Scime - Ph.D. (University of Wisconsin - Madison)
  Oleg Jefimenko Professor, Plasma Physics, Experiment

ASSOCIATE PROFESSORS
• Paul Cassak - Ph.D. (University of Maryland)
  Plasma Physics, Theory
• James P. Lewis - Ph.D. (Arizona State University)
  Computational Condensed Matter Physics
• Duncan Lorimer - Ph.D. (University of Manchester)
  Astrophysics
• Maura McLaughlin - Ph.D. (Cornell University)
  Astrophysics
• Aldo Romero - Ph.D. (University of California - San Diego)
  Theoretical Condensed Matter Physics

ASSISTANT PROFESSORS
• Loren Anderson - Ph.D. (Boston University)
  Astrophysics
• Alan Bristow - Ph.D. (University of Sheffield)
  Experimental Condensed Matter Physics
• Cheng Cen - Ph.D. (University of Pittsburgh)
  Experimental Condensed Matter Physics
• Edward Flagg - Ph.D. (University of Texas - Austin)
  Experimental Condensed Matter Physics
• Mikel Holcomb - Ph.D. (University of California - Berkeley)
  Experimental Condensed Matter Physics
• Sean McWilliams - Ph.D. (University of Maryland)
  Astrophysics
• D.J. Pisano - Ph.D. (University of Wisconsin - Madison)
  Astrophysics
• Julian Schulze - Ph.D. (Ruhr University - Bochum)
  Plasma Physics, Experiment
• Tudor Stanescu - Ph.D. (University of Illinois)
  Theoretical Condensed Matter Physics

TEACHING ASSISTANT PROFESSOR
• Paul Miller - Ph.D. (West Virginia University)
  Physics Education Research

RESEARCH PROFESSORS
• Vladimir Demidov - Ph.D. (St. Petersburg University)
  Plasma Physics and Plasma Chemistry
• Mohindar S. Seehra - Ph.D. (University of Rochester)
  Experimental Condensed Matter Physics

RESEARCH ASSISTANT PROFESSORS
• Pavel Borisov - Ph.D. (University of Duisburg - Essen)
  Experimental Condensed Matter Physics
• Yuri Glinka - Ph.D. (Shevchenko State University)
  Condensed Matter Physics
• Amy Keesee - Ph.D. (Davidson College)
  Plasma Physics

PROFESSORS EMERITI
• Martin Ferer - Ph.D. (University of Illinois)
  Theoretical Condensed Matter Physics and Statistical Physics
• Larry Halliburton - Ph.D. (University of Missouri - Columbia)  
  Experimental Condensed Matter Physics  
• Arthur S. Pavlovic - Ph.D.  
  Experimental Condensed Matter Physics  
• Mohindar S. Seehra - Ph.D. (University of Rochester)  
  Experimental Condensed Matter Physics  
• Richard Treat - Ph.D. (University of California - Riverside)  
• H. Arthur Weldon - Ph.D. (Massachusetts Institute of Technology)  
  Particle Physics

**DEGREE REQUIREMENTS**

**Degree Requirements**
A minimum GPA of 2.75 is required in all courses.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Major Requirements</td>
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</tr>
<tr>
<td>Total Hours</td>
<td>24-30</td>
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**MAJOR REQUIREMENTS**

**Major Requirements**

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PHYS 611</td>
<td>Intro Mathematical Physics</td>
<td>3</td>
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<tr>
<td>PHYS 631</td>
<td>Advanced Classical Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 633</td>
<td>Electromagnetism 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 651</td>
<td>Quantum Mechanics 1</td>
<td>3</td>
</tr>
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<td>PHYS 761</td>
<td>Statistical Mechanics</td>
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**Physics Electives** *

<table>
<thead>
<tr>
<th><em>Physics Electives</em></th>
<th>9-15</th>
</tr>
</thead>
</table>

| Total Hours         | 24-30|

**Non-Thesis Option:**
Thirty credit hours of Physics courses at the 600 or 700 level are required to complete a M.S. in physics without a thesis.

**Thesis Option:**
Students may earn a M.S. degree by performing research under the direction of a faculty advisor. The research results must be presented in a written thesis that is defended before a faculty committee. Twenty-four credit hours of physics courses at the 600 or 700 level are required to complete a M.S. in physics with a thesis.

**Ph.D. 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: a quantum mechanics exam in May, an electromagnetism exam in August, and a classical mechanics exam in January. To be eligible to take any candidacy exam, the student must be in good standing (see below).

The oral part of the candidacy exam is a presentation to the five faculty on the student’s doctoral committee. The student gives a lecture on some published research that has been assigned by his or her research advisor.

**Requirements for Remaining in the Graduate Program**

To be a graduate student in good standing requires the following:

- Maintain a GPA of 2.75 or better in graduate physics courses taken at WVU, excluding PHYS 797.
- Pass two sections of the written candidacy examination by the end of three years.
- Pass the remaining third section of the written candidacy examination by the end of four years.
- Select a Ph.D. committee of five faculty.
- Complete the oral candidacy examination within three semesters (after completing the third section of the written candidacy examination).

Students admitted as M.S. degree candidates are not expected to take the graduate qualifying exams but must maintain at GPA of 2.75 and complete their M.S. degree within three years.
**Doctor of Philosophy**

Course requirements: The Ph.D. requires thirty-six hours of courses at the 600 or 700-levels with a GPA of 2.75 or better. These twelve courses must include seven of the following basic courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 611</td>
<td>Intro Mathematical Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 631</td>
<td>Advanced Classical Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 633</td>
<td>Electromagnetism 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 634</td>
<td>Electromagnetism 2</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 651</td>
<td>Quantum Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 652</td>
<td>Quantum Mechanics 2</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 761</td>
<td>Statistical Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select at least two from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHYS 772</td>
<td>Semiconductor Physics</td>
<td>6</td>
</tr>
<tr>
<td>PHYS 773</td>
<td>Collective Phenomena in Solids</td>
<td></td>
</tr>
<tr>
<td>PHYS 774</td>
<td>Optical Properties of Solids</td>
<td></td>
</tr>
<tr>
<td>PHYS 783</td>
<td>Adv Kinetic Theory of Plasmas</td>
<td></td>
</tr>
<tr>
<td>PHYS 784</td>
<td>Adv Mgentohydrodnmc Thry-Plasma</td>
<td></td>
</tr>
<tr>
<td>PHYS 791</td>
<td>Advanced Topics</td>
<td></td>
</tr>
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</table>

and/or

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 702</td>
<td>Stellar Structure &amp; Evolution</td>
</tr>
<tr>
<td>ASTR 703</td>
<td>Galactic Astronomy</td>
</tr>
<tr>
<td>ASTR 704</td>
<td>General Relativity</td>
</tr>
</tbody>
</table>

Plus three additional graduate courses in physics or astronomy

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
</table>

Total Hours: 36

**RESEARCH REQUIREMENTS**

Research is the central focus of the degree and is directed by a faculty advisor 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 five faculty. The average completion time for the Ph.D. is five years beyond the B.S. Research specialties within the department include astrophysics, computational physics, condensed matter physics, fluid mechanics, nonlinear dynamics, and plasma physics.

**Political Science**

**Degrees Offered**

- Master of Arts
- Doctor of Philosophy

**Nature of the Program**

To give 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.

**Faculty**

The Department of Political Science has nineteen full-time faculty members. The major strengths of the graduate faculty consist of American politics (specialties include political institutions, political behavior, public opinion, and judicial politics), public policy (specialties include bureaucracy, law and society, and social welfare policies), international politics (specialties include U.S. foreign policy, comparative foreign policy, international political economy, and national security policy), comparative politics (specialties include comparative political institutions, elections systems, contentious politics, and cross-national political analysis), and research methods.

**Research**

Graduate students have opportunities to conduct research with political science faculty. Several members of the faculty regularly co-author papers with graduate students. Some graduate students have coauthored articles and book chapters with faculty and have worked on externally-funded grant projects.
Financial Aid

The department has a number of assistantships and fellowships available for students in both the M.A. and Ph.D. programs. Students interested in financial assistance should apply directly to the Department of Political Science. Graduate assistants may enroll for no more than nine credit hours per semester (excluding colloquium).

FACULTY

CHAIR
• R. Scott Crichlow - Ph.D. (Louisiana State University)

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
• Hong N. Kim - Ph.D. (Georgetown University)
  Comparative Politics (Asia), Comparative Public Policy
• Jeffrey S. Worsham - Ph.D. (University of Wisconsin)
  Public Policy (Regulation, Social Welfare), Bureaucratic Politics and Public Administration

ASSOCIATE PROFESSOR
• Neil Berch - Ph.D. (University of Washington)
  Public Policy (Political Economy), American Politics (State and Local)
• R. Scott Crichlow - Ph.D. (Louisiana State University)
  International Relations, Foreign Policy Decision-making, Middle East Politics
• Robert D. Duval - Ph.D. (Florida State University)
  Methodology, International Politics and Policy, Public Policy (Energy, Environmental, and National Security)
• John Kilwein - Ph.D. (Ohio State University)
  Associate Chair, Public Law, Judicial Politics, Public Policy, Public Administration
• 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
• Trisha Phillips - Ph.D. (Rice University)
  Social and Political Philosophy, Moral Philosophy, Research Ethics

ASSISTANT PROFESSOR
• Erin C. Cassese - Ph.D. (State University of New York)
  American Politics and Political Behavior; Gender, Religion, and Public Opinion; Political Psychology, Research Methods
• Christina Fattore - Ph.D. (Florida State University)
  International Relations, International Political Economy, International Organization, European Union Politics
• Shauna Fisher - Ph.D. (University of Washington)
  Judicial Politics, Law and Courts, Judicial Policy-Making
• Patrick Hickey - Ph.D. (University of Texas)
  American Political Institutions, Presidency
• Matthew Jacobsmeier - Ph.D. (University of Rochester)
  American Politics, Political Behavior, Public Opinion, Research Methods
• Cyanne Loyle - Ph.D. (University of Maryland)
  Comparative Politics (Developing Areas), Conflict, Contentious Politics, Human Rights

TEACHING ASSISTANT PROFESSOR
• David Hauser - Ph.D. (University of Pittsburgh)
  International Conflict, National Security Analysis
Master of Arts

The master of arts 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. A problem-analytic approach, drawn from both political science and economics, is used to develop the ability to comprehend, assess, and evaluate issues, problems, and policies in the public sector. Prospective graduates are expected to be skilled at gathering and interpreting data as well as reporting, writing, and analyzing policy options and political behaviors. 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.

Prerequisites/Requirements

Ideally, applicants for the master of arts degree should have a B.A. in political science (with a minimum of six hours in economics). However, students from other fields and disciplines are also encouraged to apply. In addition, the applicant should have an overall grade point average of 3.0 and should submit three letters of recommendation from faculty familiar with their work. All students must also submit the results of the Graduate Record Examination.

In order to remain in good standing, students must maintain a 3.0 cumulative average and receive a 3.0 average in each semester for which they are enrolled. Students who do not maintain a 3.0 cumulative average will be placed on probation and will be suspended if they fail to regain a 3.0 cumulative average in their next nine hours of study. Admission to candidacy for the M.A. degree requires that the student complete a minimum of thirty-six hours. Students must complete work in political science methodology and statistical methods. All students must enroll in POLS 799 each semester in residence.

Doctor of Philosophy

The doctor of philosophy degree 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 in three of the four major subfields (the subfields include American politics, international politics, comparative 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.

Admission

Admission to the Ph.D. program is open to students with either a bachelor’s or master’s degree. Students with degrees in political science, economics, public administration, sociology, psychology, engineering, social work, business, law, medicine, or journalism are encouraged to apply. Applicants should have a grade point average of 3.5. Some training in statistics and a strong background in written communication is desired. In addition, all applicants must submit the results of the Graduate Record Examination and at least three letters of recommendation from faculty familiar with the applicant’s work. Applicants from foreign countries must submit the official results of the Test of English as a Foreign Language (TOEFL) as well. Admission will be based on an overall assessment of the individual’s record.

Minimum Requirements

Students must complete fifty-seven hours of coursework (fifteen hours in each of their three substantive fields plus twelve hours of research methods). In addition to their coursework, students must also pass written comprehensive examinations in two of their specialty fields and complete and defend a dissertation. All coursework completed for the M.A. at West Virginia University also counts toward the Ph.D.; coursework from other institutions will be evaluated on a case-by-case basis.

In order to remain in good standing, students must maintain a 3.0 cumulative average and receive a 3.0 average in each semester for which they are enrolled. Students are required to spend at least one year (two semesters) in residence and enroll in a full-time graduate program of no less than nine semester hours each semester. All graduate students must enroll in POLS 799 each semester in residence.

Psychology

Degrees Offered

- Master of Arts
- Master of Science
- Doctor of Philosophy
Program Areas of Emphasis Offered
The doctoral degree areas of emphasis in Behavior Analysis, Behavioral Neuroscience, Clinical & Clinical Child 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 training areas of emphasis: Clinical Psychology and Clinical Child Psychology. The Program has been accredited continuously by the American Psychological Association since 1966. In 2012, the Program was re-accredited for a full 7 years, with the next site visit scheduled to occur in 2019. For any questions regarding accreditation of this or any other 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.apa.org/ed/accreditation.

Admission
Students are admitted only at the beginning of the fall semester. Applications must be completed by the preceding December 15.

Acceptance is based on the following:

• Adequate academic aptitude at the graduate level as measured by the Graduate Record Examination
• Achievement in undergraduate coursework with a minimum grade point average of 3.0
• Personal qualities that predict success in graduate study and as a professional after graduation
• Adequate preparation in psychology and related fields
• Fit between the applicant’s interests and the offerings of a department graduate program area of emphasis

Grade Point Average
Students must have a 3.0 average in all psychology courses attempted.

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.

FACULTY
CHAIR
• Kevin Larkin - Ph.D.

PROFESSORS
• Barry A. Edelstein - Ph.D. (University of Memphis)
  Eberly Family Distinguished Professor of Clinical Psychology. Clinical Geropsychology, Anxiety and Decision-making in Older Adults
• William J. Fremouw - Ph.D. (University of Massachusetts)
  Forensic Psychology, Malingering and Deception
• Katherine Karraker - Ph.D. (Michigan State University)
  Adults’ Perceptions of Infants, Infant Social Development, Infant Stress and Coping, Infant Temperament, Infant Assessment
• Kevin T. Larkin - Ph.D. (University of Pittsburgh)
  Clinical Health Psychology, Applied Psychophysiology, Cardiovascular Behavioral Medicine
• Kennon A. Lattal - Ph.D. (University of Alabama)
  Centennial Professor. Experimental Analysis of Behavior, History and Philosophy of Psychology, Human-Pet Interactions
• Cheryl B. McNeil - Ph.D. (University of Florida)
  Disruptive Behavior Disorders of Children, Child Behavior Therapy, Parent-Child Interactions
• Daniel W. McNeil - Ph.D. (University of Alabama)
  Eberly Family Professor for Outstanding Public Service. Experimental Psychopathology, Behavioral Dentistry and Behavioral Medicine, Pain and Anxiety
• Tracy L. Morris - Ph.D. (University of Mississippi)
  Eberly Distinguished Professor of Outstanding Teaching. Developmental Psychopathology, Social Anxiety, Peer Relationships, Parent-Child Interactions
• Melanie C. Page - Ph.D. (Arizona State University)
  Assistant Vice President for Creative and Scholarly Activity. Quantitative/Developmental Psychology
• Michael Perone - Ph.D. (University of Wisconsin-Milwaukee)
  Positive and Negative Reinforcement, Animal and Human Operant Behavior, Research Methodology
• JoNell Strough - Ph.D. (University of Utah)
  Lifespan Development, Decision Making, Everyday Problem Solving, Gender Development

ASSOCIATE PROFESSORS
• Karen G. Anderson - Ph.D. (University of Florida)
  Behavioral Pharmacology, Self-Control and Impulsivity
• Christina Duncan - Ph.D. (Louisiana State University)
  Behavioral Pediatrics, Chronic Illness, Adherence
• 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
• Hawley Montgomery-Downs - Ph.D. (University of Connecticut)
  Sleep, Sleep Disorders, Developmental Psychobiology
• Julie Hicks Patrick - Ph.D. (University of Akron)
  Decision Making, Family Processes in Mid- and Late-Life
• Claire St. Peter - Ph.D. (University of Florida)
  Applied Behavior Analysis, Assessment and Treatment of Problem Behavior, School-Based Interventions

ASSISTANT PROFESSORS
• Melissa Blank - Ph.D. (Virginia Commonwealth University)
  Behavioral Neuroscience, Tobacco Use, Tobacco-Related Health Risks, Genetics of Substance Use
• Regina Carroll - Ph.D. (University of Nebraska Medical Center)
  Applied Behavior Analysis, Autism and Developmental Disabilities
• Amy Gentzler - Ph.D. (Kent State University)
  Emotion Regulation and Coping in Childhood, Positive Psychology
• Steven Kinsey - Ph.D. (Ohio State University)
  Behavioral Neuroscience, Stress and Inflammation
• Elizabeth Kyonka - Ph.D. (University of Canterbury)
  Quantitative Analysis of Behavior, Operant Conditioning, Comparative Cognition
• Aaron Metzger - Ph.D. (University of Rochester)
  Adolescent Social-Cognitive Development, Civic Engagement, Adolescent-Parent Communication
• Miranda Reed - Ph.D. (Auburn University)
  Alzheimer’s Disease, Synaptic Correlates of Learning and Memory, Behavioral Pharmacology, Quantitative Analysis of Behavior
• Natalie Shook - Ph.D. (Ohio State University)
  Social Psychology, Attitudes and Emotion, Cognitive Bias

TEACHING ASSOCIATE PROFESSOR
• Connie Toffle - Ph.D. (West Virginia University)
  Teaching of Psychology

TEACHING ASSISTANT PROFESSOR
• Elizabeth Levelle - Ph.D. (West Virginia University)
  Teaching of Psychology, Academic Advising

PROFESSORS EMERITI
• Stanley Cohen - Ph.D.
• Philip Comer - Ph.D.
• Robert Hawkins - Ph.D.
• Kent Parker - Ph.D.
• Hayne Reese - Ph.D.
Master of Science

Students who are accepted into the doctoral (Ph.D.) program in psychology will receive the M.S. degree upon completing the following requirements: PSYC 511, one additional three-credit research methodology course, a minimum of six credits of Research PSYC 795, completion of a minimum of forty-eight total credits, and completion of an empirical master’s thesis.

Requirements for the M.S. Degree in Psychology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PSYC 511</td>
<td>Resch Design/Data Analysis 1</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 795</td>
<td>Independent Study</td>
<td>6</td>
</tr>
<tr>
<td><strong>One Additional 3-Credit research Methodology Course from the following list or another methodology course approved by the student’s advising committee</strong></td>
<td>3</td>
<td></td>
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<tr>
<td>PSYC 512</td>
<td>Resch Design/Data Analysis 2</td>
<td></td>
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<tr>
<td>PSYC 611</td>
<td>Single-Subject Research Meth</td>
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<tr>
<td>PSYC 612</td>
<td>Multivariate Analysis</td>
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<tr>
<td>PSYC 613</td>
<td>Quasi-Experimental Design</td>
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<tr>
<td>PSYC 614</td>
<td>Program Evaluation/Interventn</td>
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<tr>
<td>PSYC 711</td>
<td>Seminar in Methodology</td>
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<tr>
<td><strong>36 additional hours</strong></td>
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<td>36</td>
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<tr>
<td><strong>Completion of an empirical Master’s Thesis</strong></td>
<td></td>
<td>48</td>
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</table>

Total Hours 48

Footnotes

** PSYC 795 - A minimum of 6 credits is required

Master of Arts

The master of arts degree is given to students who complete the professional M.A. degree track in clinical psychology. Two years of full-time study with a minimum of 60 hours of credit are required for the M.A. degree. Students must complete a specified sequence of courses and a six-month, full-time internship. There is no thesis option. **Note: The MA track in clinical psychology is being discontinued and new students are no longer being admitted.**

Requirements for the Clinical Professional Master’s (M.A.) Degree in Psychology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 661</td>
<td>Behavior Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 671</td>
<td>Child Behavior Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 653</td>
<td>Behavioral &amp; Psyc Assessment 1</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 654</td>
<td>Behavioral &amp; Psyc Assessment 2</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 531</td>
<td>Experimental Analysis of Beh</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 652</td>
<td>Clinical Interviewing</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 607</td>
<td>Ethical &amp; Legal Issues in Psyc</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 651</td>
<td>Behavior Pathology</td>
<td>3</td>
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<tr>
<td><strong>Practica:</strong></td>
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<tr>
<td>PSYC 660</td>
<td>Clinical Psychology Practicum</td>
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<tr>
<td>PSYC 670</td>
<td>Clinical Child Psyc Practicum</td>
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<td>PSYC 750</td>
<td>Clinical Internship</td>
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<td><strong>Additional Requirements: Electives</strong></td>
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<tr>
<td>Total Hours</td>
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</tbody>
</table>

Footnotes

* Practica and Internship: You must complete at least eight hours of practica (660 Clinical Psychology Practicum or 670 Clinical Child Practicum) and eighteen hours of internship (750 Clinical Internship). At least one academic year of practica must be through a Quin Curtis Center Clinical Team lasting one academic year or twelve month period.
Doctor of Philosophy Requirements

Students are accepted for study toward the doctor of philosophy degree upon entry into the department. Each training area requires completion of a specific set of required courses and electives (see below). Students are formally admitted to doctoral candidacy after completion of the master's degree or its equivalent, a comprehensive preliminary examination, and other requirements.

A dissertation and oral examination on the dissertation are required for all Ph.D. candidates. Students in the clinical and clinical child training areas must also complete a twelve-month internship. The internship must be approved by the training area and by the director of clinical training.

BEHAVIORAL ANALYSIS DOCTORAL PLAN OF STUDY

A minimum GPA of 3.0 is required in all courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 511</td>
<td>Resrch Design/Data Analysis 1</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 512</td>
<td>Resrch Design/Data Analysis 2</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 611</td>
<td>Single-Subject Research Meth</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 732</td>
<td>Behavior Theory &amp; Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 531</td>
<td>Experimental Analysis of Beh</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 533</td>
<td>Applied Behavior Analysis</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 609</td>
<td>Ethics in Behavior Analysis</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 731</td>
<td>Res Issues in Behav Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Select five of the following courses, or another course approved by the Behavior Analysis Training Committee. One course must be PSYC 737, PSYC 630, or PSYC 730.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>PSYC 532</td>
<td>Human Behavior</td>
</tr>
<tr>
<td>PSYC 615</td>
<td>Software Design in Psychology</td>
</tr>
<tr>
<td>PSYC 630</td>
<td>Behavior Analysis Practicum</td>
</tr>
<tr>
<td>PSYC 721</td>
<td>History And Systems</td>
</tr>
<tr>
<td>PSYC 733</td>
<td>Stimulus Control &amp; Memory</td>
</tr>
<tr>
<td>PSYC 734</td>
<td>Reinforcement &amp; Punishment</td>
</tr>
<tr>
<td>PSYC 736</td>
<td>Adv Exprmntl Analysis-Behavior</td>
</tr>
<tr>
<td>PSYC 737</td>
<td>Adv Applied Behavior Analysis</td>
</tr>
<tr>
<td>PSYC 754</td>
<td>Clinical Psychopharmacology</td>
</tr>
</tbody>
</table>

Research:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 795</td>
<td>Independent Study *</td>
</tr>
</tbody>
</table>

* You are expected to be involved in research throughout your graduate career, and your enrollment in PSYC 795, should reflect this activity. You must complete at least six hours.

BEHAVIORAL NEUROSCIENCE DOCTORAL PLAN OF STUDY

A minimum GPA of 3.0 is required in all courses

Core Behavioral Neuroscience Courses - All of the Following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>PSYC 608</td>
<td>Prof Issues-Behvrl Neuroscienc</td>
</tr>
<tr>
<td>PSYC 650</td>
<td>Behavioral Neuroscience Method</td>
</tr>
<tr>
<td>PSYC 656</td>
<td>Grant Writing in Psychology</td>
</tr>
<tr>
<td>PSYC 701</td>
<td>Adv Professional Issues-Psych</td>
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</tbody>
</table>

Methodology Courses - Both of the Following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 511</td>
<td>Resrch Design/Data Analysis 1</td>
</tr>
<tr>
<td>PSYC 512</td>
<td>Resrch Design/Data Analysis 2</td>
</tr>
</tbody>
</table>

Advanced Methodology Courses - Two of the Following (after 511 & 512)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 611</td>
<td>Single-Subject Research Meth</td>
</tr>
<tr>
<td>PSYC 612</td>
<td>Multivariate Analysis</td>
</tr>
<tr>
<td>PSYC 614</td>
<td>Program Evaluation/Interventn</td>
</tr>
<tr>
<td>PSYC 711</td>
<td>Seminar in Methodology</td>
</tr>
</tbody>
</table>

History, Philosophy, and Theory of Psychology - One of the Following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 545</td>
<td>Conceptl Issues-Devlpmnt Pysc</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>PSYC 721</td>
<td>History And Systems</td>
</tr>
<tr>
<td>PSYC 732</td>
<td>Behavior Theory &amp; Philosophy</td>
</tr>
</tbody>
</table>

Or an advanced course on History, Philosophy, or Theory of Psychology in Psychology or another department (Requires approval by Behavioral Neuroscience Training Committee)

**Research - As appropriate:**
- PSYC 795 Independent Study *** 6

**Teaching Experience**
- PSYC 606 Seminar on Teaching Psych 1
- PSYC 790 Teaching Practicum 1-3

**Additional Requirements**
Nine hours of required elective courses approved by the Behavioral Neuroscience Training Committee 9

* Seminar in Behavioral Neuroscience - Must take every semester offered.
** For Advanced Methodology Courses - You may also take an advanced course on research design or data analysis in Psychology, Statistics, or another department (requires approval by the Behavioral Neuroscience Training Committee).
*** Independent Study - At least six hours during thesis work, continuous during dissertation work.

### CLINICAL PSYCHOLOGY DOCTORAL PLAN OF STUDY

**Course**
A minimum GPA of 3.0 is required in all courses

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>PSYC 511</td>
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<td>PSYC 655</td>
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<tr>
<td>PSYC 721</td>
<td>History And Systems</td>
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<td>PSYC 661</td>
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<td>PSYC 671</td>
<td>Child Behavior Therapy</td>
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</tr>
<tr>
<td>PSYC 653</td>
<td>Behavioral &amp; Psych Assessment 1</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 654</td>
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<tr>
<td>PSYC 531</td>
<td>Experimental Analysis of Beh</td>
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<tr>
<td>PSYC 652</td>
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<td>Prof Issues-Clinical Psychology</td>
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<td>PSYC 607</td>
<td>Ethical &amp; Legal Issues in Psych</td>
<td>3</td>
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<tr>
<td>PSYC 722</td>
<td>Biological Aspects of Behavior</td>
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<td>PSYC 651</td>
<td>Behavior Pathology</td>
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<td>Social Psychology</td>
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<tr>
<td>PSYC 745</td>
<td>Seminar-Life Span Development</td>
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<tr>
<td>PSYC 755</td>
<td>Seminar in Clinical Supervision</td>
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</table>

**Practica and Internship:**
- PSYC 660 Clinical Psychology Practicum
- PSYC 670 Clinical Child Psych Practicum
- PSYC 750 Clinical Internship 3

**Research:**
- PSYC 795 Independent Study 6

**Additional Requirements ******
- Research Methods in Clinical Psychology counts as the third departmental methods course.
- Practica and Internship: You must complete at least 18 hours of practica (660 Clinical Psychology Practicum or 670 Clinical Child Practicum) and three hours of internship (750 Clinical Internship). 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.
- Research - You are expected to be involved in research throughout your graduate career, and your enrollment in PSYC 795 (Independent Study), should reflect this activity. You must complete at least six hours.
- At least 9 hours of electives approved by the Clinical Training Committee
# CLINICAL CHILD PSYCHOLOGY DOCTORAL PLAN OF STUDY

**Course**
A minimum GPA of 3.0 is required in all courses

<table>
<thead>
<tr>
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<td>PSYC 670</td>
<td>Clinical Child Psych Practicum</td>
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<td>PSYC 750</td>
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**Research:** ***

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**Additional Requirements****

<table>
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</tbody>
</table>

* Research Methods in Clinical Psychology counts as third departmental methods course.

** Practica and Internship: You must complete at least 18 hours of practica (660 Clinical Psychology Practicum or 670 Clinical Child Practicum) and three hours of internship (750 Clinical Internship). 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.

*** Research: You are expected to be involved in research throughout your graduate career, and your enrollment in PSYC 795 (Independent Study), should reflect this activity. You must complete at least six hours.

**** At least 9 hours of electives approved by the Clinical Child Training Committee

# LIFE-SPAN DEVELOPMENTAL PSYCHOLOGY DOCTORAL PLAN OF STUDY

A minimum GPA of 3.0 is required in all courses

**Course**

<table>
<thead>
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<tbody>
<tr>
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<td>PSYC 512</td>
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<td>PSYC 545</td>
<td>Concept Issues-Devlpmntl Psych</td>
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<td>PSYC 546</td>
<td>Meth Issues in Dev Psych</td>
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<tr>
<td>PSYC 602</td>
<td>Prof Issues-Devlpmntl Psych</td>
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<td>PSYC 701</td>
<td>Adv Professional Issues-Psych</td>
<td>1-3</td>
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<tr>
<td>PSYC 541</td>
<td>Infant Development</td>
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<td>PSYC 542</td>
<td>Child Development</td>
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<td>PSYC 543</td>
<td>Adolescent/Young Adult Devlpmnt</td>
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<tr>
<td>PSYC 544</td>
<td>Adult Development and Aging</td>
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</table>

**Advanced Methodology Courses (After PSYC 511 & 512)**

6

You must take two of the following advanced methodology courses. Other advanced methodology courses approved by the Life-Span Developmental Training Committee also may be used to fulfill this requirement.
Public Administration

Degree Offered

- Master of Public Administration

The Master of Public Administration (MPA) degree prepares individuals for a career in public service. WVU’s Department of Public Administration offers the only nationally 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.

Curriculum

The curriculum provides a strong foundation in both the theory and practice of public administration. Students complete a total of 45 credit hours for the MPA degree, including:

- 27 credit hours of required core courses in public management, budget and finance, human resources, research methods, and the historical, intellectual, legal and political foundations of public administration;
- 12 credit hours of elective courses offered through Public Administration and other departments at WVU; and
- 6 credit hours of internship (500 contact hours), completed in one or two semesters.

FACULTY

CHAIR

- John C. Kilwein - Ph.D. (Ohio State University)
  Associate Professor, Constitutional Law, Public Law and Policy

ASSOCIATE PROFESSOR

- L. Christopher Plein - Ph.D. (University of Missouri)
  Eberly Professor of Outstanding Public Service, Legal and Political Foundations, Public Policy Analysis, Social Policy, Community and Economic Development

ASSISTANT PROFESSOR

- Maja Husar Holmes - Ph.D. (Syracuse University)
  Public Management, Public Leadership, Environmental and Energy Policy
- Karen Kunz - D.P.A. (University of Illinois, Springfield)
  Financial Management, Corporate Use of Public Funds, Political Economy
- Margaret Stout - Ph.D. (Arizona State University)
  Local Government, Community Development, Public Policy and Public Planning
CLINICAL ASSISTANT PROFESSOR
• Nancy L. Adams - Ph.D. (Fielding Institute)

PROFESSORS EMERITI
• Gerald M. Pops - Ph.D. (Syracuse University)
• David G. Williams - Ph.D. (State University of New York at Albany)

Admission
Candidates must meet the WVU general admission requirements for graduation from an accredited college and grade point average. Admission into the MPA program is competitive with decisions based on the following:

• Application for admission and transcripts (submitted to the Office of Admissions)
• Graduate Record Exam (GRE) test scores (GMAT and LSAT scores can be submitted in place of the GRE.)
• Two letters of reference (Students can request a form from the Department or download the form from our webpage: http://publicadmin.wvu.edu/graduate/master-of-public-administration/mpa-admission-process.)
• Personal Statement
• Resume/Curriculum Vitae

Application Deadline
Applicants may request admission to the MPA program in the fall, spring, and summer terms. The deadline for all application materials for fall and summer admission is April 1; applicants will be notified of the committee’s decision around April 15. The deadline for all application materials for spring admission is October 15; applicants for the spring term will be notified around October 31. Applications for admission may be considered after these deadlines on a space-available basis. Incomplete applications will not be considered.

For further information, please contact:
Department of Public Administration
P.O. Box 6322
Morgantown, WV 26506
Debbie.Koon@mail.wvu.edu
(304) 293-2614
or publicadmin.wvu.edu

General Requirements
The MPA degree requires the completion of forty-five credit hours. The requirements are listed below. Elective courses can be tailored to the student's needs with revisions agreed upon by both the student and advisor.

A grade point average of 3.0 is required to graduate with the MPA degree.

A grade of C or higher must be earned in all required courses

<table>
<thead>
<tr>
<th>Integrative Seminar</th>
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<tbody>
<tr>
<td>PUBA 600</td>
<td>Scope and Practice</td>
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<th>Foundation Courses</th>
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<tbody>
<tr>
<td>PUBA 610</td>
<td>Public Mangmnt Theory/Practice</td>
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<td>PUBA 620</td>
<td>Public Financial Management</td>
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<td>PUBA 630</td>
<td>Research Methods</td>
</tr>
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<td>PUBA 640</td>
<td>Legal/Political Foundations</td>
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<td>PUBA 720</td>
<td>Public Budgeting</td>
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<tr>
<td>PUBA 730</td>
<td>Applied Research-Public Admin</td>
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<td>PUBA 741</td>
<td>Human Resource System</td>
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</table>

<table>
<thead>
<tr>
<th>Elective Courses</th>
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</table>
Degree Completion

It usually takes four semesters for full-time students to complete the M.P.A. degree. Students are required to complete 6 credit hours of internship experience. For those individuals who have had substantial public service experience, internship credit can be awarded.

Healthcare Administration Specialization

DESCRIPTION

The Public Administration Department offers a healthcare administration specialization 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.

CURRICULUM

The specialization consists of fifteen credit hours:

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>PUBA 670</td>
<td>Health Systems</td>
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<tr>
<td>PUBA 671</td>
<td>Healthcare Organizatn/Operatn</td>
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<tr>
<td>PUBA 672</td>
<td>Healthcare Finance</td>
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Healthcare Electives

See electives listed on web page

Capstone Experience

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>PUBA 780</td>
<td>Healthcare Administrtn Practcm (or equivalent capstone course approved by the Director.)</td>
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</tbody>
</table>

Total Hours

15

Students who desire to specialize in this area as part of their MPA degree take elective courses offered in healthcare administration. A certificate program is also available for students who are just interested in the healthcare specialization as a non-degree seeking student. For more information, please consult: http://publicadmin.wvu.edu/.

Dual Degrees

The department has established both joint degree and dual degree programs with a number of other graduate programs. A dual JD/MPA degree program has been established with the College of Law to provide preparation in both law and public administration. A dual MSW/MPA degree has been developed in cooperation with the School of Social Work to provide preparation for administrators in the social services. Dual degree programs may also be arranged with other academic programs and professional schools. Graduate studies regulations permit limited credit from one graduate degree to be applied to a second degree. Students may pursue two degrees and use approved coursework for both degrees. For more information: http://publicadmin.wvu.edu/.

Social Work

Degree offered

• Master of Social Work

Nature of the Program

The mission of the M.S.W. Social Work Program at West Virginia University is to train graduate students in advanced social work practice either with individuals, families, and groups or in community organizing and social administration. The focus of this training is to produce competent and effective practitioners committed to enhancing social well-being and quality of life with particular emphasis on vulnerable and oppressed populations in small towns and rural areas characteristic of the Appalachian region.
Students have the opportunity to focus their practice interests by selecting one of two practice tracks—direct practice or community organization and social administration. Students have the opportunity to complete their field internships with agencies throughout West Virginia and adjacent areas. In addition, a dual degree option is offered in conjunction with the Department of Public Administration. Graduate certificates are available in the areas of gerontology and non-profit management (http://grad.wvu.edu). All degree programs offered by the university are accredited by the Council on Social Work Education.

The School of Social Work supports both full-time and part-time graduate study at the campus in Morgantown and part-time graduate study at several extended campus sites, including Charleston, Beckley, Keyser, Wheeling, and Martinsburg. Regular-standing students—those with degrees in areas other than social work or those with social work degrees who do not meet the criteria for advanced-standing status—begin the program in fall semesters. It takes two years to complete the program on a full-time basis (including two summer sessions between the first and second years of the program) and three years to complete the program on a part-time basis (including summer sessions). Full-time advanced standing students (those with a qualifying B.S.W. degree) begin the program in January and complete the program in sixteen months. Part-time advanced-standing students begin in the fall semester and finish in just under two years.

Applicants to the M.S.W. program come from a variety of academic disciplines and have varying degrees of experience in the field of social work. Students interested in applying should consult the website: http://socialwork.wvu.edu or contact:

M.S.W. Admissions
School of Social Work
West Virginia University
P.O. Box 6830
Morgantown, WV 26506-6830
Phone: (304) 293-3501

Application information is also available on our website: http://socialwork.wvu.edu.

Career Opportunities

Graduates of the M.S.W. 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.

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 social work curriculum is designed to help students prepare for these careers.

FACULTY

DIRECTOR

• Elise Fullmer - Ph.D. (University at Albany, The State University of New York)

PROFESSOR

• Karen V. Harper-Dorton - Ph.D. (Ohio State University)
  Professor and Chair, Title IV-E Project in Child Welfare, Rural Social Work, Social Administration

ASSOCIATE PROFESSOR

• Helen P. Hartnett - Ph.D. (Ohio State University)
  M.S.W. Director, Communities and Organizations, Homelessness

• Kristina Hash - Ph.D. (Virginia Commonwealth University)
  Aging, Family Care Giving, Gay and Lesbian Issues

• Neal Newfield - Ph.D. (Texas Tech University)
  Strategic Therapy, Hypnosis, Solution-focused Therapy, Social Documentary Photography

• Carrie Rishel - Ph.D. (University of Pittsburgh)
  Child Mental Health, Program Evaluation

• Leslie Tower - Ph.D. (Barry University)
  Domestic Violence, Women’s Issues, Health Care Administration
• Michael Zakour - Ph.D. (Washington University)
  Associate Director of the Nova Institute, Organizations and Communities, Non-profit Management, Disaster Response

ASSISTANT PROFESSOR
• Portia Adams - Ph.D. (Washington University)
  Clinical Practice, Adolescents
• HaeJung Kim - Ph.D. (University of Maryland)
  Non-profit Management, Social Policy
• Emily McCave - Ph.D. (University of Kansas)
  Research LGBT

CLINICAL ASSOCIATE PROFESSOR
• Linda Ferrise - M.S.W. (West Virginia University)
  Baccalaureate Program Director, Clinical Practice, Community Mental Health

CLINICAL ASSISTANT PROFESSOR
• Patricia Chase - Ed.D (West Virginia University)
  Child Welfare

SENIOR LECTURER
• Eveldora Wheeler - M.S.W. (University of Pittsburgh)
  Management, Training, Deliberation and Dialogue

INSTRUCTORS AND FACULTY EQUIVALENTS
• Carol Amendola - M.S.W. (West Virginia University), L.C.S.W.
  B.S.W. Program Coordinator, Clinical Practice, Child Welfare
• J. Scott Dixon - M.S.W. (Temple University)
  Martinsburg M.S.W. Coordinator, Spirituality, Mental Health, Poverty Issues
• Jacqueline Englehardt - M.S.W. (West Virginia University), L.C.S.W.
  Professional and Community Education, Non-profit Management
• Lori Fell - M.S.W. (West Virginia University)
  M.S.W. Coordinator, Group Work, Spirituality in Social Work Practice, Substance Abuse Treatment and Recovery
• Samuel J. Leizear - M.S.W. (WVU), L.C.S.W.
  Field Education Coordinator, Human Diversity, Health Care and Aging, LGBT Issues
• Chatman Neely - M.S.W. (West Virginia University)
  Wheeling M.S.W. Coordinator, Clinical Practice, Teaching Instructor
• Alyssa Nichols - M.S.W./M.P.A. (West Virginia University)
  Teaching Instructor
• Debra Young - Ed.D (Marshall University)
  Charleston M.S.W. Coordinator, Community Organization and Social Administration

RESEARCH ASSOCIATE
• Rebekah Bledsoe - M.S.W. (West Virginia University)
  Title IV-E, Child Welfare

EMERITUS FACULTY
• Marjorie H. Buckholz-Cleveland - Ph.D. (West Virginia University)
• Barry Locke - 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)

The School of Social Work
M.S.W. ADMISSION PROCESS
The School of Social Work has adopted an online application process. Please carefully read and follow all instructions as outlined.

APPLICATION DEADLINES
Please remember that all required materials must be received and processed by the following deadline dates. Keep in mind transcripts, references, and test scores often take longer than anticipated to arrive.

March 1 is the priority deadline. Applications submitted by March 1 will be given preference for graduate assistantships and scholarships.

April 1 is the standard deadline. All applications must be submitted by April 1 for consideration.

May 1 is the late application deadline. All applications must be submitted by May 1, and late application acceptance is based upon available space.

Requirements
Note: Materials marked with an * must be uploaded/submitted at http://grad.wvu.edu/apply in the Supplemental Material section.

COLLEGE PREP
• Bachelor’s degree from an accredited college or university

PREREQUISITE COURSES
• Successful completion of thirty hours of courses in the liberal arts, including the social, behavioral, and biological sciences
• Evidence of study related to diverse cultures, social conditions, social problems, and individual lifespan

ADVANCED-STANDING
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. Advanced-standing enables the baccalaureate-holding social worker to move directly to the program’s advanced curriculum, waiving twelve credits of foundation-level courses as well as the foundation field experience.

The School of Social Work does not give academic credit for work or life-experience.

GRADE POINT AVERAGE
• At least a 3.0 overall GPA
• A 3.0 or higher GPA in their undergraduate social work courses

APPLICATION AND APPLICATION FEE*
• Complete the combined WVU Graduate/School of Social Work application
• $60 application fee

TRANSCRIPTS
• Submit official transcripts to the WVU Office of Graduate Admissions at P.O. Box 6009, Morgantown, WV 26506

RESUME*:
• Submit a current resume including employment and volunteer experience

LETTERS OF RECOMMENDATION*
Three letters of recommendation are required. Contact information for these individuals should be provided within the online Graduate Application. Please submit a recommendation from each of the following categories:
• Academic
• Social Work/Human Service Experience (volunteer or paid)
• Employer

Advanced-standing applicants must submit a supporting recommendation from the director of their undergraduate program.

TESTING
Applicants with an undergraduate GPA above 3.0 do not have to take the General Requirements Examination (GRE).
Applicants whose undergraduate GPA is below 3.0 must take the GRE. Official copies of test scores must be sent directly from Educational Testing Services (ETS) to WVU. Our Institution code is 5904.

International Students whose first language is not English must take the Test Of English as a Foreign Language (TOEFL). The GRE is also required if GPA is below 3.0.

**ADMISSION ESSAY**:  
All applicants must submit an Admission Essay. Please read the detailed description below.

**Admission Essay Guidelines**

This essay is one essential part of the student’s admission application. This is the student’s opportunity to communicate with the Graduate Program Committee members about their professional goals. Before submitting, make certain that the essay gives the reader a clear picture of your personal interests, experiences, and professional objectives. Once complete, please upload the Admissions Essay to your online application under the “Personal Statement” tab.

The Admission Essay must address each of the following:

**HUMAN SERVICES AND COMMUNITY WORK**

Please discuss any volunteer or paid experiences in human services, community work, and/or other experiences that contributed to your choice of social work as a profession. The Program Committee is looking for evidence of some leadership ability, experience, or interest in working with diverse populations or oppressed groups; commitment to social and economic justice; and other interests congruent with WVU’s School of Social Work mission and social work practice in a rural setting.

**PROFESSIONAL ETHICS**

The NASW Code of Ethics includes the following statement:

“Social workers treat each person in a caring and respectful fashion, mindful of individual differences and cultural and ethnic diversity. Social workers promote clients’ socially responsible self-determination. Social workers seek to enhance a client’s capacity and opportunity to change and to address their own needs. Social workers are cognizant of their dual responsibility to clients and to the broader society. They seek to resolve conflicts between client’s interests and the broader society’s interests in a socially responsible manner consistent with the values, ethical principles, and ethical standards of the profession.”

Using a specific experience you have had with someone/some group different than you (in terms of race, socioeconomic background, gender, religion, sexual orientation, culture, age, etc.), discuss what challenges you had and what lessons you learned from this. How did the interaction affect your personal views about this individual/group? How will you reconcile any conflicts between your personal values and the requirement of the profession?

**SOCIAL WORK PRACTICE**

Please describe an aspect of social work that interests you most and explain how you became interested in this issue. Identify how you think social work, as a profession, should respond to this issue. Feel free to describe a response at the policy, program, or practice levels of social work.

**ADDENDUM**

If necessary, applicants should submit an addendum that addresses any gaps or deficiencies in their academic record, including incomplete grades, withdrawals from courses, etc.

**ADVANCED-STANDING APPLICANTS MUST ALSO ADDRESS:**

Please choose a practice example on individuals, group, family, or organization and describe it, disguising names and identifying information. Please introduce the example with a brief paragraph describing the agency, its function, and its purpose. Please limit your response to 500 words.

Your description headings should include the following:

- **Assessment** – A summary of the essential case data, including age, ethnicity, race, presenting problem, history of the problem, coping abilities. (If the assessment is based on a group or organization, describe the type of group/organization, membership makeup, and purpose.)

- **Case Plan** – Describe the plan and how it relates to the assessment evaluation.

- **Interventions** – Describe and analyze your practice interventions and how they are related to the case plan or assessment formulation.

- **Evaluation** – Critically analyze the strength and limitations of your intervention. With hindsight, how might you have intervened differently and why?
Admission Essay Guidelines have been compiled and adapted from the following institutions: University of Maine, UNC-Chapel Hill, University of Maryland at Baltimore, and the University of Michigan.

Curriculum and Degree Requirements

- Degree Requirements
- Curriculum Components
- Field Instruction
- Grade Point Average (GPA) Requirements for Good Standing
- Summary of Degree Requirements for Regular M.S.W. Program
- Summary of Degree Requirements for Advanced Standing M.S.W. Program
- Dual M.S.W/M.P.A.

MASTER’S DEGREE REQUIREMENTS:

The degree of master of social work (M.S.W.) is conferred upon those students who satisfactorily complete the requirements as established for graduate education. These requirements are as follows:

Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minimum GPA of 2.75 is required in all courses.</td>
<td></td>
</tr>
</tbody>
</table>

Major Requirements 18-34

Area of Emphasis Requirement 12

Electives 12

Total Hours 42-58

- Satisfactory completion of no less than fifty-eight semester hours for those admitted to the regular M.S.W. program and forty-two semester hours for those admitted to the advanced standing M.S.W. program. These hours may be earned through the program on the campus in Morgantown as well as at the extended campus sites.

- Satisfactory completion of all components called for by the degree plan to which students are admitted in the graduate program.

Curriculum Components

All M.S.W. students complete coursework in social work practice, social welfare policy, human behavior and the social environment, social work research, and field instruction. In addition, students select a practice track.

Direct practice track students gain the knowledge and skills to provide direct and clinical services to individuals, families, and small treatment groups. Community organization and social administration track students gain knowledge and skills to provide leadership to communities in the development, administration, and support of service programs.

Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOWK 513</td>
<td>Social Work Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 520</td>
<td>Human Behav-Social Environment</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 531</td>
<td>Social Welfare Policy/Services</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 540</td>
<td>Generalist Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 581</td>
<td>Generalist Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 621</td>
<td>Humn Behr/Divrsty/Socl Justce</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 633</td>
<td>Social Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 682</td>
<td>Advanced Field Experience</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>34</td>
</tr>
</tbody>
</table>

Direct Practice Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOWK 618</td>
<td>Personal Practice Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 643</td>
<td>Psychopathology/So Wk Practice</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 649</td>
<td>Adv Practice:Individual/Family</td>
<td>3</td>
</tr>
</tbody>
</table>
Field Instruction

Field instruction provides the student with an opportunity to test classroom knowledge as well as to develop and refine advanced-practice skills. Field instruction opportunities are available throughout West Virginia and adjacent areas as well as in a select number of settings outside the region.

Full-time regular-standing M.S.W. students have a generalist field experience during the first two semesters of study. Advanced-field placement is typically completed on a concurrent plan requiring sixteen–twenty-four hours of field instruction activity each week throughout the second year of study according to degree plans.

Students are required to take at least three credits of classroom coursework concurrently with the advanced field placement and to complete assignments designed to facilitate the integration of filed and classroom study. Decisions regarding the field placement assignment are jointly reached by the student, faculty advisor, and field instruction coordinator. Only sites on the Division of Social Work’s list of approved agencies may be used for field instruction.

Grade Point Average (GPA) Requirements for Good Standing

All graduate courses must be completed with a grade of C or better; students may repeat any course for which the final grade is less than C one time only. Students are required to maintain an overall minimum GPA of 2.75 (on a four-point scale) to continue in the program, to be eligible for field instruction, and to be eligible for graduation.

Summary of Degree Requirements for Regular M.S.W. Program

<table>
<thead>
<tr>
<th>Required Course Credits</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalist Field Credits</td>
<td>4</td>
</tr>
<tr>
<td>SOWK 581 Generalist Field Experience</td>
<td></td>
</tr>
<tr>
<td>Advanced Field Credits</td>
<td>12</td>
</tr>
<tr>
<td>SOWK 682 Advanced Field Experience</td>
<td></td>
</tr>
<tr>
<td>Electives Credits</td>
<td>12</td>
</tr>
<tr>
<td>Total Hours</td>
<td>58</td>
</tr>
</tbody>
</table>

Summary of Degree Requirements for Advanced Standing M.S.W. Program

<table>
<thead>
<tr>
<th>Required Course Credits</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Field Credits</td>
<td>12</td>
</tr>
<tr>
<td>SOWK 682 Advanced Field Experience</td>
<td></td>
</tr>
<tr>
<td>Electives Credits</td>
<td>12</td>
</tr>
<tr>
<td>Total Hours</td>
<td>42</td>
</tr>
</tbody>
</table>

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 Division of Social Work and the Division of Public Administration. For a student admitted to the regular M.S.W. program, a total of eighty-two credit hours are required to meet the dual degree requirements. For a student admitted to the advanced standing M.S.W. program, a total of sixty-nine credit hours are required to meet dual degree requirements. Many students complete such requirements through one or more additional semesters of study beyond the semesters required for the M.S.W. degree. Applicants must meet the admission requirements of each program. Acceptance by one program does not guarantee acceptance by the other. Additional information and descriptive materials about the dual degree program are available from either of the following:

M.S.W. Admissions
Division of Social Work
West Virginia University
Graduate Certificate in Gerontology

The Graduate Certificate in Gerontology is available to students who meet WVU graduate admission requirements and have an interest in learning more about the aging processes and older people. The certificate affords students an opportunity to explore the basic biological, psychological, and sociological processes of aging; the effects on needs and experiences of older people; and the impact of social policies related to human aging. An understanding of the unique problems and needs of older adults in Appalachia and other rural areas is emphasized.

- The certificate requires fifteen graduate credits as detailed below.
- A 3.0 grade-point average must be maintained in all certificate coursework.

Coordination of the Graduate Certificate in Gerontology was assumed by the Beatrice Ruth Burgess Center for WV Families and Communities of the WVU School of Social Work in Fall 2009. As Certificate requirements are reviewed, it is possible that some of them may be modified. You may want to check this site periodically or contact Dr. Kristina Hash, Director of the Gerontology Certificate Program, for the latest information about program requirements.

Students must apply to be enrolled in the certificate program. An application form (http://socialwork.wvu.edu/certificate-programs/graduate-certificate-in-gerontology) is available on this website or may be obtained from Dr. Hash who may be contacted at (304) 293-8807.

Those interested in the Gerontology Certificate may also want to explore the Summer Institute on Aging (http://socialwork.wvu.edu/continuing-education/west-virginia-summer-institute-on-aging).

Curriculum Requirements for Gerontology Certificate Program are as follows:

A grade of B or better must be earned in all required courses

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER0 512 Public Policy of Aging</td>
<td>9</td>
</tr>
<tr>
<td>GER0 681 Rural Gerontology</td>
<td></td>
</tr>
<tr>
<td>GER0 628 Aging Women &amp; Cultural Issues</td>
<td>3</td>
</tr>
<tr>
<td>GER0 695 Independent Study</td>
<td>1-6</td>
</tr>
<tr>
<td>PHAR 751 Geriatrics</td>
<td>2</td>
</tr>
</tbody>
</table>

Electives (Select two)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOWK 653</td>
<td>End Of Life Care</td>
</tr>
<tr>
<td>SOWK 572</td>
<td>Contemporary Issues in Aging</td>
</tr>
<tr>
<td>GER0 645</td>
<td>Fundamentals of Gerontology</td>
</tr>
<tr>
<td>PHAR 754</td>
<td>Decision Analysis-Healthcare</td>
</tr>
</tbody>
</table>

Total Hours: 21-26

For further information, please consult the School of Social Work’s website, http://socialwork.wvu.edu/certificates, or contact Dr. Kris Hash at KMHash@mail.wvu.edu.

Graduate Certificate in Integrated Mental and Behavioral Health

ADMISSION AND PERFORMANCE STANDARDS

The goal of the program is to train students to become effective mental and behavioral health care providers. To be admitted to the Certificate program, applicants must demonstrate graduate student status at West Virginia University (either degree or non-degree) and be in good standing. The requirements for participation in the required Capstone course also impact admission criteria. The capstone course requires students to complete an individualized project that applies content learned in the certificate program to their target population of focus. In order to complete this capstone course, students must have access to field placement, clinical practicum, internship, or employment setting in which they have the ability for “hands-on” practice with the target population. Applicants will be asked to explain and document their anticipated access to this type of experience at the time they would
be completing the capstone course. To continue their progress in the Certificate program, students must maintain a grade of "B" or higher in certificate coursework.

PROGRAM REQUIREMENTS:
The Graduate Certificate in Integrated Mental and Behavioral Health will consist of 15 credit hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOWK 649</td>
<td>Adv Practice: Individual/Family</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 650</td>
<td>Families and Groups</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 626</td>
<td>Child Mental Health</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 644</td>
<td>Brief Therapy</td>
<td></td>
</tr>
<tr>
<td>SOWK 675</td>
<td>Substance Abuse</td>
<td></td>
</tr>
<tr>
<td>SOWK 641</td>
<td>Social Work with Groups</td>
<td></td>
</tr>
<tr>
<td>SOWK 658</td>
<td>Social Work With Veterans</td>
<td></td>
</tr>
<tr>
<td>SOWK 678</td>
<td>Family Victimology</td>
<td></td>
</tr>
<tr>
<td>SOWK Course Advanced Practice in Integrated Healthcare (still to be developed)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 15

Graduate Certificate in Non-profit Management

The School of Social Work, in cooperation with the other units of the School of Applied Social Sciences, offers a fifteen-hour graduate Non-profit Management Certificate Program. The program consists of two required three-hour courses, six hours of electives, and a three-hour capstone project.

REQUIRED COURSES

All students must enroll in SOWK 654 and SOWK 655.

ELECTIVES

Students enrolled in the certificate may choose a wide variety of electives, including appropriate courses in their field of study, employment, volunteer history, or other interests. In the past, certificate students have elected courses in public administration, social work, sociology, political science, geography, agriculture, journalism, and other disciplines.

Please consult the School of Social Work’s website (http://socialwork.wvu.edu/certificate-programs/graduate-certificate-in-nonprofit-management) for more information.

CAPSTONE

Upon completion of the required and elective coursework, each student is required to do an individual capstone project in order to complete the certificate requirements. Students in public administration typically do their non-profit capstone requirement concurrently with a similar departmental requirement there. Dual-degree and social work students frequently develop their capstone projects in conjunction with their field placements.

Candidates for the graduate certificates must meet regular WVU graduate admission requirements. Program participants must maintain a minimum grade point average of 3.0 in certificate coursework.

For more information on the Graduate Certificate in Non-profit Management, please contact Dr. Helen Hartnett at helen.hartnett@mail.wvu.edu or by calling (304) 293-8808.

School of Social Work
105 Knapp Hall
P.O. Box 6830
West Virginia University
Morgantown, WV 26506-6830
(304) 293-3501

Sociology and Anthropology

Degree Offered

• Master of Arts in Sociology
Nature of the Program
The Department of Sociology and Anthropology offers a master of arts degree in sociology. The program trains students in the core areas of sociology, including research design, quantitative and qualitative methods, data analysis, theory, and sociological writing. It also teaches a range of professional skills designed to help graduates enter the academic or non-academic job markets. Emphasis is placed on writing and presentation skills, knowledge of statistical software, teaching ability, expertise in program evaluation, and the ability to communicate and apply sociological theory. Graduates of the program have entered Ph.D programs and have taken positions in universities, government, community agencies, and private industry.

Employers value our graduates’ technical skills, understanding of the research process, and overview of the interaction between research, planning, and policy. Many of our graduates are soon promoted to positions as project directors, managers, and supervisors. As a consequence, our network for placing graduates is ever-expanding.

In addition to instruction of technical skills, faculty furnish an overview of the relationship between policy and research and provide expertise in a broad range of substantive areas, including economic development in Appalachia; gender, racial and ethnic studies; sociology of education and work; the criminal justice system; health care delivery; injury prevention; community and organizational development; and conflict analysis and resolution. In addition to coursework, students will have an opportunity to work with faculty who are actively engaged in research in the areas previously mentioned. It is not uncommon to have students work with faculty on research that is presented at local, regional, and national professional meetings; published in professional journals; and presented to development agencies and legislative bodies.

Degree Requirements
The thirty-six hour program requires thirty hours of coursework and either the completion of a thesis (six hours) or an applied research report (six hours). During the first three semesters, students are required to enroll in a series of core research courses. In addition, the student, in consultation with his or her program committee, chooses electives either within the department or elsewhere in the university as a basis for gaining expertise in some specific area of concentration.

FACULTY
PROFESSOR
- Lawrence T. Nichols - Ph.D. (Boston College)
  Sociology, Criminology, Theory, Business

PROFESSOR EMERITUS
- Ronald C. Althouse - Ph.D. (University of Minnesota)
  Theory, Work, Occupational Safety and Health

ASSOCIATE PROFESSORS
- Corey Colyer - Ph.D. (Syracuse University)
  Sociology, People Processing Systems, Agencies of Social Control
- S. Melissa Latimer - Ph.D. (University of Kentucky)
  Sociology, Gender/Race/Ethnicity, Inequality/Labor Markets/Welfare Systems
- James Nolan, III - Ph.D. (Temple University)
  Sociology, Criminal Justice, Group and Social Processes
- Karen Weiss - Ph.D. (State University of New York, Stony Brook)
  Sociology, Criminology, Victimization, Gender/Sexuality/Culture
- Rachael A. Woldoff - Ph.D. (Ohio State University)
  Sociology, Community, Crime, Inequality/Race/Class

ASSOCIATE PROFESSORS EMERITI
- Ann L. Paterson - Ph.D. (Michigan State University)
  Sociology
- Patricia C. Rice - M.A. (Ohio State University)
  Anthropology
- Joseph J. Simoni - Ph.D. (University of Notre Dame)
  Sociology
- William I. Torry - Ph.D. (Columbia University)
  Anthropology

ASSISTANT PROFESSOR
- Lisa M. Dilks - Ph.D. (University of South Carolina)
Sociology, Social Psychology, Group Processes, Law and Society, Quantitative Methods

- Amy Hirshman - Ph.D. (Michigan State University)
  Anthropology, Mesoamerican Anthropology, Social Complexity, Ceramics

- Jason Manning - Ph.D. (University of Virginia)
  Sociology, Conflict and Social Control, Violence, Sociology of Knowledge

- Daniel Renfrew - Ph.D. (State University of New York, Binghamton)
  Anthropology, Environmental and Political Anthropology, Social Movements, Latin American Cultures

- Rachel Stein - Ph.D. (University of Akron)
  Sociology, Criminology, Victimization, Media and Crime

- Joshua Woods - Ph.D. (Michigan State University)
  Sociology, Social Psychology, Media, Complex Organizations, Sociology of Risk

- Jesse Wozniak - Ph.D. (University of Minnesota)
  Sociology, Policing, Criminology, Deviance, State Power

TEACHING ASSISTANT PROFESSOR

- Adam Dasari - Ph.D. (Oklahoma State University)
  Sociology, Social Stratification, Globalization, Environmental Sociology, Theory

CLINICAL ASSISTANT PROFESSOR

- Jennifer Steele - Ph.D. (Pennsylvania State University)
  Rural Sociology, Natural Resource Sociology, Rural Community and Economic Development

Admission

Applicants for admission to graduate study must have a bachelor’s degree from an accredited institution. Applicants must submit a university graduate application and have their college or university transcripts sent directly to the WVU Office of Admissions. Candidates should also submit three completed recommendation forms from former professors, supervisors, or employers. Applicants should submit a written statement of purpose outlining graduate study goals and plans (career plans, research experience, and any special circumstances), a short sample of academic writing, and scores for the Graduate Record Examination (GRE). Foreign students for whom English is not the native language are required by the university to submit Test of English as a Foreign Language (TOEFL) scores (a minimum score of 550 is required) and may be required to participate in the university’s language orientation sessions.

Application Deadline

The application process should be completed by March 1 for admission to the fall semester. Students seeking financial assistance must request and submit a separate application form furnished by the Department of Sociology and Anthropology.

Remediation

Students with deficient background in sociological theory, methods, or statistics may be required to do remedial work. Full-time students who are admitted as special provisional students are required to complete twelve hours of approved coursework with a B average or better within a year; students who fail to do so are suspended. The department’s Graduate Committee assesses all students and determines who will be permitted to continue in the program, with or without assistance. Normally, assistance is for no more than two years.

DEGREE REQUIREMENTS

Degree Requirements

A minimum GPA of 3.0 is required in all courses.

Major Requirements

MAJOR REQUIREMENTS

Major in Sociology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCA 510</td>
<td>Principles of Research Design</td>
<td>3</td>
</tr>
<tr>
<td>SOCA 513</td>
<td>Qualitative Methods</td>
<td>3</td>
</tr>
<tr>
<td>SOCA 517</td>
<td>Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SOCA 518</td>
<td>Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SOCA 522</td>
<td>Contemp Sociological Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOCA 693</td>
<td>Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>
Statistics

Degrees Offered

• Master of Science
• Master of Data Science
• Doctor of Philosophy

Nature of the Programs

The Department of Statistics offers a Master of Science (M.S.) in Statistics, a Master of Data Science (M.D.S.), and a Doctor of Philosophy (Ph.D.) in Computational Statistics. The department also offers a Certificate in Applied Statistics (C.A.S.). The M.S. degree is intended to qualify the student to assume a professional role in educational, industrial, or governmental research projects; to teach in a college; or to undertake advanced training toward a doctorate in statistics or one of the quantitative fields of science. The M.D.S degree is intended for professionals or students who want applied statistics and data science courses to enhance their job opportunities and quantitative knowledge. The Ph.D. degree is designed for students who are interested in the statistical and data sciences and who want to work in the following: 1) a research university, 2) collaboratively with researchers in the computational sciences at research institutes, 3) the government, or 4) research-driven corporations.

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 degree programs in statistics. A good background in mathematics, science, or engineering is reasonable preparation for graduate work in statistics.

The Department of Statistics also participates in the Combinatorial Computing and Discrete Mathematics (CCDM) Area of Emphasis within the Computer and Information Science Ph.D. Program or the Mathematics Ph.D. Program.

FACULTY

PROFESSORS

• Erdogan Gunel - Ph.D. (State University of New York, Buffalo)
  Bayesian Inference, Biostatistics, Categorical Data Analysis
• E. James Harner - Ph.D. (Cornell U.)
  Dynamic graphics, Statistical computing and modeling, Statistical education.
• Robert Mnatsakanov - Ph.D. (Moscow State Institute of Electronics and Mathematics)
  Nonparametric statistics, Statistical Inverse Problems, Mixture Models, Change-set Problems

ASSOCIATE PROFESSORS

• Mark V. Culp - Ph.D. (University of Michigan)
  Statistical Machine Learning, Computational Statistics, Semi-supervised and Multi-view Learning, Biometrics
• Gerald R. Hobbs Jr. - Ph.D. (Kansas State University)
  Biostatistics, Nonparametric Statistics, Regression Analysis
• Kenneth J. Ryan - Ph.D. (Iowa State University)
  Experimental Design, Statistical Machine Learning, Biometrics

ASSISTANT PROFESSOR

• Erin R. Leatherman - Ph.D. (Ohio State)
  Prediction and Design for Computer and Physical Experiments.
• Philip Turk - Ph.D. (Montana State University)
  Statistical Computing, Adaptive Cluster Sampling, Response Surface Methodology, Statistical Applications to Biological and Environmental Problems

CLINICAL ASSISTANT PROFESSOR

• Huey Miin Lee - Ph.D. (Johns Hopkins University)
  Bioinformatics, Statistical Education
RESEARCH ASSISTANT PROFESSOR
• Yanqing Hu - Ph.D. (University of Virginia)
  Design of Clinical Trials, Adaptive Designs, Nonparametric Statistics, Bioinformatics

INSTRUCTOR
• Sarah Quesen - M.P.H. (West Virginia University)
  Biostatistics, Health Policy, Statistical Education

RESEARCH ASSOCIATE
• Anthony A. Billings - M.S. (West Virginia University), A.B.D. (Carnegie Mellon University)
  Statistical Computing, Statistical Modeling, Robust Estimation, Nonlinear Dynamic Systems, Statistical Education

ADJUNCT PROFESSOR
• Michael Andrew - Ph.D. (University of Wyoming)
  Epidemiological Analysis, Statistical Modeling, Time Series Analysis

ADJUNCT ASSISTANT PROFESSOR
• Stacey Culp - Ph.D. (University of Michigan)
  Functional Data Analysis, Statistical Consulting
• Fekedulegn B. Desta - Ph.D.
  Categorical Data Analysis, Multivariate Statistical Methods, Nonlinear Regression, Forest Growth Modeling, SAS Programming

PROFESSOR EMERITUS
• William V. Thayne - Ph.D. (University of Illinois)
  Experimental Design, Statistical Genetics, Regression Analysis
• Edwin C. Townsend - Ph.D. (Cornell University)
  Experimental Design, Regression Analysis

ASSOCIATE PROFESSOR EMERITUS
• Daniel M. Chilko - M.S. (Rutgers University)
  Statistical Computing, Computer Graphics

ADMISSIONS AND PREREQUISITES FOR MASTER OF SCIENCE IN STATISTICS
Students are expected to know the material contained in the following courses or areas upon admission to the program. Otherwise, these deficiencies must be removed as early as possible in the student’s degree program under the terms specified by the Admissions and Standards Committee.

• Single and multivariable calculus (MATH 155, MATH 156, MATH 251, or equivalent)
• Linear or matrix algebra (MATH 441 or equivalent)
• Probability and statistics (STAT 215 or equivalent)
• Knowledge of a high-level programming language

ADMISSIONS AND PREREQUISITES FOR MASTER OF DATA SCIENCE
The Master of Data Science is designed for a Fall admission for full-time students. This will allow students to complete the MDS by the end of the summer in the following year through an intensive program of study, i.e., in 15 months. Students can lessen the course load during the academic year by entering the MDS in the Summer term. Students entering the Spring term may require an extra semester to complete the program due to scheduling constraints. Part-time students, including part-time online students, can enter the program at any time.

A West Virginia University graduate student can petition the Director to enter the program as a transfer student or as part of a dual major. However, transfer students and degree students within West Virginia University are required to take at least 12 of their 30 credits after admission into the Master of Data Science program. Financial aid is not given for this program by the Department of Statistics.

The prerequisite for admission is college algebra and single-variable calculus. Matrix algebra and knowledge of a high-level programming language are recommended, but are not required for admission. Students without single-variable calculus can be admitted provisionally, but this deficiency must be removed during their first or second term of enrollment, e.g., by taking MATH 150 or equivalent.

Beyond the above mathematical entrance requirements, the Director will base admission on the applicant’s:

• résumé;
• transcript;
• graduate (and/or undergraduate) GPA and major;
• statement of interest.

The GRE General Test is not required for admission.

To maintain major status and to graduate, students must maintain at least a 3.0 GPA in all courses counting towards the Master of Data Science. Students falling below a 3.0 GPA for a semester on courses counting towards this degree will be placed on academic probation and will have one year to raise their GPA to a 3.0.

ADMISSIONS AND PREREQUISITES FOR THE CERTIFICATE IN APPLIED STATISTICS

Students can apply for the Certificate in Applied Statistics during the time, or prior to the time, they are taking STAT 511 or STAT 512. Students who have taken courses beyond these two basic courses can petition the Academic Standards Committee for acceptance into the program.

The prerequisite for admission is a college algebra course. Single and multi-variable calculus are recommended but not required for admission. However, certain elective courses have calculus prerequisites. Applicants must have a baccalaureate degree.

Beyond the above mathematical entrance requirements, the Admissions and Standards Committee will base admission on the following material submitted by the applicant:

• Resume or curriculum vitae
• Transcript

The GRE General Test is not required for admission.

Master of Science in Statistics
Master of Data Science

MASTER OF SCIENCE IN STATISTICS

DEGREE REQUIREMENTS

To obtain a Master of Science in Statistics, the student must complete the course and comprehensive examination requirements. The student must maintain a minimum GPA of 3.0 and earn a grade of C or better in all courses counting towards the degree.

COURSE REQUIREMENTS

CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 512</td>
<td>Statistical Methods 2</td>
<td>3</td>
</tr>
<tr>
<td>STAT 513</td>
<td>Design of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>STAT 545</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 555</td>
<td>Categorical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 561</td>
<td>Theory of Statistics 1</td>
<td>3</td>
</tr>
<tr>
<td>STAT 562</td>
<td>Theory of Statistics 2</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CREDIT HOUR REQUIREMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>STAT 582</td>
<td>Statistical Consulting</td>
<td>1</td>
</tr>
<tr>
<td>STAT 590</td>
<td>Teaching Practicum</td>
<td>1</td>
</tr>
<tr>
<td>STAT 696</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Electives*</td>
<td></td>
<td>6 - 12</td>
</tr>
<tr>
<td>STAT 697</td>
<td>Research</td>
<td>1 - 6</td>
</tr>
</tbody>
</table>

Total Credit Hours: 33

Non-thesis Option: Thirty-three credit hours of Statistics courses at the 500**, 600, or 700 level, including the core courses, are required to complete an M.S. in Statistics without a thesis.

Thesis Option: Twenty-seven credit hours of Statistics courses at the 500**, 600, or 700 level, including the core courses, are required to complete an M.S. in Statistics with a thesis. In addition, the student must complete six credits of STAT 697 under the direction of a faculty advisor over two consecutive semesters, produce a written thesis, and orally defend the thesis before a faculty committee.

* Non-STAT electives require departmental consent.
Credit towards the degree requirement is not given for STAT 511 Statistical Methods 1.

EXAMINATIONS
Students must pass a written comprehensive examination on foundational material. The examination covers the theory taught in STAT 561 and STAT 562 and the applications taught in STAT 512, STAT 513, and STAT 545. The exam is given twice a year on the Thursday during the second full week following spring semester final exams and on the third Saturday in October.

MASTER OF DATA SCIENCE
The Master of Data Sciences is designed for students and professionals who want data science courses to enhance their job opportunities and quantitative knowledge. This course-based master’s degree includes an experiential component/capstone that integrates the practical application of statistical and data science skills with professional knowledge. This program is designed for off-campus delivery. However, students can take the program on-campus or by combining online and distance-based courses. Students can be full-time or part-time and schedule courses according to job-related or other constraints. Due to the nature of this program and the required skills for being a data scientist, the curriculum is largely prescribed.

This master’s program will provide students a solid foundation in data analysis, data modeling, big data processing, predictive analytics, statistical computing, massive and streaming data mining, high-dimensional data analysis, high-performance analytics, and data/web technologies. Together, these skills will enhance the analytical abilities of graduate students and the quantitative skills of professionals.

DEGREE REQUIREMENTS
Students in the Master of Data Science program must complete 30 credit hours.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSCI 501</td>
<td>Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 502</td>
<td>Data Modeling</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 503</td>
<td>Data Science</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 504</td>
<td>Data Visualization</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 601</td>
<td>High-Dimensional Data Analysis or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DSCI 602 Massive Data Mining</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 15

TOTAL CREDIT HOUR REQUIREMENT

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td>15</td>
</tr>
<tr>
<td>Electives*</td>
<td>12</td>
</tr>
<tr>
<td>DSCI 682 Data Science Practicum or DSCI 689 Professional Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>30</td>
</tr>
</tbody>
</table>

RECOMMENDED ELECTIVE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 521</td>
<td>SAS Programming</td>
<td>3</td>
</tr>
<tr>
<td>STAT 522</td>
<td>Advanced SAS Programming</td>
<td>3</td>
</tr>
<tr>
<td>STAT 523</td>
<td>Statistical Computing</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 601</td>
<td>High-Dimensional Data Analysis or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DSCI 602 Massive Data Mining</td>
<td></td>
</tr>
<tr>
<td>STAT 623</td>
<td>Data Technologies</td>
<td>3</td>
</tr>
<tr>
<td>STAT 624</td>
<td>High Performance Analytics</td>
<td>3</td>
</tr>
</tbody>
</table>

EXPERIENTIAL COMPONENT/CAPSTONE
DSCI 682 (Data Science Practicum) or DSCI 689 (Professional Field Experience): The experiential component includes a capstone project integrating data science skills with professional knowledge. The capstone project is: developed by the student in conjunction with faculty and, whenever possible, with employers; supervised by faculty and, whenever possible, with employers; and evaluated by faculty. Students should apply the methodologies learned in this program to a real-world problem in data science. As such, this course should be taken at or near the end of a student's program of study. A reproducible report on the methodologies used and the results is required for this experiential component/capstone.

* Electives without a DSCI or STAT subject code require departmental approval.

More information concerning masters-level graduate studies may be found at the Department of Statistics website (http://www.stat.wvu.edu).
Ph.D. in Computational Statistics

The Computational Statistics doctoral program is designed for students who are interested in the statistical and data sciences and who also want to work collaboratively with researchers in the computational sciences, e.g., computational biology, computational finance, and computational chemistry. Students graduating in this major will be in strong demand by universities as teaching and research faculty; by high technology, biotechnology, financial, and pharmaceutical companies among others; and by various governmental agencies and research institutes.

Students enrolled in this major will become research statisticians, and they will develop deep theoretical and conceptual understanding of and strong skills in data technologies, statistical computation, high-performance analytics, data mining, statistical machine learning, statistical modeling, and bioinformatics. They will also have the option of pursuing a theoretical track. Students in this program will develop strong statistical consulting and grant-writing skills and be able to apply these skills to collaborative research projects, including the ability to write reproducible research-based documents.

ALL ADMITTED STUDENTS MUST COMPLETE THE FOLLOWING:

- Pass the qualifying exam by the end of their first year.
- Complete the core M.S. courses (listed below) within the first two years of study.

To maintain major status and to graduate, students must maintain at least a 3.0 GPA in all courses counting towards the Ph.D. Students falling below a 3.0 GPA for a semester on courses counting towards the Ph.D. will be placed on academic probation and will have one year to raise their GPA to a 3.0.

RESIDENCY REQUIREMENTS

Residency requires at least two consecutive semesters of full-time work (at least nine hours per term) after being admitted to the doctoral program. Courses taken for non-degree credit will not count for graduate residency.

PROGRAM REQUIREMENTS

Required M.S. Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 512</td>
<td>Statistical Methods 2</td>
<td>3</td>
</tr>
<tr>
<td>STAT 513</td>
<td>Design of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>STAT 523</td>
<td>Statistical Computing</td>
<td>3</td>
</tr>
<tr>
<td>STAT 541</td>
<td>Applied Multivariate Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 545</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 555</td>
<td>Categorical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 561</td>
<td>Theory of Statistics 1</td>
<td>3</td>
</tr>
<tr>
<td>STAT 562</td>
<td>Theory of Statistics 2</td>
<td>3</td>
</tr>
<tr>
<td>STAT 582</td>
<td>Statistical Consulting</td>
<td>1</td>
</tr>
<tr>
<td>STAT 682</td>
<td>Statistics Practicum</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

Students entering the Ph.D. program must have at least the equivalent of these courses. If not, courses representing deficient areas must be taken within the first two years of study.

QUALIFYING EXAMINATION

The Ph.D. qualifying exam consists of the theory and applied parts of the M.S. Comprehensive Exam. Students who have not passed this exam with a 70 on each part prior to admittance into the doctoral program must take the Qualifying Exam prior to the end of their first year, including the summer term. The theory and applied parts are given separately and students must obtain a 70 on each. Students falling short of passing are allowed to retake one or both parts as necessary the next time the exam is given.

REQUIRED PHD COURSES

Ph.D. candidates must complete at least forty-six semester credit hours, including at least twelve hours of research, beyond the required M.S.-level statistics core courses.

A minimum GPA of 3.0 is required in all courses and a minimum grade of C must be earned in all required STAT courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 623</td>
<td>Data Technologies</td>
<td>3</td>
</tr>
<tr>
<td>STAT 624</td>
<td>High Performance Analytics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 723</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>STAT 745</td>
<td>Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>STAT 746</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>STAT 763</td>
<td>Stochastic Processes</td>
<td>3</td>
</tr>
</tbody>
</table>
or STAT 765  Stat Methods-Bioinformatics

STAT 782

At least twelve credit hours from STAT 500-, 600-, and 700-level normal graded courses not previously taken as part of the courses counted towards the Statistics M.S.

STAT 796

STAT 797  Research

Total Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 765</td>
<td></td>
</tr>
<tr>
<td>STAT 782</td>
<td>3</td>
</tr>
<tr>
<td>STAT 796</td>
<td>12</td>
</tr>
<tr>
<td>STAT 797</td>
<td>12</td>
</tr>
<tr>
<td>Total Hours</td>
<td>46</td>
</tr>
</tbody>
</table>

Students who have taken more than the required hours for the M.S. degree core courses can apply some or all of these extra courses to the Ph.D. as long as all of the other Ph.D. requirements are met. The student’s dissertation committee can also approve elective courses from other programs if these courses contribute to the student’s program of study.

RECOMMENDED ELECTIVES

Students contemplating an academic or a research-oriented career should take these advanced theoretical statistics courses: STAT 761 Theoretical Statistics 1 and STAT 762 Theoretical Statistics 2.

RESEARCH

Ph.D. candidates must take at least twelve hours of research and at least one hour of STAT 796, where the student’s research is presented.

EXAMINATIONS

Ph.D. students must pass two written comprehensive area exams with a score of 70 on each. These student can choose two from the following list:

- A computation exam based on STAT 623 Data Technologies, STAT 624 High Performance Analytics, and STAT 723 Computational Statistics
- A statistical machine learning exam based on STAT 745 Data Mining and STAT 746 Statistical Machine Learning
- A statistical theory exam based on STAT 761 Theoretical Statistics 1 and STAT 762 Theoretical Statistics 2

DISSERTATION

The student should form a dissertation committee after passing the Comprehensive Exam. The dissertation committee must consist of a chair, who must be a member of the graduate faculty, and at least three other committee members, a majority of whom must be on the graduate faculty. The dissertation committee approves the student’s final plan of study. The student must also develop a dissertation topic in conjunction with his or her major professor and present this topic to the committee. Once the dissertation committee approves the area of research, the student is directed to develop a prospectus. Once the student’s major professor approves the prospectus, the student is directed to schedule the Oral Candidacy Exam. The prospectus must be complete in the sense that the student presents a solid case that his or her area of research can be completed.

ORAL CANDIDACY EXAM

The student must present and defend the prospectus. The student becomes a Ph.D. candidate once this exam is passed. If the student is not passed, he or she may be given another opportunity to revise the prospectus or begin a new research area at the discretion of the dissertation committee.

ORAL DEFENSE

The student must present and defend the results of the research as proposed in the Oral Candidacy Examination. If the student is not passed, he or she may be given another opportunity to retake the Oral Defense after the dissertation is revised at the discretion of the dissertation committee.

Students must follow all ECAS and university requirements relating to graduate studies and research throughout their entire graduate program. This includes the Electronic Dissertation Program.

Certificate in Applied Statistics

The Certificate in Applied Statistics (C.A.S.) can be earned through traditional classroom delivery as well as distance-based delivery. Many of the courses are offered both on-campus and online, including the required courses and the SAS and Data Science tracks.

The C.A.S. is designed for professionals or students who want applied statistics and data science courses to enhance their job opportunities and quantitative skills. If prerequisite requirements are met, theoretical courses in statistics are available as an option. This certificate program is designed for both on and off-campus delivery.

This certificate program will provide students with a solid foundation in statistical methods, predictive analytics, statistical computing, and data technologies. This program will enhance the quantitative skills of professionals or the research productivity of graduate students.
The C.A.S. is based on a coherent group of courses representing a specialized area of knowledge. To meet this objective each student must choose a track reflecting his or her interests. Certain tracks, e.g., the SAS, Data Science, and Modeling tracks, are offered as on and off-campus options. Other tracks are residential, although certain courses within these tracks may be offered in a distance-based format.

To maintain their status and to receive a Certificate in Applied Statistics, students must maintain at least a 3.0 GPA in courses counted towards the certificate. Students falling below a 3.0 GPA for a semester on courses counting towards this degree will be notified, and they will have one year to raise their GPA to a 3.0.

**REQUIRED COURSES**

Students in the certificate program must complete at least fifteen credit hours. The Certificate in Applied Statistics should represent a distinct area of study, which builds on the foundational required statistics courses. The distinct areas of study are: SAS, data science, modeling, applied statistics, and mathematical statistics. The courses required for the completion of each of these areas are defined below.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 511</td>
<td>Statistical Methods 1</td>
<td>3</td>
</tr>
<tr>
<td>STAT 512</td>
<td>Statistical Methods 2</td>
<td>3</td>
</tr>
<tr>
<td>Three courses from one of the tracks listed below</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**TRACK OPTIONS AND COURSES**

**SAS TRACK:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 521</td>
<td>SAS Programming</td>
<td>3</td>
</tr>
<tr>
<td>STAT 522</td>
<td>Advanced SAS Programming</td>
<td>3</td>
</tr>
<tr>
<td>STAT 540</td>
<td>Intro-Exploratory Data Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

**DATA SCIENCE TRACK:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 523</td>
<td>Statistical Computing</td>
<td>3</td>
</tr>
<tr>
<td>STAT 623</td>
<td>Data Technologies</td>
<td>3</td>
</tr>
<tr>
<td>STAT 624</td>
<td>High Performance Analytics</td>
<td>3</td>
</tr>
</tbody>
</table>

**MODELING TRACK:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 541</td>
<td>Applied Multivariate Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 545</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 547</td>
<td>Survival Analysis</td>
<td>3</td>
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**APPLIED STATISTICS TRACK:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 513</td>
<td>Design of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>STAT 531</td>
<td>Sampling Theory and Methods</td>
<td>3</td>
</tr>
<tr>
<td>STAT 551</td>
<td>Nonparametric Statistics</td>
<td>3</td>
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**MATHEMATICAL STATISTICS TRACK:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 516</td>
<td>Forensic Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 561</td>
<td>Theory of Statistics 1</td>
<td>3</td>
</tr>
<tr>
<td>STAT 562</td>
<td>Theory of Statistics 2</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**CUSTOMIZED TRACK:**

A student can propose a customized track to the Admissions and Standards Committee for approval based on three cohesive courses selected from 500 or 600-level courses taught by the Department of Statistics or two courses taught by the Department of Statistics and one statistics course taught by another department.

**CAPSTONE EXPERIENCE**

The certificate capstone will test the student’s ability to apply statistical methods to a real dataset using statistical computing tools. The student is required to develop a reproducible report including a brief description of the methodologies used, the results, and the conclusions. The report is limited to ten pages. The dataset type and methods used will depend on the track the student has chosen.
The capstone experience will be administered by the student’s advisor. The student will be given five days to complete the report at a date mutually agreed upon by the student and his or her advisor at or near the end of the student’s coursework. The advisor will determine whether the student passes or fails based on an agreed upon rubric. A student who fails will receive written information on the reasons for failure and be given three additional days to improve his or her report to the standards required for passing.

**Women's and Gender Studies**

**Program Description**

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.

**Financial Aid is Available**

Women’s & Gender Studies students are eligible to apply for graduate teaching assistantships (GTAs) in Women’s & Gender Studies. The Center for Women’s & Gender Studies has five GTA positions available each year. GTAs work with the lead instructor and teach two sections of the course or assist with other courses. Students can apply for GTA positions each winter, usually in early February. Salaries include tuition waivers for the academic year and subsequent summer. GTAs must be enrolled as full-time students (at least nine hours).

For further information about GTA positions, please contact the Center for Women’s & Gender Studies. Students may be eligible for GTA positions in the Academic Advising Center and should contact that center directly for more information.

**FACULTY**

**DIRECTOR**  
• Jennifer E. Orlikoff - Ph.D. (Rutgers University)

**ASSOCIATE PROFESSOR**  
• Jennifer Kasi Jackson - Ph.D. (University of Kentucky)

**SENIOR LECTURER**  
• Brian Jara - Ph.D. ABD (Pennsylvania State University)

**Graduate Certificate in Women’s & Gender Studies**

The Graduate Certificate in Women’s and Gender Studies consists of 15 credit hours of course work that can complement any graduate degree program.

Per WVU policies, students can complete this certificate while completing the requirements for a graduate degree, as 12 of the 15 credit hours can count for both the degree and certificate.

Course Requirements (fifteen hours):

No more that two 400-level course may be counted toward certificate.

In lieu of an exam at the end of the graduate certificate program, students may also make a presentation in the seminar course at the end of the semester in which they take that course.

Choose one of the following:  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGST 694</td>
<td>Sem:Capstone</td>
</tr>
<tr>
<td>WGST 530</td>
<td>Feminist Theory</td>
</tr>
</tbody>
</table>

Choose one of the following:  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGST 491</td>
<td>Professional Field Experience</td>
</tr>
<tr>
<td>WGST 595</td>
<td>Independent Study</td>
</tr>
</tbody>
</table>
World Languages, Literatures, and Linguistics

Ángel Tuninetti, Chair
205B Chitwood Hall
Angel.Tuninetti@mail.wvu.edu

Sandra Stjepanovic, Graduate Coordinator
318 Chitwood Hall
sastjepanovic@mail.wvu.edu

Degree Offered

• Master of Arts, with five possible areas of emphasis

AREAS OF EMPHASIS

• French
• Spanish
• Linguistics
• Teaching English as a Second Language (TESOL)
• Combined Areas

Nature of Program

The M.A. program in World Languages, Literatures, and Linguistics offers courses in literature, culture, and literary criticism as well as in theoretical and applied linguistics, and language-teaching methodology. 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 master's degree is intended for those students who seek more specialized knowledge in order to teach in their chosen area, as well as for students who plan to prepare for doctoral studies or other professional employment.

Available Financial Aid

Graduate teaching assistantships are available for different languages, including Arabic, Chinese, French, German, English as a Second Language, Italian, Japanese, Russian, Portuguese, and Spanish. The assistantships carry full tuition remission and a nine-month stipend (August–May); there are also limited opportunities to teach during the university's summer session. Assistantships are awarded annually to those students who have demonstrated potential to become effective teachers. In order to be considered for a teaching assistantship, students must fill out the department application and submit a writing sample as well as a recorded sample of their speech in the language they are applying to teach.

In addition to 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 teaching Arabic, French, Italian, and Spanish must register for LANG 621 during their first semester. Graduate assistants teaching any other language must register for LANG 521 in their first semester. 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 Graduate Program Coordinator is available to answer questions regarding the degree program, requirements, comprehensive examinations, graduation, etc. Students may consult with the chairperson regarding departmental matters.

INTERNATIONAL STUDENTS

An F-1 student visa is required for study in the U.S. The visa must be obtained in the student’s home country with an I-20 Form from the WVU Office of Admissions. The I-20 will be sent by the Office of Admissions to the student’s home address once all academic, English proficiency, and financial requirements have been satisfied.

International students studying in the department on an F-1 Visa should remember that they are required to carry a minimum course load of nine hours each semester (excluding the summer) in order to maintain their legal status for their visa. International students, who may be forced to withdraw from a course and thus fall below nine hours in any semester, must first check with the department chair and the Office of International Students and Scholars in E. Moore Hall. Exceptions may be possible in the student’s final semester of study.

STUDY ABROAD OPPORTUNITIES FOR GRADUATE STUDENTS

Qualified graduate students 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, the Eberly College of Arts and Sciences, and through the Office of International Programs to assist students who wish to study abroad.

FACULTY

CHAIR
• Ángel T. Tuninetti - Ph.D. (Washington University)
  Latin American Literature and Culture

ASSOCIATE CHAIR
• Susan Braidi - Ph.D. (University of Delaware)
  ESL/Linguistics, Applied Linguistics, Second Language Acquisition, Syntax

GRADUATE COORDINATOR
• Sandra Stjepanovic - Ph.D. (University of Connecticut)
  Linguistics, Syntax, Psycholinguistics

PROFESSORS EMERITI
• Pablo González - Ph.D. (University Complutense de Madrid)
  Spanish American Literature and Culture
• Kathleen McNerney - Ph.D. (Universidad Nacional Autonoma de Mexico)
  Spanish, Catalan Language and Literature, Spanish Literature and Culture, Women Writers

PROFESSORS
• Valérie Lastinger - Ph.D. (University of Georgia)
  French, 18th-century French Literature, French Women Writers
• Janice Spleth - Ph.D. (Rice University)
  French and Francophone Literature and Culture, 19th-century French Drama

ASSOCIATE PROFESSORS
• María Amores - Ph.D. (Pennsylvania State University)
  Spanish, Foreign Language Acquisition
• 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

- Ahmed Fakhri - Ph.D. (University of Michigan)
  ESL/Linguistics, Second Language Acquisition, Applied Linguistics, Discourse Analysis

- Daniel Ferreras - Ph.D. (Michigan State University)
  French and Spanish, Comparative Romance Literature, French/Spanish 19th-century Novel, Theory of the Fantastic

- Deborah Janson - Ph.D. (University of California)
  German, 18th-21st-century German Literature, Enlightenment, Romanticism, GDR and Post-Wende Literature, Ecofeminism

- Xiangying Jiang - Ph.D. (Northern Arizona University)
  ESL/Linguistics, Second Language Acquisition

- Twyla Meding - Ph.D. (University of Virginia)
  French, 16th and 17th-century French Literature, The Pastoral Novel

- Sandra Stjepanovic - Ph.D. (University of Connecticut)
  Linguistics, Syntax, Psycholinguistics, Semantics

- Ángel T. Tuninetti - Ph.D. (Washington University)
  Chairperson, Spanish, Spanish-American Literature and Culture, Travel Literature

ASSISTANT PROFESSORS

- Manal AlNatour - Ph.D. (University of Arkansas)
  Arabic Studies, Comparative Literature, Cultural Studies

- Tania De Miguel Magro - Ph. D. (State University of New York, Stony Brook)
  Spanish Golden Age Literature

- Sandra Dixon - Ph.D. (Brown University)
  Spanish, Spanish American Literature, Brazilian Literature

- Lourdes Estrada-López - Ph.D. (University of Connecticut)
  Spanish Language

- Pablo Garcia - Ph.D. (Indiana University)
  Latin American Colonial Literature

TEACHING ASSOCIATE PROFESSOR

- Lisa Di Bartolomeo - Ph.D. (University of North Carolina-Chapel Hill)
  Russian, Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema, Science Fiction, the Holocaust

- Hannah Lin - Ph.D. (Ohio State University)
  Chinese Studies

- Annastella Vester - Ph.D. (University of California, Los Angeles)
  Italian, Contemporary Italian Literature, 18th and 19th-century Italian

TEACHING ASSISTANT PROFESSOR

- Edward Chauca - Ph.D. (University of California, Los Angeles)
  Spanish, Andean Studies, Latin American Literature and Culture

- Victoria Garrett - Ph.D. (University of California, Los Angeles)
  Latin American Literature, Argentine Popular Theater, Latin American Studies

- Jennifer Orlikoff - Ph.D. (Rutgers University)
  French; 16th, 18th, and 19th-century French Literature, Second Language Acquisition and Methodology, Art History, Feminist Criticism

ADMISSION REQUIREMENTS

To be admitted to the program, a student is expected to have an undergraduate degree in the desired area of study (or an acceptable related-area) with a GPA of 3.0 (overall as well as within the major). The student must complete the university admission application, including payment of the required fee and completion of the supplemental departmental application form, which requires a 300-word statement of purpose, an extended writing sample in the language of the area to which the student is applying, and three letters of recommendation. International students must also submit an acceptable TOEFL or IELTS score. For more information about the admission requirements and application guidelines, please visit our website (http://worldlang.wvu.edu/graduate_programs/graduate/graduate_programs_how_to_apply).

In this section:

- Degree Requirements
- French Area of Emphasis
Degree Requirements

Students may select from five areas of emphasis (French, Spanish, Linguistics, TESOL, or a combined area that allows them to combine two areas for their degree) to complete a Master of Arts in World Languages, Literatures, and Linguistics. Students must meet all university and college requirements as outlined in the WVU Graduate Catalog as well as the specific departmental requirements described below:

**GENERAL**

- A minimum of thirty-six credit hours at the graduate level, of which thirty hours of coursework must be taken within the department. (No more than twelve hours of coursework done at the 400 level will be counted toward the degree.)
- No more than three hours of independent study will apply to the degree (unless approved by the departmental chairperson). Note: Independent studies will be permitted only in special circumstances; in most instances, students must enroll in the regularly-scheduled courses.
- No more than twelve hours can be transferred to our program from another accredited institution. (In the case of combination concentrations, no more than six hours can be transferred to any of the combined areas, for a total of twelve hours.)
- No courses for the degree may be taken pass/fail.
- No more than six hours of thesis credits (697/698) can be applied to the degree.
- A 3.0 GPA is required for graduation. Note: No course for which the grade of D or below is recorded can be counted for graduation credit.
- Students must satisfy the foreign language requirement.
- Students must pass comprehensive examinations or successfully defend a thesis.

**FOREIGN LANGUAGE REQUIREMENT**

Native speakers of English in TESOL, Linguistics, or a combination of the two, 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 score.

**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 (http://worldlang.wvu.edu/graduate_programs/comprehensive_exams_reading_lists) and coursework. Although many of the works on the reading lists will be included in coursework, independent reading will be necessary. Students must take the comprehensive examinations the semester they intend to graduate.

**THESIS**

A student may request to write a thesis and prepare an oral defense. The feasibility of writing a thesis may be limited due to faculty availability, the student’s academic performance, or other factors (to see the qualifying requirements for writing a thesis, consult the Graduate Program Handbook). Under this option, the student is not required to take the written comprehensive examinations but may be asked to comment on coursework and the reading lists, particularly as they relate to the thesis. For more information about this option, see the document “Thesis Guidelines (http://worldlang.wvu.edu//download/99265).”

**French Area of Emphasis**

<table>
<thead>
<tr>
<th>Research and Theoretical Bases</th>
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<tbody>
<tr>
<td>BIBY 615</td>
<td>Methods Of Research</td>
</tr>
<tr>
<td>FRCH 611</td>
<td>Literary Criticism</td>
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<thead>
<tr>
<th>Knowledge/ Application</th>
<th>12</th>
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<tbody>
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<td>Choose any 4 courses</td>
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<tr>
<td>FRCH 532</td>
<td>Early French Literature</td>
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<tr>
<td>FRCH 533</td>
<td>Seventeenth Century Literature</td>
</tr>
<tr>
<td>FRCH 534</td>
<td>Eighteenth Century Literature</td>
</tr>
<tr>
<td>FRCH 535</td>
<td>Nineteenth Century Literature</td>
</tr>
<tr>
<td>FRCH 536</td>
<td>Twentieth Century Literature</td>
</tr>
<tr>
<td>FRCH 538</td>
<td>Francophone Literature</td>
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**French Area of Emphasis**

### Research and Theoretical Bases

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<tbody>
<tr>
<td>FRCH 431</td>
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<tr>
<td>or FRCH 432</td>
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### Cultural/Social/Historical Context:

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>FRCH 431</td>
<td>French Civilization</td>
</tr>
<tr>
<td>or FRCH 432</td>
<td>Contemporary Culture</td>
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### Language Structures:

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>FRCH 501</td>
<td>French Stylistics</td>
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<tr>
<td>or LING 603</td>
<td>History of French Language</td>
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</tbody>
</table>

### Extensions: 12

- Thesis Option
  - 6 hrs from the Extension list (see below)*
  - 6 hrs of FRCH 697 Thesis

- Comprehensive Examination Option:
  - 12 hrs from the Extension list (see below)*

Total Hours 36

* For a list of approved courses, see page two of the French Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)

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**Spanish Area of Emphasis**

### Research and Theoretical Bases

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BIBY 615</td>
<td>Methods Of Research</td>
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<tr>
<td>SPAN 611</td>
<td>Literary Criticism</td>
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### Knowledge/Applications: Choose any 4 courses

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SPAN 631</td>
<td>Latin American Short Story</td>
</tr>
<tr>
<td>SPAN 632</td>
<td>Latin American Novel to 1960</td>
</tr>
<tr>
<td>SPAN 633</td>
<td>Latin Amer Novel Since 1960</td>
</tr>
<tr>
<td>SPAN 634</td>
<td>Latin American Poetry</td>
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<td>SPAN 635</td>
<td>Latin American Theatre</td>
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<td>SPAN 636</td>
<td>Latin American Nobel Prize Win</td>
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<td>SPAN 651</td>
<td>Medieval and Golden Age</td>
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<td>SPAN 652</td>
<td>Cervantes</td>
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<td>SPAN 653</td>
<td>18th/19th Century Literature</td>
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<td>SPAN 654</td>
<td>Spanish Literature 1898-1936</td>
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<td>SPAN 655</td>
<td>Spanish Literature 1936-1975</td>
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<tr>
<td>SPAN 630</td>
<td>Latin American Culture</td>
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<tr>
<td>or SPAN 650</td>
<td>Spanish Civilization</td>
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### Language Structures:

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>LING 501</td>
<td>Structure of Spanish</td>
</tr>
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</table>

### Extensions: 12

- Thesis Option
  - 2 courses from the Extension list (see below)*
  - 6 hours of SPAN 697 Thesis

- Comprehensive Examination Option:
  - 4 courses from the Extension list (see below)*

Total Hours 36

* For a list of approved courses, see page two of the Spanish Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)

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**Linguistics Area of Emphasis**

A grade of B or better must be earned in all required courses

### Research and Theoretical Bases: 6

<table>
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<tr>
<td>BIBY 615</td>
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<td>LING 513</td>
<td>History of Linguistics</td>
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### Knowledge/Applications:

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<tbody>
<tr>
<td>LING 411</td>
<td>Phonology</td>
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<tr>
<td>LING 412</td>
<td>Syntax</td>
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<td>LING 611</td>
<td>Advanced Phonology</td>
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<td>LING 612</td>
<td>Advanced Syntax</td>
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### Cultural/Social/Historical Context:

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<tr>
<td>LING 514</td>
<td>Sociolinguistics</td>
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<tr>
<td>or LING 516</td>
<td>Discourse Analysis</td>
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### Language Structures: Choose 1 course

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>LING 402</td>
<td>Structure of Modern French</td>
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<td>LING 501</td>
<td>Structure of Spanish</td>
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<td>LING 511</td>
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<td>LING 616</td>
<td>Language Typology</td>
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### Language Structures:

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<tr>
<td>LING 402</td>
<td>Structure of Modern French</td>
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<td>LING 501</td>
<td>Structure of Spanish</td>
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<td>ESL Linguistics</td>
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<tr>
<td>LING 616</td>
<td>Language Typology</td>
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### Thesis Option:

- 2 courses from the Extension list (see below)*
- 6 hrs of Ling 697

### Comprehensive Examination Option:

- 4 courses from the Extension list (see below)*

Total Hours 36

* For a list of approved courses, see page two of the Linguistics Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)

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### TESOL Area of Emphases

#### Research and Theoretical Bases:

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<tr>
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<td>LANG 622</td>
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#### Knowledge/Application:

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<tr>
<td>LANG 521</td>
<td>ESL Methods</td>
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<td>LANG 422</td>
<td>Second Language Reading</td>
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<td>LANG 522</td>
<td>Computer Assisted Lang Learn</td>
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<tr>
<td>LANG 623</td>
<td>ESL Materials/Syllabus Design</td>
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<tr>
<td>LANG 624</td>
<td>Second Language Writing</td>
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<td>LANG 625</td>
<td>Language Assessment</td>
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<td>LANG 626</td>
<td>Literacy in a Second Language</td>
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<td>LING 512</td>
<td>Applied Linguistics</td>
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<td>LING 516</td>
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#### Cultural/Social/Historical Context:

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<tr>
<td>ESL 630</td>
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An additional approved course

#### Language Structures:

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<tr>
<td>LING 511</td>
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<td>LING 613</td>
<td>ESL-Phonetics</td>
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#### Extensions:

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<tbody>
<tr>
<td>LANG 697</td>
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### Thesis Option I

- 6 hrs of Lang 697

### Comprehensive Examination Option:

- 2 courses from the Extension list (see below)

Total Hours 36

* For a list of approved courses, see page two of the TESOL Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)
## Combined Areas

**RESEARCH AND THEORETICAL BASES**

<table>
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<tr>
<th>Course</th>
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<td>BIBY 615</td>
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**PRIMARY AREA**

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<td>A. Theoretical Bases and Knowledge/Applications</td>
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<tr>
<td>B. Cultural/Social/Historical Context</td>
<td>3</td>
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<tr>
<td>C. Language Structures</td>
<td>3</td>
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**SECONDAY AREA**

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<tr>
<td>b. Cultural/Social/Historical Context</td>
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<tr>
<td>c. Approved Elective</td>
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Total Hours: 36

* For a list of approved courses, see page two of the Combination Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)
Degrees Offered

- Master of Arts in Economics
- Master of Business Administration
- Master of Science in Finance
- Master of Professional Accountancy
- Master of Science in Industrial Relations
- Doctor of Philosophy in Business Administration
- Doctor of Philosophy in Economics

The College of Business and Economics was founded in November of 1951 and graduated its first class in the spring of 1953. Since that time, the College of Business and Economics has become one of the largest colleges at West Virginia University. In 1954, the college became fully accredited by the AACSB International (http://www.aacsb.edu), the highest level of business accreditation.

In 1990, the new College of Business and Economics building was completed on the site of Old Mountaineer Stadium on the downtown campus adjacent to historic Woodburn Hall. The four-story facility houses modern classrooms, two auditoriums, state-of-the-art computer laboratories, and space for the college’s research and service centers.

Overview of Programs

The doctor of philosophy and master of arts degrees in economics prepare students for careers in business, government, and 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 master of business administration (M.B.A.) program is especially attractive for the student with a non-business undergraduate major since no previous business courses are required for admission. Coursework includes an even exposure to all of the functional areas of business and provides a broad general management orientation. The M.B.A. program is offered during the day for full-time students in Morgantown. The M.B.A. program is also offered for working professionals online and in the evenings at various locations throughout West Virginia and is referred to as the executive M.B.A.

The master of science in industrial relations (M.S.I.R.) provides an interdisciplinary education for the student desiring a career in human resources management and industrial relations. All undergraduate majors are acceptable. Elective areas of study may include the functional areas of business, counseling, law, safety, and others.

The master of professional accountancy (M.P.A.) 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 AICPA’s recommendations for a five-year accounting education and meets the requirements of most states with 150-hour requirements for C.P.A. certification. The division of accounting also offers a graduate certificate in forensic accounting and fraud.

The master of finance (M.S. Fin.) program is available to students with a strong background in finance or accounting (either through 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 C.F.A. (Chartered Financial Analyst) Candidate Body of Knowledge.

Specific information about graduate programs in the College of Business and Economics may be obtained from Office of Graduate Programs, 340 Business and Economics Building, P.O. Box 6027, West Virginia University, Morgantown, WV 26506-6027, Telephone (304) 293-6579.

ADMINISTRATION

DEAN
- Jose V. Sartarelli - Ph.D. (Michigan State University)
  Milan Puskar Dean

ASSOCIATE DEANS
- Karen France - Ph.D. (University of Pittsburgh)
  Associate Dean for Academic Affairs
- Gary S. Insch - Ph.D. (Indiana University)
  Associate Dean for Graduate Programs
- Jess Mancini - M.P.A. (West Virginia University)
Special Requirements
Admissions to the M.B.A., M.P.A., M.S. in finance, M.S. in industrial relations, the Ph.D. in business administration, and the M.A. and Ph.D. in economics programs require a bachelor’s degree from an accredited institution. The Graduate Management Admissions Test (GMAT) is preferred for all of the business graduate programs. For the M.S.I.R. Program, the Graduate Record Examination (GRE) may be substituted for the GMAT. The economics programs require the GRE. A resume is a requirement of the admission process for all programs. Under certain circumstances, the GRE may substitute for the GMAT for the M.B.A and M.P.A. Programs.

Accountancy, Professional

e-mail: accountingdepartment@mail.wvu.edu

Degrees Offered
- Master of Professional Accountancy (M.P.A.)
- Graduate Certificate in Forensic Accounting and Fraud Examination

Given the changing environment in both the public and private sectors of the economy, many accountants will need an educational background that goes beyond that obtained 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 M.P.A. program include the integration of financial and nonfinancial 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 accounting programs at WVU, both undergraduate and graduate, have separate accounting accreditation by the AACSB International—The Association to Advance Collegiate Schools of Business. At the date of this printing, there are relatively few colleges and universities in the nation that have achieved this status at both the undergraduate and graduate levels.

Program
The M.P.A. program is a thirty credit-hour program, which can be completed in approximately ten months of full-time study or twenty-two months half-time. The program requires that the student have the equivalent of an undergraduate degree in accounting and meet very specific accounting and business course prerequisites. Work experience is not a requirement for admission. Students may enter the program on either a full-time or half-time basis. Fall is the preferred starting date, but students may start in May or January. 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 twelve-hour semesters and one four-week summer session. Half of the courses each term are taught in the early evening and the other half in the late afternoon to provide the opportunity for part-time employment for full-time students and part-time study for full-time employees.

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.

Academic Standards
The M.P.A. 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 College of Business and Economics, including prescribed work taken to remove undergraduate deficiencies. A 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 graduate program. A course with a grade below C will not count for the thirty semester-hour requirement for graduation unless repeated with a grade of C or above. A student must have a grade point average of 3.0 or above on the thirty semester hours required for the degree. Complete information about the M.P.A. program may be obtained from http://www.be.wvu.edu/mpa/index.htm.

Requirements to Sit for C.P.A. Examination
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 occasionally 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 be certified. Most boards of accountancy require 150 semester hours of academic credit for certification.

The West Virginia Board of Accountancy requires a bachelor’s degree with a specified distribution of coursework as the minimum qualification to sit for the C.P.A. examination. This includes twenty-seven semester hours of accounting (excluding principles), six hours of business law, and twenty-seven hours of related business courses. West Virginia also requires a three semester credit-hour ethics course for all individuals applying to sit for the exam. This course may be counted as either an accounting or a business elective. West Virginia requires 150 semester hours of academic credit to be completed prior to certification.

For the specific requirements to sit for the C.P.A. examination in West Virginia, go to the Board’s website at http://www.boa.wv.gov or call (304) 558-3557. For requirements in other jurisdictions, go to the National Association of State Boards of Accountancy’s website at http://www.nasba.org and use the links to the web pages for all boards of accountancy under the “Members” section.

Content specification of the C.P.A. examination and related information may be found at http://www.cpa-exam.org using the “Prepare for the Exam” and then “How to Prepare” links.

Financial Assistance

WVU has a strong comprehensive financial aid program to help you finance your education. Although the cost to attend WVU is relatively low, more than half of our students qualify for financial aid awarded on the basis of need, merit, or a combination of the two. The Free Application for Federal Student Aid (FAFSA) must be completed before March 1. Contact the Student Financial Aid Office at (304) 293-5242 or at finaid@mail.wvu.edu for more information or go to the website at http://adm.wvu.edu/.

The Accounting Department in the College of Business and Economics has a very limited number of graduate assistantships and tuition waivers for M.P.A. students. This is common among many master’s degree programs in accounting and business at public universities. Applicants are encouraged to note that the WVU M.P.A. program is a quality but relatively short (thirty credits over ten and one-half months) master’s program of only two semesters and one summer session.

FACULTY

CHAIR

• Arron Scott Fleming - Ph.D. (Virginia Polytechnic Institute and State University)
  C.P.A., C.M.A., Managerial and Financial Accounting, Fraud and Forensic Accounting, Behavioral Research

PROFESSORS

• Barbara Apostolou - Ph.D. (Louisiana State University)
  C.P.A., Auditing, Assurance Services, Fraud and Forensic Accounting
• Richard C. Brooks - Ph.D. (Louisiana State University)
  C.G.F.M., Governmental Accounting, Public Sector Accounting
• Adolph A. Neidermeyer - Ph.D. (University of Iowa)
• Presha Neidermeyer - Ph.D. (Virginia Commonwealth University)
• Richard Riley - Ph.D. (University of Tennessee)

ASSOCIATE PROFESSOR

• Richard Dull - Ph.D. (Virginia Polytechnic Institute and State University)
  C.P.A./C.F.F., C.F.E., C.I.S.A., Accounting Information Systems, Forensic Accounting, IT Auditing
• Arron Scott Fleming - Ph.D. (Virginia Polytechnic Institute and State University)
  C.P.A., C.M.A., Managerial and Financial Accounting, Fraud and Forensic Accounting, Behavioral Research
• Christian Schaupp - Ph.D. (Virginia Polytechnic Institute and State University)
  C.F.E., Accounting Information Systems, IT Auditing

ASSISTANT PROFESSOR

• Noel Brock - M.P.A. (West Virginia University), J.D. (West Virginia University), L.L.M. (Georgetown University)
  C.P.A., Federal Taxation, Pass-through Entity and Owner Taxation
• Jack W. Dorminey - Ph.D. (Virginia Commonwealth University)
  Intermediate Financial Accounting, Regulatory Accounting
• Theresa D. Hilliard - D.B.A. (Georgia State University)
• Kip D. Holderness - Ph.D. (Bentley University)
  C.P.A., C.M.A., C.F.E., Managerial accounting, Forensic accounting, Behavioral research
• Mark Nigrini - Ph.D. (University of Cincinnati)
  Auditing, Forensic Analytics, Prosecution of fraud schemes

VISITING PROFESSOR
• Nicholas Apostolou - D.B.A. (University of Tennessee)
  C.P.A., C.F.A., Financial Accounting, Managerial Accounting, Fraud and Forensic Accounting

PROFESSORS EMERITI
• Jay H. Coats - Ph.D. (University of Pittsburgh)
  Dean
• Robert Maust - A.B.D. (University of Michigan)
  C.P.A.
• David B. Pariser - Ph.D. (Southern Illinois University)
  C.P.A., C.M.A., C.C.A., C.G.F.M.
• Ann B. Pushkin - Ph.D. (Virginia Polytechnic Institute and State University)
  C.P.A.

LECTURERS
• Nancy P. Lynch - M.S. (University of Colorado)
  C.P.A., C.M.A.
• Megan McBride - M.A.C.I.S. (Virginia Polytechnic Institute and State University)
  C.I.S.A.
• Denise R. White - M.P.A. (West Virginia University)
  C.P.A.

Admission to Program

Admission to the M.P.A. 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 will consider applicants with a GPA of 3.2 or above from their undergraduate institution if the university has achieved accreditation from AACSB or its equivalent internationally. For those applicants whose GPA is not equal to 3.2 or those who have not graduated from an accredited institution, the Admissions Committee prefers applicants who can achieve a 1200 Georgetown score. This score is made up of 200 x the undergraduate GPA + the GMAT score. The total should be equal to 1200 or above for unconditional admission. Applicants may be considered for provisional admission if they fall below this point at the discretion of the Committee.

Applicants who have passed the Certified Public Accountant examination are exempt from the GMAT requirement. Candidates who meet most of the above requirements will still be considered. Other factors such as work experience and other graduate degree work may also be a part of the committee’s decision-making.

The above requirements apply to both full and part-time student applicants. As an AACSB-accredited program in accounting, these requirements must also be met by non-degree students who desire to take any of the graduate courses required by the M.P.A. Program.

Students who possess appropriate GMAT scores and grade point averages but do not possess a bachelor’s degree with a major in accounting (or equivalent) may apply for non-degree or provisional status while they are taking undergraduate prerequisite courses in accounting and business. Provisional students must complete the prerequisite courses before enrolling in M.P.A. courses. Applicants with accounting undergraduate degrees must also satisfy all the prerequisite courses for the M.P.A. Program.

Students receiving provisional admission to the M.P.A. degree will meet with the M.P.A. Coordinator to develop a written plan for the completion of the prerequisite courses. Failure to satisfactorily complete the plan will result in the cancellation of the applicant’s provisional M.P.A. graduate student status.

Provisional students may not enroll in any graduate accounting courses until prerequisite courses have been successfully completed. After completing prerequisite coursework the student must request a change from provisional to regular M.P.A. status which is subject to approval by the M.P.A. Admission Committee. The M.P.A. degree is designed to follow an undergraduate degree in business. Students without a bachelor’s degree with a major in accounting (or equivalent) will be required to take additional business and accounting courses.

International students should note that the College of Business and Economics TOEFL requirement is higher than the university’s. Applicants must have a TOEFL score of 580 (paper), 237 (computer), or 92 (internet-based). If applicants have taken the IELTS instead of the TOEFL, the minimum
score must be 7.0. International students who do not meet the College of Business and Economics TOEFL or IELTS requirement may be admitted "conditionally" provided that they enroll in the University’s Intensive English Program.

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 M.P.A. graduate courses: principles of accounting (six hours); intermediate accounting (six hours); cost accounting, income tax accounting, auditing, principles of microeconomics, principles of marketing, principles of management, principles of finance, statistics, business law (six hours, three of which may be taken concurrently with graduate courses); and computer science. A student without the necessary prerequisite courses may be approved to enter the M.P.A. Program as a provisional graduate student.

Master of Professional Accountancy
Courses will be offered in Morgantown.

M.P.A. Course Offerings
A minimum GPA of 3.0 is required in all courses
A grade of C or higher must be earned in all required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 511</td>
<td>Fin Accounting Theory/Practice</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 512</td>
<td>Mergers and Acquisitions</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 521</td>
<td>Information Technology Auditing</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 522</td>
<td>E-Commerce/Internet Security</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 541</td>
<td>Federal Tax Research/Writing</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 551</td>
<td>Assurance Srvces/Profsl Stnds</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 556</td>
<td>Fraud Detection and Deterrence</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: *

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 561</td>
<td>Govmnt/Not for Profit Acctg</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 473</td>
<td>Personal Financial Advising</td>
<td></td>
</tr>
<tr>
<td>ACCT 571</td>
<td>Accounting/Business Consulting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 501</td>
<td>Economic Decision Making</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 30

* Select the topic that was not studied at the Undergraduate level.

Note: Students who have not completed Accounting Systems (ACCT 322, three hours) and Law for the CPA (BLAW 420, three hours) as part of their undergraduate program must also take these two courses in addition to the above thirty hours. These courses may be taken concurrently with the graduate courses.

Graduate Certificate in Forensic Accounting and Fraud Examination (FAFE)

The widespread growth in white-collar crime, litigation disputes, the illegal international movement of money and terrorism financing have greatly raised the demand for forensic accountants, fraud examiners and for accounting professionals who possess those skills. Federal, state, and local governmental agencies, such as the Securities and Exchange Commission, Public Company Accounting Oversight Board, The US Bureau of Alcohol Tobacco, Firearms and Explosives, the Federal Bureau of Investigation, the Internal Revenue Service, Homeland Security, and the Offices of Inspector General all need professionals with forensic accounting and fraud examination skills. In the private sector, legislation (e.g., Dodd-Frank of 2010, Sarbanes-Oxley Act of 2002) and auditing standards (Statement on Auditing Standard No. 99) require companies and their auditors to be more aggressive in detecting, preventing and deterring fraud.

CFE Exam Prep Course: Included in your tuition is the ACFE (http://www.acfe.com) Exam Prep Course, making you eligible and qualified to sit for the CFE Exam.

Further, our experiential learning assignments are designed to ensure that graduates can “hit the ground running” in their jobs using their knowledge, skills and abilities developed in the FAFE program.

A unique program creating employment opportunities for graduates.

The WVU Department of Accounting has responded to the demand for forensic accountants and fraud examiners by developing an academic program designed to prepare students for careers in litigation support, forensic accounting and fraud examination. Although many schools offer a single fraud
examination or forensic accounting course, very few offer a multi-course program. The 12-credit graduate Certificate Program in Forensic Accounting and Fraud Examination (FAFE) is offered via three options:

- **Option 1:** Complete the four course Graduate Certificate program curriculum on-line over two semesters. The on-line option requires two, 2-day on-campus residencies (described below)

- **Option 2:** Complete the four course Graduate Certificate program curriculum during the summer

- **Option 3:** Complete the Master of Professional Accountancy (MPA) on-campus degree plus complete two advanced FAFE certificate courses to earn the both FAFE Graduate Certificate and the MPA over 11 months. To explore the MPA program, please click here: http://www.be.wvu.edu/mpa/index.htm. All MPA students are exposed to essentially all of the material covered in ACCT 581 and ACCT 582. Various fraud-related topics are covered in several MPA courses, but the primary overlap with ACCT 581 and ACCT 582 is in ACCT 556 Fraud Detection & Deterrence and ACCT 521 Information Technology Auditing, respectively. ACCT 556 is a required MPA course that responses to changing demands of the accounting profession. ACCT 521 covers data analysis techniques.

FAFE students are eligible to participate in all College of B&E’s Center for Career Development (CCD) services. Even for on-campus interviews, on-line students not residing in Morgantown, WV can participate via phone call / internet-based interviews. WVU typically has more than 25 employers visit campus each year seeking qualified accounting students, several of which also recruit students with FAFE credentials. Please see http://www.be.wvu.edu/careers/index.htm.

**ADMISSION REQUIREMENTS**

1. A bachelor’s degree with two years of relevant work experience, Certified Public Accountant (CPA) certificate, a related Certification by an approved credentialing body, law degree or admission to an accredited law school OR a

2. A bachelor’s degree with an overall GPA of 2.9 or above, and a score of 500 on the Graduate Management Admission Test (GMAT) (http://www.mba.com/mba/thegmat) or a score of 1000 on the Graduate Record Examination (GRE).

3. The following courses, or equivalent in terms of professional experience, are prerequisites for admission to the Certificate Program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 201</td>
<td>Principles of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 311</td>
<td>Intermediate Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 322</td>
<td>Accounting Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 451</td>
<td>Auditing Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

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. An Admissions Committee for the Department of Accounting will assess prior experience.

Not all applicants may be admitted to the program. Because the program consists of intense hands-on cases and specialized assignments, enrollment in the program is limited. An Admissions Committee of three accounting faculty members will review applications and will accept individuals demonstrating the greatest potential for success.

Applicants whose first language is not English must provide proof of English language proficiency. The Test of English as a Foreign Language (TOEFL) (http://www.ets.org/portal/site/ets/menuitem.fab2360b1645a1de9b3a07791751509/?vgnextoid=69c0197a484f0010VgnVCM1000002295190RCRD&WT.ac=Redirect_ets.org_toefl) is used as the measure of English language proficiency. A score of 250 on the computer-based TOEFL or 600 on the paper-based TOEFL is the minimum required of all such applicants. Applicants who have received a high school diploma or a bachelor’s degree in the United States need not submit a TOEFL score.

**FAFE PROGRAM DETAILS**

Students will complete four courses. All four courses are taught using actual and simulated case materials, a hands-on approach to prepare students for their careers in litigation support, forensic accounting and fraud examination. To mimic real-world expectations, students are required to perform two actual case engagements and report their findings both in writing and orally – see pitch-to-prosecutor and moot court exercise description below.

The four courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 581</td>
<td>Fraud Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 582</td>
<td>Fraud Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 583</td>
<td>Fraud/Criminology/Legal Issues</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 584</td>
<td>Advanced Fraud Investigation</td>
<td>3</td>
</tr>
</tbody>
</table>

The program includes two in-class / on-line case investigations and two investigative engagements that students must complete in a team format. Both require students to present and defend their work in front of practicing professionals as follows:

*“Pitch to Prosecutor” Exercise in Accounting 581 - Students will complete one major case investigation (MCI) over the course of study in Acct 581. The purpose is to provide students with experience in performing basic investigative tasks and analysis. These projects involve analyzing simulated case
The full-time M.B.A. plan of study requires a total of fifty credit hours of graduate credit. The program is designed for individuals with varying educational and professional backgrounds. Students must have pre-requisite courses to be eligible for the program: ACCT 201, ECON 201, and ECON 225 or STAT 211. If students are applying to the M.B.A. program from outside WVU, the course descriptions can be used to match courses at other institutions. Students not able to meet the prerequisite coursework prior to completing their undergraduate degree can meet this requirement via an online software program. No master’s thesis is required for completion of the degree.
The full-time M.B.A. degree program is completed on the Morgantown campus. A full-time student can enter the program only in June of each year and graduate in mid-August of the following year. Students may enter the executive M.B.A. program at the start of either the fall or spring semester and complete the program two years later.

Executive M.B.A. Program
The executive M.B.A. plan of study requires forty-eight credit hours of graduate credit. The program is designed for working professionals with varying educational and professional backgrounds. The program requires a minimum of two years of work experience. There are two program offerings, online and evening. The online program begins twice a year in fall and spring. In addition to the online curriculum, four three-four day residencies are required. The residencies occur once a semester. The evening program is offered in Morgantown, Martinsburg, and Charleston. Classes are two evenings a week with an occasional Saturday. The evening program begins once a year in the summer.

Dual Degree Programs
The College of Business of Economics offers a number of joint programs through both the full-time and the executive M.B.A. programs. Please contact the Office of Graduate Programs for details regarding admission criteria and plans of study.

Dual Degree Programs in conjunction with the full-time M.B.A.:
• M.B.A./M.S.I.R.
• M.B.A./M.S. of sport management
• M.B.A./M.S. in finance
• M.B.A./M.D.
• M.B.A./D.D.S.
• M.B.A./M.P.H.

Dual Degree Programs in conjunction with the Executive M.B.A.:
• M.B.A./J.D.
• M.B.A./Pharm.D.

Financial Aid
Scholarships are available for the full-time M.B.A. program on a competitive basis. Additional information and application forms can be obtained from the director of masters programs.

Academic Standards
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.

FACULTY
DIRECTOR OF MASTERS PROGRAMS
• Elizabeth Vitullo - Ph.D. (West Virginia University)

PROFESSORS
• Jack Fuller - Ph.D. (University of Arkansas)
• Clifford Hawley - Ph.D. (Duke University)

ASSOCIATE PROFESSORS
• Gerald Blakely - Ph.D. (University of North Carolina)
• David Dawley - Ph.D. (Florida State University)
• Karen R. France - Ph.D. (University of Pittsburgh)
  Associate Dean for Academic Affairs, Associate Professor of Marketing
• Jeff Houghton - Ph.D. (Virginia Polytechnic Institute and State University)
• Gary S. Insch - Ph.D. (Indiana University)
  Associate Dean for Graduate Programs, Associate Professor of Management
Admissions to 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 and also the grade-point average in the last sixty 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 Admissions as early as possible. 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 Admissions. The Graduate Management Admissions Test (GMAT) or the Graduate Record Examination (GRE) is required and the Admissions Committee takes no action on an application for admission to the full-time program until the applicant submits a GMAT or GRE score. However, a GMAT score is preferred and is required to determine eligibility for meritorious scholarships. Each applicant must submit a resume with the application. Additionally, applicants are encouraged to submit a statement of purpose and no more than three letters of reference. The deadline for the full-time M.B.A. program is March 1st of each year.

Admissions to Executive M.B.A. Program

To gain admission to the executive M.B.A. 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. The Graduate Management Admissions Test (GMAT) is required unless an applicant has a terminal degree. GMAT waivers may also be granted if the applicant has five or more years of professional work experience and an undergraduate GPA of 3.0 or better. Applicants must apply for the GMAT waiver; these requests are reviewed by the Admissions Committee. The applicant must have submitted an application to be considered for a GMAT waiver. Each applicant must submit a resume showing prior work experience. For applicants with less than five years of work experience, the GMAT and the undergraduate record provide 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. For applicants with terminal degrees, the Admissions Committee may waive the GMAT requirement. Additionally, applicants are encouraged to submit a statement of purpose and no more than three letters of reference. The priority deadline for receipt of applications and transcripts in the College’s Office of Graduate Programs is June 1 for the summer intake and July 1 for the fall intake, and December 1 is the priority deadline for the spring intake. Admission to the program is competitive and subject to space being available.

M.B.A. Program

The M.B.A. degree program requires fifty hours of graduate credit presented in the following format:

A minimum GPA of 3.0 is required in all courses
A grade of C or higher must be earned in all required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 511</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 512</td>
<td>Law/Ethics and Diversity</td>
<td>3</td>
</tr>
</tbody>
</table>
The executive M.B.A. program requires forty-eight hours of graduate credit presented in the following format:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 611</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BADM 612</td>
<td>Managerial and Team Skills</td>
<td>3</td>
</tr>
<tr>
<td>BADM 613</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 621</td>
<td>Business Research</td>
<td>3</td>
</tr>
<tr>
<td>BADM 622</td>
<td>Financial Statements Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BADM 623</td>
<td>Strategy</td>
<td>3</td>
</tr>
<tr>
<td>BADM 631</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 632</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>BADM 633</td>
<td>Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BADM 641</td>
<td>Decision Analysis-Executives</td>
<td>3</td>
</tr>
<tr>
<td>BADM 644</td>
<td>Legal Environment and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 652</td>
<td>Marketing Strategy</td>
<td>3</td>
</tr>
<tr>
<td>BADM 653</td>
<td>Integrated Global Business</td>
<td>3</td>
</tr>
<tr>
<td>BADM 661</td>
<td>Executive Project 1</td>
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</tr>
<tr>
<td>BADM 662</td>
<td>Executive Project 2</td>
<td>2</td>
</tr>
</tbody>
</table>

Choose two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 638</td>
<td>Operations/Supply Chain Mngmnt</td>
<td></td>
</tr>
<tr>
<td>BADM 651</td>
<td>Personal Financial Planning</td>
<td></td>
</tr>
<tr>
<td>ILR 543</td>
<td>Negotiation Strategy</td>
<td></td>
</tr>
<tr>
<td>MKTG 440</td>
<td>Export Management</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 48

Applications Are Currently Not Being Accepted for the D.B.A program. Please refer to the Ph.D. in Business Administration - Management major for doctoral studies in management.

The doctorate of business and administration program is offered through a combination of face-to-face and distance learning instruction to various sites in the United States and Europe. The D.B.A is designed for working professionals seeking to increase their research and problem-solving abilities.
beyond an M.B.A. Emphasis is placed on workplace solutions to workplace problems using current research techniques. Graduates will have the ability to function as change agents in their organization or in a consultancy role. The program requires three years to complete. The standards of excellence that support accreditation by the AACSB are maintained at all instructional sites.

Credit Hours
The plan of study requires a total of fifty-six credit hours of graduate study distributed as follows:

- Concentration courses – eighteen semester credit hours
- Research methods – twelve semester credit hours
- Current issues – six semester credit hours
- Dissertation – twenty semester credit hours

The D.B.A. degree program is completed on the Morgantown and selected European campuses. Students can enter the program only in May of each year. A dissertation is required to complete the program.

Admission
To gain admission to the D.B.A. program, an applicant must have an M.B.A degree or equivalent from a recognized university. 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 and also the grade point average in the last sixty hours of coursework. The Graduate Management Admissions Test (GMAT) is required and the Admissions Committee takes no action on an application for admission to the full-time program until the applicant submits a GMAT score. Each applicant must submit a resume showing prior work experience. A minimum of two years work experience post bachelor’s degree is required for admission into this program. Additionally, applicants are encouraged to submit a statement of purpose and no more than three letters of reference.

Transcripts and Deadlines
Applications for admission to the D.B.A. program and official transcripts of all prior academic work should be submitted to the appropriate Office of Admissions as early as possible. 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 appropriate Office of Admissions. The deadline for receipt of applications and transcripts in the appropriate Office of Graduate Programs is November 1.

Financial Aid
Scholarships are available on a competitive basis. Additional information and application forms can be obtained from the director of graduate programs.

Academic Standards
The D.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.

PHD Business Administration-Accounting

Overview
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, and they will work closely with faculty on a one-on-one basis. The anticipated duration of the full-time residency is four years.

Highly 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, and managerial accounting. The individual plan of study for each candidate will be determined by the student, the faculty mentor, and the Ph.D. committee.
Admission Requirements

The following will be considered for admission into the program:

• A completed application received by December 1 is required to be considered for University fellowships. Completed applications received by February 1 of each year will be given full consideration for College fellowships and admission in the succeeding fall semester
• A master’s degree or equivalent from an accredited university
• A statement of purpose regarding the PhD degree describing why the applicant is pursuing a PhD and the applicant’s career aspirations upon completion of the degree
• A current résumé
• Three 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 GMAT (Graduate Management Admissions Test) score is preferred. However, in some cases the GRE (Graduate Record Examination) may be accepted. (High GMAT/GRE scores are required for admission to the PhD Program in Business Administration.)
• The College of Business & Economics TOEFL requirement for PhD 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 (250 under the old computer-based exam or 600 under the paper-based exam) or a score of at least 7.0 on the IELTS test to be admitted to graduate study. Go to www.toefl.org or 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 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.

Doctor of Philosophy

CURRICULUM REQUIREMENTS

Although the plan of study for each candidate will be highly individualized, students must complete a minimum of 45 credit hours.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 794</td>
<td>Seminar (subject matter varies)</td>
<td>12</td>
</tr>
<tr>
<td>ACCT 795</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>STAT 511</td>
<td>Statistical Methods 1</td>
<td>3</td>
</tr>
<tr>
<td>STAT 512</td>
<td>Statistical Methods 2</td>
<td>3</td>
</tr>
<tr>
<td>STAT 513</td>
<td>Design of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>STAT 545</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 551</td>
<td>Nonparametric Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Support Area Courses</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>45</td>
</tr>
</tbody>
</table>

Forty-five hours of coursework is required for the major in accounting:

• Four doctoral seminars (twelve hours)
• One Accounting Independent Study – Research Project (three hours)
• Five statistical courses (fifteen hours)
• Five supporting area courses (fifteen hours)

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 at least three out of the four accounting focused seminars: Behavioral Research, Archival Research, Accounting Information Systems, and/or Fraud and Forensic Accounting. The seminars will be determined by the student, the faculty mentor, and the Ph.D. committee. Each course will cover seminal research within the functional areas of accounting.

One graduate independent study course is required. The course will be centered on a research project selected in conjunction with the faculty mentor.

A minimum of fifteen semester hours of graduate coursework is required in a collateral supporting area. A collateral 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, statistics, psychology, sociology, operations management, law, and industrial engineering. The collateral area focus and courses will be selected with the faculty mentor.

A minimum of fifteen semester hours of graduate coursework is required in graduate statistical research methods and analysis.

A minimum of twenty-nine dissertation hours are required.

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.

**PHD Business Administration-Finance**

**Overview**

The Ph.D. program in finance is a relatively small, high-quality program. The primary goal of the program is to prepare students for careers in research and teaching. Small classes and an "open-door" policy allow for close interaction between students and faculty, with plentiful opportunities to discuss ideas and work on joint research projects. We involve our students in research projects early, so that by the time students complete the Ph.D., they have the experience of both presenting their work at academic conferences and having one or more research articles accepted in academic journals. Students also acquire teaching experience through teaching undergraduate finance courses during the third and fourth years of the program.

**Admission Requirements**

The following will be considered for admission into the program:

- A completed application received by December 1 is required to be considered for University fellowships. Completed applications received by February 1 of each year will be given full consideration for College fellowships and admission in the succeeding fall semester.
- A Bachelor’s degree or equivalent from an accredited university.
- A statement of purpose regarding the PhD program describing why the applicant is pursuing a PhD in Business Administration with a major in finance and the applicant’s career aspirations upon completion of the degree.
- A current résumé.
- Three 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) will be accepted. (A High GMAT/GRE score is required for admission to the PhD Program in Business Administration with a major in finance, usually a GMAT score of 650 or above.)
- The College of Business & Economics TOEFL requirement for PhD 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 (250 under the old computer-based exam or 600 under the paper-based exam) or a score of at least 7.0 on the IELTS test to be admitted to graduate study. Go to www.toefl.org or 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 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.

These 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.

**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 at WVU is a full-time graduate program and requires at least three years in residence. The residency requirement is important not only because the doctoral degree has aspects of an apprenticeship which can only be accomplished on campus by working directly with the business faculty but because teaching on campus is a requirement of the program.

To prepare Ph.D. candidates for eventual university teaching responsibilities, students are expected to teach after their second year in the program. They will work closely with faculty to ensure quality instruction and receive feedback on their development as university-level teachers.
Doctor of Philosophy

Our program is built around an applied curriculum with a strong theoretical and quantitative foundation. The program involves taking doctoral courses, passing a finance comprehensive exam, and defending a dissertation. The program curriculum includes fourteen doctoral courses.

CURRICULUM REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 701</td>
<td>Adv Micro-Economic Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>ECON 702</td>
<td>Adv Macro-Economic Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 721</td>
<td>Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 725</td>
<td>Econometrics 1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 726</td>
<td>Econometrics 2</td>
<td>3</td>
</tr>
<tr>
<td>ECON 727</td>
<td>Econometrics 3</td>
<td>3</td>
</tr>
<tr>
<td>ECON 735</td>
<td>Portfolio Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 736</td>
<td>Asset Pricing</td>
<td>3</td>
</tr>
<tr>
<td>FIN 737</td>
<td>Corporate Finance Theory</td>
<td>3</td>
</tr>
<tr>
<td>FIN 741</td>
<td>Corporate Finance Seminar</td>
<td>3</td>
</tr>
<tr>
<td>FIN 742</td>
<td>Investments Seminar</td>
<td>3</td>
</tr>
<tr>
<td>FIN 743</td>
<td>Advanced Topics Seminar</td>
<td>3</td>
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<tr>
<td>Electives</td>
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<td><strong>Total Hours</strong></td>
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<td><strong>43</strong></td>
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Students who have an M.S. in finance or an MBA with 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 will serve as an essential preliminary step towards a Ph.D. degree.

PRE-PH.D. YEAR: M.S. IN FINANCE PROGRAM SUGGESTED PLAN OF STUDY

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours</th>
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<tr>
<td>BADM 512</td>
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<tr>
<td>BADM 631</td>
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<tr>
<td><strong>Total credit hours: 6</strong></td>
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SUGGESTED PLAN OF STUDY

**First Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Spring</th>
<th>Hours Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 701</td>
<td>4 ECON 711</td>
<td></td>
<td>4 Student Research Paper*</td>
</tr>
<tr>
<td>ECON 721</td>
<td>3 ECON 725</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 735</td>
<td>3 ECON 736</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
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</tr>
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**Second Year**

<table>
<thead>
<tr>
<th>Fall</th>
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<th>Spring</th>
<th>Hours Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 702</td>
<td>3 ECON 727</td>
<td></td>
<td>3 Finance Comprehensive Examination</td>
</tr>
<tr>
<td>ECON 726</td>
<td>3 FIN 742</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FIN 741</td>
<td>3 FIN 743</td>
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<td></td>
</tr>
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**Third Year**

<table>
<thead>
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<th>Fall</th>
<th>Hours Spring</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>FIN 797</td>
<td>3 Elective</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>FIN 797</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
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<td></td>
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</table>
Fourth Year

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 797</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credit hours: 50

Notes:

- Electives include Monetary Economics 1 and 2, Game Theory, Microeconomic Theory 2, Macroeconomic Theory 2, Econometrics 4 (ARE 693L), Dynamic Methods (1 credit), and advanced mathematics and statistics courses.
- First year research paper: a completed paper must be presented to faculty and doctoral students by the end of the first summer. The paper should be original work with a clear potential for publication.
- Second year research paper: a completed paper must be presented to faculty and doctoral students early in the fall semester of the third year. The paper must be of sufficient quality to be submitted to a good academic journal. The paper will be evaluated by faculty as part of the finance comprehensive exam.

PHD Business Administration-Management

Overview

The Ph.D. program in Management is a full-time, in-residence program lasting 4-5 years. It is a relatively small, high-quality program. Generally 2-3 new students are admitted each Fall. 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 comprehensive examination, and dissertation research. Students will take courses in various management topics, research methods, and statistics. Small classes and an "open-door" policy allow for close interaction between students and faculty, with frequent opportunities to discuss ideas and work on joint research projects. We involve our students in research projects early, so that by the time students complete the Ph.D., they have the experience of both presenting their work at academic conferences and having one or more research articles accepted in academic journals. Students also acquire teaching experience through teaching undergraduate management courses on several occasions throughout their stay in the program.

FACULTY

COORDINATOR
- Mark Gavin - Ph.D. (Purdue University)
  MgmtPhD@mail.wvu.edu or (304)293-7952

ASSOCIATE PROFESSORS
- David Dawley - Ph.D. (Florida State University)
- Mark Gavin - Ph.D. (Purdue University)
- Joyce Heames - Ph.D. (University of Mississippi)
- Jodi Goodman - Ph.D. (Georgia Institute of Technology)
- Usha Haley - Ph.D. (New York University)
- Jeff Houghton - Ph.D. (Virginia Polytechnic Institute and State University)
- Curt Moore - Ph.D. (Texas Tech)
- Jennifer Sexton - Ph.D. (Florida State University)
- Abhishek Srivastava - Ph.D. (University of Maryland)
- Edward Tomlinson - Ph.D. (Ohio State University)
- Miles Zachary - Ph.D. (Texas Tech University)

Admission Requirements

The following will be considered for admission into the program:

- A completed application received by December 1 is required to be considered for University fellowships. Completed applications received by February 1 of each year will be given full consideration for College fellowships and admission in the succeeding fall semester
- A Bachelor's degree or equivalent from an accredited university
• A statement of purpose regarding the PhD program describing why the applicant is pursuing a PhD in Business Administration and the applicant’s career aspirations upon completion of the degree
• A current résumé
• Three 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 College of Business & Economics TOEFL requirement for PhD 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 (250 under the old computer-based exam or 600 under the paper-based exam) or a score of at least 7.0 on the IELTS test to be admitted to graduate study. Go to www.toefl.org or 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 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.
• Writing samples
• Other application materials as required by WVU

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.

Contact Information
For additional questions concerning the program, please contact:
Dr. Mark Gavin
Coordinator, Management Ph.D. Program
Email: MgmtPhd@mail.wvu.edu
Office: (304) 293-7952
Website: http://be.wvu.edu/phd_business/index.htm

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 mandatory research methods and statistics courses. Additional requirements include a research paper in the first summer and preparing for and taking comprehensive examinations in the second summer. 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

| Methods and Statistics Courses - all required | 18 |
| MANG 710 Philosophy of Research |
| MANG course- Qual/Quant Research Methods | 3 |
| STAT 511 Statistical Methods 1 |
| STAT 512 Statistical Methods 2 |
| STAT 541 Applied Multivariate Analysis |
| MANG 713 Multivariate Analysis and SEM |
| Management Content Seminars ( 6 of the following courses required) | 18 |
| MANG 720 Research Seminar-HR Mangmmt |
| MANG 730 Research Seminar-Leadership |
| MANG 740 Social Psych/Group Process |
| MANG 760 Organization Theory |
| MANG 780 Current Topics-Org Behavior |
| MANG 770 Global Strategy and Theory |
| MANG 785 Current Topics-Strategy |

Summer and Dissertation Courses
First Summer Paper 1
SUGGESTED PLAN OF STUDY

First Year
Fall | Hours | Spring | Hours | Summer | Hours
---|---|---|---|---|---
MANG 710 | 3 | Qual/Quant Research Methods | MANG 797 | 1
STAT 511 | 3 | STAT 512 | 3
Management Content Seminar | 3 | Management Content Seminar | 3
| 9 | 9 | 1

Second Year
Fall | Hours | Spring | Hours | Summer | Hours
---|---|---|---|---|---
STAT 541 | 3 | MANG 713 | 3 MANG 797 | 1
Management Content Seminar | 6 | Management Content Seminar | 6 Comprehensive Exam
| 9 | 9 | 1

Third Year
Fall | Hours | Spring | Hours | Summer | Hours
---|---|---|---|---|---
MANG 797 | 5 | MANG 797 | 5 MANG 797 | 1
MANG 798 | 4 | MANG 798 | 4
| 9 | 9 | 1

Fourth Year
Fall | Hours | Spring | Hours | Summer | Hours
---|---|---|---|---|---
MANG 797 | 5 | MANG 797 | 5 MANG 797 | 1
MANG 798 | 4 | MANG 798 | 4
| 9 | 9 | 1

Total credit hours: 76

PHD Business Administration-Marketing

Overview
The Ph.D. program in marketing is a full-time, residential program that seeks to prepare students to contribute to the marketing discipline though 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.

Admission Requirements
The following will be considered for admission into the program:

- A completed application received by December 1 is required to be considered for University fellowships. Completed applications received by February 1 of each year will be given full consideration for College fellowships and admission in the succeeding fall semester
- A master's degree or equivalent from an accredited university
- A statement of purpose regarding the PhD program describing why the applicant is pursuing a PhD in Business Administration and the applicant's career aspirations upon completion of the degree
- A current résumé
- Three 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 College of Business & Economics TOEFL requirement for PhD 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 (250 under the old computer-based exam or 600 under the paper-based exam) or a score of at least 7.0 on the IELTS test to be admitted to graduate study. Go to www.toefl.org or 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 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.

Doctor of Philosophy

MAJOR REQUIREMENTS

Research Hours

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MKTG 797</td>
<td>Research 6</td>
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Dissertation Hours

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MKTG 798 Dissertation</td>
<td>30</td>
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<tr>
<td>MKTG 700</td>
<td>Seminar on Marketing Theory 3</td>
</tr>
<tr>
<td>MKTG 710</td>
<td>Philosophy of Research 3</td>
</tr>
<tr>
<td>MKTG 711</td>
<td>Advanced Topics in Marketing 1 3</td>
</tr>
<tr>
<td>MANG 713</td>
<td>Multivariate Analysis and SEM 3</td>
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<td>MKTG 720</td>
<td>Seminar in Buyer Behavior 3</td>
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<tr>
<td>MKTG 721</td>
<td>Advanced Topics in Marketing 2 3</td>
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<tr>
<td>MKTG 730</td>
<td>Advanced Marketing Research 3</td>
</tr>
<tr>
<td>MKTG 740</td>
<td>Sem:Marketing Strategy/Policy 3</td>
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</tbody>
</table>

Marketing Area of Emphasis Courses 9

Statistical Methods 1 * 3
Statistical Methods 2 * 3
Statistical Methods 3 * 3

Dissertation Proposal Defense

Dissertation Defense

Total Hours 78

* Statistical Methods 1, 2, and 3 are not specific marketing courses. They can be taken from several different disciplines and must be approved by your committee.

SUGGESTED PLAN OF STUDY

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Fall</th>
<th>Hours Spring</th>
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<tr>
<td>MKTG 700</td>
<td>3 MKTG 711</td>
<td>3 MKTG 797</td>
<td>3</td>
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<tr>
<td>MKTG course -</td>
<td>3 MKTG 720</td>
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<tr>
<td>MKTG 710</td>
<td>3 MKTG course -</td>
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<tr>
<td>Statistical Methods 2</td>
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<td></td>
<td>9</td>
<td>9</td>
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Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Fall</th>
<th>Hours Spring</th>
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<tbody>
<tr>
<td>MKTG 721</td>
<td>3 MKTG 730</td>
<td>3 MKTG 797</td>
<td>3</td>
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</tr>
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</table>
Economics

Degrees Offered

- Master of Arts
- 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 http://www.be.wvu.edu/phd_economics/index.htm. Students are bound by these regulations and requirements, as well as those of the College of Business and Economics.

Prerequisites

Applicants with a bachelor's degree may apply directly to the Ph.D. program. To be admitted as a regular M.A. or 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 1,000 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

A limited number of graduate assistantships and tuition scholarships are available on a competitive basis to full-time Ph.D. students. Major selection criteria include prior academic performance and GRE scores. Graduate assistants receive a cash stipend that is comparable in amount to that offered at other universities. Graduate assistants engage in research and/or teaching activities. 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 http://www.be.wvu.edu/phd_economics/prospective.htm.

Academic Standards

To qualify for a graduate 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 suspension from the program include failing grades on more than fifty percent of the coursework taken in any semester, a third failure on either a micro-economic theory or macroeconomic theory comprehensive examination, a fourth failure on comprehensive field examinations, or failure to complete all degree requirements within the specified time limits.

Comprehensive Examinations

Students must pass written comprehensive examinations in microeconomic theory, in macroeconomic theory, and in two fields. For detailed rules, see http://www.be.wvu.edu/phd_economics/rulesregulations.htm.

Candidacy and Dissertation

When an applicant has passed the written comprehensive examinations, 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.

FACULTY

CHAIR

• Clifford Hawley - Ph.D. (Duke University)
  Professor of Economics

PROFESSORS

• Roger Congleton - Ph.D. (Virginia Polytechnic Institute and State Univesity)
  Public Choice
• William S. Reece - Ph.D. (Washington University, St. Louis)
  Public Economics

ASSOCIATE PROFESSORS

• Arabinda Basistha - Ph.D. (University of Washington, Seattle)
  Monetary
• Brian J. Cushing - Ph.D. (University of Maryland)
  Urban and Regional Economics, Econometrics, Public Finance
• John Deskins - Ph.D. (University of Tennessee)
  Director Bureau of Business and Economics Research
• Stratford M. Douglas - Ph.D. (University of North Carolina)
  Econometrics, Industrial Organization, Corporate Finance
• Donald Lacombe - Ph.D. (Florida State University)
• Joshua Hall - Ph.D. (West Virginia University)
  Applied Microeconomics
• Brad Humphreys - Ph.D. (Johns Hopkins University)
  Sports Economics & Economics of Gambling
• Shuichiro Nishioka - Ph.D. (University of Colorado at Boulder)
  International Trade & Economic Development
• Jane Ruseski - Ph.D. (Johns Hopkins University)
  Associate Director Bureau of Business & Economic Research
• Andrew Young - Ph.D. (Emory University)

ADJUNCT PROFESSORS

• Pedro Bento - Ph.D. (University of Toronto)
  Macroeconomics
• Adam Nowak - Ph.D. (Arizona State University)
Master of Arts Program

The master of arts program requires a total of thirty-seven hours of graduate credit, including twenty-two hours of economics. At least twenty-five hours of coursework completed must be at the 700-level. To qualify for the M.A. degree, graduate students in economics must earn a grade of B or better in ECON 701 and ECON 702 and maintain a grade point average of 3.0 in all courses attempted as a graduate student at WVU. The M.A. program has a thesis and a non-thesis option. Specific course requirements include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ECON 701</td>
<td>Adv Micro-Economic Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>ECON 702</td>
<td>Adv Macro-Economic Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 721</td>
<td>Mathematical Economics</td>
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Statistics Requirement

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>STAT 331</td>
<td>Sampling Methods</td>
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</tr>
<tr>
<td>ECON 425</td>
<td>Introductory Econometrics</td>
<td>3</td>
</tr>
</tbody>
</table>

Or for students who are considering going into the Ph.D. program, these two courses may be replaced by:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 725</td>
<td>Econometrics 1</td>
<td>3</td>
</tr>
</tbody>
</table>

The student must also select either the thesis or the non-thesis alternative:

- Thesis alternative: an acceptable thesis for six hours is required, and the student must pass a final oral examination.
- Non-thesis alternative: in lieu of a thesis, the requirements for the M.A. are met by completion of two 700-level courses in one field of concentration in economics and submission of a research paper that gives evidence of substantial ability to conduct scholarly research.

Doctor of Philosophy

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. To qualify for the doctor of philosophy degree in economics, a student must earn a cumulative grade point average of 3.0 in courses completed as a graduate student at WVU.

The Ph.D. degree is not awarded for the mere accumulation of course credits nor for the completion of the specified residence requirements. All students are required to complete the graduate core curriculum, prepare themselves in two fields of concentration, and pass at least two additional 700-level economics courses with grades of B or better. Each student must also submit an acceptable dissertation. A minimum of forty-five hours of graduate work in economics at the 700-level is required for all candidates for the Ph.D. degree in economics.

CURRICULUM REQUIREMENTS

Core Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>ECON 702</td>
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<tr>
<td>ECON 709</td>
<td>Research Design/Methodology</td>
<td>1-3</td>
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<tr>
<td>ECON 711</td>
<td>Adv Micro-Economics Theory 2</td>
<td>4</td>
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<td>ECON 712</td>
<td>Adv Macro-Economic Theory 2</td>
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<td>ECON 721</td>
<td>Mathematical Economics</td>
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<tr>
<td>ECON 723</td>
<td>Dynamic Methods of Economics</td>
<td>1</td>
</tr>
<tr>
<td>ECON 725</td>
<td>Econometrics 1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 726</td>
<td>Econometrics 2</td>
<td>3</td>
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<tr>
<td>ECON 727</td>
<td>Econometrics 3</td>
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<tr>
<td>Field 2 Course 1</td>
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<td>3</td>
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**SUGGESTED PLAN OF STUDY**

**First Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
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<tr>
<td>Fall</td>
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<td>ECON 701</td>
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<td>ECON 725</td>
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**Second Year**

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<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
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<tr>
<td>Fall</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>3</td>
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</tr>
<tr>
<td>Field 1 Course 1</td>
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<td>Field 1 Course 2</td>
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<tr>
<td>Field 2 Course 1</td>
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<tr>
<td><strong>Total</strong></td>
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**Third Year**

<table>
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<tr>
<td>ECON 709</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>Total credit hours: 40-42</strong></td>
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* Six semester hours (or the equivalent) must be taken in each of the student’s two fields of concentration. The areas of concentration offered by the Department are financial 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 very unusual cases. Only one of the fields of concentration may be in an outside area; selection must be approved by the graduate economics faculty.

**Finance**

**Degree Offered**

- Master of Science in Finance

The M.S. in finance program provides students with the theory, tools, and applications to support their goal of becoming proficient financial researchers and analysts through acquiring the most recognized global market credentials via the CFA charter designation. We provide students with the theoretical underpinnings that provide the basis for becoming a practicing analyst. We prepare students to become competent investment professionals.

**The CFA Designation**

The designation CFA stands for chartered financial analyst. This is the industry designation for expertise regarding securities from assessments of risk to interpretation of value. The CFA designation is awarded after the successful candidate passes three levels of testing over an expansive list of topics from ethical practice to general technical knowledge of investment and securities. The M.S. in finance program of study includes the CFA candidate body of knowledge among its core offerings. The program is designed so that a student may sit for the CFA Level One exam in December and sit for the CFA Level Two exam the following June.

**Credit Hours**

The thirty-six-hour program is comprised of a core of advanced finance classes, laboratory experiences, and practical application of theory for success in this career path. Students complete an intensive twelve-month program that starts in June. The program includes a quantitative finance tools course, a course in ethical and professional standards, a firm foundation in the general theory of economics, seven advanced finance courses, and a three credit-hour internship. A subset of the coursework provides graduates with a thorough understanding of the material in the CFA Candidate Body of Knowledge (CBOK).

**Financial Aid**

A limited number of tuition scholarships are available on a competitive basis to full-time students. Major selection criteria include prior academic performance and GMAT scores. Further information and applications can be obtained from the director of the M.S. in finance program.
Academic Standards

The M.S. in finance 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.

FACULTY

COORDINATOR

• Paul J. Speaker - Ph.D. (Purdue University)
  Corporate finance, Public sector financial management, Business valuation, Business of forensics

PROFESSORS

• K. Victor Chow - Ph.D. (University of Alabama), C.F.A.
  Corporate Finance, Portfolio Management
• William B. Riley - Ph.D. (University of Arkansas)
  Investments, Capital Markets
• Harry Turtle - Ph.D. (University of Alberta)
  Investment Theory, Financial Markets, Portfolio Analysis, International Finance

ASSOCIATE PROFESSORS

• Ashok Abbott - Ph.D. (Virginia Polytechnic Institute and State University)
  Financial Institutions, Corporate Finance, Mergers and Acquisitions
• Alex Kurov - Ph.D. (State University of New York, Binghamton), C.F.A.
  Financial Market Microstructure, Futures Markets
• Terry L. Rose - Ph.D. (University of Illinois)
  Insurance, Risk Management
• Paul J. Speaker - Ph.D. (Purdue University)
  Corporate Finance, Public Sector Financial Management, Business Valuation, Business Forensics

ASSISTANT PROFESSORS

• Naomi Boyd - Ph.D. (The George Washington University)
  Financial Market Microstructure, Behavioral Finance
• Ann Marie Hibbert - Ph.D. (Florida International University)
  International Finance, Asset Pricing, Behavioral Finance
• Bingxin Li - Ph.D. (University of Houston)
  Energy finance, Investments, Risk management
• Costanza Meneghetti - Ph.D. (Georgia State University)
  Corporate Finance, Hedge Funds

TEACHING ASSISTANT PROFESSOR

• Frank DeGeorge, C.P.A. - M.S.A. (Duquesne University)
  Financial Statement Analysis

Admission

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. The Graduate Management Admissions Test (GMAT) is required and the Admissions Committee takes no action on an application for admission to the full-time program until the applicant submits a GMAT score. Each applicant must submit a resume with the application. For applicants with a significant amount of work experience in a financial field, the GMAT may be waived. Additionally, applicants are encouraged to submit a statement of purpose and two letters of reference. Each applicant will be interviewed either in person or by phone prior to admission. Provisional admissions are very rare and will be evaluated on a case-by-case basis.

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

**Transcripts and Deadlines**

Application for admission to the M.S. in finance program and official transcripts of all prior academic work should be submitted to the WVU Office of Admissions as early as possible. 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 Admissions. Review of applications and consideration of financial awards will begin on January 15 and continue until April 15.

**Major Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 491</td>
<td>Professional Field Experience</td>
<td>1-18</td>
</tr>
<tr>
<td>FIN 511</td>
<td>Financial Economics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 512</td>
<td>Ethical Standards in Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 513</td>
<td>Macroeconomics/Financial Mrkts</td>
<td>3</td>
</tr>
<tr>
<td>FIN 520</td>
<td>Quantitative Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 521</td>
<td>Financial Reporting/Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FIN 522</td>
<td>Adv Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 523</td>
<td>Equity Investment</td>
<td>3</td>
</tr>
<tr>
<td>FIN 526</td>
<td>Portfolio Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 527</td>
<td>Alternative Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIN 528</td>
<td>Integrated Financial Analysis</td>
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</table>

Total Hours: 31-48

**Suggested Plan of Study**

<table>
<thead>
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<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>FIN 511</td>
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<tr>
<td>FIN 512</td>
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<tr>
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<td>6</td>
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<td>Second Semester</td>
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</tr>
<tr>
<td>FIN 513</td>
<td>3</td>
</tr>
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<td>FIN 520</td>
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<td>FIN 526</td>
<td>3</td>
</tr>
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<td>15</td>
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<td>Third Semester</td>
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<tr>
<td>FIN 491</td>
<td>1-18</td>
</tr>
<tr>
<td>FIN 522</td>
<td>3</td>
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<td>FIN 528</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10-27</td>
</tr>
</tbody>
</table>

Total credit hours: 31-48
Industrial Relations

Degree Offered

• Master of Science in Industrial Relations

The Department of Management offers a master of science in industrial relations (M.S.I.R.). The AACSB-accredited program of study prepares students for professional positions in human resources (employee relations) and labor relations.

Entry-level professional opportunities for M.S.I.R. graduates include such positions as human resource generalist, human resource managers, labor relations specialist, training coordinator, recruiting specialist, compensation analyst, and benefits administrator. Other positions include staff representative with organized labor, apprentice arbitrator, labor-management consultant, National Labor Relations Board field examiner, government employee relations representative, and employment analyst. Many graduates are employed by Fortune 500 companies. Some find positions with organized labor, all levels of government, and advocacy organizations. The department, in conjunction with the College of Business and Economics Center for Career Development, makes a concerted effort to place graduates in positions that fulfill student job objectives.

IRSA

Students are encouraged to participate in academic-related extracurricular activities. Many are cosponsored by the Industrial Relations 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 Industrial Relations Honor Society. The faculty makes Outstanding IR Student awards annually to persons selected on the basis of scholarship, informal leadership, and extracurricular activities.

Financial Aid

Over half of all M.S.I.R. students qualify for financial aid on the basis of need, merit, or a combination of both. A limited number of scholarships and tuition waivers are awarded each year on a competitive basis. Additional information can be obtained from the graduate programs office at http://www.finaid.wvu.edu.

Academic Common Market

The WVU M.S.I.R. program is a member of the Southern Regional Education Board's Academic Common Market program. Residents of Delaware, Florida, Georgia, Kentucky, Maryland, and Virginia who are admitted to the M.S.I.R. program can pay tuition at West Virginia University's in-state (resident) rates. See http://www.sreb.org for more information.

FACULTY

CHAIR, DEPARTMENT OF MANAGEMENT

• Joyce Thompson Heames - Ph.D. (University of Mississippi)
  Talent Acquisition, Organizational Behavior and Change Renewal, Management, Corporate Social Responsibility

PROFESSOR

• Neil S. Bucklew - Ph.D. (University of Wisconsin)
  Former WVU President, Industrial Relations, Collective Bargaining, Labor Management Relations, Negotiations and Conflict Resolutions

ASSOCIATE PROFESSORS

• Jodi Goodman - Ph.D. (Georgia Institute of Technology)
  Research Methods for Human Resource Management, Training, Organizational Behavior, Entrepreneurship
• Joyce Thompson Heames - Ph.D. (University of Mississippi)
  Talent Acquisition, Human Resource Management, Training and Development, Corporate Social Responsibility
• Jeffery D. Houghton - Ph.D. (Virginia Polytechnic Institute & State University)
  International Human Resource Management, Organizational Behavior, Self Leadership, Team Processes
• Ed Tomlinson - Ph.D. (The Ohio State University)
  Labor Relations, Compensation, Conflict Resolution

TEACHING ASSISTANT PROFESSOR

• Suzanne Gosden Kitchen - Ed.D. (West Virginia University)
  MSIR Program Student Adviser, Human Capital Management, EEO, Training and Development
EXECUTIVE IN RESIDENCE
• Bill Hutchinson - M.S.I.R. (West Virginia University)
  Collective Bargaining, Performance Management, Compensation and Benefits

EMERITI
• Randyl Elkins - Ph.D.
• Dieter Schaupp - Ph.D.

LECTURER
• Jon Reed - J.D. (West Virginia University)
  Employment Law

Admission
The MSIR degree is interdisciplinary in nature and no specific undergraduate major is required. Coursework in computer science, labor economics, statistics, and business disciplines is helpful. To gain admission into the M.S.I.R. 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. Either the Graduate Record Examination (GRE) or the Graduate Management Admissions Test (GMAT) is required. No action is taken on an application for admission until a GRE or GMAT score is submitted. International students must also submit a satisfactory TOEFL score.

Applicants must also send additional supportive material: a personal statement of purpose addressing their desire and reasons for applying, a minimum of two reference letters, and a professional resume of their school and work experiences.

Application Deadlines
The MSIR program accepts applications for fall admission only. The application deadline is March 1. Later applications, while acceptable, may diminish the chances for admission due to the graduate class being filled. Because no admission decision can be made without the applicant’s GRE/GMAT score being submitted, applicants should keep in mind the GRE/GMAT test schedule.

Industrial Relations Degree Program

COURSES
A minimum GPA of 3.0 is required in all courses
A grade of C or higher must be earned in all required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR 505</td>
<td>Employment Law</td>
<td>3</td>
</tr>
<tr>
<td>ILR 506</td>
<td>Performance Management</td>
<td>3</td>
</tr>
<tr>
<td>ILR 508</td>
<td>Organizational Change/Renewal</td>
<td>3</td>
</tr>
<tr>
<td>ILR 509</td>
<td>Talent Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>ILR 511</td>
<td>Human Capital Management</td>
<td>3</td>
</tr>
<tr>
<td>ILR 520</td>
<td>HR Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ILR 522</td>
<td>International Industrial Relations</td>
<td>3</td>
</tr>
<tr>
<td>ILR 530</td>
<td>Compensation Issues</td>
<td>3</td>
</tr>
<tr>
<td>ILR 544</td>
<td>Benefits Management</td>
<td>3</td>
</tr>
<tr>
<td>ILR 546</td>
<td>Training and Development</td>
<td>3</td>
</tr>
<tr>
<td>ILR 548</td>
<td>Strategic Management for HR</td>
<td>3</td>
</tr>
<tr>
<td>ILR 562</td>
<td>Collective Bargaining</td>
<td>3</td>
</tr>
<tr>
<td>ILR 580</td>
<td>Human Resources Practicum</td>
<td>3</td>
</tr>
<tr>
<td>ILR 589</td>
<td>NS-IR Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

3 electives would be chosen from the following 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR 507</td>
<td>Conflict Management Processes</td>
</tr>
<tr>
<td>ILR 534</td>
<td>Work Group Dynamics Leadership</td>
</tr>
<tr>
<td>ILR 543</td>
<td>Negotiation Strategy</td>
</tr>
<tr>
<td>ILR 581</td>
<td>Collective Bargaining Pract</td>
</tr>
<tr>
<td>ILR 591</td>
<td>Advanced Topics</td>
</tr>
<tr>
<td>ILR 595</td>
<td>Independent Study</td>
</tr>
</tbody>
</table>
SUGGESTED PLAN OF STUDY

MASTER OF SCIENCE INDUSTRIAL RELATIONS (MSIR) PROGRAM

Two-Year Course of Study: (forty-eight credit hours including fourteen core courses and two electives)
*Select one elective each semester or term.

First Year

Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ivy League Modules</td>
<td>0</td>
</tr>
</tbody>
</table>

Total credit hours: 0

First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ILR 511 (weeks 1-3)</td>
<td>3 ILR 506</td>
<td>3 ILR 589</td>
</tr>
<tr>
<td></td>
<td>ILR 505 (wk 4 - wk 9)</td>
<td>3 ILR 509</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ILR 562 (wk 10 - wk 16)</td>
<td>3 ILR 522</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ILR 546</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>12</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ILR 508</td>
<td>3 ILR 530</td>
</tr>
<tr>
<td></td>
<td>ILR 520</td>
<td>3 ILR 548</td>
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<tr>
<td></td>
<td>ILR 544</td>
<td>3 ILR 580</td>
</tr>
<tr>
<td></td>
<td>Elective - Select from following</td>
<td>3 Elective - Select from following</td>
</tr>
<tr>
<td></td>
<td>ILR 507</td>
<td>ILR 581</td>
</tr>
<tr>
<td></td>
<td>ILR 543</td>
<td>ILR 534</td>
</tr>
<tr>
<td></td>
<td>MANG 426</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours: 48

1 Year M.S.I.R. and Dual Degree Option

Some graduates with a J.D., M.B.A., or other business-related master’s degree from a US institution may apply to complete the M.S.I.R. degree program in one year. Not all applicants will be approved for the one-year option, but each application will be evaluated individually by the Admissions Committee. Combining study for the M.S.I.R. and the M.B.A. degrees is another option available to qualified candidates. Students need to apply separately for admission to each program. A plan of study will be created for any student admitted in the dual degree option.

GPA

The M.S.I.R. 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 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.
**College of Creative Arts**

**Degrees Offered**

- Master of Arts in Art & Design
- Master of Music
- Doctor of Musical Arts
- Doctor of Philosophy in Music
- Master of Fine Arts in Art & Design or Theatre

**Introduction**

Creative development in art, music, theatre, and dance is central to the College of Creative Arts. Made up of three professionally accredited and nationally recognized Schools of Art & Design, Music, and Theatre & Dance, 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, music, theatre, and dance, graduate students gain a greater understanding of the arts and—in turn—themselves.

A distinguished faculty of scholars and artists bring 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 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**

We envision broadening our role as a leader of innovation and engagement in the arts.

**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.

**FACILITIES**

The Creative Arts Center, which houses the college, is a modern, multimillion-dollar instructional and performance facility with four 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.

**PROGRAMS OF STUDY**

The doctor of musical arts (D.M.A.) curricula in performance (piano, voice, percussion, flute, oboe, clarinet, bassoon, saxophone, horn, trumpet, trombone, tuba, violin, viola, cello, or double bass) or composition and the Ph.D. curriculum in music education 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 ceramics, graphic design, painting, printmaking, sculpture, acting, or theatre design/technology (costume, scenery, and lighting).

The master of music (M.M) degree enhances undergraduate training in performance, music education, theory, music history, and composition.

The master of arts (M.A.) has concentrations in art education, art history, 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 Coordinators for each School’s graduate program.

**ART & DESIGN**
Graduate Advisor, School of Art & Design  
Phone: (304) 293-4077  
Website: http://artanddesign.wvu.edu/  

MUSIC  
Director of Graduate Studies, School of Music  
Phone: (304) 293-4489  
Website: http://music.wvu.edu/  

THEATRE  
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 Coordinator 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 http://grad.wvu.edu/  

ADMINISTRATION  
DEAN AND DIRECTOR  
• Paul K. Kreider - D.M.A. (University of Arizona)  

ASSOCIATE DEAN  
• William J. Winsor - M.F.A. (Ohio State University)  

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.  

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. 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 http://grad.wvu.edu/
School of Art and Design

Degrees Offered

- Master of Arts
- Master of Fine Arts

The graduate programs in the School of Art and Design lead to a master of arts (M.A.) with emphasis in art history, art education, 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 studio art (three years and seventy-two 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 is a professionally-oriented terminal degree in the studio arts, with concentration in ceramics, graphic design, intermedia/photography, painting, printmaking, or sculpture. 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.

Accreditation

The School of Art and Design is an accredited institutional member of the National Association of Schools of Art and Design (NASAD), the only nationally recognized accrediting agency for professional art instruction. 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 thirty 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 twelve 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. 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.

FACULTY

DIRECTOR
- Alison Helm - M.F.A. (Syracuse University)
  Sculpture

ASSOCIATE DIRECTOR, UNDERGRADUATE ADVISOR
- Kristina Olson - M.A. (Stony Brook University)
  Art history-Modern and contemporary, Art criticism
GRADUATE ADVISOR
• Joseph Lupo - M.F.A. (University of Georgia)
  Graduate Advisor, Printmaking

PROFESSORS
• Eve Faulkes - M.F.A. (Rhode Island School of Design)
  Graphic Design
• J. Bernard Schultz - Ph.D. (University of Pittsburgh)
  Art History-Italian Renaissance
• Janet Snyder - Ph.D. (Columbia University)
  Art History-Ancient, Medieval, Northern Renaissance, Native American

ASSOCIATE PROFESSOR
• Gerald Habarth - M.F.A. (University of South Florida)
  Electronic Media
• Jason Lee - M.F.A. (University of Wisconsin-Madison)
  Sculpture, Foundations
• 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
• Naijun Zhang - MFA (West Virginia University)
  Painting, Drawing
• Michael Sherwin - M.F.A. (University of Oregon)
  Photography, Digital Imaging

ASSISTANT PROFESSOR
• Joseph Galbreath - M.F.A. (Maryland Institute College of Art)
  Graphic Design
• Robert Moore - M.F.A. (Utah State University)
  Ceramics
• Kofi Opoku - M.F.A. (West Virginia University)
  Graphic Design

LECTURERS
• Dylan Collins - M.F.A. (Kent State University)
  Sculpture, Drawing
• Kristen Harkness - Ph.D. (University of Pittsburgh)
  Art History-Survey, Methodology

Admission to Masters Program
Applicants for the M.A. in art history must submit a copy of a written research project, three letters of recommendation, a statement of purpose, and GRE scores.

Applicants for the M.A. (studio and art education) or the M.F.A. must present a portfolio for admission to the School of Art and Design. This portfolio must contain twenty JPG images with a minimum of 800 x 600 pixels or equivalent video documentation. Applicants should take care to select images of recent and representative work for inclusion in the portfolio. Each image should be documented with name, date of completion, size of work, and type of medium. Applicants must also submit a statement of purpose and three letters of recommendation from college faculty or persons knowledgeable of the applicant’s interests and abilities.

Details about additional application requirements and the link to the online application form can be located at: http://artanddesign.wvu.edu/graduate_students/application_process. Materials should be submitted to: Graduate Advisor, School of Art and Design, College of Creative Arts, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-6111.

In addition to the School of Art and Design's graduate application and portfolio requirements, prospective students are required to fill out a separate West Virginia University student application form, which is to be submitted electronically to the Office of Admissions at http://grad.wvu.edu/ along with an application fee and official transcripts.
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.

Master of Fine Arts

The Master of Fine Arts is a terminal degree in studio art. Our selective and limited enrollment ensures regular individual contact with a dedicated, diverse faculty who are committed to a sustained professional exchange with each student. A collaboratively designed curriculum is augmented by regular critiques engaging all studio majors and faculty. Media experimentation is encouraged. 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 position within the context of contemporary art discourse. The suggested distribution of studies for the three-year program is as follows:

**DEGREE REQUIREMENTS: THREE-YEAR M.F.A. PROGRAM**

<table>
<thead>
<tr>
<th>Course Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Art Concentration Courses</td>
<td>36</td>
</tr>
<tr>
<td>Electives (studio/cognates)</td>
<td>15</td>
</tr>
<tr>
<td>Art History</td>
<td>9</td>
</tr>
<tr>
<td>Teaching Practicum</td>
<td>3</td>
</tr>
<tr>
<td>Graduate Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Graduate Exhibition and Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Total Hours</td>
<td>72</td>
</tr>
</tbody>
</table>

**Note:** All graduate credits must be at the 500-level (graduate) or higher.

**TRANSFERS**

In addition to the application materials listed, transfer students must ask to 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.

**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.

Master of Arts in Studio Art

The studio art concentration promotes advanced study in ceramics, painting, printmaking, graphic design, intermedia/photography, and sculpture. This course of study requires a baccalaureate degree in art or its equivalent for admission. Preparation should include twelve hours of art history, forty-five hours of studio art related to professional needs, and thirty-six hours of general education. The suggested distribution of studies is as follows:

**DEGREE REQUIREMENTS: TWO-YEAR M.A. PROGRAM IN STUDIO ART**

<table>
<thead>
<tr>
<th>Course Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Art Concentration Courses</td>
<td>18</td>
</tr>
<tr>
<td>Art History</td>
<td>6</td>
</tr>
<tr>
<td>Graduate Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Electives (studio/cognates)</td>
<td>6</td>
</tr>
<tr>
<td>Graduate Exhibition and Thesis</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>36</td>
</tr>
</tbody>
</table>

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.

Master of Arts in Art Education

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.
DEGREE REQUIREMENTS: TWO-YEAR M.A. PROGRAM IN ART EDUCATION

<table>
<thead>
<tr>
<th>Clinic/Academic Electives</th>
<th>12-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Education or Approved Studies</td>
<td>12</td>
</tr>
<tr>
<td>ART 602 Master’s in Art Ed Project</td>
<td>6</td>
</tr>
<tr>
<td>Total Hours</td>
<td>30-36</td>
</tr>
</tbody>
</table>

M.A. art education students are required to produce a written thesis or, at the graduate committee’s discretion, may complete a research project.

Master of Arts in Art History

The Master of Arts in art history program offers a two-year degree that provides a solid foundation in historical and theoretical study of the history of Western Art, from Medieval to Contemporary. The program emphasizes independent exploration and interdisciplinary research.

Applicants for admission to the master’s program are expected to demonstrate competence in the history of art, equivalent to an undergraduate major, as well as reading competence of at least one language other than English (four-semester equivalent), and must submit GRE examination scores. The B.A. degree in an area of substantial humanistic research plus a foreign language may also be considered appropriate preparation.

Reading proficiency in one language other than English in writing and speaking skills needed to communicate clearly and effectively are required for completion of the degree and can be met through additional coursework or passing a proficiency exam.

Art history studies the traditions and techniques of the visual arts. It is an interdisciplinary field, drawing upon philosophy, history, literature, religion, and mythology to examine works of art and their contexts. The history of art provides means to penetrate cultural constructions and their aesthetic and artistic productions. To assist the student in developing skills needed to analyze and understand the object, the course of study includes requirements in academic coursework and research.

The collection of the Art Museum of West Virginia University both provides first-hand experience with works of significant aesthetic and cultural value and introduces students to curatorial and museum practice. The Laura and Paul Mesaros Galleries in the Creative Arts Center and the Visiting Artist and Scholar program form a crucial link in the course of study, presenting installation and curatorial opportunities. Through the School of Art and Design’s association with regional institutions, museum and gallery internships are encouraged.

Completion of the program culminates in the master’s thesis, which may take a variety of forms within the context of art’s historical and critical practices. The student will select a thesis topic that must meet with the approval of the art history faculty. The thesis consists of a research paper demonstrating critical knowledge of relevant sources, skill in analysis and interpretation, and ability to present the results in a well-organized and intelligent manner. The thesis must be defended in an oral examination.

DEGREE REQUIREMENTS: TWO-YEAR M.A. PROGRAM IN ART HISTORY

| Art History | 21 |
| Cognate Subjects | 6 |
| Master’s Thesis | 3 |
| Total Hours | 30 |

* Cognate subjects to be selected in support of research. (e.g.: history, philosophy, classics/religious studies, anthropology, arts administration, historic preservation, etc.)

School of Music

Degrees Offered

- Master of Music
- Doctor of Musical Arts
- Doctor of Philosophy

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.

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, music history, and performance must take diagnostic tests in music theory, music history, and 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 diagnostic exams in music history and music theory. The results of these tests may indicate the need for remedial study, which must be completed before admission to candidacy.

**FACULTY**

**SCHOOL OF MUSIC DIRECTOR**
- H. Keith Jackson - D.M.A. (Arizona State University)
  Trombone, Jazz Studies

**DIRECTOR OF GRADUATE STUDIES**
- Cynthia Babin Anderson - M.M. (Manhattan School of Music)
  Oboe, Theory

**PROFESSORS**
- Peter Amstutz - D.M.A. (Johns Hopkins University, Peabody Institute)
  Coordinator of Keyboard Instruments, Piano
- John Beall - Ph.D. (University of Rochester, Eastman School of Music)
  Composition, Theory
- William P. Haller - D.M.A. (North Texas State University)
  Organ, Theory
- Christine B. Kefferstan - D.M.A. (University of Cincinnati College-Conservatory of Music)
  Piano Performance
- James E. Miltenberger - D.M.A. (University of Rochester, Eastman School of Music)
  Piano, Piano Repertoire, Jazz
- Janet Robbins - Ph.D. (Ohio State University)
  Music Education
- William Skidmore - M.M. (University of Illinois)
  Cello, Chamber Music
- David Taddie - Ph.D. (Harvard University)
  Music Theory, Electronic Music
- Robert H. Thieme Jr. - M.M. (West Virginia University)
  Director of WVU Opera Theatre, Opera, Vocal Repertoire, Accompanying-Coaching
- Virginia Thompson - D.M.A. (University of Iowa)
  Horn, Chamber Music
- Molly Weaver - Ph.D. (University of Michigan)
  Coordinator of Music Education, Instrumental Music Education
- John F. Welgand - D.M.A. (Florida State University)
  Coordinator of Woodwinds, Clarinet, Chamber Music
- Christopher Wilkinson - Ph.D. (Rutgers University)
  Music History
- Cecil B. Wilson - Ph.D. (Case Western Reserve University)
  Associate Provost, Musicology, 19-century Music, Orchestration
- John Winkler - D.M.A. (Northwestern University)
  Coordinator of Brass Instruments, Trumpet, Chamber Music

**ASSOCIATE PROFESSOR**
- Mitchell Arnold - D.M.A. (Northwestern University)
  Director of Orchestral Activities, Conducting
- David Bess - Ph.D. (West Virginia University)
  Music Education
- John E. Crotty - Ph.D. (University of Rochester, Eastman School of Music)
  Music Theory
- Mary Ferer - Ph.D. (University of Illinois)
  Coordinator of Music History, Music History
- John Hendricks - M.M. (West Virginia University)
  Assistant Dean, Director of Bands, Coordinator of Conducting and Large Ensembles, Conducting
- Hope Koehler - D.M.A. (University of Kentucky)
Coordinator of Voice Studies, Voice

- Andrew Kohn - Ph.D. (University of Pittsburgh)
  Coordinator of Theory and Composition, Double Bass, Theory

- Lucy Mauro - D.M.A. (Johns Hopkins University, Peabody Institute)
  Piano Pedagogy, Class Piano, Piano, Chamber Music

- Mikylah McTeer - D.M.A. (University of Houston, Moores School of Music)
  Coordinator of String Instruments, Violin, Chamber Music

- Paul Scea - M.M. (University of Iowa)
  Director and Coordinator of Jazz Studies, Jazz, Chamber Music, Theory

- Sandra Schwartz - Ph.D. (University of Miami)
  Choral Music Education

- George Willis - M.M. (Temple University)
  Coordinator of Percussion Studies

ASSISTANT PROFESSOR

- Nina Assimakopoulos - M.M. (Academy of Music and Performing Arts, Munich)
  Flute, Chamber Music

- Dearl J. Drury - M.M. (West Virginia University)
  Marching Band, Varsity Band, Concert Band

- Lynn Hileman - D.M.A. (University of Rochester, Eastman School of Music)
  Bassoon, Theory

- Andrea Houde - M.M. (Johns Hopkins University, Peabody Institute)
  Viola, String Pedagogy, Chamber Music

- Michael Ibrahim - D.M.A. (Manhattan School of Music)
  Saxophone

- Nicholas Perna - D.M.A. (University of Miami)
  Voice

- Jeffery Redding - Ph.D. (Florida State University)
  Director of Choral Activities

- Michael Vercelli - D.M.A. (University of Arizona)
  Director of World Music Performance Center

FACULTY EQUIVALENT ACADEMIC PROFESSIONAL

- Mark Benincosa - M.S. (West Virginia University)
  Recording Technology

- Christopher Nichter - M.M. (West Virginia University)
  Bands, Conducting

LECTURERS

- Scott Elliott - M.M. (Duquesne University)
  Guitar

- Jeanne Frieben - M.M. (West Virginia University)
  Clarinet

- Janna L. Kisner - M.Ed. (Waynesburg University)
  Music Education

- William Koehler - D.M.A. (University of Minnesota)
  Voice

- Rebecca Kreider - M.M. (Indiana University)
  General Education Courses

- Diana B. Love - Ed.D. (Virginia Polytechnic Institute and State University)
  Music Education

- David P. McCollum - M.M. (Duquesne University)
  Tuba, Euphonium

- Adam Osmianski - M.M. (West Virginia University)
  General Education Courses

- Brian Plitnik - D.M.A. (West Virginia University)
  Trombone, Euphonium, Chamber Music
• Kathleen Shannon - D.M.A. (University of Miami)
  General Education Courses
• Mandy Spivak - D.M.A. (University of Miami)
  Voice
• Albert J. Wrublesky - M.M. (West Virginia University)
  Percussion
• Renee Wyatt - M.M. (West Virginia University)
  Music Education

PROFESSORS EMERITI
• James W. Benner - M.A. (Columbia University)
• Thomas S. Brown
• Philip J. Faini
• Barton Hudson
• Gerald Lefkoff
• Leo Horacek, Jr.
• Connie Arau Sturm
• Gilbert Trythall
• Don G. Wilcox
  Director of Bands Emeritus

ASSOCIATE PROFESSORS EMERITI
• Joyce A. Catalfano
• Rose M. Crain
• June D. Swartwout

Admission to Masters Program

Applicants to the program leading to the degree of master of music 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. Applicants for music history and music theory must also submit scores from the Graduate Record Examination General Aptitude Test. 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, 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 music history majors must submit a sample of writing, such as a term paper. A musical subject is recommended but not required.

Applicants to music education curricula 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 acceptance as provisional students. If, upon completion of up to twelve semester hours of graduate study, they have achieved a minimum of a B (3.0) average and satisfied any previous undergraduate deficiencies or other conditions, such students may be accepted as degree students.

Admission to Doctoral 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 to the D.M.A. in vocal pedagogy and performance must submit a letter detailing their previous pedagogic experience which states their purpose in attaining such a degree and a sample of their scholarly writing.

Applicants who do not meet all of the criteria for regular admission to the D.M.A. degree program may be granted a 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.

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.

Master of Music

The degree of master of music may be taken in music education, performance, composition, music theory, or music history.

ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

- Master’s degree students must establish an overall grade point average of 3.0.
- 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.
- A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

Graduate-Level Music Theory and Music History Courses

The following graduate-level courses in music theory and music history can be taken to fulfill graduate degree program requirements; the credits for each course are noted:

THEORY COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 460</td>
<td>Upper Division Composition</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 461</td>
<td>Counterpoint</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 462</td>
<td>Counterpoint</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 463</td>
<td>Analysis 18th-19th Cent. Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 464</td>
<td>Analysis 20th-Century Art Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 465</td>
<td>Electronic Music</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 466</td>
<td>Electronic Music-Digital Audio</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 468</td>
<td>Jazz Harmony</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 761</td>
<td>Theory Topics</td>
<td>3-5</td>
</tr>
<tr>
<td>MUSC 762</td>
<td>Pedagogy of Theory</td>
<td>3</td>
</tr>
</tbody>
</table>
MUSC 763  Analytical Techniques  3
MUSC 764  Comp Techniques/Contemp Music  3
Total Hours  30-32

HISTORY COURSES
MUSC 470  European Music Before 1500  3
MUSC 471  16Th & 17Th Century Music  3
MUSC 472  18Th Century Music  3
MUSC 473  19Th Century Music  3
MUSC 474  20Th Century Music  3
MUSC 475  History Of Jazz  3
MUSC 591 - Advanced Topics (subject matter changes)  1-6
MUSC 670  Perspectives of Music History  3
MUSC 731  Keyboard Literature  3
MUSC 791 - Advanced Topics (subject matter changes)  1-6
Total Hours  26-36

In this Section:

1. DOCTOR OF MUSICAL ARTS
- Audition Requirements
- Curriculum
- Candidacy
- Residency Requirements
- Academic Requirements
- Performance Requirements
- Composition Requirements
- Research Requirements
- Final Examination
- Time Limitation

2. DOCTOR OF PHILOSOPHY IN MUSIC EDUCATION
- Coursework
- Examinations
- Candidacy
- Dissertation Prospectus
- Dissertation
- Residence Requirements
- Time Limitation

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), vocal pedagogy and performance, 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.

AUDITION REQUIREMENTS

Have a complete 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 tapes or other recorded formats 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 that allows the applicants 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.

CONDUCTING
An on-campus audition with the WVU Wind Symphony, University Choir, 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–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.

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, music history, and music literature.
• Academic requirements for the D.M.A. in vocal pedagogy will also include courses in vocal pedagogy, voice pathology, and voice acoustics/teaching technology.

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, 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 his/her 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 his/her 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. The research project for vocal pedagogy and performance students must include original research. 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.

For vocal pedagogy and performance candidates, the final examination will be the oral defense of the doctoral research document.

TIME LIMITATION
Following admission to candidacy, doctoral students are allowed five years to complete all remaining degree requirements. An extension of time may be permitted only upon repetition of the qualifying examination and completion of any other requirements specified by the student’s doctoral committee.

Doctor of Philosophy in Music Education
The doctor of philosophy curriculum in music education prepares students for careers as teachers and researchers in higher education. A main purpose of the program is to develop skilled and knowledgeable professionals who will challenge the present and enrich the future with significant contributions to the field through teaching, research, and service. Acceptance into the doctoral program is competitive. A prospective doctoral student in music education is required to have completed appropriate undergraduate and master’s degrees in music or their equivalent at institutions of recognized standing. Also, an applicant must provide evidence of excellence in teaching and musicianship demonstrated during at least three years of successful, full-time contractual K-12 music teaching. Applicants to the program leading to the doctor of philosophy must present necessary credentials for evaluation of previous training and experience to the School of Music. These include transcripts showing 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. The following items must be submitted directly to the Director of Graduate Studies in Music:

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 possible audition.)

Applicants who do not meet all of the criteria for regular admission to the Ph.D. degree program may be granted a 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.

COURSEWORK FOR PH.D. IN MUSIC EDUCATION
MUSIC EDUCATION COURSES
Other Required Courses (eleven–twelve credits): Music History, Music Theory/Composition, Statistics, Educational Psychology

COGNATE COURSES (TWELVE CREDITS TOTAL, NINE CREDITS IN SAME DISCIPLINE)
Anthropology, applied music, art history, audiology, computer science, curriculum and instruction, educational administration, educational foundations, educational psychology, elementary education, foreign language, history, literature, music history, music theory/composition, philosophy, physics, psychology, secondary education, sociology, special education, statistics, and theatre

ELECTIVE COURSES (EIGHT TO NINE CREDITS)
Selected at the discretion of the student in conjunction with an academic advisor.

EXAMINATIONS
WRITTEN QUALIFYING
Each student must demonstrate the following areas of knowledge:

- A broad knowledge in the fields of music history and music theory
- Appropriate knowledge in the cognate field
- In-depth knowledge in the field of music education

ORAL QUALIFYING
The student’s doctoral committee will administer a comprehensive oral examination integral with the written examinations; passage of all is the basis for formal admission to candidacy.

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. Complete all coursework.
2. Complete a major project from a graduate music education seminar. (This project should be appropriately refined and presented publicly under the supervision of a member of the graduate music education faculty. A concise written proposal articulating the scope and context of the project and the nature of its intended forum must be submitted to the graduate music education faculty for consensus approval.)
3. Pass written qualifying examinations demonstrating the following:
   A. Broad knowledge in music history and music theory
   B. Appropriate knowledge in the cognate field (usually integrated into the music education exam)
   C. In-depth knowledge in the field of music education
4. Pass a comprehensive oral qualifying examination.

The qualifying examinations shall be considered as one integral examination consisting of the 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.

DISSERTATION PROSPECTUS
1. The requirement for doctoral seminars must be completed before the presentation of the dissertation prospectus.
2. The prospectus must include the following: table of contents, introduction, statement of purpose, research hypothesis, summary of related literature, specifics of methodology, research design, data collection process, analysis procedures, appendices, and a comprehensive bibliography.

DISSERTATION
The candidate must submit a dissertation produced at WVU under the direction of a major professor that demonstrates a high-order of independent scholarship, originality, and competence in research and that makes an original contribution to the field of specialization.

After the dissertation has been approved and all other requirements have been fulfilled, the candidate’s doctoral committee will administer the final oral examination. However, a final examination will not be given in the same semester as the qualifying examination. At the option of the student’s committee, a final written examination may also be required. The final examination(s) shall be concerned with the dissertation, its contribution to knowledge, its relation to other fields, and the candidate’s grasp of the field of specialization.

RESIDENCE 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 residence in full-time graduate study at WVU beyond the master’s degree or its equivalent.
TIME LIMITATION

Following admission to candidacy, Ph.D. students are allowed five years to complete all remaining degree requirements. An extension of time may be permitted only upon repetition of the qualifying examination and completion of any other requirements specified by the student’s doctoral committee.

MM Collaborative Piano

ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

• Master’s degree students must establish an overall grade point average of 3.0.
• 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.
• A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

M.M. Collaborative Piano Program

Performance Level ten required for admission. Undergraduate piano performance or collaborative piano degree required. Jury required at end of first semester (solo/collaborative). Students need to have appropriate amount of diction at undergraduate level or will be required to register for diction for every semester in residence.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 700E</td>
<td>Performance: Piano</td>
<td>8</td>
</tr>
<tr>
<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 689</td>
<td>Recital (vocal)</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 689</td>
<td>Recital (instrumental)</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 647</td>
<td>Chamber Music: Piano</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>One graduate-level music theory course and one graduate-level music history course</td>
<td>5-6</td>
</tr>
<tr>
<td>Music Electives (no more than four hours in the major performance area)</td>
<td>7-8</td>
<td></td>
</tr>
<tr>
<td>Ensembles (two semesters)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>31-33</td>
<td></td>
</tr>
</tbody>
</table>

MM Composition

ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

• Master’s degree students must establish an overall grade point average of 3.0.
• 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.
• A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

M.M. Composition Program

Prerequisite: Piano proficiency (level four); evaluation of previously completed compositions at a graduate major level.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 660</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 764</td>
<td>Comp Techniques/Contemp Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 761</td>
<td>Theory Topics</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 762</td>
<td>Pedagogy of Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 698</td>
<td>Thesis</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Ensemble (two semesters)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Music Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 465</td>
<td>Electronic Music</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 763</td>
<td>Analytical Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 765</td>
<td>Transcription and Arranging</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

### MM Conducting

**ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS**

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

- Master’s degree students must establish an overall grade point average of 3.0.
- 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.
- A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

### M.M. Conducting Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 700</td>
<td>Performance (major performance area)</td>
<td>8</td>
</tr>
<tr>
<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 710</td>
<td>Conducting</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 711</td>
<td>Conducting Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one survey course (major area)</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 631</td>
<td>Survey of Orchestral Music</td>
<td></td>
</tr>
<tr>
<td>MUSC 632</td>
<td>Survey Of Wind Music</td>
<td></td>
</tr>
<tr>
<td>MUSC 633</td>
<td>Survey Of Vocal Music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one Techniques course (secondary area)</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 780</td>
<td>Choral Techniques</td>
<td></td>
</tr>
<tr>
<td>MUSC 781</td>
<td>Instrumental Techniques</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One 700-level theory course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One graduate-level music theory or music history course</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>Ensemble (2 semesters)</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 689</td>
<td>Masters Recital</td>
<td>2-4</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>31-34</td>
</tr>
</tbody>
</table>

### MM Jazz Pedagogy

**ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS**

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

- Master’s degree students must establish an overall grade point average of 3.0.
• 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.

• A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

M.M. Jazz Pedagogy Program

Prerequisite: Level nine in the major performance area; piano proficiency (level three); one year of jazz pedagogy/group or equivalent teaching experience.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 700</td>
<td>Performance (Major Performance Area)</td>
<td>8</td>
</tr>
<tr>
<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 689</td>
<td>Masters Recital</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 634</td>
<td>Jazz Performance/Pedagogy</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>One graduate-level music theory course or</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>one graduate-level music history course</td>
<td></td>
</tr>
<tr>
<td>MUSC 797</td>
<td>Research</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Ensemble (two semesters)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>31-33</td>
</tr>
</tbody>
</table>

MM Music Education

REQUIREMENTS FOR M.M. MUSIC EDUCATION 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: Field Study Option, Recital Option, Thesis Option, and Certification Option.

At the core of each of the thirty-hour degree options is coursework that immerses students in the foundations and research of music education, performance studies, music history, and music theory. Depending on the degree option a student selects, coursework and culminating projects are tailored to emphasize a specialization in performance, research, or teaching.

M.M. Music Education Program

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 783</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 784</td>
<td>Intro-Research Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Advanced seminars *</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>One graduate-level music theory course and one graduate-level music history course **</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>MUSC 500 or MUSC 700 Performance</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Master’s Field Study</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Music Electives</td>
<td></td>
<td>4-5</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>29-31</td>
</tr>
</tbody>
</table>

* Advanced seminars in music education, methods, workshops, and directed studies. (Maximum of two hours from workshops; maximum of two hours from directed studies.)
** Students who do not take the diagnostic exam in music theory must take MUSC 561 Graduate Theory Review as a prerequisite to any graduate-level theory course. Students who do not take the diagnostic exam in music history must take MUSC 670 Perspectives of Music History as a graduate-level history course.

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 783</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 784</td>
<td>Intro-Research Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Advanced seminars *</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>One graduate-level music theory course and one graduate-level music history course **</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>MUSC 500 or MUSC 700 Performance</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>MUSC 689</td>
<td>Masters Recital (total of 8 hours)</td>
<td>2</td>
</tr>
<tr>
<td>Music electives</td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>29-31</td>
</tr>
</tbody>
</table>

* Advanced seminars in music education, methods, workshops, and directed studies. (Maximum of two hours from workshops; maximum of two hours from directed studies.)

** Students who do not take the diagnostic exam in music theory must take MUSC 561 Graduate Theory Review as a prerequisite to any graduate-level theory course. Students who do not take the diagnostic exam in music history must take MUSC 670 Perspectives of Music History as a graduate-level history course.

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 783</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 784</td>
<td>Intro-Research Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Advanced seminars *</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>One graduate-level music theory course and one graduate-level music history course **</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>MUSC 500 or MUSC 700 Performance</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MUSC 698</td>
<td>Thesis</td>
<td>4</td>
</tr>
<tr>
<td>Music electives</td>
<td></td>
<td>4-5</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>29-31</td>
</tr>
</tbody>
</table>

* Advanced seminars in music education, methods, workshops, and directed studies. (Maximum of two hours from workshops; maximum of two hours from directed studies.)

** Students who do not take the diagnostic exam in music theory must take MUSC 561 Graduate Theory Review as a prerequisite to any graduate-level theory course. Students who do not take the diagnostic exam in music history must take MUSC 670 Perspectives of Music History as a graduate-level history course.

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 487</td>
<td>Student Teaching Seminar - CAP</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 491</td>
<td>Professional Field Experience</td>
<td>10</td>
</tr>
<tr>
<td>MUSC 380</td>
<td>Instrumental Methods/Tech Apps</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 381</td>
<td>Choral Music Methods/Tech Apps</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 382</td>
<td>Gnl Music Methods/Tech Apps</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 783</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 784</td>
<td>Intro-Research Music Education</td>
<td>3</td>
</tr>
</tbody>
</table>
MM Music History

ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master's degree programs:

• Master’s degree students must establish an overall grade point average of 3.0.
• 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.
• A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

M.M. Music History Program

Prerequisite: Audition on principal instrument; submission of writing sample and GRE Scores; two semesters or equivalent proficiency in one language (French, German, Italian, or a language pertaining to the thesis topic); four semesters of undergraduate music theory study; three semesters of undergraduate music history study.

MUSC 771 Music Research & Bibliography 3

Graduate Music History Electives 6

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 470</td>
<td>European Music Before 1500</td>
</tr>
<tr>
<td>MUSC 471</td>
<td>16Th &amp; 17Th Century Music</td>
</tr>
<tr>
<td>MUSC 472</td>
<td>18Th Century Music</td>
</tr>
<tr>
<td>MUSC 473</td>
<td>19Th Century Music</td>
</tr>
<tr>
<td>MUSC 474</td>
<td>20Th Century Music</td>
</tr>
<tr>
<td>MUSC 475</td>
<td>History Of Jazz</td>
</tr>
<tr>
<td>MUSC 670</td>
<td>Perspectives of Music History</td>
</tr>
<tr>
<td>MUSC 791/591</td>
<td>Advanced Topics</td>
</tr>
</tbody>
</table>

Graduate Music Theory Electives 6

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 460</td>
<td>Upper Division Composition</td>
</tr>
</tbody>
</table>
MM Music Theory

ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

- Master’s degree students must establish an overall grade point average of 3.0.
- 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.
- A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

M.M. Music Theory Program

Prerequisite: Level eight in the major performance area; piano proficiency (level four); equivalent undergraduate courses of MUSC 461 16th-century counterpoint and 18th-century counterpoint (MUSC 461 and MUSC 462 will be required if not taken at the undergraduate level.)

MUSC 771 Music Research & Bibliography 3
MUSC 763 Analytical Techniques 3
MUSC 764 Comp Techniques/Contemp Music 3
MUSC 762 Pedagogy of Theory 3
MUSC 761 Theory Topics 3
One graduate-level music history course 3
Electives 8
MUSC 698 Thesis 4
Ensemble (two semesters) 2
Total Hours 32

MM Performance

PERFORMANCE MAJORS MAY SPECIALIZE IN THE FOLLOWING:

- piano
- piano pedagogy
• collaborative piano
• voice
• percussion
• flute
• oboe
• clarinet
• bassoon
• saxophone
• horn
• trumpet
• trombone
• tuba
• violin
• viola
• cello
• double bass
• guitar
• jazz pedagogy
• conducting

ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS
In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

• Master’s degree students must establish an overall grade point average of 3.0.
• 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.
• A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

M.M. Performance Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 700</td>
<td>8</td>
</tr>
<tr>
<td>MUSC 689 Masters Recital</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 689 Masters Recital</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 771 Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>One graduate-level music theory course and one graduate-level music history course</td>
<td>5-6</td>
</tr>
<tr>
<td>Music Electives (no more than four hours in the major performance area)</td>
<td>7-8</td>
</tr>
<tr>
<td>Ensemble (two semesters)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>31-33</strong></td>
</tr>
</tbody>
</table>

MM Piano Pedagogy

ADDITIONAL REQUIREMENTS FOR MASTER’S DEGREE PROGRAMS
In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

• Master’s degree students must establish an overall grade point average of 3.0.
• 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.
• A general comprehensive oral examination must be passed by all candidates for the master of music degree. 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.

M.M. Piano Pedagogy Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>MUSC 700E</td>
<td>Performance:Piano</td>
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<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
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<td>MUSC 689</td>
<td>Masters Recital</td>
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<td>MUSC 630</td>
<td>Keyboard Performance/Pedagogy</td>
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<td>One graduate-level theory course or one graduate-level musc history course</td>
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<td>Music Electives</td>
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<td>Ensembles (2 semesters)</td>
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School of Theatre & Dance
e-mail: theatre@mail.wvu.edu

Degree Offered
Master of Fine Arts Theatre with an emphasis in any of the following:

• Acting
• Scene Design & Technology
• Costume Design & Technology
• Lighting Design & Technology

The School of Theatre & Dance at WVU offers the master of fine arts as the terminal degree in acting and theatre design (scene, costume, and lighting). The MFA Theatre program is accredited by the National Association of Schools of Theatre (NAST).

FACULTY

DIRECTOR
• Joshua Blackmer Williamson - M.F.A. (University of Wisconsin, Madison)

PROFESSORS
• Jerry McGonigle - M.F.A. (American Conservatory Theatre)
  Acting, Directing
• Joann Spencer Siegrist - M.F.A. (University of Georgia)
  Puppetry, Creative Drama

ASSOCIATE PROFESSOR
• Jessica Morgan Bishop - M.F.A. (Ohio State University)
  Stage Movement
• Laura Hitt - M.A. (Brown University)
  Voice and Speech
• Robert Klingelhofer
  Scene Design
• Jay Malarcher - Ph.D. (Louisiana State University)
  Theatre History and Criticism
• Mary McClung - M.F.A. (West Virginia University)
Director of Costuming, Costume Design
- Linda D. Milian - M.F.A. (Rutgers University)
- William J. Winsor - M.F.A. (Ohio State University)

Associate Dean, Scenography
- Joshua Blackmer Williamson - M.F.A. (University of Wisconsin, Madison)

ASSISTANT PROFESSORS
- Lee Blair - M.F.A. (University of Florida)
  Acting
- Roger Smart - M.F.A. (University of California, Irvine)
  Acting, Directing

CLINICAL ASSISTANT PROFESSOR
- Alan McEwen - M.F.A. (University of Oregon)
  Lighting, Sound Design
- Steven Neuenschwander - M.F.A. (Yale University)
  Production Management, Technical Direction

Admission
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, address inquiries to the School of Theatre & Dance, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-611, visit 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 division chairperson at the time of application.

Master of Fine Arts Degree in Theatre
For the master of fine arts degree, students must complete requirements for one of the following Areas of Emphasis:

- Acting Emphasis
- Costume Design and Technology Emphasis
- Lighting Design and Technology Emphasis
- Scene Design and Technology Emphasis

Acting Emphasis

ACTING EMPHASIS
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.
MFA acting students are accepted every three years and must follow the prescribed course sequence in the order that they are offered. The next entrance date will be Fall 2015 and The School of Theatre and Dance will be recruiting and auditioning students in the 2014-15 academic year.

Graduation from the program is contingent upon completion of the following:

- Three years of graduate courses and production work totaling at least sixty-six designated credit hours and three elective graduate credits
- A final thesis project including both a performance of a significant role or roles and a thesis paper exploring aspects of the creation and performance of this role
- Oral defense of this thesis
- A successful evaluation of the student’s performance in the graduate acting studio program at the end of each semester of study

### Curriculum Requirements

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<tr>
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<th>Course Title</th>
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<td>Graduate Stage Movement 1</td>
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<td>Graduate Acting Studio 1</td>
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<td>THET 545</td>
<td>Graduate Acting 2</td>
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<td>THET 610</td>
<td>Research Methods</td>
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<td>Adv Grad Stage Movement</td>
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<td>THET 750</td>
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<td>THET 650</td>
<td>Grad Study in Musical Theatre</td>
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<td>THET 698</td>
<td>Thesis</td>
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<td>THET 751</td>
<td>Showcase Development</td>
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<td>THET 690</td>
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Advance Study Elective

Total Hours 62

### Suggested Plan of Study

#### First Year

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<th>Spring</th>
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#### Second Year

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<tr>
<td>THET 642</td>
<td>2 THET 643</td>
<td></td>
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</table>
**Costume Design and Technology Emphasis**

**DESIGN & TECHNOLOGY EMPHASIS**

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

## Curriculum Requirements

### Theatre Studies

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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<tr>
<td>THET 610</td>
<td>Research Methods</td>
<td>3</td>
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<tr>
<td>THET 627</td>
<td>Graduate Costume &amp; Decor 1</td>
<td>3</td>
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<td>THET 628</td>
<td>Graduate Costume &amp; Decor 2</td>
<td>3</td>
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<tr>
<td>THET 697</td>
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### Theatre Design and Technology

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<td>THET 425</td>
<td>Advanced Costume Construction</td>
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<td>THET 520</td>
<td>Principles of Stage Lighting</td>
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<td>THET 621</td>
<td>Graduate Theatre Make-up</td>
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<td>THET 622</td>
<td>Graduate Scene Design</td>
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<td>THET 624</td>
<td>Graduate Costume Design 1</td>
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### Practicum

Four 600 Practicums

### Electives

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Scene Design and Technology Emphasis

SCENE DESIGN & TECHNOLOGY EMPHASIS

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

Curriculum Requirements

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<td>THET 610 Research Methods</td>
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<td>THET 698 Thesis</td>
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<td>THET Performance Design</td>
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<td>THET 424 Advanced Technical Production</td>
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<td>THET 520 Principles of Stage Lighting</td>
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<td>THET 622 Graduate Scene Design</td>
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<td>THET 623 Advanced Graduate Scene Design</td>
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<td>THET 629 Graduate CAD Seminar</td>
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<td>THET 630 Graduate Rendering Techniques</td>
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<tr>
<td>THET 631 Graduate Drafting for Stage</td>
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<td>THET 635 Graduate Scene Painting</td>
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Practicum

Four THET 600 Practicum

12 Theatre Electives

Total Hours

61

Lighting Design and Technology Emphasis

DESIGN & TECHNOLOGY EMPHASIS

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

## Curriculum Requirements

### Theatre Studies

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<td>Graduate Costume &amp; Decor 1</td>
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### Theatre Performance/Design

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<td>THET 520</td>
<td>Principles of Stage Lighting</td>
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<td>THET 613</td>
<td>Stage Management</td>
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<td>Graduate Scene Design</td>
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<td>Graduate Rendering Techniques</td>
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<td>Graduate CAD Seminar</td>
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<td>THET 631</td>
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### Practicum

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### Electives

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### Total Hours

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</table>
School of Dentistry

Degrees Offered

- D.D.S. in Dentistry
- M.S. in Dental Specialties (Endodontics, Orthodontics, and Prosthodontics)
- M.S. in Dental Hygiene
- B.S. in Dental Hygiene

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

It is the mission of the West Virginia University School of Dentistry to promote 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 dental hygiene, 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 dental 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 chancellor 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 service 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.

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.
Academy of Dentistry for Persons with Disabilities. The Academy of Dentistry for Persons with Disabilities is an international organization for dental students and dental hygiene students interested in management and treatment of special care patients. Community services are provided by assisting with Special Olympics and presenting disability awareness programs to area grade schools. Guest speakers are sponsored on topics such as: “Managing the Hearing Impaired Patient in the Dental Office,” “Use of Restraint in Treating Patients with Disabilities,” and “Child Abuse and Neglect in Special Needs Children.”

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.

ADMINISTRATION

DEAN
- David A. Felton - D.D.S. (University of North Carolina)

ASSOCIATE DEANS
- Christina B. DeBiase - Ed.D. (West Virginia University) Academic and Postdoctoral Affairs
- Shelia S. Price - D.D.S. (West Virginia University) Recruitment and Access

ASSISTANT DEAN
- Robert L. Wanker - D.D.S. (West Virginia University) Student and Alumni Affairs

PROFESSORS
- Mohssen Ghalichebaf - D.D.S. (University of Istanbul) Restorative Dentistry
- Harold Reed - D.D.S. (West Virginia University) Periodontics

ASSOCIATE PROFESSORS
- Eros Chaves - D.D.S. (The University of Campinas Brazil) Periodontics
- Chris A. Martin - D.D.S. (West Virginia University) Orthodontics
- Timothy J. Tremont - D.D.S. (University of Pittsburgh) Orthodontics

ASSISTANT PROFESSOR
- Bryan Dye - D.D.S. (West Virginia University) Restorative Dentistry

PROGRAM DIRECTORS
- Anthony T. Borgia - D.D.S. (Georgetown University) Endodontics
- Peter Ngan - D.M.D. (Harvard University)
Dental Hygiene

Degrees Offered
- Bachelor of Science in Dental Hygiene
- Master of Science in Dental Hygiene

The Profession
Dental hygiene is an exciting profession with many rewarding and challenging career opportunities which include clinical/patient care, administration, education, research, and sales/marketing. Dental hygienists are employed in diverse settings such as private dental practices; clinics; hospitals; geriatric dental educational programs; national, state, and local government agencies; and private/business industry. As a licensed health professional and oral health educator, the dental hygienist has an important role in the overall health and welfare of the public. The dental hygienist is an integral part of the dental team, providing direct patient care based on the prevention of disease. The duties and responsibilities of dental hygienists vary from state to state but may include oral prophylaxis (removing stains and deposits from teeth); root debridement; exposing radiographs; application of preventive and therapeutic agents; local delivery of antimicrobial agents; nutritional counseling; oral, head, and neck cancer screenings; monitoring nitrous oxide sedation; and administration of local anesthesia. The educational background of a dental hygienist provides the knowledge, attitudes, and skill necessary to be successful in a wide variety of careers. From providing clinical care to research to public administration, dental hygiene opens the door to many successful career options.

Nature of the Program
The establishment of the integrated baccalaureate degree in dental hygiene program at West Virginia University in September 1961 was a milestone in dental hygiene education. The program stands out as one of the top dental hygiene programs nationally as shown by the students' commitment to excellence. With the addition of the degree completion program in 1987 and the master of science program in 1989, the Division of Dental Hygiene provides graduates the opportunity to further their education. The integrated curriculum in dental hygiene combines the advantages of both liberal arts and the professional aspects of education. Graduates from the program are awarded a bachelor of science degree in dental hygiene, with the option to obtain a master of science degree with the completion of a minimum of one additional year.

The dental hygiene curriculum is rigorous and provides excellent preparation for the practice of dental hygiene in numerous practice settings. The curriculum requires successful completion of a total of 136 hours and was constructed in accordance with the standards specified for a school of dental hygiene by the American Dental Association Commission on Dental Accreditation. The program has been fully accredited by this organization since 1965.

The dental hygiene program has a strong commitment to providing care and educational programs to residents of West Virginia, which is demonstrated by the required 100 hours of service learning and clinical care courses. To provide students in dental hygiene program with the necessary clinical experience that is required, the School of Dentistry maintains and operates dental clinics in the Robert C. Byrd Health Sciences Center School of Dentistry. Through the West Virginia Rural Health Education Program (WVRHEP), students are required to provide direct patient care for the citizens of West Virginia at a rural site during the summer session between their junior and senior year.

The dental hygiene program has an excellent reputation for producing outstanding clinicians and many faculty members as well as graduates are recognized as leaders in dental education and organized dentistry.

Academic and Professional Standards

DENTAL HYGIENE - STUDENT RIGHTS AND RESPONSIBILITIES
(Effective for all undergraduate students enrolled in the Dental Hygiene Program)

I. Preamble

By enrolling in the Dental Hygiene program of West Virginia University, the student accepts the academic and professional standards/requirements outlined herein as requisite for continued enrollment in this curriculum and graduation. Knowledge of and conformity to these standards/requirements are the students' responsibility.
Students enjoy the rights specified in the West Virginia University Board of Governors Policy #10 which include freedom of expression and assembly, freedom of association, and privacy.

Students are expected to abide by federal, state, and local statutes and ordinances, both on and off campus, refrain from behavior incompatible with the responsibilities of the dental profession, and follow the specific rules of conduct established in West Virginia University Board of Governors Policy #10.

In all disciplinary proceedings, students are considered innocent until allegations with regard to violations of this policy have been established by clear and convincing evidence.

II. Professional Performance Standards

A. Personal Appearance:

Students are required at all times to be in compliance with the requirements of dress and appearance contained in the document entitled *WVU School of Dentistry Policy on Professional Appearance* (Appendix A).

B. Personal Behavior/Conduct:

Students are required at all times to be in compliance with the *Student Code of Academic and Professional Behavior* (Appendix B).

III. Dental Hygiene Academic Policies

At mid-term and the conclusion of every semester, the Dental Hygiene Committee on Academic and Professional Standards reviews the status of every student in the program. The committee may also convene more frequently as any Professional/Academic situations arise. The Committee recommends promotion, probation, suspension, or dismissal to the dean of the School of Dentistry.

If students fulfill all course requirements, meet all professional standards, and have the necessary grade point averages, promotion is unconditional.

A. All students enrolled in the Dental Hygiene Program must maintain full-time status and meet with the Director prior to making any changes to their prescribed schedule. Alterations in your schedule could adversely affect your ability to meet Program expectations and could result in sanctions up to and including dismissal.

B. Students must maintain cumulative and dental hygiene/science grade point averages of 2.25 (2.5 for the incoming freshman class, effective fall 2011) or higher. The dental hygiene/science grade point average is based upon the average of grades earned in all attempts of the following courses, or their equivalent:

C. A grade of F in a dental hygiene/science course or failure to attain a 2.25 (2.5 for the incoming freshman class, fall 2011) cumulative or dental hygiene/science grade point average in any semester will result in placing a student on probation.

D. Students on probation who do not raise their cumulative or dental hygiene/science grade point average to 2.25 (2.5 for the incoming freshman class, fall 2011) or better the following semester may be dismissed from the Dental Hygiene program.

E. A student who receives a grade of D, F, W, or WU in a required dental hygiene/science course must repeat that course. These courses may only be repeated ONCE. Failure to earn a grade of C or better on the student’s second attempt will result in dismissal from the Dental Hygiene program.

F. A student may repeat only TWO dental hygiene/science courses throughout the Dental Hygiene curriculum. A third D or F in a dental hygiene/science course may require the student to repeat the year as a full-time student as determined by the Academic and Professional Standards Committee. Four or more grades of D or F will result in dismissal from the Dental Hygiene program, and the student will be ineligible for readmission to the Program.

G. The Dental Hygiene Program will acknowledge West Virginia University’s D/F repeat policy in relationship to determining the overall grade point average, hours attempted and hours earned. The Program will utilize both grades (attempts) to determine the dental hygiene/science grade point average. Rectifying one or more grades of D, F, W, or WU through the D/F repeat policy does not negate recognizing the original grade (1st attempt) by the Program in determining the sanctions associated with the number of courses.

H. Students repeating the year are required to repeat any dental hygiene courses in which they were enrolled that year and earned a grade of C or below. The Academic and Professional Standards Committee may also prescribe any additional course to enhance the student’s academic progress and psycho-motor skills.

I. Prior to entrance into the fall semester of the sophomore (2nd) year, a student must have successfully completed Chemistry 111/112.

J. Prior to entrance into the major, a student must pass all Basic Science courses required in the first two years of the curriculum.
K. Dental hygiene/science pre-requisite courses in which students earn a grade of D, F, W, or WU must be repeated prior to the student’s progression to the next course in that sequence and at the discretion of the Academic and Professional Standards Committee, which may result in repeating the year.

L. The Division of Dental Hygiene reserves the right to recommend imposition or academic sanctions, to require remedial work, or to withhold the opportunity to take one or more licensing exams. This policy would affect any student who may have met formal curriculum requirements but who lacks the professional skills and/or behavior and conduct considered necessary for the baccalaureate degree in Dental Hygiene.

M. Students recommended for dismissal have the opportunity for due process by writing to the Academic and Professional Standards Committee within five working days of receipt of the written notice and may be asked to meet in person with the recommending Committee. (See Academic Sanctions: Procedures and Appeals in the WVU Student Handbook.) The dean may accept, modify, or reject the Academic and Professional Standards Committee’s recommendation. The dean’s decision is final.

N. Successful completion of the National Dental Hygiene Board Examination is a requirement for graduation. Failure to produce evidence of taking this examination before the first day of the spring semester of the senior year will result in academic sanctions up to and including repeating the year or dismissal.

O. All students are also required to take a clinical board for licensure prior to graduation.

P. The School of Dentistry Division of Dental Hygiene reserves the right to declare a student ineligible for any licensure examination (national, regional, or state boards).

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FACULTY

DIRECTOR
• Amy D. Funk - M.S.D.H.

PROFESSORS
• Michael D. Bagby - D.D.S. (Loyola University)
  Biomaterials, Restorative Dentistry
• Richard J. Crout - D.M.D. (University of Pittsburgh)
  Periodontics, Drug Therapy and Pharmacology
• Christina B. DeBiase - Ed.D. (West Virginia University)
  Curriculum and Instruction, Special Patient Care
• Mohssen Ghalichebaf - D.D.S. (University of Istanbul)
  Maxillofacial Prosthetics
• Elizabeth C. Kao - D.M.D. (University of Pennsylvania)
  Restorative Dentistry
• Peter W. Ngan - D.M.D. (Harvard University)
  Orthodontics, Craniofacial Growth and Development, Appliance Therapy
• Shelia S. Price - D.D.S. (West Virginia University)
  Diagnostic Sciences, Health Awareness, Education Leadership
• Thomas F. Razmus - D.D.S. (University of Michigan)
  Radiology/Imaging, Oral Medicine, Treatment Planning
• Robert N. Stuchell - D.M.D. (University of Pittsburgh)
  Preventive Dentistry, Treatment Therapy
• John G. Thomas - Ph.D. (Syracuse University)
  Periodontology
• Bryan D. Weaver - D.D.S. (West Virginia University)
  Oral and Maxillofacial Surgery

ASSOCIATE PROFESSORS
• Cathryn L. Frere - M.S.Ed. (University of Southern California)
  Dental Hygiene
• C. Russell Jackson - D.D.S. (West Virginia University)
  Endodontics, Pulpal Trauma
• Chris A. Martin - D.D.S. (West Virginia University)
  Orthodontics
• Harold H. Reed - D.D.S. (West Virginia University)
Prosthodontics
- Mark W. Richards - D.D.S (University of Washington)
  Prosthodontics, Implantology
- Louise Tupta-Veselicky - D.D.S. (West Virginia University)
  Periodontics, Treatment Therapy

Admission Requirements

The program’s admission requirements are as follows:

- Meet WVU requirements for admission to graduate study. Applicants who do not meet the minimum requirements for admission must gain provisional acceptance into the program. All provisions of admission must be met no later than completion of the eighteenth credit hour to be reclassified as a regular student. A student who fails to meet the provisions of admission or who fails to meet the required GPA will be suspended.
- Possess a baccalaureate degree in dental hygiene from an accredited dental hygiene program or a baccalaureate degree in another field of study from an approved institution of higher education while holding a certificate or associate’s degree in dental hygiene from a program fully accredited by the American Dental Association Commission on Dental Accreditation.
- Demonstrate evidence of scholastic and clinical achievement to indicate the applicant’s ability to progress in a program of this nature. Generally, a minimum grade point average of 3.0 or above on a 4.0 scale on all college work attempted is required.
- Complete the Graduate Record Examination (GRE) with an acceptable score within the last five years.
- Submit all information requested in the graduate application to the Office of Academic and Postdoctoral Affairs.
- Consent to and pass a criminal background investigation prior to final acceptance.

e-mail: afunk@hsc.wvu.edu

Degree Offered

- Master of Science

The School of Dentistry and its Division of Dental Hygiene offer a program of advanced study leading to the degree of master of science. This program requires a minimum of thirty-eight semester hours through full-time or part-time enrollment in the School of Dentistry. It is designed to qualify dental hygienists for careers in teaching, administration, research, and management.

Inquiries concerning this program should be directed to the Office of Academic and Postdoctoral Affairs, School of Dentistry. Applications should be filed by July 1 for fall admission and by October 15 for spring enrollment.

Degree Requirements — Master of Science Degree

- Complete a minimum of thirty-eight semester credit hours: twenty-six required credit hours and twelve credit hours in an elective area(s) of dental hygiene specialization. Two elective areas of specialization are offered. These areas are teaching/administration and special patient care. The student chooses one area of study. Courses within these specializations are taught by a number of schools or colleges within the University. An individualized program will be devised for each student.
- Complete a maximum of six hours in research (part of the twenty-eight hours required by the program) leading to an acceptable thesis.
- Oral defense of the thesis is required.
- Student teaching in the undergraduate clinic a minimum of one semester.

GPA

In order to earn a master’s degree in dental hygiene students must also meet the following:

- Achieve of a 3.0 GPA or an overall academic average of at least a B in all work attempted in the master’s program. A grade of C or below in one course will require a faculty review of the student’s progress. A second C or below will result in dismissal from the program. A student may repeat only one course one time to bring the GPA up to the 3.0 requirement.
- Remove all conditions, deficiencies, and incomplete grades from the student’s transcript. Credit hours for courses with a grade lower than C do not count toward degree requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 689</td>
<td>Cultural Diversity -Classroom</td>
<td>3</td>
</tr>
<tr>
<td>DTHY 678</td>
<td>Dental Hygiene Teaching Method</td>
<td>2</td>
</tr>
<tr>
<td>DENT 687</td>
<td>Research Methods</td>
<td>1</td>
</tr>
<tr>
<td>PUBH 601</td>
<td>Intro Community/Public Health</td>
<td>3</td>
</tr>
<tr>
<td>DTHY 679</td>
<td>Clinical Evaluation</td>
<td>2</td>
</tr>
</tbody>
</table>
DTHY 680  Dental Hygiene Sem/Practice 1  3
DTHY 690  Teaching Practicum  1
DTHY 697  Research  6

Elective area(s) of dental hygiene specialization - choose from the following:  17
- Business & Economics courses
- Educational Psychology courses
- Medicine (Community Health Promotion)
- Multidisciplinary Students Program
- Human Resources and Education

Total Hours  38

* Courses taught by the schools of:
  Business and Economics
  Educational Psychology
  Medicine (Community Health Promotion) and the
  Multidisciplinary Students Program
  Human Resources and Education

Doctor of Dental Surgery

Doctor of Dental Surgery

The WVU School of Dentistry is dedicated to fostering a humanistic learning environment and preparing students to meet the oral health needs of a diverse society. A dental degree offers a variety of career options including private practice, teaching, research, and public health dentistry. In addition to the Doctor of Dental Surgery (DDS) degree, specialty practice areas may be pursued by advanced training. Oral health professionals are essential members of the health care team. Emerging research indicates oral systemic health linkages and profound oral health disparities. The School of Dentistry engages students in a plethora of educational research experiences to identify reasons for these disparities and to develop culturally sensitive interventions.

Due to the large number of applications received each year 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 to the Higher Education Policy Commission Rules and Policies, Series 25. The dental admissions committee utilizes a holistic selection process. It does not set absolute minimum Grade Point Averages (GPA) and Dental Admission Test (DAT) scores. Competition for admission has elevated the academic profile of admitted candidates to a rather high plateau. Nonresident applicants generally have earned a GPA of 3.75 or above and DAT scores of 19 or above. The School of Dentistry recognizes the importance of diversity in fulfilling its mission and strongly encourages individuals from diverse backgrounds to apply.

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 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 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.

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 convened for their class. 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. 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 prior to entering school and are required to acknowledge by their signature that they have read and accepted the conditions set by the material contained therein. At the completion of each academic term, following the Committee on Academic and Professional Standards meetings, the status of each student is reported to the dean. The committee may recommend 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.

**Admission Requirements**

Admission to the WVU School of Dentistry 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 the time of 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 admission committee. Detailed information is available on the dental admissions webpage: http://dentistry.wvu.edu/admissions.

Applications should be submitted in the summer or early fall of the year prior to anticipated enrollment. Candidates for the D.D.S. degree must have abilities and skills of five varieties including observation; communication; motor; intellectual, conceptual, integrative, quantitative; behavioral and social. Technological compensation can be made for some disabilities in certain areas, but a candidate should be able to perform in a reasonably independent manner. (Refer to the School of Dentistry website for additional details about technical standards).

Applicants for admission must also present evidence of having successfully completed at least three years of college course work in U.S. or Canadian colleges or universities. To be considered for admission, applicants must have completed a minimum of ninety semester credit hours at the time of application. The prerequisites for admission include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English composition and rhetoric, or equivalent</td>
<td>6</td>
</tr>
<tr>
<td>Zoology or Biology (with laboratory)</td>
<td>8</td>
</tr>
<tr>
<td>Inorganic Chemistry (with laboratory)</td>
<td>8</td>
</tr>
<tr>
<td>Organic Chemistry (with laboratory)</td>
<td>8</td>
</tr>
<tr>
<td>Physics (with laboratory)</td>
<td>8</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>8</td>
</tr>
<tr>
<td>Anatomy (Comparative or Human)</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>44</td>
</tr>
</tbody>
</table>

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 for a well-rounded intellectual background for the study and practice of dentistry. The School of Dentistry participates in the Associated American Dental Schools Application Service (AADSAS).

All applications must be submitted online via AADSAS at http://www.adea.org. The AADSAS application becomes available in the beginning of June each year. November 1st is the deadline for submission of a completed AADSAS application for the West Virginia University School of Dentistry. The Dental Admissions Committee uses a rolling admissions process and begins admitting highly qualified individuals on December 1, applicants to the DDS program are strongly encouraged to apply early. Each applicant is required to have letters of recommendation submitted to AADSAS. Specific information regarding letter of recommendation requirements is available on the School of Dentistry website. 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) website www.ada.org. DAT scores must be submitted by November 1st of the year preceding the date of anticipated matriculation. The Dental Admission Committee evaluates all AADSAS applications and invites selected applicants to submit a secondary (WVU) application.

Applicants who are West Virginia residents are usually interviewed, although the admissions committee may elect not to interview an unrealistic applicant. Selected non-resident applicants will be invited to interview depending on their qualifications. Individuals who receive provisional acceptance must obtain criminal background clearance and provide documentation of the specified immunizations prior to matriculation.

**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 must:

1. Submit an application through the Associated American Dental Schools Application Service (AADSAS) by November 1. To obtain additional information, please refer to the general admissions requirements, which include completion of at least 90 semester credit hours at a U.S. or Canadian College or University prior to application submission.
2. Provide documentation of a D.D.S. or D.M.D. degree (or equivalent) from a non-U.S. dental school.

3. Demonstrate proficiency in the English language as demonstrated by performance on the Test of English as a Foreign Language (TOEFL) - paper-based minimum score of 500 or computer-based minimum score of 173 or internet-based test minimum score of 61 - and completion of English 1 and English 2 (or equivalent) at an accredited U.S. college or university earning grade of C or above.

4. Provide three letters of recommendation by college instructors who are familiar with the applicant, excluding family members.

5. Submit Dental Admission Test (DAT) scores showing at least average competence in the various subsections of the test - 17 minimum score, or provide evidence of having successfully passed the National Board Dental Examination, Part I, within five years preceding the application.

6. Have all previous coursework from non-U.S. colleges evaluated by Educational Credential Evaluators (ECE) or the World Educational Services (WES). An official or certified copy of the evaluation must be provided to WVU. The applicant is responsible for payment of fees for this service.

7. Provide official transcripts from all schools attended in the original language of issue.

If granted an interview, applicants must present to the school for personal interview with the admissions committee. Applicants who are invited for an interview must complete the secondary (institution) application for admission and submit the associated fees. The transcripts of international dental graduates who are approved for an interview will be evaluated by the WVU Office of Admission, International unit. West Virginia residents will be given priority consideration.

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 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 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.

Curriculum Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 705</td>
<td>General Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>DENT 700</td>
<td>Anesthesiology</td>
<td>1</td>
</tr>
<tr>
<td>DENT 701</td>
<td>Art/Science: Prevent Dentistry</td>
<td>2</td>
</tr>
<tr>
<td>DENT 703</td>
<td>Introduction to Patient Care</td>
<td>3</td>
</tr>
<tr>
<td>DENT 704</td>
<td>Operative Dentistry</td>
<td>4</td>
</tr>
<tr>
<td>DENT 707</td>
<td>Intro to Clinical Dentistry</td>
<td>2</td>
</tr>
<tr>
<td>DENT 710</td>
<td>Dental Anatomy &amp; Occlusion</td>
<td>4</td>
</tr>
<tr>
<td>DENT 711</td>
<td>Periodontics</td>
<td>2</td>
</tr>
<tr>
<td>DENT 712</td>
<td>Dental Materials</td>
<td>3</td>
</tr>
<tr>
<td>DENT 715</td>
<td>Intro-Community Dentistry</td>
<td>2</td>
</tr>
<tr>
<td>DENT 719</td>
<td>Pedodontics</td>
<td>1</td>
</tr>
<tr>
<td>DENT 721</td>
<td>Endodontics</td>
<td>2</td>
</tr>
<tr>
<td>DENT 722</td>
<td>Tooth-Colored Restorations</td>
<td>4</td>
</tr>
<tr>
<td>DENT 725</td>
<td>Practice Management</td>
<td>1</td>
</tr>
<tr>
<td>DENT 726</td>
<td>Removable Partial Dentures</td>
<td>7</td>
</tr>
<tr>
<td>DENT 727</td>
<td>Dental/Maxillofacial Radiology</td>
<td>2</td>
</tr>
<tr>
<td>DENT 729</td>
<td>Gold Dirct/Indirect Restoratn</td>
<td>3</td>
</tr>
<tr>
<td>DENT 730</td>
<td>Community Dentistry</td>
<td>2</td>
</tr>
<tr>
<td>DENT 731</td>
<td>Occlusion</td>
<td>2</td>
</tr>
<tr>
<td>DENT 733</td>
<td>Adv Endo Theory and Practice</td>
<td>1</td>
</tr>
<tr>
<td>DENT 734</td>
<td>Complete Dentures</td>
<td>6</td>
</tr>
<tr>
<td>DENT 735</td>
<td>Pediatric Dentistry</td>
<td>1</td>
</tr>
<tr>
<td>DENT 737</td>
<td>Treatment Planning</td>
<td>2</td>
</tr>
<tr>
<td>DENT 739</td>
<td>Oral Surgery</td>
<td>1</td>
</tr>
</tbody>
</table>
DENT 740  Periodontics  1
DENT 744  Diagnosis/Treatment Planning  1
DENT 745  Principles of Orthodontics  1
DENT 746  Orthodontic Techniques  1
DENT 747  Mgt Medical/Dental Emergencies  1
DENT 751  Occlusion  1
DENT 752  Community Dentistry  2
DENT 754  Introduction-Dental Implantlgy  2
DENT 756  Fixed Prosthodontics: Part 1  4
DENT 757  Fixed Prosthodontics: Part 2  4
Taken twice for 2 hours each:
  DENT 758  Senior Seminar  4
  DENT 759  Oral Surgery  2
  DENT 761  Pedodontics  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 773  Composite Restorations  1
  DENT 774  Principles of Medicine  2
  DENT 775  Practice Management  6
  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  4
  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 789  Fixed Prosthodontics  5
MICB 702  Microbiology  5
NBAN 718  Dental Histology  6
NBAN 724  Human Gross Anatomy  7
PATH 728  General Pathology  5
PATH 738  Oral Pathology 1  3
PATH 753  Oral Pathology 2  2
PATH 755  Clinico-Pathlgc Corrlatn Conf  1
PCOL 760  Pharmacology & Therapeutics  5
PSIO 743  Fundamentals of Physiology  5

Total Hours  196

Suggested Plan of Study

First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
</tr>
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**Second Year**

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Total credit hours: 196

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**Endodontics**

**Degree Offered**

- Master of Science
General Information

The School of Dentistry and the Department of Endodontics 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 and two summer sessions) of full-time residency in the School of Dentistry. It is designed to qualify dentists for careers in endodontic clinical practice, teaching, and research.

A stipend plus tuition waiver will be provided for graduate students in Endodontics at the end of the second year for the Summer Session and Fall/Spring Semesters. 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 and Recruitment. 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 Department website at http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Master-of-Science-in-Endodontics.

Program Goals

• Provide the education and training necessary for graduate dentists to practice in the specialty of Endodontics.
• Provide the basis for a specialist in Endodontics to achieve Board Certification in Endodontics.

Graduate Courses

Advanced Oral Surgery: Advanced study of therapeutics, hospital protocol, and surgical aspects of oral surgery involving lectures, seminars, demonstrations, and clinical applications.

Advanced Topics: Biomedical Sciences Module Series: The Biomedical Sciences Module series has been designed as an online course for students enrolled in the advanced education programs in the WVU School of Dentistry. Three modules currently exist. They include pharmacology, anatomy/histology/embryology, and microbiology/immunology/genetics.

The content of these modules focuses on the clinical application of each of the biomedical sciences to dentistry. Cases will be used to integrate theory and practice. Students will attend a virtual classroom by viewing online lectures, reading prescribed materials, and interacting with faculty and classmates through an online discussion forum.

Advanced Topics: Investigation of advanced topics not covered in regularly scheduled courses.

Applied Biostatistics for Health: Statistical models, distributions, probability, random variables, tests of hypotheses, confident intervals, regression, correlation, transformations, F and Chi-square distributions, analysis of variance and multiple comparisons.

Clinical Endodontics: Graduate of an accredited dental school and admission to the Advanced Education Program in Endodontics or consent. Clinical endodontic practice in the areas of: ordinary endodontic cases, complex endodontic cases, hemisection, root amputation, replantation, transplantation, endodontic implantation, vital pulp therapy, apexification, and bleaching.

Endodontic Theory: Provides seminar discussions in the topics of: basic endodontic techniques, advanced endodontic techniques, endodontic literature review, case presentation, and advanced endodontic theory.

Research: Research activities leading to a thesis, problem report, research paper, or equivalent scholarly project.

Special Studies in Oral Pathology: Advanced study of local or systemic disease processes affecting oral structures through seminars.

Teaching Practicum: Supervised practice in college teaching of dentistry.

FACULTY

DIRECTOR
• Takashi Komabayashi - D.D.S. (University of California San Francisco & Hiroshima University)

CHAIR
• Anthony T. Borgia - D.D.S. (Georgetown University)

Admission Requirements

The program’s requirements are as follows:
• Must have passed the National Dental Board Examination—Part 1 and Part 2.
• Must have earned a D.M.D. or D.D.S. degree, or equivalent.
• Must be a graduate of an accredited US or Canadian Dental School.
• Complete and submit a WVU Graduate Application.
• Must be proficient in the English language and report most 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. Generally, a minimum grade-point average of 3.0 is required.
• Must apply to the program through the Postdoctoral Application Support Service (PASS) http://www.adea.org/ and have all application materials submitted by August 1. For more detailed information, go to the School of Dentistry website (http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Master-of-Science-In-Endodontics).
• 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 meet certain Federal and University standards regarding the Responsible Conduct of Research (RCR). To comply with these standards, all individuals admitted to the Doctor of Dental Surgery (DDS) and dental graduate programs must successfully complete the Biomedical Responsible Conduct of Research (BRCR) online course offered by the Collaborative Institutional Training Initiative (CITI). The BRCR course must be completed no later than 30 days after beginning your first semester in the education program. Failure to satisfy this requirement within the specified period of time will impact your enrollment.
• Must become familiar with the West Virginia University School of Dentistry’s policy and procedure for Bloodborne Pathogens and Infectious Diseases.

Degree Requirements — Master of Science degree

• Fulfill University requirements for graduate study.
• Complete thirty-four months (three academic years and two summer sessions) 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.
• Must satisfactorily pass a final oral examination.
• Must successfully complete all didactic and clinical work in the required curriculum.
• Must demonstrate satisfactory clinical competency in endodontics.
• Complete a minimum of eighty-five credit hours, including forty-eight hours of endodontic courses, a minimum of nineteen hours of selected basic sciences subjects, eight hours teaching practicum, and a thesis (ten 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

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Total Hours 65-85

SUGGESTED PLAN OF STUDY

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8

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Third Semester

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14-27

Fourth Semester

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Sixth Semester

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10
Orthodontics

Degree Offered

• Master of Science

General Information

The School of Dentistry and the Department of Orthodontics 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 and two summers) of full-time residency in the School of Dentistry. It is designed to qualify dentists for careers in orthodontic clinical practice, teaching, and research.

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. 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 Admission and Recruitment. Applications will be processed by the School of Dentistry. Applicants approved for admission to the program will be notified soon after December 1.

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 http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Master-of-Science-in-Orthodontics.

Program Goals

The postgraduate 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 let the residents make choices 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 in 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.

FACULTY

CHAIR

• Peter Ngan - D.M.D. (Harvard University)

ASSOCIATE PROFESSORS

• Chris A. Martin - D.D.S. (West Virginia University)
• Timothy J. Tremont - D.D.S. (University of Pittsburgh)

Admission Requirements

The program’s admission requirements are as follows:

• Must have passed the National Dental Board Examination — Part I.
• Must have earned a D.M.D./D.D.S. degree, or its equivalent.
• Must report most recent GRE scores.
• Complete and submit WVU Graduate Application.
• Must be proficient in the English language 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. Generally, a minimum grade point average of 3.0 is required.
• Must apply to the program through the Postdoctoral Application Support Service (PASS) http://www.adea.org/ and have all application materials submitted by September 15. Each applicant must also have a MATCH number from National Matching Services (http://www.natmatch.com). For more detailed information, go to the School of Dentistry website (http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Graduate-Programs/Master-of-Science-In-Orthodontics).

• 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 meet certain Federal and University standards regarding the Responsible Conduct of Research (RCR). To comply with these standards, all individuals admitted to the Doctor of Dental Surgery (DDS) and dental graduate programs must successfully complete the Biomedical Responsible Conduct of Research (BRCR) online course offered by the Collaborative Institutional Training Initiative (CITI). The BRCR course must be completed no later than 30 days after beginning your first semester in the education program. Failure to satisfy this requirement within the specified period to time will impact your enrollment.

• Must become familiar with the West Virginia University School of Dentistry’s policy and procedure for Bloodborne Pathogens and Infectious Diseases.

**Degree Requirements - Master of Science Degree**

• Fulfill University requirements for graduate study.

• Complete thirty-four months (three academic years and two summer sessions) 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.

• Must pass the Mock ABO clinical examination which includes a written and an oral examination.

• Must pass the written component of the ABO examination.

• Must successfully complete all didactic and clinical work in the required curriculum.

• Must demonstrate satisfactory clinical competency in this field.

• Complete a minimum of eighty-five credit hours, including fifty-seven hours of orthodontic courses and a minimum of ten hours of selected basic science subjects, six hours of teaching practicum, and a research/thesis (twelve 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.

**Program Curriculum**

The thirty-four-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, the department maintains a relationship with many commercial orthodontic companies that regularly visit the clinic to present new products and techniques.

Clinical work simulates the private practice environment. There are two 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 has been chosen as the first department in the WVU School of Dentistry to be completely paperless. This process is now underway. The objective is to maximize clinical efficiency so residents are able to increase their number of patient experiences.

**CURRICULUM REQUIREMENTS**

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<td>PATH 601</td>
<td>Special Studies: Oral Pathology</td>
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<td>Applied Biostatistics Lab</td>
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<td>Growth And Development</td>
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**SUGGESTED PLAN OF STUDY**

**First Semester**

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**Summer**

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**Fifth Semester**

**Fall**

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**Eighth Semester**

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**Ninth Semester**

**Spring**

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<tr>
<td>ORTH 621</td>
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Prosthodontics

Degree Offered

• Master of Science

General Information

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 thirty-three months (three academic years and two summers) 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 for summer session and fall/spring semesters. 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 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 website at http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Master-of-Science-in-Prosthodontics.

Program Goals

The postgraduate 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 prosthodontics dental implantology. A series of structured didactic and clinical courses provides 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.

FACULTY

DIRECTOR

• Mark W. Richards - D.D.S. (University of Washington)

PROFESSORS

• Mohssen Ghalichebaf - D.D.S. (University of Istanbul)
• Harold Reed - D.D.S. (West Virginia University)

ASSISTANT PROFESSOR

• Bryan Dye - D.D.S. (West Virginia University)

Admission Requirements

The program’s admission requirements are as follows:

• Must have passed National Dental Board Examination – Part I.
• Must have earned a D.M.D./D.D.S. degree, or its equivalent.
• Must be a graduate of a U.S. or Canadian dental school.
• Must be proficient in the English language 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. Generally, a minimum grade point average of 3.0 is required.
• Must apply to the program through the Postdoctoral Application Support Service (PASS) http://www.adea.org/ and have all application materials in PASS by August 1. For more detailed information go to the School of Dentistry website (http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Master-of-Science-in-Prosthodontics).
• 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 meet certain Federal and University standards regarding the Responsible Conduct of Research (RCR). To comply with these standards, all individuals admitted to the Doctor of Dental Surgery (DDS) and dental graduate programs must successfully complete the Biomedical Responsible Conduct of Research (BRCR) online course offered by the Collaborative Institutional Training Initiative (CITI). The BRCR course must be completed no later than 30 days after beginning your first semester in the education program. Failure to satisfy this requirement within the specified period of time will impact your enrollment.
• Must become familiar with the West Virginia School of Dentistry’s policy and procedure for Bloodborne Pathogens and Infectious Diseases.

Degree Requirements — Master of Science Degree
• Fulfill University requirements for graduate study.
• Complete thirty-three months (three academic years and two summer sessions) 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.
• Must pass a final oral examination.
• Must successfully complete all didactic and clinical work in the required curriculum.
• Demonstrate satisfactory clinical competency in this field.
• Complete a minimum of eighty-seven credit hours. This includes sixty credit hours of prosthodontic courses, a minimum of fourteen credit hours of selected basic science subjects, six hours of teaching practicum, and a research/thesis (seven 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.

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 at 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. A topic in the field of prosthodontics will be selected and developed into a high quality table clinic for presentation at the American College of Prosthodontists annual session.

THIRD-YEAR PROGRAM
The third year of the program continues with more advanced clinical treatment and concepts of prosthodontics, including the completion of three patients to meet the current requirements for presentation to the American Board of Prosthodontics. The resident will spend a significant amount of time treating older adult patients.

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 to Committee. 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.

**CURRICULUM REQUIREMENTS**

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<td>Orthodontic Materials</td>
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**Total Hours**

|   | 85 |

**SUGGESTED PLAN OF STUDY**

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**Third Semester**

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### Sixth Semester

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11

Total credit hours: 87
Degrees Offered

- Doctor of audiology
- Doctor of philosophy in counseling psychology
- Doctor of philosophy in education
- Doctor of education in curriculum and instruction
  - Doctor of education in educational leadership studies
  - Doctor of education in educational psychology
  - Doctor of education in higher education administration
  - Doctor of education in instructional design and technology
  - Doctor of education in special education
- Doctor of education in higher education administration
- Doctor of education in instructional design and technology
- Doctor of education in literacy education
- Doctor of education in secondary education
- Doctor of education in special education
- Doctor of science in rehabilitation counseling
- Doctor of science in speech pathology

The College of Education and Human Services, located in Allen Hall on the Evansdale campus, offers graduate-level programs of study in counseling, counseling psychology, curriculum and instruction, educational leadership, educational psychology, elementary education, literacy education, instructional design and technology, rehabilitation counseling, secondary education, special education, and communication sciences and disorders. Thesis programs are devoted to the study and development of human talent and resources in the school, family, and community. Instruction, research, and extended service are carried out in close cooperation with related departments and units of the university.

Some graduate programs require the successful completion of clinical experiences in approved sites. Clinical placements are arranged by faculty and the professional judgments of faculty are used to determine continuation of students in these placements.

Non-Degree Status

Students who fail to meet the specific requirements of the sections dealing with admission, grade point average, course repeats, transfer credits, comprehensive examinations, or special written requirements specified by the program will not be admitted to or will be terminated from the degree program. Students not admitted to or terminated from a degree program may apply in writing for classification as a non-degree graduate student to the appropriate department chair or the Office of Student Advising and Records of the College of Education and Human Services, P.O. Box 6122, Morgantown, WV 26506-6122. Non-degree classification would allow the student to take coursework for certificate renewal, certification, or personal interest. A non-degree graduate student may accumulate unlimited graduate credit hours, but if the student is later admitted to a degree program, the faculty of that program will decide whether or not any credit earned as a non-degree student may be applied to the degree. Under no circumstances may a non-degree student apply more than twelve hours of previously earned credit toward a degree.

Students may obtain additional information about a particular graduate program by writing to the coordinator of that program or by writing Dean Lynn Schrum, West Virginia University College of Education and Human Services, P.O. Box 6122, Morgantown, WV 26506-6122.

ADMINISTRATION

DEAN

- Lynne Schrum - Ph.D. (University of Oregon)
  Dean
Admission

Admission, curriculum, and specific requirements of the various degree programs of the College of Education and Human Services are provided in each program section in this catalog. It is the responsibility of the student to take steps to ensure that he or she is properly informed of the degree requirements and/or the certification standards being sought. 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 advisers, and the college certification officer on matters pertaining to degree and certification requirements.

All applicants for admission to the doctoral program in the College of Education and Human Services must submit their scores on the Graduate Record Examination and/or the Miller Analogies Test, three letters of recommendation, a current vita, and a sample of long-range and short-range goals. Applicants to the college must comply with the general university graduate study regulations. Personal interviews are required by several programs. Additional information may be required by the faculty of a specific area of emphasis prior to program admission.

Master’s Degree Programs

Master’s degree programs are offered in counseling, rehabilitation counseling, speech pathology, educational leadership studies, educational psychology, elementary education, instructional design and technology, reading, secondary education, and special education.

Three options are generally available in the college’s master’s programs; the student should refer to the specific program to determine the option that applies.

1. At least thirty semester hours of coursework, including six semester hours of research
2. At least thirty semester hours of coursework, including three semester hours of research, selected in conference with the candidate’s committee, directed by the adviser, with final approval of the committee
3. At least thirty-six semester hours of approved coursework

• The student must comply with specific graduate requirements of the university, the College of Education and Human Services, and the program.
• All students will be assigned an adviser. For options A and B, two additional faculty members will be assigned to serve as the remainder of the three-member master’s committee. For option C, only the adviser is required.
• No student may be awarded a master’s degree unless the student has a minimum grade point average of 3.0 on all work taken for the graduate degree. (A grade of less than C does not carry credit toward a graduate degree but counts in determining the grade point average.)
• No student will be permitted to repeat a required graduate course more than once.

Some programs may require the comprehensive examination in options A, B, and C above. The candidate’s committee (options A and B) or adviser (option C) will determine whether the examination will be oral or written or both. Within the first two weeks of the semester in which the student intends to take the final master’s degree examination, he or she must submit to the appropriate department chair an application to take the examination. A student must have completed a minimum of twenty-seven semester hours of approved coursework before taking the comprehensive examination. In addition, a student must have achieved a 3.0 grade point average on all work taken for graduate credit before applying to take the comprehensive examination.

Time Limit

All requirements must be completed within eight years immediately preceding the awarding of the degree.

Doctoral Programs

If you would like additional information about the graduate programs in the College of Education and Human Services, contact the chairperson of the department most relevant to your program interests. Students in the doctor of education (Ed.D.) program may elect an area of emphasis in curriculum and instruction, educational leadership studies, instructional design and technology, or special education. Specific information about doctoral studies in these emphasis areas is listed in the program description area of the catalog. Students interested in the doctor of audiology (Au.D.) and the doctor of philosophy (Ph.D.) in counseling psychology and in education will find information about those programs in separate areas of this catalog. Students in the interdisciplinary (Ph.D.) program select a focus area from one of the following major areas of study: educational leadership and policy studies, learning, instructional design and technology; or curriculum, literacy and cultural studies, and human development and family studies.

Committee Formation

Typically after admission to a specific program, the student, in consultation with the adviser, selects a chairperson and four committee members to serve as his or her doctoral committee. This committee must be approved by the department chair and the dean of the college. The doctoral committee must meet the following minimum standards:
• The doctoral committee must be composed of a minimum of five members, the majority of whom must be regular members of the graduate faculty.
• At least three members of the doctoral committee must be members of the graduate faculty of the College of Education and Human Services.
• The student’s major adviser must be from the student’s major program and must be a regular member of the graduate faculty. No more than two other members of the doctoral committee may be from the student’s major program area of study.
• At least two members of the doctoral committee must be from the student’s major program area of study.
• At least one member of the doctoral committee must be from the student’s minor program area of study.
• The doctoral committee must include at least one member from outside the student’s program area and that individual must have knowledge and insights relevant to the student’s program of study.
• No more than one member of the doctoral committee may be a nonmember or associate of the graduate faculty.

Program Plan

The final determination of the program of coursework and research is the responsibility of the student’s doctoral committee. Doctor degrees are not awarded on the basis of the completion of any set number of credits but is awarded on the basis of demonstrated academic achievement and scholarly competence. Seventy-two semester hours of relevant graduate work, excluding dissertation credit, but including credits of relevant graduate work completed at the master’s degree level, constitute the minimum coursework acceptable.

Candidacy

The student and the committee at the time of program planning will identify competencies to be developed and how they will be assessed. These will be stated in the student’s individual program. The doctoral student and his or her doctoral committee will determine when the student is ready for assessment of competencies. The examination will be prepared and assessed by the student’s doctoral committee and will address all work in the doctoral program plan of the student. The student must be enrolled in the semester in which candidacy examination occurs. The chairperson will notify the student and the student records office. Personnel in the student records office will notify all appropriate university and college offices of the outcome. Upon successful completion of the examination, the student will formally propose the dissertation prospectus to the committee.

Prospectus

The candidate must submit and justify a prospectus for a doctoral dissertation. The doctoral committee must review and approve, approve with change, or reject the outline or prospectus. The student must consult with all members of the committee and with other appropriate members of the university faculty during the dissertation phase of the program.

Dissertation Defense

Upon fulfillment of the program requirements set by the doctoral committee, the student must successfully defend the dissertation. The defense will be conducted by the students doctoral committee and the publicized meeting will be open to all members of the university faculty. If the student receives more than one unfavorable vote from the committee, the candidate will not be recommended for the doctoral degree.

Time Limit

Because the qualifying examination attests to the academic competence of the student who is about to become an independent researcher or practitioner, the length of time between the examination and degree must be limited. Consequently, doctoral candidates are allowed no more than five years after the qualifying examination in which to complete remaining degree requirements. If the student should fail to complete an approved dissertation within five years, he or she must repeat the admission to candidacy examination and any other requirements specified by the student’s doctoral committee.

Residency

A student must satisfactorily complete a minimum of nine semester hours of approved graduate credit in each of two consecutive terms in residence.

Department of Counseling, Rehabilitation Counseling, and Counseling Psychology

Degrees Offered

• Master of arts in counseling
• Master of science in rehabilitation counseling
• Doctor of philosophy in counseling psychology

Department of Counseling, Rehabilitation Counseling, and Counseling Psychology offers three graduate programs. These are the master of arts program in counseling, with specializations in community and school counseling; the master of science program in rehabilitation counseling, including vocational-evaluation coursework and an e-campus program; and the Ph.D. program in counseling psychology.
The key unifying component in all of our programs is "counseling." The American Counseling Association (ACA) defines professional counseling as "the application of mental health, psychological, or human development principles, through cognitive, affective, behavioral or systematic intervention strategies, that address wellness, personal growth, or career development, as well as pathology."

These interrelated fields all hold great promise in the job market and for your life. Professionals who make their careers in these fields are dedicated to making a difference in the lives of others. We support their learning in many ways—through classroom activities, research, and service learning.

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**FACULTY**

**CHAIR**

- Jeffrey A. Daniels - Ph.D. (University of Nebraska)
  Chair, Associate Professor, Counseling Psychology, Global Hostage-taking, Averting Lethal School Violence, Spirit and Religious Issues in Counseling

**ASSOCIATE PROFESSORS**

- Margaret K. Glenn - Ed.D.,CRC (George Washington University)
  Program Coordinator, Rehabilitation Counseling and Leadership, Substance Abuse Treatment and Vocational Rehabilitation, Complementary and Alternative Approaches in Rehabilitation, Use of Indigenous Practices in Rehabilitation

- Ed Jacobs - Ph.D. (Florida State University)
  Coordinator of the Master’s Degree Program in Counseling, Creative Counseling, Group Counseling, Marriage and Family, Impact Therapy

**ASSISTANT PROFESSORS**

- Monica Leppma - Ph.D. (University of Central Florida)
  Practicum and Internship Coordinator, Mental Health Counseling, Counseling in the School System, Counselor Development, Positive Emotions, Mediation and Spirituality

- George Mamboleo - Ph.D. (University of Arizona)
  Rehabilitation Counseling

- Christine J. Schimmel - Ed.D. (Marshall University)
  Coordinator of School Counseling, Counseling Master’s Program, School Counselor Role, Creative Counseling, Group Counseling in Schools

- Jennifer Taylor - M.S. (University of Florida)
  Counseling and Counseling Psychology

**VISITING ASSISTANT PROFESSOR**

- James W. Bartee - Ph.D. (University of Washington)
  Director of Training, Counseling Psychology Ph.D. Program, Counseling Psychology in Multinational Settings, Psychology, Neuroscience and Spirituality, Professional Training and Development

**TEACHING INSTRUCTOR**

- Regina Burgess - M.S., CRC, LPC (West Virginia University)
  Vocational Assessment, Rehabilitation Counseling

**PROFESSORS EMERITI**

- L. Sherilyn Cormier - Ph.D. (Purdue University)
- James DeLo - Ph.D. (University of Pittsburgh)
- Ranjit K. Majumder - Ph.D. (University of Oklahoma)
- Robert L. Masson - Ed.D. (State University of New York)
- Jeffrey K. Messing - Ed.D. (Syracuse University)
- David J. Srebalus - Ed.D. (Indiana University)

**ASSOCIATE PROFESSOR EMERITA**

- Kathryn B. Greever - Ed.D. (West Virginia University)

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**Certification**

Certification requirements in school counseling are the same as for the master’s of arts in counseling, except as noted below:

- A minimum grade point average of 3.0
- Recommendation of the faculty
• A valid professional teaching certificate at the level for which counseling and guidance endorsement is desired or the completion of a six-hour block of professional education coursework (see department for list) and competency assessment in addition to the sixty-hour master’s degree program
• Specialization area examination (Satisfactory performance is required for certification eligibility. This examination is administered under the auspices of the State Department of Education.)

Counseling
Edward E. Jacobs, Program Coordinator
Allen Hall, P.O. Box 6122
http://counseling.wvu.edu

Degree Offered
• Master of arts in counseling

The Department of Counseling, Rehabilitation Counseling, and Counseling Psychology of the College of Education and Human Services 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) and is a WVU program of excellence. Variations of the curriculum allow emphasis in school counseling and community counseling. All applicants must comply with university, the College of Education and Human Services, and departmental requirements.

A degree in counseling provides a broad opportunity to work with children at the elementary-school level, adolescents at the secondary-school level, and all ages at the community level. The school counselor is involved in personal counseling, career guidance, vocational and educational counseling, family counseling, and consultation on classroom problems with teachers and administrators. Community counselors work with all ages and populations in various community settings such as correctional facilities, treatment centers, mental health agencies, etc. Counselors must be equipped to work with both individuals and groups.

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.

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, Rehabilitation Counseling, and Counseling Psychology 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
• GRE scores (900 preferred; minimum of 800 on old system; 290 preferred on new system)
• Three letters of reference
• Completed WVU Graduate School Application
• Completion of the departmental application (http://counseling.wvu.edu/counseling/future_students/admissions) to the counseling program

Admission
The West Virginia University counseling department’s admission process is a two-step procedure:

Step 1 is a review of paper credentials including references, department application (relevant major, general quality of application), work experience, GRE scores, and GPA. The initial screening decision is based upon this information. Successful applicants are then interviewed by program faculty.

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 applicants’ capacity to complete the counseling curriculum successfully.

Application deadline for fall admission is March 1 with review of completed applications beginning February 15. We only accept students once a year.

Degree Requirements
Degree requirements include completion of the required counseling coursework, including practicum and internship. A minimum of sixty hours of coursework with a 3.0 grade point average is required.
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.

In reviewing the curriculum available in counseling, the applicant will note that much of the coursework provides the background applicable for employment in general community agency work. Graduates seek employment in school settings and in community settings such as mental health centers, drug and alcohol agencies, corrections, and private practice.

All students who are candidates for a master’s in counseling are required to take the following core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 501</td>
<td>Counseling Theory/Techniques 1</td>
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<tr>
<td>COUN 505</td>
<td>Theory &amp; Pract Human Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>COUN 536</td>
<td>Theories of Human Development</td>
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<tr>
<td>COUN 606</td>
<td>Counseling Theory/Techniques 2</td>
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</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
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<tr>
<td>COUN 608</td>
<td>School Counseling Services *</td>
<td>3</td>
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<tr>
<td>COUN 622</td>
<td>Community Counseling **</td>
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<tr>
<td>COUN 609</td>
<td>Group Counsel Theory/Technique</td>
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<td>COUN 620</td>
<td>Lifespan Career Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 630</td>
<td>Children/Adolescents/Parents</td>
<td>3</td>
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<tr>
<td>COUN 634</td>
<td>Cultural Issues</td>
<td>3</td>
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<td>COUN 640</td>
<td>Addictions Counseling</td>
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<tr>
<td>COUN 645</td>
<td>Couple/Family Counseling</td>
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<td>COUN 664</td>
<td>Ethical Issues in Counseling</td>
<td>3</td>
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<td>COUN 665</td>
<td>Abnormal Behavior</td>
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<td>COUN 668</td>
<td>Crisis Trauma Grief Counseling</td>
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<td>COUN 684</td>
<td>Supervision Models/Counseling</td>
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<td>COUN 685</td>
<td>Practicum</td>
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<td>COUN 686</td>
<td>Counseling Internship</td>
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<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
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</table>

Total Hours 60

* Required for school counselor certification only. A special school counselor certificate is available for individuals without a teaching background. The program includes an additional six hours of coursework.

** Required for community counseling students only. Note: doctoral-level courses in counseling have the prefix CPSY.

Non Education Degree Students

Students seeking a degree in school counseling who do not have an education degree must take COUN 660 and a C&I elective.

Counseling Psychology

James W. Bartee, Director of Training
Allen Hall, P.O. Box 6122

Degree Offered:

- Doctor of philosophy in counseling psychology

All applicants must comply with the graduate requirements of the College of Education and Human Services and the Counseling Psychology program of study. The program includes coursework hours and training experiences in addition to the College of Education and Human Services requirements for the Ph.D. degree.
Admitted students are expected to understand and comply with the current revision of the Ethical Principles of Psychologists and Code of Conduct published by the American Psychological Association.

The area of specialization for the doctoral degree is oriented primarily toward training practitioner-scholars who have a substantial background in the philosophy and methods of psychology as a comprehensive science. Students are expected to work closely with faculty in doing research and in supervised professional practice. Successful completion of the program requires core coursework in counseling psychology, as well as in the foundations of psychology, statistics and research, and clinical training.

The counseling psychology program at West Virginia University is fully accredited by the American Psychological Association to offer the doctor of philosophy in this specialty area of professional training in psychology. Our next program review is scheduled for 2017.

Accreditation is a process that reflects the commitment of the institution to self-study and external-review by one’s peers in seeking not only to meet professional standards but also to continuously seek ways in which to enhance the quality of education and training provided by the program.

For more information, please refer to The Office of Program Consultation and Accreditation, American Psychological Association, 750 First Street, NE, Washington, DC 20002-4242, phone: (202) 336-5979, fax: (202) 336-5978, e-mail: apaaccred@apa.org.

COMPETENCY BASED TRAINING

Training in professional psychology in our Ph.D. program is based on the Competency Benchmarks documents provided by the APA. They can be found on our website (http://counseling.wvu.edu/counseling_psychology) and in our Doctoral Student Handbook (http://counseling.wvu.edu/counseling_psychology/future_students). All students are evaluated yearly to document their attainment of the various competencies germane to their level of training within the program.

CANDIDACY

Students are accepted for the preliminary study toward the Ph.D. degree upon admission into the program. Candidacy for the degree is the next stage in the program of study, and requires the following:

• Students must complete the prerequisite doctoral coursework with a 3.25 or better grade point average. The "Readiness for Practicum" benchmark competencies must be achieved.
• Passing scores on the written, comprehensive doctoral qualifying examination covering major areas in counseling psychology and research. (Once advanced to candidacy for the degree, students are afforded an additional five years to complete all remaining elements of the program of study leading to the Ph.D. in counseling psychology.)

PRACTICUM TRAINING

A minimum of nine credit-hours requiring 600 on-site clock-hours, and must include at least 200 hours of direct client/patient service and 125 hours of one-to-one supervision by a licensed psychologist. Sites available to our students include the Carruth Center for Psychological and Psychiatric Services at WVU, other college counseling centers within a ninety-minute drive, Veterans Medical Centers, medical centers/hospitals, county agencies, community mental health centers, and private practice settings. All sites must be approved by the program as meeting the standards set forth in the Doctoral Counseling Psychology Handbook.

INTERNSHIP

A one-year, full-time predoctoral internship is required in order to complete the program. Students are required to apply via the APPIC Match to APA-accredited programs. As part of the match policies, students must accept and attend the predoctoral internship provided by the match. These are typically out-of-state as only a few such programs exist in West Virginia and Morgantown. Students who do not match must petition for an alternative arrangement, approved at the discretion of the Counseling Psychology faculty.

Admissions

• The admission process consists of two stages and the pertinent materials are evaluated on several facets.
• In Stage I, applications received after December 1 are not guaranteed a review for the coming year, unless openings remain after the initial reviews are completed.

Applications are screened based on the Departmental Application, Application to the Graduate School, and academic credentials provided to the Admissions Committee, including the following:

• Completion of a master’s degree in an area related to counseling psychology
• Graduate grade point average of 3.5 or higher, verified by the official transcripts of graduate coursework
• Three letters of recommendation are required that support the applicant’s competency in counseling, assessment, research, and personal qualities that indicate readiness for advanced study in professional psychology.
• GRE Scores: the Educational Testing Service has provided a new set of norms for those persons taking the Graduate Records exams on or after August 1, 2011. We have revised our recommended score levels to reflect these changes. For the Verbal Reasoning section, the faculty recommends a minimum score of 153. For the Quantitative Reasoning section a minimum score of 144 is recommended.

If you are reporting scores on the GRE taken prior to August 1, 2011 a combined Verbal and Quantitative score of 1,000 points is recommended. Applicants reporting GRE scores less than these recommended may still apply, but their applications may not be competitive with others whose scores achieve the recommended levels.

The scoring norms for the Analytical Writing section of the GRE have not been changed. A score of 3.0 (out of 6.0) or better on the Analytic Writing section is taken into account in evaluating the application and due credit accorded.

• Two years of relevant work experience is desirable.

• Stage II: Those persons whose basic preparation, references, and relevant application materials recommend them for graduate study in professional psychology are invited to campus for a personal interview with the program faculty.

The personal interview is required for a final admission decision. The interview helps to determine the applicant’s interpersonal and clinical skills, which are predictive of success in graduate study, internship, and post-degree placement. Based on a review of all written materials and the interview, the faculty determines to whom admission will be offered. A waiting list of qualified applicants is usually prepared as well.

• Announcements regarding admission are made by April 15.

THE DOCTORAL DISSERTATION

• By the end of the second year of study, the candidate must define and refine a research topic and select a doctoral dissertation chair. At that time, students must also secure an additional four members to serve on the doctoral committee whose credentials must meet specific criteria as determined by the College of Education and Human Services.

• The candidate prepares and orally presents a research prospectus that elucidates the relevant theory and scientific literature, the research design, and the quantitative or qualitative methods to be used in the study. The written prospectus must be approved by the committee.

• Approval must be granted by the Institutional Review Board at West Virginia University to proceed with the proposed study.

• Upon completion of the research as determined by the dissertation chair, the student will present an oral defense of his or her study to the full committee and scholarly community. The committee must agree the defense is successful, and the document is ready to be submitted to the Electronic Thesis and Dissertation (ETD) office at West Virginia University. The dissertation is considered complete when the ETD office accepts the final draft approved by the committee.

PREDOCTORAL INTERNSHIP

• After admission to candidacy, students are required to enter the national psychology predoctoral internship matching program (APPIC). APPIC comprises the national database of APA-accredited and APPIC-listed internship programs and positions in the United States. The application process is lengthy and demanding both of time and resources.

• The "Readiness for Internship" benchmarks competencies must be achieved and documented on the competency benchmarks rating form, signed and attested by the candidate’s advisor.

• In order to apply for internship, the student must have successfully proposed their dissertation.

• Only if a student is unsuccessful in matches across two years, or there are significant extenuating circumstances, will permission to seek an internship outside the match be granted at the faculty’s discretion.

• APA-accredited/APPIC-listed internships are typically off-campus and likely to be out-of-state. They are full-time, twelve-month paid positions usually beginning and ending in August. A successful final evaluation from the internship supervisor is required to complete this element of doctoral study in professional psychology.

All relevant details and additional specifics are available on the program website (http://counseling.wvu.edu/counseling_psychology).

CURRICULUM REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CPSY 701</td>
<td>Adv Counseling Psychlg Intrvnt</td>
<td>3</td>
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<tr>
<td>CPSY 709</td>
<td>Adv Grp Couns/Thrupct Intrvnt</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 710</td>
<td>Cognitive-Affective Behavior</td>
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<td>CPSY 734</td>
<td>Multicultural Psychology</td>
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<td>CPSY 735</td>
<td>Social Psychology</td>
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<td>CPSY 738</td>
<td>Life Span Psychology</td>
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<td>CPSY 740</td>
<td>Assessment of Psychopathology</td>
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<tr>
<td>CPSY 745</td>
<td>History/Systems of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CPSY 750</td>
<td>Physiological Psychology</td>
<td>3</td>
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</table>
CPSY 760  Intro: Counseling Psychology  3
CPSY 763  Adv Theories-Counseling Psych  3
CPSY 764  Intellectual Assessment  4
CPSY 766  Vocational Theory/Assessment  3
CPSY 769  Personality Testing/Interpretation  3
CPSY 780  Prof/Ethical Issues-Coun Psych  3
CPSY 783  Consultation & Supervision  3
CPSY 770  Doctoral Practicum-Coun Psych  9
CPSY 772  Internship  12
CPSY 781  Research Practicum  1
CPSY 782  Research Methods & Design  3
Research  18
CPSY 797  Research  6
CPSY 799  Graduate Colloquium  6
EDP 611  Measurement/Evaluation-Educ Psyc  3
EDP 613  Statistical Methods 1  3
EDP 614  Statistical Methods 2  3
Total Hours  107

Rehabilitation Counseling

Degree Offered

• Master of science

Master of Science in Rehabilitation Counseling

The rehabilitation counselor education program in the College of Education and Human Services offers a curriculum at the master's degree level. All students complete coursework related to rehabilitation and disability issues as well as coursework in counseling.

This professional counseling specialty assists individuals with physical, mental, developmental, cognitive, and emotional disabilities to achieve their personal, career, and independent living goals in the most integrated setting possible through the application of the counseling process. The counseling process involves communication, goal-setting, and beneficial growth or change through self-advocacy, psychological, vocational, social, and behavioral interventions. The objectives of our program are linked to provide: educational experiences for every student that facilitates the development of knowledge, skills, and beliefs necessary to practice as a qualified rehabilitation counselor; learning opportunities to support students’ ability to implement culturally responsive and ethically sound rehabilitation counseling practices, and clinical training environments that are focused on real world expectations. Graduates also work in mental health and substance abuse service agencies. The program is fully accredited by the Council on Rehabilitation Education and is a WVU Program of Excellence.

FACULTY

PROGRAM COORDINATOR

• Margaret K. Glenn - Ed.D., CRC (The George Washington University)

ASSISTANT PROFESSORS

• George Mamboleo - Ph.D. (University of Arizona
  Rehabilitation Counseling

TEACHING INSTRUCTOR

• Regina Burgess - M.S., CRC, LPC (West Virginia University)

Application

Applications for admission to the rehabilitation counseling program should be made to the WVU Office of Admissions. In addition to the admission requirements of the university and the College of Education and Human Services, the rehabilitation counseling 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); under 2.5 GPA cannot be admitted
• GRE or MAT scores
• Three letters of reference
• Completion of the WVU Graduate School Application (http://grad.wvu.edu)
• Completion of the rehabilitation counseling program application found on the program’s website (http://counseling.wvu.edu/rehabilitation_counseling/future_students)

The initial screening decision is based upon this information as well as considering the applicant’s previous work or related experiences related to persons with disabilities. Successful applications are then interviewed by program faculty. Final decisions about admission are based on both the requirements and the interview process.

Admission
Admission to the program is a two-step procedure. Step one involves a review of credentials presented in the application materials including references, department application (relevant major; general quality of application), GPA, and GRE scores (verbal, quantitative, and analytical writing). The Miller’s Analogy Test (MAT) may be taken in place of the GRE. 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, knowledge and understanding of rehabilitation counseling as well as an assessment of applicants’ capacity to complete the rehabilitation counseling curriculum successfully.

The preferred application deadline for receiving completed materials is March 15. However, applications are accepted until April 15 if space is available.

The program of study includes fifty-one credit hours or coursework including four didactic courses, a practicum (150 hours), then a faculty-supervised internship (600 hours) in the final semester. Graduation is contingent upon completion of these fifty-one credit hours with a 3.0 grade point average. In addition to completing coursework satisfactorily, a candidate must demonstrate the ability to assume the responsibilities required of a professional rehabilitation counselor and the personal characteristics essential to effective working relationships with others.

The rehabilitation counseling program is available for both full- and part-time students. The e-campus program is offered through Extended Learning and starts in the fall of each year. Students may work with a faculty advisor to substitute on-campus counseling courses for those offered online as part of their plan of study.

Students may take the professional examination to obtain national certification as a rehabilitation counselor during their internship semester. Graduates who take additional available coursework (leading to sixty credit hours) and undertake the appropriate level of supervised experience after completion of their degree are typically eligible for licensure as a counselor in West Virginia and many other states.

Required Courses
All students are required to take the following core courses:

A minimum GPA of 3.0 is required in all courses

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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COUN 501</td>
<td>Counseling Theory/Techniques 1</td>
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<td>COUN 505</td>
<td>Theory &amp; Pract Human Appraisal</td>
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<td>COUN 606</td>
<td>Counseling Theory/Techniques 2</td>
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<td>Medical Aspects-Rehabilitation</td>
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<td>REHB 612</td>
<td>Disability Across the Lifespan</td>
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<td>REHB 620</td>
<td>Career Development/Job Placement</td>
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<td>REHB 624</td>
<td>Rehabilitation Client Services</td>
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<td>COUN 664</td>
<td>Ethical Issues in Counseling</td>
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<td>REHB 680</td>
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<td>Licensure Elective</td>
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Total Hours 51
LICENSURE ELECTIVES

Must take one of the following for degree and you have option of taking 3 additional courses for licensure:

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<tr>
<th>Course</th>
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<td>COUN 634</td>
<td>Cultural Issues</td>
<td>3</td>
</tr>
<tr>
<td>COUN 640</td>
<td>Addictions Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 645</td>
<td>Couple/Family Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 665</td>
<td>Abnormal Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 12

SUGGESTED PLAN OF STUDY

The following plan of study is an example of how the program can be completed through the eCampus program and include sixty credit hours of study for licensure application. Three additional electives are offered to allow graduates to meet the requirements of licensing but each state has different expectations for coursework. It is the responsibility of the student to investigate those expectations with the state licensing body.

First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>REHB 600</td>
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<td>REHB 612</td>
<td>3</td>
<td>COUN 501</td>
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<tr>
<td>REHB 610</td>
<td>3</td>
<td>REHB 620</td>
<td>3</td>
<td>COUN 606</td>
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<td>REHB 680</td>
<td>3</td>
<td>COUN 505</td>
<td>3</td>
<td>Elective Course- Select</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>COUN 634</td>
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<td></td>
<td></td>
<td></td>
<td>COUN 640</td>
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<td>COUN 645</td>
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<td></td>
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<td>COUN 665</td>
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</table>

Total hours: 9

Second Year

<table>
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<tr>
<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 664</td>
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<td>REHB 675</td>
<td>12</td>
<td>Courses required for licensure:</td>
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<tr>
<td>REHB 624</td>
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<td>COUN 609</td>
<td>3</td>
<td>COUN 634</td>
<td>9</td>
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<td>REHB 672</td>
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<td>COUN 645</td>
<td></td>
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<td></td>
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<td></td>
<td>COUN 665</td>
<td></td>
</tr>
</tbody>
</table>

Total hours: 15

Total credit hours: 51

* Student must select one for degree completion. Licensure students must complete all four courses.

Curriculum and Instruction/Literacy Studies

The Department of Curriculum and Instruction/Literacy Studies, Social and Cultural Foundations, Educational Leadership Studies offers opportunities for graduate study, teaching certification and research, leading to degrees in each related specialty area for the master of arts. Our programs are designed for educators and other professionals with educational leadership responsibilities. The primary purposes of the master of arts and doctor of education programs in the department provides increased knowledge, skills, research, and professional competencies for licenses related to each specialty area in the department. Faculty work with national accreditation standards for each of their programs and contribute to the profession at university, state, and national levels of professional involvement. The experiences available through our graduate programs involve technology, diversity, global initiatives, culturally responsive teaching, and faculty who are leaders in research, teaching, and service in their scholarly work.

For more information, please visit our website at http://cils.wvu.edu/.

Degrees Offered

- Master of Arts
- Doctor of Education
Graduation

All students must apply on-line for graduation. Please contact the Center for Student Advising and Records, Room 710 Allen Hall, PO Box 6122, Morgantown, WV 26506-6122. http://advising.cehs.wvu.edu

FACULTY

CHAIR

• Dale S. Niederhauser - Ph.D. (University of Utah)
  Foundations of Education, Educational Technology, Elementary Education: Early Childhood

PROFESSORS

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Program Policies and Matriculation Benchmarks—Teaching Certification Programs

All students enrolled in Master and Certification (MAC) programs in the Department of Curriculum and Instruction/Literacy Studies must adhere to the following policy. Please consult with your advisor to discuss your program plan.

CRITERIA FOR ADMISSION TO THE M.A. PROGRAMS IN ELEMENTARY/SECONDARY EDUCATION:

- Bachelor’s degree
- GPA 2.75
- One-page goal statement.
- Testing requirements: Praxis Core Academic Skills for Educators: # 5712 OR GRE (contact department for acceptable scores)
- TOEFL - International students, TOEFL 550 paper or 213 computer. (79-80 iBT)

MATRICULATION CRITERIA:

- Transcript analysis for content requirements. Contact the Center for Student Advising and Records http://advising.cehs.wvu.edu
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State Policy # 5100

6.2.3. PPST Waivers. In lieu of taking the WVBE-approved PPST, prospective educators completing WVBE-approved programs may provide evidence of:

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1. C&I 602 must be taken in the first or second semester after admission into the program.
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Department of Curriculum & Instruction/Literacy Studies, Social & Cultural, Educational Leadership Studies
Dale S. Niederhauser, Chair
602 Allen Hall
ADMISSIONS

Admissions Standards. An Admissions Committee composed of members from each of the four areas of emphasis screens the applications and makes admissions decisions based on the following standards, in consultation with the faculty in the areas of emphasis.

# Applicants need to have achieved at least a 3.0 grade point average upon completion of their undergraduate degree and at least a 3.5 grade point average upon completion of any graduate degree.

# Applicants will have a combined score of at least 1,100 on the verbal and quantitative parts of the Graduate Record Examination [or equivalent on the new GRE scale] or at least 410-416 on the Miller Analogies Test. International applicants will also have to provide TOEFL scores of at least 80 (internet version), 213 (computer-based), or 550 (paper-based). Test scores may not be older than five years.

# Applicants will be required to submit writing samples that will be evaluated by teams of faculty members.

# Three letters of recommendation will be required.

# Applicants will submit a statement of purpose discussing their research goals and how they can be met through the Interdisciplinary PhD program.

# A face-to-face, phone, or Internet interview may be included in the process at the discretion of the admissions committee.

Please click on the link below for more specific information about the Interdisciplinary Ph.D. program.

http://cehs.wvu.edu/academics/grad/doctoeal/ed_interdisc

Doctoral Admission

All applicants must comply with the requirements of West Virginia University, the College of Education and Human Services, and curriculum and instruction program area. Prospective candidates to the Curriculum & Instruction Ed.D:

• Completion of a master’s degree from an accredited school.
• Graduate grade point average of a 3.25 or higher.
• Personal Vita
• A goal statement articulating the topic(s) of research the candidate would like to pursue, how the faculty and resources in the C&I department could support those interests, and how the candidate’s professional, personal, and academic experiences have shaped those interests; Three letters of references that explicitly address your potential as a C&I Doctorate student.
• Graduate Records Examination (GRE) or Millers Analogy Test (MAT) are required for admission (score cannot be more than five years old). Please contact department for minimum score requirements and/or program changes.
• Writing sample. The writing sample is to provide clear evidence of your academic writing ability.
• TOEFL (international students) - TOEFL score must be at least 550 (paper) or 213 (computer) 79-80 iBT

Applications are reviewed and admission recommendations are made by the program’s Doctoral Admissions Committee. Submission and completion of the requirements does not guarantee admission into the program. The number of students accepted into the program in each admission period is determined by available resources. For additional information or requirements, visit http://cils.wvu.edu.

Master of Arts Elementary Education with Initial Teaching Certification

This program is available to those students who hold a bachelor’s degree in non-education fields or other education fields and choose to pursue a degree and certification in teacher education. This program is also designed for career changers, individuals who choose to change careers after several years on the job.

This program requires 36 hours of education core classes, 12 hours of clinical experience, and 45 hours of content areas courses. Students must consult the Center for Advising and Records for a transcript analysis to determine the exact content requirements.

Please note: Students must also complete required content coursework for teaching certification. Contact the Center for Advising and Records for a transcript analysis for the additional certification coursework required.

Master of Arts Elementary Education Early Childhood Education (Pre K-4)

This program is designed for those individuals who choose to become experts in early childhood education. Students gain practical experience by working with young children throughout their educational experience.

Secondary Education Master’s Degree Programs with Teaching Certification

The purpose of the secondary education program is to provide rigorous experiences that prepare individuals to be highly qualified and effective teachers. Students pursuing a master of arts in secondary education with initial certification may choose one of eight content specialization areas
(English, German, French, Spanish, math, science, or social studies). Teacher certification requirements are based on the West Virginia Department of Education’s Policy 5100, Approval of Educational Personnel Preparation Programs and Policy 5202, Licensure of Professional/Paraprofessional Personnel.

**MASTERS-ONLY PROGRAMS**

**Master of Arts - Advance online Elementary Education Program**

Designed for individuals who hold a teaching license in elementary education. This program provides increased knowledge, skill, and competence for teachers working with children in elementary school settings. The program consists of 36 credit hours and is offered online through the Electronic Campus of the Southern Regional Education Board (SREC). All students pay in-state tuition rates for courses offered through the Electronic Campus regardless of residency.

Students will complete thirty-six hours of online coursework that is designed to broaden their professional knowledge and teaching skills.

**Masters of Arts - Advanced online Secondary Education with SCIENCE emphasis**

Designed for individuals who hold a teaching license in secondary education with a science specialization. This program provides increased knowledge, skill, and competence for teachers working with children in secondary science. The program consists of 36 credit hours and is offered online through the Electronic Campus of the Southern Regional Education Board (SREC). All students pay in-state tuition rates for courses offered through the Electronic Campus regardless of residency.

Students will complete thirty-six hours of online coursework that is designed to broaden their professional knowledge and teaching skills.

**Masters of Arts - Advanced online Secondary Education with SOCIAL STUDIES emphasis**

Designed for individuals who hold a teaching license in secondary education with a specialization in social studies. This program provides increased knowledge, skill, and competence for teachers working with children in secondary social studies. The program consists of 36 credit hours and is offered online through the Electronic Campus of the Southern Regional Education Board (SREC). All students pay in-state tuition rates for courses offered through the Electronic Campus regardless of residency.

**Master of Arts Elementary Education (Thesis Option - 30 Credit Hours)**

The thesis option is available to those who choose to advance their career through the intensive study of their area of interest while creating an individualized research agenda. Students interested in pursuing this option should contact the chair of the department for program options.

**Requirements:** All applicants must comply with the general requirements of the University and the College of Education and Human Services.

**Master of Arts Secondary Education (Thesis Option - 30 Credit Hours)**

The thesis option is available to those who choose to advance their career through the intensive study of their area of interest while creating an individualized research agenda. Students interested in pursuing this option should contact the chair of the department for program options.

**Requirements:** All applicants must comply with the general requirements of the University and the College of Education and Human Services.

**Doctor of Education (Ed.D.)**

The curriculum and instruction area of emphasis for the doctoral degree is designed to prepare candidates to teach at college or university levels, work with school districts or other agencies in curriculum areas, or to hold leadership positions in organizations that emphasize teaching and learning. Program flexibility allows candidates to design programs that meet their career goals. All programs are approved by an advisor and Faculty Committee.

The program requires a minimum of seventy-two hours beyond the baccalaureate degree, including forty-two hours beyond a master’s degree; thirty-three of the forty-two hours must be taken at WVU. In addition to the major area coursework in curriculum and instruction, students must:

- Have coursework in an area of specialization
- Must complete a core of foundations and research courses
- Successfully complete a comprehensive examination
- Seek approval of a dissertation topic
- Successfully defend dissertation research
CANDIDACY

Students are accepted for study toward the Ed.D. with an emphasis in curriculum and instruction upon admission into the program. To advance to candidacy for the doctorate, the student must:

- Complete prerequisite doctoral program coursework with at least a 3.25 grade point average
- Pass a written comprehensive and oral examination
- Have a research prospectus approved by the Dissertation Committee

For additional information concerning admission criteria, program requirements, deadlines, and timelines, please direct inquiries to:

The Chairperson of Curriculum and Instruction/Literacy Studies
College of Education and Human Services
602 Allen Hall
P.O. Box 6122
Morgantown, WV 26506-6122

Interdisciplinary Ph.D. program

DESCRIPTION

The Ph.D. program is intended to enhance the ability of the College to meet the needs of those candidates who seek an explicitly scholarly career path. This program strengthens the research and teaching capacity of the College and the capacity of the College to serve the needs of the state that can only be addressed by its flagship university. The research and scholarly experiences that are more typical of a Ph.D. program add to the capacity and the marketability of graduates who plan to engage in a lifelong research agenda in higher education or in educational research or policy centers. Students in the program will acquire knowledge in and across various contexts and disciplines. These contexts include: education in rural contexts, families, human development, impact of poverty on education, Appalachia as a social-cultural context, diversity, marginalization, and challenge of assumptions about equity in education. Students chose one of the following areas of emphasis: Educational Leadership and Policy, Learning, Instructional Design, and Technology, Curriculum, Literacy, and Cultural Studies, and Human Development & Family Studies.

Secondary Education

The Department of Curriculum and Instruction/Literacy Studies, Social and Cultural Foundations, Educational Leadership Studies offers opportunities for graduate study, teacher certification, and research leading to a Master of Arts degree in a specialty area. These programs are designed to prepare individuals to become educators or educational leaders. The primary purposes of the graduate programs in this department are to provide increased knowledge, skills, and professional competencies for licenses related to each specialty area in the department (listed below). Each program has met national accreditation standards. Students in the programs will work with faculty who contribute as educational scholars to the profession at university, state, and national levels. Additionally, the programs offer opportunities to explore technology, global initiatives, and culturally responsive teaching, and current educational research in your selected program.

For more information, please visit our website at http://cils.wvu.edu/.

Curriculum and Instruction/Literacy Studies, Social and Cultural Foundations, Educational Leadership Studies

Dale S. Niederhauser, Chair
602 Allen Hall

ADMISSION REQUIREMENTS

- WVU application for admission
- Bachelor’s degree with a 2.75 GPA or above
- A one-page goal statement
- Test requirements: Praxis Core Academic Skills for Educators # 5712 (reading, writing & math) or Graduate Records Examination (280 and above). Testing may be waived with a score of 26 on ACT, 1125 on SAT or MA degree.
- TOEFL (international students) - TOEFL score must be at least 550 (paper) or 213 (computer) 79-80 iBT

Note: Students should contact the Center for Student Advising and Records for a transcript analysis.

Secondary Education Master’s Degree Programs

The purpose of the secondary education program is to provide rigorous experiences that prepare individuals to be highly qualified and effective teachers. Students pursuing a master of arts in secondary education with initial certification may choose one of eight content specialization areas (English, German, French, Spanish, math, science, or social studies). Teacher certification requirements are based on the West Virginia Department
Students who wish to pursue a master degree without certification may choose a Secondary Education/Higher Education Curriculum and Teaching degree, a Masters/thesis option, or the Advanced Masters with specialization in science or social studies.

Master’s of Arts - Secondary Education Programs with Initial Teaching Certification

This masters with initial certification program is designed for students who hold a bachelor’s degree and wish to complete a master’s degree with initial certification in a secondary subject area, including English, French, German, Spanish, math, sciences, and social studies. The Masters with Initial Certification program requires 36 hours of core education courses, 12 hours of clinical experience, and content area requirements for each subject area. Contact the Center for Advising and Records for a transcript analysis to determine program and content area requirements (710 Allen Hall).

PROGRAM REQUIREMENTS

- Transcript analysis required (Center for Student Advising and Records)
- C&I 602 must be taken in the first or second semester after admission into the program. "B" or better is required in C&I 602.
- State back ground check and a current TB test are required before entering a public school classroom
- 3.0 GPA in graduate coursework with "C" or better in all graduate courses
- No more than fourteen hours at a 400-level plus student teaching may count toward a thirty-six hour master's degree.
- Application for transient credit for graduate courses taken at other institutions must be approved by the advisor and the Assistant Dean for Student Services.
- Elective courses must be approved by the advisor prior to enrollment.
- Portfolio demonstrating teaching standards, to be completed in C&I 680
- Passing scores on the Praxis II in content area, due one full semester before student teaching
- Principles of Teaching and Learning (PLT) test, due at the end of the program.
- Completion of 125 hours of field experiences (embedded in the program)

REQUIREMENTS TO BE COMPLETED PRIOR TO STUDENT TEACHING:

- Updated transcript analysis
- Completion of all professional education and subject content coursework
- Completion and submission of Student Teaching Application
- Application for the State Student Teaching permit, due 90 days before student teaching.
- Successful scores on the content area PRAXIS II (Test scores must be submitted to the Center for Student Advising and Records)
- Completion of a minimum 125 hours of field-based experience (embedded in program).
- Completion and submission of the State Student Teaching Permit Application.

REQUIREMENTS FOR GRADUATION:

- Completion of all coursework, with C or better in all graduate coursework
- Enrollment in at least one credit hour in the graduation semester
- On-line application to graduate (Contact Advising Center for additional information)
- 3.0 GPA.

ADDITIONAL NOTES

For teaching certification, submit passing scores for the PLT and forms, 10T, 7, and the Applicant Information Page, required for certification to Mike Sekula, Certification Officer, in the Center for Student Advising and Records during final semester.

MASTERS-ONLY PROGRAMS

Masters of Arts - Advanced online Secondary Education with SCIENCE emphasis

Designed for individuals who hold a teaching license in secondary education with a science specialization. This program provides increased knowledge, skill, and competence for teachers working with children in secondary science. The program consists of 36 credit hours and is offered online through the Electronic Campus of the Southern Regional Education Board (SREC). All students pay in-state tuition rates for courses offered through the Electronic Campus regardless of residency.

Students will complete thirty-six hours of online coursework that is designed to broaden their professional knowledge and teaching skills.
Required Professional Graduate Education Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 605</td>
<td>21st Century Teaching/Learning (First class of program)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 604</td>
<td>School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 645</td>
<td>Global Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 648</td>
<td>Science/Tech.: Soc Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 639</td>
<td>Science Research/Tchng Ethics</td>
<td>3</td>
</tr>
<tr>
<td>SCFD 640</td>
<td>History of American Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 649</td>
<td>History/Philosophy of Science</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 680</td>
<td>Tech Intgrtn-Capstone Exper (last course of program)</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>Advisor Approval</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>Hours</td>
<td>36</td>
</tr>
</tbody>
</table>

Requirements for Graduation:

- Completion of all coursework, with C or better in all graduate coursework
- Enrollment in at least one credit hour in the graduation semester
- On-line application to graduate (Contact Advising Center for additional information)
- 3.0 GPA.

Masters of Arts - Advanced online Secondary Education with Social Studies emphasis

Designed for individuals who hold a teaching license in secondary education with a specialization in social studies. This program provides increased knowledge, skill, and competence for teachers working with children in secondary social studies. The program consists of 36 credit hours and is offered online through the Electronic Campus of the Southern Regional Education Board (SREC). All students pay in-state tuition rates for courses offered through the Electronic Campus regardless of residency.

Students will complete thirty-six hours of online coursework that is designed to broaden their professional knowledge and technical skill.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 605</td>
<td>21st Century Teaching/Learning (first class of program)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 604</td>
<td>School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 615</td>
<td>Issues in Holocaust Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 645</td>
<td>Global Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 656</td>
<td>Challenges in Teaching History</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 757</td>
<td>Social Studies Curr Devlp K-12</td>
<td>3</td>
</tr>
<tr>
<td>SCFD 640</td>
<td>History of American Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 680</td>
<td>Tech Intgrtn-Capstone Exper (last class of program)</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Advisor Approval</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>Hours</td>
<td>36</td>
</tr>
</tbody>
</table>

Requirements for Graduation:

- Completion of all coursework, with C or better in all graduate coursework
- Enrollment in at least one credit hour in the graduation semester
- On-line application to graduate (Contact Advising Center for additional information)
- 3.0 GPA.

Masters of Arts - Secondary Education /Higher Education Curriculum and Teaching

This degree is intended for students who wish to complete a general education master degree. It does not provide a pathway to teaching certification.

Higher Education Curriculum and Teaching

<table>
<thead>
<tr>
<th>Required Courses in Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 701 Curriculum Development</td>
</tr>
<tr>
<td>C&amp;I 687 Advanced Teaching Strategies</td>
</tr>
<tr>
<td>C&amp;I 789 Teaching In Higher Education</td>
</tr>
<tr>
<td>EDP 600 Educational Psychology</td>
</tr>
</tbody>
</table>

Select one of the following: 3
REQUIREMENTS FOR GRADUATION:
• Completion of all coursework, with C or better in all graduate coursework
• Enrollment in at least one credit hour in the graduation semester
• On-line application to graduate (Contact Advising Center for additional information)
• 3.0 GPA.

Master of Arts Secondary Education (Thesis Option - 30 Credit Hours)
This option is available to students who wish to advance their career through the intensive individualized study of their area interest. Students interested in pursuing this option should contact the chair of the department of Curriculum and Instruction for program information.

REQUIREMENTS FOR GRADUATION:
• Completion of all coursework, with C or better in all graduate coursework
• Enrollment in at least one credit hour in the graduation semester
• On-line application to graduate (Contact Advising Center for additional information)
• 3.0 GPA.

Elementary Education

Masters Degree Programs in Elementary Education
The Department of Curriculum & Instruction/Literacy Studies, Social and Cultural Foundations, and Educational Leadership Studies offers opportunities for graduate study, teacher certification, and research leading to Master's degrees and a Master's degree with initial certification. These programs are designed to prepare individuals to become educators or educational leaders. The primary purposes of the graduate programs in this department are to provide increased knowledge, skills, and professional competencies for licenses related to each specialty area in the department (listed below). Each program has met national accreditation standards. Students in the programs will work with faculty who contribute as educational scholars to the profession at university, state, and national levels. Additionally, the programs offer opportunities to explore technology, global initiatives, and culturally responsive teaching, and current educational research in your selected program.

Students who wish to pursue a masters degree with certification may choose the Masters and Certification (MAC) program. Students pursing a masters without certification may choose the Advanced Masters in Elementary Education, the Masters in Elementary/Early Childhood, or the Masters in Elementary Education (thesis option).

Admission Requirements
• WVU application for admission
• Bachelor's degree with a 2.75 GPA or above
• A one-page goal statement
• Test requirements: Praxis Core Academic Skills for Educators #5712 (reading, writing & math) or Graduate Records Examination (280 and above). Testing may be waived with a score of 26 on ACT, 1125 on SAT or MA degree.
• TOEFL (international students) - TOEFL score must be at least 550 (paper) or 213 (computer) 79-80 iBT).

Note: Students should contact the Center for Student Advising and Records for a transcript analysis.

Masters in Elementary Education with Initial Certification
This program requires 36 hours of education core classes, 12 hours of clinical experience, and 45 hours of content areas courses. Students must consult the Center for Advising and Records for a transcript analysis to determine the exact content requirements.
Teacher certification requirements are based on the West Virginia Department of Education’s Policy 5100 Approval of Educational Personnel Preparation Programs and Policy 5202 Licensure of Professional/Paraprofessional Personnel. Please note, students must also complete required content coursework for teaching certification. Contact the department for the additional certification coursework required.

MASTERS-ONLY PROGRAMS

Master of Arts - Advanced Online Elementary Education Program
This program is designed for individuals who already hold a teaching license in elementary education and for educators. Students have the opportunity to advance their knowledge and skills applicable to student learning. The program consists of 36 credit hours and is offered online through the Electronic Campus of the Southern Regional Education Board (SREC). All students pay in-state tuition rates for courses offered through the Electronic Campus regardless of residency.

Master of Arts - Elementary Education/ Early Childhood Education (Pre K-4)
This program is designed for individuals who choose to become experts in early childhood education. Students gain practical experience by working with young children throughout their educational experience. This program does not provide certification.

Master of Arts - Elementary Education (Thesis Option)
This thesis option is available to those who choose to advance their career through the intensive study of their area of interest while creating an individualized research agenda. Students interested in pursuing this option should contact the chair of the department for program options. All applicants must comply with the general requirements of the university and the College of Education and Human Services.

Master of Arts Elementary Education with Initial Teaching Certification (MAC)
This program is available to those students who hold a bachelor’s degree in non-education or education fields and choose to pursue a degree and certification in elementary teacher education. This program is also designed for career changers, individuals who choose to change careers after several years on the job.

This program requires 36 hours of education core classes, 12 hours of clinical experience, and 45 hours of content areas courses. Students must consult the Center for Advising and Records for a transcript analysis to determine the exact content requirements.

<table>
<thead>
<tr>
<th>Required Professional Graduate Education Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 631 Mathematics-Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 602 Curriculum/Teaching Principles</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 640 Science In Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 650 Social Studies-Elementary Schol</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 689 Cultural Diversity -Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDP 600 Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 603 Literature-Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 621 Rdng &amp; Wrtng Inst-Elem Schools</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 640 Instructing Students-Rdng Dif</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 641 Problems in Reading</td>
<td>3</td>
</tr>
<tr>
<td>SPED 500 Legal/Eductnl Foundtns:Spec Ed</td>
<td>3</td>
</tr>
<tr>
<td>SPED 601 Academic Interventns:Spec Needs</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLINICAL EXPERIENCE REQUIREMENTS</th>
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<tbody>
<tr>
<td>C&amp;I 584 Studnt Tchng Elem/Erly Chldhd</td>
<td>7</td>
</tr>
<tr>
<td>C&amp;I 588 Professional Field Experience</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;I 680 Tech Intgrtn-Capstone Exper</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>12</td>
</tr>
</tbody>
</table>

Please note: Students must also complete required content coursework for teaching certification. Contact the Center for Advising and Records for a transcript analysis for the additional certification coursework required.

REQUIREMENTS TO BE COMPLETED PRIOR TO STUDENT TEACHING

• Updated transcript analysis
• Completion of all professional education and subject content coursework
• Completion and submission of Student Teaching Application
• Application for the State Student Teaching permit, due 90 days before student teaching.
• Successful scores on the content area PRAXIS II (Test scores must be submitted to the Center for Student Advising and Records)
• Completion of a minimum 125 hours of field-based experience (embedded in program).
• Completion and submission of the State Student Teaching Permit Application.

REQUIREMENTS FOR GRADUATION
• Completion of all coursework, with C or better in all graduate coursework
• Enrollment in at least one credit hour in the graduation semester
• On-line application to graduate (Contact Advising Center for additional information)
• 3.0 GPA.

ADDITIONAL NOTES
For teaching certification, submit passing scores for the PLT and forms, 10T, 7, and the Applicant Information Page, required for certification to Mike Sekula, Certification Officer, in the Center for Student Advising and Records during final semester.

Master of Arts - Elementary Education Early Childhood Education (Pre K-4)
This program is designed for those individuals who choose to become experts in early childhood education. Students gain practical experience by working with young children throughout their educational experience.

REQUIREMENTS FOR GRADUATION
• Completion of all coursework, with C or better in all graduate coursework
• Enrollment in at least one credit hour in the graduation semester
• On-line application to graduate (Contact Advising Center for additional information)
• 3.0 GPA.

MASTERS-ONLY PROGRAMS
Master of Arts - Advanced Online Elementary Education Program
Designed for individuals who hold a teaching license in elementary education. This program provides increased knowledge, skill, and competence for teachers working with children in elementary school settings. The program consists of 36 credit hours and is offered online through the Electronic Campus of the Southern Regional Education Board (SREC). All students pay in-state tuition rates for courses offered through the Electronic Campus regardless of residency.

Students will complete thirty-six hours of online coursework that is designed to broaden their professional knowledge and teaching skills.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 605</td>
<td>21st Century Teaching/Learning (first class in Program)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 604</td>
<td>School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 631</td>
<td>Mathematics-Elementary School (Fall Only)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 630</td>
<td>Problem Solving in Math</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 639</td>
<td>Science Research/Tchng Ethics</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 648</td>
<td>Science/Tech:Soc Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 757</td>
<td>Social Studies Curr Devlp K-12</td>
<td>3</td>
</tr>
<tr>
<td>SCFD 640</td>
<td>History Of American Education</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 621</td>
<td>Rdng &amp; Wrtng Inst-Elem Schools</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 680</td>
<td>Tech Intgrtn-Capstone Exper (last class of program offered Spring Only)</td>
<td>3</td>
</tr>
<tr>
<td>Electives (Approved by Advisor)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

REQUIREMENTS FOR GRADUATION
• Completion of all coursework, with C or better in all graduate coursework
• Enrollment in at least one credit hour in the graduation semester
• On-line application to graduate (Contact Advising Center for additional information)
• 3.0 GPA.
Higher Education Administration

Degrees Offered
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 (M.A.) in higher education administration
- Doctor of Education (Ed.D.) in higher education administration

Online Masters (M.A.) - Higher Education Administration
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 with options for face-to-face courses
- Part-time or full-time enrollment options
- Courses can be taken from any geographic location
- Flexible program of study (two to eight years to complete the program)
- Advanced learning platform technologies (synchronous and asynchronous)
- Courses taught by full-time faculty and administrators

Career Placement
- Alumni have been placed within executive, administrative (business administration, academic affairs, and student affairs), and faculty support positions.
- Higher education administrators held about 161,800 jobs in 2012 and employment in this area is projected to grow 15% from 2012 to 2022, faster than the average for all occupations.
- Higher education administrators work at colleges, universities, community colleges, and technical schools.

FACULTY

CHAIR
- Dale S. Niederhauser - Ph.D.

PROFESSOR EMERITUS
- Ernest Goeres - Ph.D.
  (University of Iowa)

ASSISTANT PROFESSORS
- Lauryl Lefebvre - Ph.D.
  (University of Indiana)
- Nathan Sorber - Ph.D.
  (Pennsylvania State University)

ADJUNCT PROFESSORS
- John (Jay) Cole - Ph.D.
  (University of Michigan)
- Gabrielle St. Leger - Ed.D.
  (West Virginia University)
- Steve Robinson - Ph.D.
  (University of Alabama)
- Erin McHenry Sorber - Ph.D.
  (Pennsylvania State University)
Acceptance Policy

The University’s Graduate Council sets minimum standards for admission into graduate study. However, faculty members in each respective program area decide who should be admitted into graduate study under their supervision. Ultimately, it is them who certify which students have demonstrated sufficient mastery of the discipline to qualify for a graduate degree. Although a student may be admitted for the purpose of enrolling in advanced coursework, only the program faculty may grant permission for the pursuit of a degree. Likewise, if a student will not be recommended for a degree until the faculties of that specific graduate program have indicated, in writing, that the student has gained satisfactory knowledge and has completed all the requirements for the graduate program.

Applicants for a master of arts degree in higher education administration (HIED) 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 of 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 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 advisor and guidance on the development of a personalized program of study.

Admissions Procedures

The Higher Education Administration Program admits students to the Master of Arts Program once a year for the Fall term. Students should apply prior to February 15 of the academic year they wish to enroll.

Applicants should arrange for the following items to be sent to West Virginia University:

1. All official course transcripts. Official undergraduate and graduate transcripts should be sent to the WVU Office of Admissions. The undergraduate grade point average must be equal to or greater than 3.0 (on a four-point scale)

Office of Admissions - West Virginia University

P. O. Box 6009, Morgantown, WV 26506-6009

Phone: 304-293-2121 Fax 304-293-3080

2. Graduate Records Examination (GRE) or Miller Analogies Test (MAT) Scores. Request that the GRE or MAT send your scores to WVU using Institution Code 5904. Test dates should be within five years of the date of application. Applicants must score at or above the 50th percentile on the GRE or MAT examinations. In addition, all applicants whose native language is not English must have a minimum score of 93 on the internet-based test (IBT) TOEFL examination

In addition to college transcripts and test scores, applicants are required to submit an online application, which can be found at http://grad.wvu.edu.

Prepare in advance to upload the following items to the “Supplemental Materials” section of the online application.

1. Letter of application describing past work experience and goals for graduate study in higher education administration. Please upload under “personal statement” section of the supplemental materials page.

2. Resume. Please upload under “resume/vitae” section of the supplemental materials page.

3. Complete contact information and description of professional relationship for three references. Please upload under “other” section of the supplemental materials page. Do not submit references contacts under the “recommendations” section of the online application, as letters of recommendation are not required.

4. Two scholarly writing samples. Please upload under “other” section of the supplemental materials page.

Curriculum Requirements

NOTE: EDLS courses that are specific to the Higher Education Administration program will be changed over to HIED courses in the Spring of 2015.

A minimum GPA of 3.25 is required in all major courses.
A grade of C or higher is required in all major courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 650</td>
<td>Higher Education Admin</td>
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</tr>
<tr>
<td>HIED 651</td>
<td>College Student Development</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 693A</td>
<td>Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>
**Required Research Core Courses** (6 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDL 693X</td>
<td>Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>EDP 617</td>
<td>Program Evaluation (Required Research Core Courses) (6 credit hours)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sample of HIED/EDLS ELECTIVES** (6 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDL 693Y</td>
<td>SPTP: Enrollmnt Mang Higher Ed</td>
<td>3</td>
</tr>
<tr>
<td>HIED 693B</td>
<td>SPTP: Org Theory/Behavior</td>
<td>3</td>
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</tbody>
</table>

**Sample of Support Area Courses** (9 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP 600</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDP 640</td>
<td>Instructional Design</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 789</td>
<td>Teaching In Higher Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Capstone Experience** (3 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 693C</td>
<td>Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours**

36

*or other advisor-approved research methods courses

**Doctor of Education (Ed.D.)- Higher Education Administration**

The Doctor of Education degree (Ed.D.) in higher education administration is currently not accepting new applications due to oversubscription.

For an alternative option, see the Educational Leadership and Policy Studies area of emphasis in the Ph.D. in education (interdisciplinary) program at [http://www.hre.wvu.edu/education_phd](http://www.hre.wvu.edu/education_phd) or join our waiting list by visiting [http://edls.wvu.edu/hied/doc](http://edls.wvu.edu/hied/doc).

**DOCTOR OF EDUCATION (ED.D.)- HIGHER EDUCATION ADMINISTRATION**

The Doctor of Education degree (Ed.D.) in higher education administration is currently not accepting new applications due to oversubscription.

For an alternative option, see the Educational Leadership and Policy Studies area of emphasis in the Ph.D. in education (interdisciplinary) program at [http://www.hre.wvu.edu/education_phd](http://www.hre.wvu.edu/education_phd) or join our waiting list by visiting [http://edls.wvu.edu/hied/doc](http://edls.wvu.edu/hied/doc).

**Literacy Education**

The Department of Curriculum and Instruction/Literacy Studies, Social and Cultural Foundations, Educational Leadership Studies offers opportunities for graduate study, teacher certification, and research, leading to a degree in Masters of Art in Reading. Our program is designed for educators and other professionals with educational leadership responsibilities. The primary purposes of the Reading program are to provide increased knowledge, skills, research, and professional competencies for licensure. Our program faculty work with national accreditation standards for each of their programs. Our faculty contribute to the profession at university, state, and national levels of professional involvement. The experiences available through the reading program involve effective technology, diversity, global initiatives, culturally responsive teaching, and effective faculty who are leaders in research, teaching and service in their scholarly work.

For more information, please visit our website at [http://cils.wvu.edu/](http://cils.wvu.edu/).

**Curriculum and Instruction/Literacy Studies, Social & Cultural Foundations, Educational Leadership Studies**

Dale S. Niederhauser, Chair

602 Allen Hall

**Degree Offered**

- Master of Arts

The primary purpose of the Master’s program in Literacy Education is to provide increased knowledge, skill, and competence for teachers or those who work in the field. The program contains a number of related options for emphasis within its framework, making it flexible enough to meet a wide variety of needs. Advanced teacher certification requirements are based on the West Virginia Department of Education’s Policy 5100 Approval of Educational Personnel Preparation Programs and Policy 5202 Licensure of Professional/Paraprofessional Personnel.

**COURSES**

Course offerings provide opportunities to become familiar with the organization, implementation, and administration of pre-kindergarten through adult reading programs. Practical opportunities for teachers and specialists-in-training are provided in the University Reading Clinic.
For further information on admission and program requirements, write to the following:

Dale S. Niederhauser, Chair
Department of Curriculum and Instruction/Literacy Studies
College of Education and Human Services
602 Allen Hall
P.O. Box 6122
Morgantown, WV 26506-6122

FACULTY

CHAIR
• Dale S. Niederhauser

PROGRAM DIRECTOR
• Steven D. Rinehart - Ed.D. (West Virginia University)
  Professor

ASSOCIATE PROFESSORS
• Allison Swan Dagen - Ph.D. (University of Pittsburgh)
• Aimee L. Morewood - Ph.D. (University of Pittsburgh)
  Reading Education, Professional Development, Effective Teaching Strategies
• Charline Barnes Rowland - Ed.D. (Virginia Polytechnic Institute and State University)

REQUIREMENTS

All applicants must comply with the general West Virginia University requirements, requirements of the College of Education and Human Services, and the reading program. As State certification requirements change, additional coursework may be required.

Professionals with successful teaching experience at the elementary, secondary, or college level may elect to enroll in these courses to increase their competencies as reading teachers, and/or literacy coaches to keep themselves informed of the latest trends and developments in reading education, or to prepare for positions of greater responsibility. Students who plan to enter the teaching field may also wish to enroll in these courses to increase their overall skills and knowledge.

DEGREE REQUIREMENTS

Degree Requirements
A minimum GPA of 3.0 is required in all courses.

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hours</td>
<td>36</td>
</tr>
</tbody>
</table>

MAJOR REQUIREMENTS

Required Courses

<table>
<thead>
<tr>
<th>RDNG 621</th>
<th>Rdng &amp; Wrtng Inst-Elem Schools</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDNG 622</td>
<td>Content Area Literacy Inst</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 624</td>
<td>Foundations of Literacy</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 627</td>
<td>Developing Reading Interests</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 640</td>
<td>Instructing Students-Rdng Dif</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 641</td>
<td>Problems in Reading</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 682</td>
<td>Assessment of Reading Ability</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 685</td>
<td>Pract:Clinical Teach Intrmshp</td>
<td>6</td>
</tr>
<tr>
<td>RDNG 726</td>
<td>Literacy Leadership</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

• Students must complete six or more hours in reading within two years after admission (probationary or regular), or admission will be invalidated and the student will be required to reapply.
The course requirements in the program lead to reading specialist certification for qualified candidates, assuming candidates meet other state certification requirements.

PROGRAM REQUIREMENTS

• 3.0 GPA in graduate coursework with "C" or better in all graduate courses
• No more than fourteen hours at a 400-level plus student teaching may count toward a thirty-six hour master’s degree.
• Application for transient credit for graduate courses taken at other institutions must be approved by the advisor and the Assistant Dean for Student Services.
• Elective courses must be approved by the advisor prior to enrollment.
• Passing scores on the Praxis II in reading content area

REQUIREMENTS FOR GRADUATION

• Completion of all coursework, with C or better in all graduate coursework
• Enrollment in at least one credit hour in the graduation semester
• On-line application to graduate (Contact Advising Center for additional information)
• 3.0 GPA.

Public School Administration

CURRENTLY NOT ACCEPTING NEW STUDENTS INTO THIS PROGRAM.

The Educational Leadership – Public Education Administration Program at West Virginia University prepares individuals for leadership positions in elementary, secondary, and post-secondary educational institutions. Although most of our students pursue administrative careers at the secondary-education level, some prepare for college or university research, teaching, and/or staff positions.

Degrees Offered

• Master of Arts (M.A.) in education leadership/public school administration
  • Doctor of Education (Ed.D.) in educational leadership/public school administration

Certifications Offered

• Certification for elementary and secondary school principals
• Certification for instructional supervisors
• Certification for superintendents

FACULTY

CHAIR
• Dale S. Niederhauser - Ph.D.

PROFESSOR
• Helen Hazi - Ph.D.
  University of Pittsburgh

ASSISTANT PROFESSOR
• Micah Fierstein - Ed.D.
  Oregon State University

Admissions for Masters with Principle Certification

IMPORTANT: Students must complete the Praxis II (0411) within the last four (4) years, and the Teacher Evaluation Training Seminar provided by the West Virginia Center for Professional Development in order to receive ALL certifications.

Applicants for a master of arts degree in educational leadership studies must comply with the WVU requirements for admission to graduate studies, the requirements of the College of Education and Human Services, and those of the educational leadership studies program. Admission to all programs is contingent on assessment of complete official transcripts of all higher education work attempted and other evidence the faculty may deem necessary to
judge probable success in the graduate program. Admission procedures are explained more completely on the EDLS program admissions page on the department’s website. In order to graduate, students must earn at least a 3.25 grade point average on all program work attempted.

The admissions requirements for the master of arts degree are as follows:

1. Application for Admission to Graduate School http://grad.wvu.edu/admissions
2. All official college transcripts, undergraduate and graduate*
3. The undergraduate grade point average, for the last two years of coursework, must not be below 3.0 (on a four-point scale).
4. The graduate grade point average in all graduate courses taken before admissions to our program must be no lower than 3.25 (on a four-point scale).
5. On the Graduate Record Examination, applicants must score no lower than 460 for the verbal section, 500 for the quantitative, and 3.0 for the analytical section. GRE scores must be taken within five years before the date of application. In addition, all applicants whose native language is not English must submit a score of at least 93 on the internet based (IBT) TOEFL examination. [WVU institution code: 5904]*
6. Statement of professional experiences and career aspirations
7. Professional resume
8. Two reference letters

* Send items 2 and 5 to: Office of Admissions, West Virginia University, P. O. Box 6009, Morgantown, WV 26506-6009, Phone: (304) 293-2121, Fax: (304)293-3080.

Admissions Procedures

The Ed.D. in Public School Administration program admits students to the program during the fall term. The application deadline is April 15 for the fall semester. For admission consideration, applicants are required to submit the following documents:

1. Application for admission to the Graduate School (located at www.grad.wvu.edu). Please attach items 2, 3, 4, and 5 to this online application form.
2. Cover letter describing your past work experience and goals for graduate study in Public School Administration
3. Resume
4. Three letters of reference commenting on your proficiency for graduate study
5. A writing sample
6. All official college transcripts, undergraduate and graduate. The undergraduate grade point average must equal to or greater than 3.25 (on a four-point scale).*
7. Graduate Record Examination (GRE) or Miller Analogies Test (MAT) scores taken within five years of the date of application. Applicants must score at or above the fiftieth percentile on the GRE or MAT examinations. In addition, all applicants whose native language is not English must have a minimum score of 93 on the internet-based test (IBT) TOEFL examination. [WVU Institution Code: 5904]*

* Send items 6 and 7 to: Office of Admissions, West Virginia University, P.O. Box 6009, Morgantown, WV 26506-6009, Phone: (304) 293-2121, Fax: (304) 293-3080.

Acceptance Policy

The University Graduate Council sets minimum standards for admission into graduate study. However, faculty members in each respective program area decide who should be admitted into graduate study under their supervision. Ultimately, it is them who certify which students have demonstrated sufficient mastery of the discipline to qualify for a graduate degree. Although a student may be admitted for the purpose of enrolling in advanced coursework, only the program faculty may grant permission for the pursuit of a degree. Likewise, a student will not be recommended for a degree until the faculties of that specific graduate program have indicated, in writing, that the student has gained satisfactory knowledge and has completed all the requirements for the graduate program.

Applicants for an Ed. D. in Public School Administration must comply with the WVU requirements for admission to Graduate Studies, the requirements of the College of Human Resources and Education, and those that the EDLS 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 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 advisor and guidance on the development of a personalized program of study.

The Master of arts program is a blended program utilizing instructional technology to prepare students as dynamic leaders in educational institutions. The masters degree leads to principal certification K-12.
CURRICULUM REQUIREMENTS

Required Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDLS 601</td>
<td>Dynamics-Educational Organiztn</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 602</td>
<td>Human Resources Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 603</td>
<td>Principles-Educational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 610</td>
<td>School Business Administration</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 611</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 612</td>
<td>School-Policies/Politics/Laws</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 785</td>
<td>Education Administration Internship (3 one hour classes of EDLS 785)</td>
<td>3</td>
</tr>
<tr>
<td>EDP 600</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 613</td>
<td>Plan/Research/Eval-School Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 614</td>
<td>Community and Media Relations</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 620</td>
<td>Site Based Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 693</td>
<td>Special Topics (Technology and Leadership)</td>
<td>3</td>
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</tbody>
</table>

Elective Courses

Select TWO of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 701</td>
<td>Curriculum Development (OR)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 604</td>
<td>School Curriculum</td>
<td></td>
</tr>
<tr>
<td>SCFD 600</td>
<td>Sociology Of Education (OR)</td>
<td>3</td>
</tr>
<tr>
<td>SCFD 640</td>
<td>History Of American Education</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 42

NOTE: Our program is currently not accepting new applications due to oversubscription. You may join the waiting list by visiting: http://edls.wvu.edu/public_ed/doc-program

Special Education

Degrees Offered

- Master of Arts
- Area of Emphasis for Doctor of Education

The graduate program leading to the M.A. in special education is designed to prepare master teachers of infants, toddlers, children, and adults with exceptionalities and to provide initial training for the preparation of future supervisors and administrators of public-school special education programs. The College of Education and Human Services awards the doctor of education, which may include an emphasis in special education. The Ed.D. with emphasis in special education has two program options: the program option in personnel preparation in special education is designed to prepare graduates for roles as faculty members and researchers, while the program option in school leadership for special education is designed to prepare graduates for roles as administrators or supervisors in public schools or community agencies. The program also prepares professionals for emerging roles associated with interdisciplinary services to persons requiring special education or disability services.

Certification and/or Master’s Degree Program Options

- Autism Spectrum Disorders (autism grades K–6 and/or 5–adult)
- Early Childhood Special Education (preschool special needs grades pre-K–K)
- Gifted Education (gifted grades 1–12)
- Low Vision/Blindness (visual impairments grades Pre-K–adult)
- Multicategorical Special Education (intellectual disabilities, learning disabilities, behavior disorders grades K–6 and/or 5–adult)
- Severe/Multiple Disabilities (severe disabilities grades K–adult)

Applicants interested in one of the program areas should review the detailed information provided at http://specialed.wvu.edu/ or contact sped@mail.wvu.edu for a brochure and application or an update on availability of specific courses.

NOTE: The names of teaching certification categories may differ in other states, so prospective students should contact the state education agency to determine whether a program will qualify them for certification in that state.
Retention
Retention in any program requires maintaining satisfactory progress by enrolling in at least 6 credits per year, completion of all required courses with a grade of A or B, obtaining a passing score on all required performance assessments, and maintenance of an overall 3.0 GPA. Students who fail to make satisfactory progress by earning 6 credits during the first year will receive a warning letter and if they fail to earn 6 credits in the following year, they may be dismissed from the program. Students who fail to earn a grade of A or B may in any repeat that course one time; if they fail to earn an A or B on the second attempt, they will be dismissed from the program. Students who fail to maintain a 3.0 GPA will be placed on academic probation and must achieve that average within the next semester or risk being dismissed from the program.

Culminating Practicum
All certification programs require completion of a culminating practicum experience. Practicum experiences are available through two options: on-the-job option involving supervision by a colleague in the work setting if the student is employed at a site that meets placement criteria and full-time option involving placement in a classroom with a master professional who meets placement criteria if the student is not employed or on a leave of absence from another position.

To be eligible for practicum, students must meet the following requirements.

• Admission to the special education program and completion of all required coursework in the area of specialization with grades of A or B and an overall GPA of 3.0.
• Applicable criteria for one of the currently available practicum options
• Submission of an application for practicum and all supporting documentation by the posted deadline for each semester.

Students should consult the program for a complete list of practicum eligibility requirements and practicum application materials.

A student who fails to achieve an acceptable level of performance in the practicum will have his or her individual performance deficits reviewed and will be given the opportunity to repeat the practicum once; such repetition may occur following completion of an indicated remediation and/or additional instruction. Any student who fails the first practicum and does not commit to a remediation plan will not be eligible to enroll in a second practicum. A student who fails the practicum on the second attempt will be dismissed from the program.

Certification
All students in a certification program must pass required tests in the Praxis series: the Praxis Core Academic Skills for Educators (before admission) as well as the appropriate Principles of Learning and Teaching (PLT) grade-level test and the content specialization test(s) in their area of specialization prior to admission to the culminating practicum experience.

In some areas of specialization, prospective special education teachers also must hold or qualify for a teaching specialization in elementary or secondary education recognized on the professional teaching certificate.

Students are responsible for submitting an application for initial certification or additional endorsement to the appropriate state agency after they have completed all program requirements.

Note: Because of continual changes in federal mandates and state requirements, certification and degree programs in special education are always being revised, so requirements may differ from what currently appears in print; students should contact their faculty advisor for updates on all programs.

Culminating Project
All students in a degree-only program must complete a culminating project at the end of the program.

To be eligible for the project, students must meet the following requirements:

• Admission to the special education program
• Completion of all required coursework in the area of specialization with grades of A or B and an overall GPA of 3.0
• Completion of SPED 675 and SPED 680 in the same semester
• Submission of an application for culminating project and all supporting documentation no later than the posted deadline

Students should consult the program for a complete list of project eligibility requirements and project application materials.

Graduation Requirements
To be eligible for graduation, students must meet the following requirements:

• Completion of all required courses in the program of study with a grade of A or B and an overall GPA of 3.0 within an eight year period from first course to last course
• Enrollment in coursework during the semester in which graduation is planned
• Application for graduation submitted by the posted deadline for the semester for which graduation is planned

FACULTY

CHAIR
• Barbara L. Ludlow - Ed.D. (West Virginia University)

PROFESSORS
• Elizabeth A. Dooley - Ed.D. (West Virginia University)
  Mental Retardation, Learning Disabilities, Multicultural/Education
• Barbara L. Ludlow - Ed.D. (West Virginia University)
  Severe/Multiple Disabilities, Early Intervention/Early Childhood Special Education, Personnel Preparation

ASSOCIATE PROFESSOR
• Ann M. Richards - Ph.D. (University of Arizona)
  Multicategorical Special Education, Transition, Law and Policy Issues

ASSISTANT PROFESSOR
• Sara A. Aronin - Ph.D. (University of Central Florida)
  Instructional Technology, Inclusive Education in Math and Science
• Kimberly K. Floyd - Ph.D. (Old Dominion University)
  Preschool Special Needs, Inclusive Preschools, Assistive Technology
• Sung Hee Lee - Ph.D. (University of Washington)
  Reading Interventions, Inclusive Education, Bilingual Special Education
• Michael R. Mayton - Ph.D. (Tennessee Technological University)
  Positive Behavior Support, Applied Behavior Analysis, Autism Spectrum Disorders
• Naomi L. Rahn - Ph.D. (University of Minnesota)
  Early Intervention/Early Childhood Special Education, Early Language and Literacy Interventions, Response to Intervention

TEACHING ASSISTANT PROFESSOR
• Christan Grygas-Coogle - Ph.D. (Florida State University)
  Early Intervention, Early Childhood Special Education, Assessment
• Melissa B. Hartley - Ph.D. (San Diego State University)
  High Incidence Disabilities, Personnel Preparation, Program Evaluation

CLINICAL ASSISTANT PROFESSOR
• Bernard C. Jones - Ed.D. (West Virginia University)
  Inclusive Education, Cultural Competency, Emotional/Behavioral Disorders

CLINICAL INSTRUCTOR
• Michael O’Neal - M. Ed. (Texas A&M University – Commerce)
  Instructional Technology, Inclusive Education in Math and Science, Emotional/Behavioral Disorders

PROFESSORS EMERITI
• Thomas P. Lombardi - Ph.D.
• Diane T. Woodrum - Ed.D.

ASSISTANT PROFESSOR EMERITUS
• Luise B. Savage - Ed.D.

Application

All applications must comply with University, college, department, and program requirements. Teacher certification requirements are based on the West Virginia Department of Education’s Policy 5100 and Approval of Educational Personnel Preparation Programs and Policy 5202 Licensure of Professional/Paraprofessional Personnel.
Admission

All individuals seeking certification and/or a degree must be admitted into the special education program. Admission is granted on a competitive basis. Applications that are incomplete or fail to provide supporting documentation are NOT considered. Applicants who meet all regular admission criteria are NOT automatically admitted to the program since applications are ranked and accepted in order until all available program openings have been filled. Applicants who meet criteria for provisional are ONLY considered if additional openings remain at that point. Under NO circumstances will ANY requirement be waived. Students are admitted as regular, provisional, or non-degree students as follows:

REGULAR STATUS

The individual who meets all admission requirements is granted regular status as a certification and/or degree-seeking student.

• An earned baccalaureate degree from a regionally accredited college or university with a minimum grade point average of 3.0 (regular admission)
• Passing scores on a nationally standardized test of academic ability within a 10–year period (150 on GRE or 400 on MAT or 156/162/150 on PRAXIS Core)
• Recommendation for graduate study completed by a course instructor
• Permission for field and clinical experiences form signed by a public school system
• Other requirements specific to each program option

OTHER REQUIREMENTS IN CERTIFICATION PROGRAMS

The individual must also meet these additional requirements:

• PRAXIS Core Academic Skills for Educators (Core) passing scores: 156 on 5712, 162 on 5722, 150 on 5732 within 10–year period or certification through the National Board for Professional Teaching Standards (NBPTS) or prior certification in some area of education or a master’s degree from an accredited institution or a composite score of 25 (26 if enhanced) on the American College Test (ACT) or a score of 1035 (1125 if re-entered) on the Scholastic Achievement Test)
• Prior certification in education (only in some programs): autism spectrum disorders: early childhood education (K–4) or elementary education (K–6 or K–8) (for K–6 option only); gifted education: early childhood education or elementary education; or secondary education with emphasis in biology, chemistry, English, general science, mathematics, physics, reading education or specialist, and/or social studies; multi-categorical special education: early childhood education (K–4) or elementary education (K–6 or K–8) (for K–6 option only).

PROVISIONAL STATUS

In some circumstances, individuals may be granted provisional status in the program if they meet all other admission requirements and fit into one of these categories:

• An earned baccalaureate degree from a regionally accredited college or university with a minimum grade point average of 2.75 (provisional admission);
• An earned baccalaureate degree from a regionally accredited college or university with a minimum grade point average of 2.50 IF prior successful completion of a Master’s degree in education or a closely related area with GPA of 3.25 (provisional admission);
• An earned baccalaureate degree from a regionally accredited college or university with a minimum grade point average of 2.5 IF prior successful completion of a graduate TEACHER certification program of 12 credits minimum with GPA of 3.25 (provisional admission).

Provisional status allows the student an opportunity to remediate deficiencies in grade point average or other requirements in order to achieve regular status. Deficiencies must be made up by the deadline set in the admission letter.

NON-DEGREE STATUS

The individual who has earned a baccalaureate degree from a regionally accredited college or university but who does not seek certification or a master’s degree may be admitted as a non-degree student. This status allows the student to take courses for additional endorsement to the professional teaching certificate and/or for professional development and/or personal growth.

ADDITIONAL REQUIREMENTS FOR INTERNATIONAL STUDENTS

The individual who is not a native speaker of English must also meet these requirements:

• Test of English as a Foreign Language (TOEFL) score of 550 or higher (paper) or 215 or higher (computer) or 80 or higher (Internet)
• Personal interview and writing sample to document fluency needed for success in field experiences associated with many courses.

NOTE: The certification and Master’s degree programs are online programs, and international students cannot obtain a visa for study in the U.S. but may participate while residing in their own home countries.
Admission

All individuals seeking the doctoral degree emphasis in special education must be admitted into the special education program.

**REGULAR STATUS**

The individual who meets all of the following admission requirements is granted regular status as a degree-seeking student.

- An earned baccalaureate degree from a regionally accredited college or university with a minimum grade point average of 3.0
- An earned master’s degree from a regionally accredited college or university in special education or disability services with a minimum grade point average of 3.25
- Prior teaching certification in some area of special education (for personnel preparation option) or in special education or disability services (for school leadership option)
- Submission of Graduate Record Examination or Miller Analogies Test scores in support of potential for success in doctoral-level study: MAT score of 400 (sixty-third percentile) or GRE score of 1,000 total (verbal plus quantitative) with minimum score of 450 verbal (prior scale) or 300 total (verbal + quantitative) with minimum score of 155 (current scale) and within a five-year period
- Two years of documented experience providing direct service to children or adults with exceptionalities in special education and/or disability services either in instruction or intervention (for personnel preparation option) or in instruction or intervention, therapeutic interventions, assessment or behavior management, administration or supervision, or other activities (for school leadership option)
- Three letters of reference addressing the candidate’s past academic performance and qualities which would make the person suitable for doctoral-level study (contact program for specifications for reference letters)
- A personal goal statement illustrating a lifelong commitment to excellence in special education and/or disability studies and articulating career goals focused on a leadership position in personnel preparation in special education or school leadership for special education
- An academic writing sample documenting knowledge of special education and/or disability services and skill in organizing and expressing ideas and citing current sources in the professional literature

Additional requirements for international students are as follows:

- TOEFL score of 550 or higher (paper) or 215 or higher (computer) or 80 or higher (internet)

Applicants who meet the criteria specified above will also be required to undergo:

- A personal interview demonstrating communication and interpersonal skills
- A proctored writing sample to verify ability to express ideas with logic, clarity, and correct grammar

Provisional status admission to the program with provisional student status is not permitted at the present time.

Admissions criteria are based on qualifications associated with academic success in doctoral study as well as qualifications that candidates applying for leadership positions are expected to have when seeking employment as faculty at colleges and universities (personnel preparation option) or administrators and supervisors of special education or disability services programs (school leadership option). In recognition of the fact that no single criterion is an adequate predictor of satisfactory completion of a program of study or subsequent success in a professional career, faculty endorses multiple criteria for admission to this doctoral program. Requirements for admission are weighed using a +, 0, - system in judging each applicant and are considered necessary but not sufficient eligibility criteria for admission.

Applicants who meet all criteria are NOT automatically granted admission to the program. Admission is contingent upon number of applicants, number of current students, and availability of graduate faculty.

The Department of Special Education offers Master’s degree programs in the following areas:

- Autism Spectrum Disorders
- Early Childhood Special Education
- Gifted Education
- Low Vision/Blindness
- Multicategorical Special Education
- Severe/Multiple Disabilities

More information about specific programs is available at the links above. Individuals who already have a master’s degree in some other area should consider a second master’s degree to establish their expertise in special education or disability services, enhancing opportunities for other career options or eligibility for advanced degree programs. For most programs, students can earn a master’s degree with certification for as little as three to six additional credits.
Areas of Specialization

NOTE: All programs are subject to revision whenever teacher education or certification requirements change.

Autism Spectrum Disorders

Requirements for Certification or Master’s Degree with Certification in grades K-6 and/or 5-Adult (thirty-six hours minimum)

Minimum Grade B; minimum GPA 3.0

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<thead>
<tr>
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<th>Hours</th>
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<td>Classroom Behav Mangt-Spec Need</td>
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<td>SPED 650</td>
<td>Lrng Characteristics:Autism</td>
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<td>SPED 652</td>
<td>Edl Interventions: Autism</td>
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<tr>
<td>SPED 659</td>
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Requirements for Master’s Degree only (thirty-six hours minimum)

Minimum Grade B; minimum GPA 3.0

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<th>Hours</th>
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<td>SPED 601</td>
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Early Intervention/Early Childhood Special Education

Requirements for Certification or Master’s Degree with Certification in grades PreK-K (thirty-six hours minimum)

Minimum Grade B; minimum GPA 3.0

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<td>SPED 604</td>
<td>Char/Ed Adapt:Dev Disabilities</td>
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<td>SPED 605</td>
<td>Fmly/Prof Colb:Dvlpmnt Dsablty</td>
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<td>SPED 606</td>
<td>Comm/Lit Intrvntn:Dvlpmnt Dsblty</td>
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<td>SPED 607</td>
<td>Frml/Infmrnl Asemnt:Dvlpmnt Dsblty</td>
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SPED 610  Typical/Atypical Dvl:Erly Inte  3
SPED 611  Erly Learn Currdm-Erly Intrvn  3
SPED 612  Respsnv Intrvntn:Erly Intrvntn  3
SPED 616  Bhvr Guidnc/Spprt:Erly Intrvnt  3
SPED 619  Culminating Practicum:ECSE  6

Additional Requirements for Master’s Degree with Certification (36 hours minimum)
Approved Elective  3
Total Hours  36

Requirements for Master’s Degree Only (thirty-six hours minimum)

Minimum Grade B; minimum GPA 3.0

SPED 600  Instruct/Assistive Technology  3
SPED 604  Char/Ed Adapt:Dev Disabilities  3
SPED 605  Fmly/Prof Colb:Dvlpmnt Dsablty  3
SPED 606  Comm/Lit Intrvntn:Dvlp Dsblty  3
SPED 607  Frml/Infmnl Asemnt:Dvlpmnt Dsblty  3
SPED 610  Typical/Atypical Dvl:Erly Inte  3
SPED 611  Erly Learn Currdm-Erly Intrvntn  3
SPED 612  Respsnv Intrvntn:Erly Intrvntn  3
SPED 616  Bhvr Guidnc/Spprt:Erly Intrvnt  3
Approved Electives  3
SPED 675  Research to Practice  3
SPED 680  Culminating Project  3
Total Hours  36

Gifted Education Requirements

Requirements for Certification or Master’s Degree with Certification in grades K-6 and/or 5-Adult (thirty-six hours minimum)

Minimum Grade B; minimum GPA 3.0

SPED 500  Legal/Eductl Foundtns:Spec Ed  3
SPED 601  Acadmic Interventns:Spec Needs  3
SPED 603  Classrm Behavr Mangt-Spec Need  3
SPED 609  Technlgy Applicatns-Spec Needs  3
SPED 663  Collab-Consult Inclusion Strat  3
SPED 670  Introduction-Gifted Education  3
SPED 672  Teaching Strategies:Gifted Ed  3
SPED 674  Support Spec Popultn-Gifted Ed  3
SPED 676  Critcl Thnk/Creatvty-Gifted Ed  3
Approved Electives  3
SPED 679  Culminating Practicum: GE  6
Total Hours  36

Requirements for Master’s Degree Only (thirty-six hours minimum)

Minimum Grade B; minimum GPA 3.0

SPED 500  Legal/Eductl Foundtns:Spec Ed  3
SPED 601  Acadmic Interventns:Spec Needs  3
SPED 603  Classrm Behavr Mangt-Spec Need  3
SPED 663  Collab-Consult Inclusion Strat  3
SPED 670  Introduction-Gifted Education  3
SPED 672  Teaching Strategies:Gifted Ed  3
SPED 674  Support Spec Popultn-Gifted Ed  3
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<td>SPED 675</td>
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<td>SPED 680</td>
<td>Culminating Project</td>
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<td></td>
<td>Total Hours</td>
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### Low Vision/Blindness Requirements

**Requirements for Certification Only or Master’s degree with Certification (thirty-six hours minimum)**

**Minimum Grade B; minimum GPA 3.0**

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<td>SPED 630</td>
<td>Intro Low Vision/Blindness</td>
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<tr>
<td>SPED 631</td>
<td>Introduction to Braille</td>
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<td>SPED 632</td>
<td>Braille Rdng &amp; Literacy Dev</td>
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<td>SPED 633</td>
<td>Nemeth Code &amp; Math Dev</td>
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<tr>
<td>SPED 635</td>
<td>Teach Stdnts-Low Visn/Blindnes</td>
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<tr>
<td>SPED 636</td>
<td>Teach Stdnts-Visn Multi Imprmt</td>
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<tr>
<td>SPED 637</td>
<td>Basic O &amp; M Skills</td>
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<tr>
<td>SPED 639</td>
<td>Culminating Practicum:LVB</td>
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**Requirements for Master’s Degree Only (thirty-six hours minimum)**

**Minimum Grade B; minimum GPA 3.0**

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<td>Intro Low Vision/Blindness</td>
<td>3</td>
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<tr>
<td>SPED 635</td>
<td>Teach Stdnts-Low Visn/Blindnes</td>
<td>3</td>
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<tr>
<td>SPED 636</td>
<td>Teach Stdnts-Visn Multi Imprmt</td>
<td>3</td>
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<tr>
<td>SPED 637</td>
<td>Basic O &amp; M Skills</td>
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<td>Culminating Practicum:LVB</td>
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### Multicategorical Special Education (Behavior Disorders and Learning Disabilities and Mild/Moderate Intellectual Disabilities)

**Requirements for Certification or Master’s Degree with Certification in grades K-6 and/or 5-Adult) (thirty-three hours minimum)**

**Minimum grade B; minimum GPA 3.0**

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<td>Acadmic Interventns:Spec Needs</td>
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<td>Course Code</td>
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**Additional Requirements for Master’s Degree with Certification (36 hours minimum)**

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NOTE: Students seeking certification for grades 5-Adult must also complete fifteen credits of coursework in at least one academic content area (biology, English, general Science, mathematics, or social studies).

**Requirements for Master’s Degree Only (thirty-six hours minimum)**

**Minimum Grade B; minimum GPA 3.0**

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**Severe/Multiple Disabilities**

**Requirements for Certification or Master’s Degree with Certification (thirty-six hours minimum)**

**Minimum Grade B; minimum GPA 3.0**

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<td>Frl/Infml Asemnt:Dvlpmt Disb</td>
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<td>SPED 620</td>
<td>Stndrd-bsd Curr:Severe Disbts</td>
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<td>Instrctnl Pgm:Sev Disabilities</td>
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<td>Postve Behvr Supp:Severe Disbl</td>
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**Additional Requirements for Master’s Degree with Certification (36 hours minimum)**

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**Requirements for Master’s Degree Only (thirty-six hours minimum)**

**Minimum Grade B; minimum GPA 3.0**

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<td>Comm/Lit Intrvntn:Dvlp Disbty</td>
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SPED 607 Frml/Infrml Asemnt:Dvlpmt Disb 3
SPED 620 Stndrd-bsd Curr:Severe Disblts 3
SPED 622 Instrctnl Pgm:Sev Disabilities 3
SPED 625 Scndry/Adlt Prgms:Severe Disbl 3
SPED 626 Postve Behvr Supp:Severe Disbl 3
SPED 675 Research to Practice 3
SPED 680 Culminating Project 3
Approved Electives 6

Special Education

Requirements for Master's Degree (thirty-six hours minimum)

Minimum Grade B; minimum GPA 3.0

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<tr>
<td></td>
<td>Approved Electives (SPED and related area courses)</td>
<td>18</td>
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<tr>
<td>SPED 675</td>
<td>Research to Practice</td>
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<tr>
<td>SPED 680</td>
<td>Culminating Project</td>
<td>3</td>
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</table>

Total Hours 36

Doctor of Education

- Personnel preparation in special education
- School leadership for special education (not currently available)

Applicants interested in one of the program options should review the detailed information provided at http://specialed.wvu.edu/ or contact sped@mail.wvu.edu for a brochure and application or an update on availability of specific courses.

Program of Study

Programs are designed by the doctoral student, the student’s advisor, and the doctoral committee to meet the student’s career goals. Programs of study comply with all applicable institutional requirements, but typically they include coursework in excess of the minimum college requirements to meet these goals.

The leadership training provided through this program draws on the many available strengths and resources of a major university. Development of research skills is a major focus of the program, along with advanced training related to the development, education, and rehabilitation of persons with exceptionalities. Students may complete coursework in a number of programs and colleges in order to take advantage of available interdisciplinary resources. The program encourages study and involvement with faculty from a broad range of disciplines in order to best prepare doctoral students to meet their individual career aspirations as leaders in special education and disability services.

Retention

Retention in any program requires completion of all required courses with a grade of A or B in all required courses, a passing score on all required performance assessments, and maintenance of an overall 3.25 GPA. Students who fail to maintain that average will be placed on academic probation and must achieve that average within the next semester or risk being dismissed from the program.

Graduation Requirements

To be eligible for graduation, students must meet the following requirements:

- Completion of all required courses in the program of study with a grade of A or B and an overall GPA of 3.25 within an eight year period from first course to last course and successful defense of the dissertation research within five years after admission to candidacy
- Enrollment in coursework during the semester in which graduation is planned
- Application for graduation submitted prior to midterm of the semester for which graduation is planned
# Doctoral Program Emphasis in Special Education

## Requirements for Program Option: Personnel Preparation in Special Education

**Minimum Grade B; minimum GPA 3.25**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SPED 770</td>
<td>Policy Analysis/Development</td>
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</tr>
<tr>
<td>SPED 771</td>
<td>Personnel Preparation Strategies</td>
<td>3</td>
</tr>
<tr>
<td>SPED 772</td>
<td>Prof Writing/Grant Writing</td>
<td>3</td>
</tr>
<tr>
<td>SPED 773</td>
<td>Professional Development Models</td>
<td>3</td>
</tr>
<tr>
<td>SPED 774</td>
<td>Analysis/Design of Research</td>
<td>3</td>
</tr>
<tr>
<td>SPED 779</td>
<td>Contemporary Issues and Trends</td>
<td>3</td>
</tr>
<tr>
<td>SPED 781</td>
<td>Orientation to Doctoral Study</td>
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</tr>
<tr>
<td>SPED 782</td>
<td>Prof Practice-Systems Advocacy</td>
<td>1</td>
</tr>
<tr>
<td>SPED 783</td>
<td>Prof Practice-College Instrctn</td>
<td>1</td>
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<tr>
<td>SPED 784</td>
<td>Prof Practice-Clinical Suprvsn</td>
<td>1</td>
</tr>
<tr>
<td>SPED 785</td>
<td>Prof Practice-Empirical Rsrch</td>
<td>1</td>
</tr>
<tr>
<td>SPED 786</td>
<td>Prof Practice-Srvc Activities</td>
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Research Core

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<tr>
<td>SPED 797</td>
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<tr>
<td>SPED 798</td>
<td>Dissertation</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Total Hours 70-75

## Requirements for Program Option: School Leadership for Special Education

**Minimum Grade B; minimum GPA 3.25**

**THIS PROGRAM IS CURRENTLY NOT ADMITTING STUDENTS PENDING RE-ORGANIZATION**

<table>
<thead>
<tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>SPED 773</td>
<td>Professional Development Models</td>
<td>3</td>
</tr>
<tr>
<td>SPED 774</td>
<td>Analysis/Design of Research</td>
<td>3</td>
</tr>
<tr>
<td>SPED 775</td>
<td>Prgrm Administration/Supervisn</td>
<td>3</td>
</tr>
<tr>
<td>SPED 776</td>
<td>Leadership System Change</td>
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<td>SPED 779</td>
<td>Contemporary Issues and Trends</td>
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<td>Prof Practice-Srvc Activities</td>
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<td>SPED 787</td>
<td>Prof Practice-Prgm Administrtn</td>
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<tr>
<td>SPED 788</td>
<td>Prof Practice-Personnl Support</td>
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<td>SPED 789</td>
<td>Prof Practice-Evaluation Pract</td>
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Research Core

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<td>Dissertation</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Total Hours 70-75

Students must also complete college-wide requirements for the doctor of education degree including fifteen credits of research core courses and six credits of foundations courses.

All students are expected to pass a comprehensive examination designed in cooperation with doctoral program committee members and administered after they have completed all required courses to be admitted to candidacy for the doctoral degree.
All students are expected to propose, conduct, and defend original research approved by the doctoral program committee to satisfy the requirements for the doctoral degree.

**Disability Studies**

http://cedwvu.org/students/certificate.php

E-mail: mzepplhar@hsc.wvu.edu

The WVU Center for Excellence in Disabilities, in collaboration with the Department of Special Education, offers a graduate certificate program in disability studies. The certificate in disability studies prepares students, as citizens, to cope with the complex economic and social issues related to disabilities by learning directly from persons with disabilities and their families. Students will be trained to enter the workforce with the knowledge, skills, and experience needed to provide state-of-the-art services to persons with disabilities and their families and to interact with co-workers who have disabilities.

Through the certificate program, students collaborate with and learn from experts in the disability arena, including pediatric neurologists, geneticists, speech-language pathologists, audiologists, special education leaders, social workers, physical and occupational therapists, and others. These professionals, who are experienced clinicians, researchers, and educators, provide didactic instruction, clinical instruction, and mentorship to students.

Students will also have the opportunity to gain leadership and management skills that prepare them to enter the workforce with increased professional independence. The certificate program exposes students to social justice issues, Appalachian concerns, principles of practice, and cultural diversity while developing their expertise in rural practice environments. As part of the program, students have the opportunity to observe programs that serve those with disabilities and their families.

- Students must take two three-credit hour mandatory interdisciplinary courses: one of which is DISB 580.
- Six hours may be elective courses that cover subject matter related to persons with disabilities or courses within the student’s own academic discipline for which they have received prior approval from the certificate program director and the course instructor. Students will be required to complete a project that applies coursework to issues relating to persons with disabilities.
- Two credit hours are earned through thirty volunteer hours in which the student has direct interaction with persons who have disabilities.
- One credit hour is the capstone experience (DISB 686) which includes samples of the student’s accumulated work in disabilities, a final essay, and an oral presentation.
- Students must earn a B- or better in all courses to be awarded the certificate upon completion of all requirements.

**Communication Sciences and Disorders**

**Overview**

The undergraduate program in speech pathology and audiology provides a thorough understanding of the basic processes involved in speech, swallowing, hearing, and language in addition to a broad overview of communication disorders in preparation for professional graduate study in speech-language pathology or audiology.

The Master of Science (M.S.) and Doctor of Audiology (Au.D.) programs in the Department of Communication Sciences and Disorders address the knowledge and skills that prepare graduates to excel in the professions of speech-language pathology and audiology, respectively. Both graduate programs meet the clinical and academic requirements for professional licensure and certification, and both are accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association. Graduates of the professional programs are well-prepared to diagnose and treat the full range of communicative disorders in all age groups and to practice competently as speech-language pathologists and audiologists in a wide range of clinical settings.

The Doctor of Philosophy (Ph.D.) in Communication Sciences and Disorders is a customized post-professional program that prepares audiologists and speech-language pathologists to become effective teachers and researchers with an area of expertise within hearing science and disorders or within speech and language sciences and disorders.

The Department of Communication Sciences and Disorders provides professional services to the public through our on-campus clinics. The West Virginia University Speech Center offers a wide variety of speech-language pathology services to children and adults, whereas the West Virginia University Hearing Center is well-equipped to provide complete diagnostic and rehabilitative audiology services. Fully staffed by professional supervisors, these state-of-the-art clinical facilities help meet the health care needs of the community, while supporting the professional education of the department’s graduate students.
ADMISSION

All applicants for the M.S. in Speech-Language Pathology Program must have a baccalaureate degree or equivalent from a regionally accredited institution of higher learning, and present the following by the January 15 deadline:

1. An undergraduate major in speech-language pathology and audiology or communication sciences and disorders
2. One official transcript from each college attended
3. An overall undergraduate grade point average (GPA) of at least 3.0 (A = 4.0)
4. An official copy of the applicant’s Graduate Record Examination (GRE) scores
5. Proof of English language proficiency for any applicant whose first language is not English
6. Three letters of recommendation that reflect the applicant’s academic and clinical abilities, potential for success in graduate studies, and personal qualities predictive of professional success as a speech-language pathologist
7. A personal statement that addresses the applicant’s goals for professional graduate study in speech-language pathology

All applicants being considered for admission will be provided with a personal interview with members of the CSD faculty.

In some cases, applicants without preparatory coursework in speech-language pathology and audiology (communication sciences and disorders) may be considered for graduate admission, but the program of study will require two additional semesters of added coursework.

Please submit transcripts directly to:
West Virginia University
Office of Admissions
P.O. Box 6009
Morgantown, WV 26506-6009

The WVU Institution Code for the GRE is R5904. Applicants may have their official scores submitted from the newly revised GRE or from the older version, if taken within the past five years. Although no minimum is specified for either test version, GRE scores that meet or exceed the fiftieth percentile are recommended.

ADMISSION

All applicants for the Au.D. program must have a baccalaureate degree or equivalent from a regionally accredited institution of higher learning and present the following by the January 15 deadline:

1. An undergraduate major in speech pathology and audiology or communication sciences and disorders
2. One official transcript from each college attended
3. An overall undergraduate grade point average (GPA) of at least 3.0 (A = 4.0)
4. An official copy of the applicant’s Graduate Record Examination (GRE) scores
5. Proof of English language proficiency for any applicant whose first language is not English
6. Three letters of recommendation which reflect the applicant’s academic and clinical abilities, potential for success in graduate studies, and personal qualities predictive of professional success as an audiologist
7. A personal statement describing the applicant’s goals, aspirations, and motivation for pursuing professional doctoral education in audiology

All applicants being considered for admission will be provided with a personal interview with members of the CSD faculty.

In some cases, applicants without preparatory coursework in speech-language pathology and audiology may be considered for graduate admission, but the program of study will require two additional semesters of added coursework.

ADMISSION AND PERFORMANCE STANDARDS

A Ph.D. Advisory Committee composed of one member from each of the major areas of study will screen the applications and make admissions decisions based on the following criteria, in consultation with the faculty in their area of emphasis. In particular, applicants must have the following:

1. An entry-level clinical degree for the profession of speech-language pathology (i.e., M.A. or M.S.) or audiology (i.e., M.A., M.S., or Au.D.)
2. A cumulative grade point average of 3.25 or higher (A=4.0) upon completion of a graduate degree
3. A score at or above the fiftieth percentile on the Verbal and Quantitative sections and a score of at least 4.0 on the Analytical Writing section on an official copy of the Graduate Record Examination (GRE)
4. A TOEFL score of at least 79 (internet version), 213 (computer-based), 550 (paper-based) or an IELTS score of at least 6.5, if English is not the applicant’s native language
5. An interview with the Ph.D. advisory committee that will include the writing of an essay on an assigned topic to be evaluated by program faculty
6. Three letters of recommendation, two of which must come from previous instructors or professors who can comment meaningfully on the applicant’s potential for Ph.D. study
7. A personal statement that addresses the applicant's professional goals within speech and language sciences and disorders or within hearing science and disorders

Master of Science (M.S.) Program in Speech-Language Pathology

The purpose of the Master of Science degree program in Speech-Language Pathology is to provide aspiring professionals with a firm understanding of the normal processes of speech, language, and hearing; the competence to diagnose and treat the full range of communicative disorders in all age groups; and the opportunity to practice in a wide variety of clinical settings, including schools, hospitals, clinics, special treatment centers, and private practice. The M.S. in speech-language pathology, therefore, is a professional program that emphasizes the knowledge and skills requisite for competent and ethical clinical practice. Graduation thus depends on completion of all academic requirements and the demonstration of sound clinical expertise. The M.S. in speech-language pathology program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association.

Students are expected to become familiar with the 2014 Standards for the Certificate of Clinical Competence in Speech-Language Pathology. Additional information regarding graduate student expectations is outlined in the current edition of the Graduate Student Handbook for Speech-Language Pathology.

GRADUATION REQUIREMENTS

The following are the minimum graduation requirements for the M.S. degree program:

1. Completion of all required courses in the graduate speech-language pathology curriculum
2. A minimum of 400 clock hours of supervised practicum, including at least twenty-five hours of clinical observation and 375 hours of direct patient/client contact
3. An overall graduate grade point average of at least 3.0 (A = 4.0)

RESIDENCY REQUIREMENTS

All students in the M.S. program in speech-language pathology must be full-time in residence during the program of study. The minimum duration for graduate study is five consecutive semesters (including summer sessions). All M.S. students are expected to complete SPA 718 during their final semester of the program. Part-time students are not eligible for admission.

Students must complete an online Application for Graduation and Diploma form by the posted deadline at the beginning of the semester in which they intend to graduate.

Doctor of Audiology (Au.D) Program

The Doctor of audiology (Au.D.) program at West Virginia University was inaugurated in 2004 when the clinical doctorate became the entry-level degree for the profession of audiology. The program consists of 116 credit hours of academic coursework and clinical practicum experiences, including a fourth year residency. Graduates must demonstrate acquisition of all knowledge and skills delineated in the Standards for the Certificate of Clinical Competence in Audiology (CCC-A). The Au.D. program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association.

Students are expected to become familiar with the 2012 Standards for the Certificate of Clinical Competence in Audiology. Additional information regarding graduate student expectations is outlined in the current edition of the Graduate Student Handbook for Audiology.

PROGRAM OBJECTIVES

The Au.D. program has been designed to provide a firm understanding of the normal processes of hearing and communication with the academic and clinical preparation to diagnose and treat the full range of hearing disorders in all age groups. Our goal is to prepare audiologists who are competent to work in a wide variety of clinical settings, including hospitals, clinics, special treatment centers, schools, industry, and private practice. The program’s intent is to provide the knowledge and skills necessary to practice audiology autonomously in an effective, ethical manner. To this end, the following goals have been established by the Department of Speech Pathology and Audiology at West Virginia University:

1. Graduates will demonstrate mastery of knowledge and skills necessary to practice audiology in diverse settings encompassing all of the many facets of our profession.
2. Graduates will demonstrate an ability to work autonomously, using sound judgment in a competent and ethical manner.
3. Graduates will contribute to the profession and their community via active membership in professional organizations, scholarly activity, and taking the initiative in public education concerning hearing and balance disorders.
4. Graduates will be employed as audiologists serving the hearing impaired populaces, industry, and the medical community with special emphasis in underserved areas of our state.
GRADUATION REQUIREMENTS

The following are the minimum graduation requirements for the Au.D. program:

1. Successful completion of 116 semester hours of course work, including the following: (1) sixty-four semester hours in SPA courses and associated laboratories, (2) six semester hours in related areas of counseling, research methods, and business, (3) three semester hours (minimum) in appropriate elective course work, (4) nineteen semester hours of clinic practicum (seventeen audiology, two speech-language pathology), and (5) twenty-four semester hours of clinical residency.

2. An overall graduate GPA of at least 3.0 with a minimum competency level of B, P, or S in all courses and clinical practicum

3. Successful completion of an ASHA-approved practicum experience that is equivalent to a minimum of twelve months of full-time supervised experience

4. Scholarly work, approved by the student’s advisory committee, submitted in written form

5. A passing score on the Praxis exam in Audiology (which is required prior to approval for a residency experience)

Students must complete an online Application for Graduation and Diploma form by the posted deadline at the beginning of the semester in which they intend to graduate.

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.

Doctor of Philosophy (Ph.D.) Program

The Ph.D. degree program provides a rigorous course of study along with mentored research and teaching experiences to enable students to become high-quality researchers and serve effectively as leaders in the discipline of communication sciences and disorders. Graduates of the program are prepared to assume careers as researchers and scholars at colleges, universities, hospitals, industrial settings, and research facilities. The program is not designed to provide an advanced clinical degree. Rather, the Ph.D. degree will be conferred in recognition of the attainment of the highest academic excellence and productive scholarship. As doctoral programs are an integral step on a life-long journey of learning and scholarship, the Department of Speech Pathology and Audiology has established the Ph.D. program in Communication Sciences and Disorders to support students in developing knowledge, judgment, skills, and attitudes to facilitate their growth and learning throughout their careers as researchers, scholars, and teachers.

PROGRAM OBJECTIVES

The primary objective of the Ph.D. degree program is to assist students to develop in-depth mastery of subject matter in a narrow and specific area within the broad discipline of communication sciences and disorders and, simultaneously, to broaden one’s knowledge base in other fields related to the special area of interest, such as health, linguistics, education, and the physical, biological, and socio-behavioral sciences. With the intent to prepare high-quality researchers to serve as leaders in the discipline of communication sciences and disorders, graduates of the program will be prepared to assume independent careers as researchers and scholars at colleges, universities, and hospitals, as well to become key personnel at leading private and public research institutes. Specifically, the objectives of the Ph.D. program include:

1. The development of independent research skills through sequential experiences that involve the planning and conduct (or implementation) of research projects, the writing of grants, and the dissemination of research findings through the presentation of papers at scientific and other professional conferences and publication in peer-reviewed journals in the discipline;

2. The preparation of academicians equipped to teach the university students of tomorrow through guided coursework in educational methods and evaluation, instructional technologies including online course delivery, international and intercultural experiences, and classroom practice; and

3. The acquisition of advanced knowledge and understanding of a specialized area with the ability to apply this understanding to research, teaching, and scholarship.

A HIGHLY INDIVIDUALIZED EXPERIENCE

The Ph.D. program in Communication Sciences and Disorders is a highly individualized experience that includes prescribed and selected coursework designed to meet the objectives of the program, ongoing participation in research and other scholarly activities, and the independent completion of a dissertation under the mentorship of a research advisor. As such, the time needed to complete the program will vary to ensure sufficient time for the building of adequate teaching and research skills and a creditable curriculum vitae. Some diligent and highly motivated students may be able to complete their work in less time, whereas others may require more time to achieve independence as a scholar and researcher.

Because the discipline of communication sciences and disorders supports two professions, audiology and speech-language pathology, students in the Ph.D. degree program may pursue one of the following areas of emphasis:

1. Speech and language sciences and disorders

or

2. Hearing science and disorders
It is expected that—through study, scholarship, and mentorship—Ph.D. candidates will develop deep expertise in a specific topic within an area of emphasis.

PROGRAM REQUIREMENTS

RESIDENCY COMMITMENT

The Ph.D. degree program in communication sciences and disorders requires a full-time commitment. Each student who is accepted into the program works on a daily basis with faculty who will help to hone skills and to sharpen the research focus. Furthermore, each student will be expected to conduct research and pursue scholarship activities that will inform classroom teaching and lead to meaningful presentations and publications. Consequently, applicants are required to sign a statement confirming their commitment to full-time status before they may be admitted to the program.

CURRICULUM

Upon admission to the Ph.D. program, students enroll in a series of required courses in the doctoral core, in the research core, and in the area of specialization. Ph.D. students are expected to maintain a cumulative GPA of at least 3.25 each semester. Upon completion of coursework, students must successfully complete written and oral comprehensive examinations to be eligible for candidacy.

Ph.D. students enroll in a minimum of six credits of independent study, extending over at least three semesters, under the supervision of their mentor. Typically, the focus of the independent study will be on the development of independent research skills through involvement with ongoing or forthcoming projects in the mentor’s research program. Each student will be expected to present at one or more scientific meetings and submit at least two manuscripts for publication in relevant peer-reviewed journals before graduating.

Students must complete an online Application for Graduation and Diploma form by the posted deadline at the beginning of the semester in which they intend to graduate.

Department of Learning Sciences and Human Development

Degrees Offered

- Master of Arts in Educational Psychology (EdP) with areas of emphasis in the following: (1) general Educational Psychology, (2) Program Evaluation and Research, (3) Child Development and Family Studies
- Doctor of Education in Educational Psychology (EdP)
- Master of Arts and Doctor of Education in Instructional Design and Technology (IDT)
- Doctor of Philosophy in Education with areas of emphasis in the following: (1) Learning, Instructional Design, and Technology; and (2) Human Development and Family Studies

The Department of Learning Sciences and Human Development is dedicated to learning across the life span. Encompassing a diverse spectrum of education practices and human services, the department houses programs in child development and family studies, educational psychology, instructional design and technology, and program evaluation and research. Faculty and students alike master technology to share new ways to learn, teach, research, and interact in the community. With a focus on global awareness, graduates are culturally competent and develop ethical foundations to maintain integrity in their academics and professions and simultaneously inspire others.

Child Development and Family Studies

Degrees Offered

- Master of Arts in Educational Psychology
  - Area of emphasis in Child Development and Family Studies

Child Development and Family Studies (CDFS) is an area of emphasis option within the Educational Psychology (EdP) M.A. Program. This area of emphasis prepares students to work with children, adolescents, and/or families in educational, applied, and clinical settings, as well as preparing students for doctoral studies. Coursework is taken in child/adolescent development, family studies, research methods, and statistics. Students also have opportunities for field experiences, independent studies, and teaching practica.

Relative to employment opportunities, students have obtained positions for which they generally would not have been competitive with the bachelor’s degree, unless they had many years of related experience. Upon graduation, graduates have been hired as directors of childcare programs in corporations, hospitals, and the private sector. Some students have obtained positions as instructors and faculty members at four-year colleges and branch campuses of major universities teaching classes in child/human development and family studies. Still other students have become specialists in parenting and curriculum development for Head Start and similar agencies. Graduates have also obtained employment as parenting and family specialists in community-based family agencies and community health care agencies. Some graduate students have entered the program with teaching certificates and have used their master’s degree in CDFS to broaden the scope of their teaching in elementary and secondary education. Graduates of the master’s degree in CDFS have also successfully pursued positions as Extension agents through land-grant universities. Salaries for CDFS
graduates with master’s degrees are highly variable depending on the nature of the position and the location of employment. However, salaries are generally higher than students with the bachelor’s degree.

In addition to educational and applied careers, some students have entered the program with the aim of pursuing doctoral studies. Through rigorous coursework and the requirement to complete a research-based master’s thesis, students are prepared to pursue doctoral studies in human development, family studies, sociology, special education, developmental psychology, counseling, and related fields.

Graduate Assistantships

Prospective students can apply for graduate assistantships (GA) in CDFS, which may include teaching or research activities. The graduate students who have demonstrated competence in preschool education are awarded assistantships to work in the West Virginia University Child Development Laboratory. Graduate students in CDFS also have had success in acquiring assistantships in other academic units in the College of Human Resources and Education and other Colleges at WVU. Within CDFS, a limited number of graduate assistantships are available on a competitive basis. Awards, granted for a one-year period with consideration for a second year, include tuition waiver and a monthly stipend. Graduate assistants work twenty hours per week, assisting CDFS faculty members in their teaching or research activities or teaching CDFS undergraduate classes. Students recognized for academic excellence and not awarded an assistantship may qualify for a limited number of meritorious hours which results in a tuition reduction.

FACULTY

PROGRAM COORDINATOR
• Carol Markstrom - Ph.D. (Utah State University)
  Professor, Adolescent Development, Identity and Ethnic Identity Formation, American Indian Adolescents, Involvement in Adult-sponsored Activities

PROFESSOR
• Barbara Warash - Ed.D. (West Virginia University)
  Early Childhood Education, Reggio Emilia

ASSISTANT PROFESSORS
• Kristin Moilanen - Ph.D. (University of Nebraska)
  Adolescent Development, Self Regulation, Risk Behavior, Family Relationships
• Amy Root - Ph.D. (University of Maryland, College Park)
  Parenting and the Development of Emotional Competence, Individual Differences, Development of Shy/Wary Behavior
• Jessica Trollo - Ph.D. (University of Missouri)
  Cultural Conceptions of Fathers, Divorced Fatherhood, the Influence of Social Media on Relationships
• Suzanne Walraff-Hartman - Ph.D. (George Mason University)
  Three to Five-Year Child Development and Learning, Childcare Preschool Environmental Factors, At-risk Child Populations

CLINICAL INSTRUCTOR
• Nancy Wolfe-Dilgard - M.A. (West Virginia University)
  Communication in Families, Adolescent Drug and Alcohol, Gambling and Families; Parenting Infants, Toddlers, and Adolescences

EARLY CHILDHOOD TEACHERS
• Keri Law - M.A. (West Virginia University)
  Early Childhood Education, Early Childhood Teacher
• Melissa Workman - M.S., M.A. (West Virginia University)
  Early Childhood Education, Early Childhood Teacher/Associate Director of the WVU Nursery School

Admission Requirements and Performance Standards

Ideally, prospective students should have completed an undergraduate curriculum in an area of specialization related to CDFS, such as psychology, sociology, education, or social work. A student whose undergraduate degree is in an unrelated field and/or who lacks preferred foundation courses for graduate studies in CDFS will likely be required to take supplemental undergraduate courses if accepted into the program.

All CDFS faculty members review every graduate application and jointly determine whether a student will be admitted as a regular graduate student or not admitted into the program. One faculty member must be able to serve as the major advisor to the student. Final approval for admission rests with the graduate coordinator of the CDFS program. Application materials include the following:

• Completed application
• Undergraduate transcript
• GRE Scores (while a cut-off has not been established, GRE is examined vis-à-vis undergraduate transcript)
• Personal statement of interest
• Three letters of recommendation
• Resume or curriculum vita

Program Requirements

The CDFS major requires coursework in child development, family studies, statistics, research methods, elective hours, and thesis credits for a total of thirty-three hours. Six credits of electives are selected in consultation with the student’s faculty advisor and are based on the particular interests of individual students. For instance, students may take their electives in educational psychology, curriculum and instruction, counseling and guidance, psychology, special education, sociology, women’s studies, social work, public administration, and related disciplines.

Six credit hours are assigned to the completion of the required research-based thesis. The student and his/her major professor determine the research topic with input from other committee members. The thesis requires six research credits, an extensive literature review, development of a research design with associated methodological procedures, data collection or use of faculty data sets, in-depth analysis of data, and analytic discussion of the results. Most students conduct quantitative/statistically-based theses. However, qualitative research designs are permitted, with appropriate rigorous application of qualitative research methods in the collection and interpretation of data. The format for a thesis must be written in the style of the Publication Manual of the American Psychological Assn. (6th ed.). Theses at WVU are electronically submitted upon their approval.

Educational Psychology

Degrees Offered

• Master of Arts in Educational Psychology (EdP)
  Areas of Emphasis in:
  General Educational Psychology
  Program Evaluation and Research
  Child Development and Family Studies

• Doctor of Education in Educational Psychology (EdP)

Master’s Program General Description

The Educational Psychology Program in the College of Education and Human Services offers opportunities for graduate study and research leading to the Master of Arts (MA) degree. Completion of the program develops competencies related to learning, development, instruction, and program evaluation and research. The principal goal of the program is the education and training of professionals who will serve teaching and learning environments with responsibilities related to instruction, service, and research. Professional preparation focuses on one of the following three areas of emphasis: General Educational Psychology, Program Evaluation and Research, or Child Development and Family Studies.

Each student plans their program with their advisor and thesis/project committee using the specific guidelines of the student’s area of emphasis to achieve their professional development goals. In addition to the general requirements of the University and the College of Education and Human Services, there is a core of courses and supporting competencies required of all graduate students in the program, which vary depending on the area of emphasis.

Educational Psychologists function in a variety of settings. The program is dedicated to the preparation and placement of competent Educational Psychologists for positions in: educational agencies at local, state, and federal levels; public and private human service centers; medical centers; business and industrial settings; and other settings. Graduates of the program are also well prepared to continue their education and professional development in doctoral programs in Educational Psychology and related disciplines.

Areas of Emphasis

General Educational Psychology

The General Educational Psychology Area of Emphasis is designed primarily for individuals who want to pursue general preparation in learning, development, measurement, and research with the possibility of selecting additional coursework to create a focus that supports their professional development goals. All students are required to design and conduct either 1) a project that solves a practical problem in learning or development or 2) a research thesis that investigates a topic or relevance to learning or development.

Program Evaluation and Research

The Program Evaluation and Research Area of Emphasis is designed primarily for individuals with interest in conducting research and evaluation projects for private and public educational organizations and agencies. Emphasis is placed on developing proficiency in quantitative, qualitative, and mixed-methods inquiry, providing students with a breadth of methods to study varied educational, programmatic, and social research questions. All students will be required to design and conduct at least one full program evaluation during the course of their studies.
Child Development and Family Studies

The Child Development and Family Studies area of emphasis provides students with opportunities for conducting research and working with families and children in educational, applied, or other clinical settings. Courses in child development, family studies, parenting strategies, and interpersonal communication skills are supplemented with field experiences in a variety of settings. Individuals studying Child Development and family Studies may select a professional focus from a wide variety of areas including child care specialist, early childhood teacher, developmental specialist, child life educator, parent educator, extension specialist, and family life specialist.

Doctoral Program General Description

The Educational Psychology program in the College of Education and Human Services offers opportunities for graduate study and research leading to the Doctor of Education. The principal goal of the program is the education and training of professionals who will focus on teaching and learning environments as they carry out their missions associated with instruction, service, and research. Professional preparation centers on (a) learning and development; (b) instructional development; and (c) measurement, research, and statistics. Accordingly, students are expected to achieve competencies in these areas.

The student, the student’s advisor, and the student’s committee jointly plan programs to meet particular career needs. Minor fields of study are also planned for each student as appropriate. In addition to the general requirements of the University and the College of Education and Human Services, there is a core of courses supporting the development of competencies required of all graduate students in the program.

FACULTY

CHAIR AND PROGRAM COORDINATOR
- Daniel E. Hursh, 506 Allen Hall - Ph.D. (University of Kansas)

PROFESSORS
- Reagan P. Curtis - Ph.D. (University of California)
  Cognition, Development, Research, Program Evaluation and Statistics
- Daniel E. Hursh - Ph.D. (University of Kansas)
  Chair and Program Coordinator. Applied Behavior Analysis and Instructional Design
- Anne H. Nardi - Ph.D. (West Virginia University)
  Developmental Psychology, Problem Solving, Adult Learning
- Richard T. Walls - Ph.D. (Pennsylvania State University)
  Educational Psychology, Human Learning, Memory, Problem Solving Vocational Rehabilitation

TEACHING ASSISTANT PROFESSOR
- Patricia Haught - Ed.D. (WVU)
  Cognitive Development, Learning Strategies

PROFESSOR EMERITUS
- Meng Shu Tseng

ASSOCIATE PROFESSOR EMERITUS
- Floyd L. Stead

MA Admission Requirements

GENERAL EDUCATIONAL PSYCHOLOGY AREA OF EMPHASIS

All applicants must have an undergraduate degree from an accredited institution. Each applicant is required to submit the online WVU graduate application plus official transcripts of undergraduate and prior graduate work completed, a 500-word written goal statement, a personal vita (resume), and three letters of recommendation. All applicants must submit official scores for either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). All faculty members affiliated with the program evaluate the credentials submitted for all completed applications. A majority must indicate acceptance and one faculty member must be willing to serve as the student’s advisor. Final approval for admission rests with the General Educational Psychology Area of Emphasis Coordinator. The following criteria are used as guidelines to evaluate application credentials:

- Total GRE scores of 320 (on the verbal and quantitative combined) or MAT score of 412 (for an international student from a country in which English is not the native language a TOEFL score of at least 79 and a combined total score of at least 234 on the GRE verbal and the TOEFL scores);
- An undergraduate GPA of 3.0 or greater;
- Graduate GPA of 3.25 or greater for graduate work completed (if applicable);
• The extent to which the applicant’s goals and objectives may be accomplished if admitted to the program; and
• Favorable recommendations and appropriate background experiences.

PROGRAM EVALUATION AND RESEARCH AREA OF EMPHASIS

All Program Evaluation and Research faculty members review every graduate application to the program and jointly determine whether a student will be admitted as a regular graduate student or not accepted into the program. A majority must indicate acceptance and one faculty member must be willing to serve as the major advisor. Final approval for admission rests with the Program Evaluation and Research Area of Emphasis Coordinator. Application materials include the following (with guidelines for minimum levels):

• WVU Online Application
• Undergraduate transcript (GPA of 2.75)
• GRE (306) or MAT (405) and TOEFL (79 for students whose primary language is not English)
• Personal statement of interest
• Three letters of recommendation
• Vita (Resume)

CHILD DEVELOPMENT AND FAMILY STUDIES AREA OF EMPHASIS

Ideally, prospective students should have completed an undergraduate curriculum in an area of specialization related to CDFS, such as psychology, sociology, education, or social work. A student whose undergraduate degree is in an unrelated field and/or who lacks preferred foundation courses for graduate studies in CDFS will likely be required to take supplemental undergraduate courses if accepted into the program.

All CDFS faculty members review every graduate application and jointly determine whether a student will be admitted as a regular graduate student or not admitted into the program. One faculty member must be able to serve as the major advisor to the student. Final approval for admission rests with the CDFS Area of Emphasis Coordinator. Application materials include the following:

• Completed WVU Online Application
• Undergraduate transcript
• GRE Scores (while a cut-off has not been established, GRE is examined vis-à-vis undergraduate transcript)
• Personal statement of interest
• Three letters of recommendation
• Resume or curriculum vita

Doctoral Admission Requirements

All applicants must have an undergraduate degree from an accredited institution. Each applicant is required to submit the online WVU graduate application plus official transcripts of undergraduate and prior graduate work completed, a 500-word written goal statement, a personal vita (resume), and three letters of recommendation. All applicants must submit official scores for either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). All faculty members affiliated with the program evaluate the credentials submitted for all completed applications. A majority must indicate acceptance and one faculty member must be willing to serve as the student’s advisor. Final approval for admission rests with the Educational Psychology Doctoral Program Coordinator. The following criteria are used as guidelines to evaluate application credentials:

• Total GRE scores of 320 (on the verbal and quantitative combined) or MAT score of 412 (for an international student from a country in which English is not the native language a TOEFL score of at least 79 and a combined total score of at least 234 on the GRE verbal and the TOEFL scores);
• An undergraduate GPA of 3.0 or greater;
• Graduate GPA of 3.25 or greater for graduate work completed (if applicable);
• The extent to which the applicant’s goals and objectives may be accomplished if admitted to the program; and
• Favorable recommendations and appropriate background experiences.

APPLICATION INFORMATION

Applicants who are interested in being considered for admission to the MA or EdD graduate programs in Educational Psychology should indicate that interest on standard online application forms provided by the West Virginia University Office of Admissions and Records. In addition to the completed online application form, the following items should be sent to the appropriate Area of Emphasis Coordinator for MA applicants or the EdD Program Coordinator c/o The Department of Learning Sciences and Human Development, West Virginia University, PO Box 6122, Morgantown, West Virginia 26506-6122 before the admission process can be initiated:

1. A completed WVU online graduate application;
2. The applicant’s undergraduate and graduate (if any) transcript(s);
3. An official copy of the results of either the Graduate Record Examination or the Miller Analogies Test and the TOEFL for non native English speakers;
4. Three (3) letters of recommendation;
5. A personal vita (resume); and
6. A written statement of approximately 500 words, indicating the applicant’s goals relative to receiving a graduate degree in Educational Psychology.

Admission to Candidacy

Admission to candidacy for the doctoral degree shall be granted only to persons holding a master’s degree. Students may enter the doctoral program without a master’s degree but must earn a master’s degree within the program before advancing to candidacy for the doctoral program. This master’s program shall require a thesis.

Admission to candidacy occurs after:
1. Successfully completing an acceptable Master’s Degree.
2. Filing an approved program of study.
3. Successfully completing competency requirements for the Major (in the areas of Learning and Development, Instruction, and Research) and the requirements for the Minor.
4. Satisfactory completion of College requirements (i.e., a student is officially admitted to candidacy for the Ed.D. after obtaining unanimous approval of the written dissertation prospectus from the doctoral committee).
5. A signed copy of the approved prospectus and the form for “Admission to Candidacy for Ed.D.” is filed in the CEHS Office of Student Advising and Records. (This constitutes a contract for the dissertation research that the student may begin to conduct.)

Child Development and Family Studies Area of Emphasis

The CDFS Area of Emphasis requires coursework in child development, family studies, statistics, research methods, elective hours, and thesis credits for a total of thirty-three hours. Six credits of electives are selected in consultation with the student’s faculty advisor and are based on the particular interests of individual students. For instance, students may take their electives in educational psychology, curriculum and instruction, counseling and guidance, psychology, special education, sociology, women’s studies, social work, public administration, and related disciplines.

Six credit hours are assigned to the completion of the required research-based thesis. The student and his/her major professor determine the research topic with input from other committee members. The thesis requires six research credits, an extensive literature review, development of a research design with associated methodological procedures, data collection or use of faculty data sets, in-depth analysis of data, and analytic discussion of the results. Most students conduct quantitative/statistically-based theses. However, qualitative research designs are permitted, with appropriate rigorous application of qualitative research methods in the collection and interpretation of data. The format for a thesis must be written in the style of the Publication Manual of the American Psychological Assn. (6th ed.). Theses at WVU are electronically submitted upon their approval.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
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</tr>
<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
<td>3</td>
</tr>
<tr>
<td>CDFS 698</td>
<td>Thesis</td>
<td>6</td>
</tr>
<tr>
<td>CDFS 640</td>
<td>Survey of Family Studies</td>
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<tr>
<td>CDFS 645</td>
<td>Socio-Emotional Developmnt Child</td>
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<tr>
<td>CDFS 647</td>
<td>Comparative Study of Family</td>
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<td>CDFS 648</td>
<td>Theories:Child/Adol Dvlpmnt</td>
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<td>CDFS 649</td>
<td>Socialization Processes</td>
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General Educational Psychology Area of Emphasis

The General Educational Psychology Area of Emphasis is designed primarily for individuals who want to pursue general preparation in learning, development, measurement, and research with the possibility of selecting additional coursework to create a focus that supports their professional development goals. All students are required to design and conduct either 1) a project that solves a practical problem in learning or development or 2) a research thesis that investigates a topic or relevance to learning or developmentArea of Emphasis in Child Development and Family Studies.

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>EDP 600</td>
<td>Educational Psychology</td>
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<tr>
<td>EDP 611</td>
<td>Measurmnt/Evaluation-Educ Psyc</td>
<td>3</td>
</tr>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
<td>3</td>
</tr>
<tr>
<td>EDP 698</td>
<td>Thesis</td>
<td>3-6</td>
</tr>
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</table>
Program Evaluation and Research Area of Emphasis

The area of emphasis in Program Evaluation and Research is designed primarily for individuals with interest in conducting research and evaluation projects for private and public educational organizations and agencies. Emphasis is placed on developing proficiency in quantitative, qualitative, and mixed-methods inquiry, providing students with a breadth of methods to study varied educational, programmatic, and social research questions. All students will be required to design and conduct at least one full program evaluation during the course of their studies.

The graduates of the Program Evaluation and Research Area of Emphasis will be able to: demonstrate understanding of the philosophical and historical foundations of inquiry, apply appropriate quantitative, qualitative, and mixed-methods research tools to answer practical educational, programmatic, and other social research questions. They will also: apply appropriate program evaluation tools to conduct formative and summative evaluations of existing and prospective educational programs, demonstrate understanding of ethical issues in research and evaluation, and create informative reports of research and evaluation studies tailored appropriately for multiple stakeholders and decision-makers.

The more general outcomes for students and the state and region are a cadre of professionals prepared to conduct program evaluations and research in a variety of education and other human services settings. In addition, some of the graduates will directly or eventually enter doctoral programs in disciplines related to educational psychology, program evaluation, and research.

The students in the area of emphasis will be a mix of full-time and part-time students. While most instruction and mentoring will be face-to-face, online instruction and mentoring of students will be arranged as circumstances require and permit. Specialized delivery technologies may well be utilized as needed on an individual student or learning activity basis.

Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EDP 611</td>
<td>Measurement/Evaluation-Educ Psyc</td>
<td>3</td>
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<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
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<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
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<td>EDP 617</td>
<td>Program Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EDP 618</td>
<td>Mixing Research Methodologies</td>
<td>3</td>
</tr>
<tr>
<td>EDP 685</td>
<td>Practicum</td>
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<td>Thesis</td>
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<tr>
<td>SCFD 615</td>
<td>Qualitative Research Methods</td>
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<td>SCFD 781</td>
<td>Nature of Inquiry 1</td>
<td>1</td>
</tr>
<tr>
<td>SCFD 782</td>
<td>Nature of Inquiry 2</td>
<td>1</td>
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<tr>
<td>SCFD 783</td>
<td>Nature of Inquiry 3</td>
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Electives

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<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>EDP 614</td>
<td>Statistical Methods 2</td>
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<td>EDP 616</td>
<td>Nonparametric Statistics</td>
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<td>EDP 640</td>
<td>Instructional Design</td>
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<tr>
<td>EDP 685</td>
<td>Practicum</td>
<td></td>
</tr>
<tr>
<td>EDP 711</td>
<td>Multivariate Methods 1</td>
<td></td>
</tr>
<tr>
<td>EDP 713</td>
<td>Designing Single Case Research</td>
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Total Hours 30

SUGGESTED PLAN OF STUDY

First Year

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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Winter</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>3 EDP 611</td>
<td>3 EDP 618</td>
<td>3</td>
<td></td>
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<tr>
<td>EDP 613</td>
<td>3 EDP 617</td>
<td>3 EDP 685</td>
<td>3</td>
<td></td>
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<tr>
<td>SCFD 615</td>
<td>3 EDP 685</td>
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<tr>
<td>SCFD 781</td>
<td>1 SCFD 782</td>
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<td></td>
<td></td>
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</tr>
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</table>

Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP 698</td>
<td>3</td>
</tr>
</tbody>
</table>
For the EdD Degree in Educational Psychology

A program of study consists of a minimum of seventy-two hours of graduate credit beyond a bachelor’s degree or forty-two hours beyond a master’s degree (not including dissertation credits). In addition, successful completion of the competency requirements in the areas of (a) learning and development, (b) instruction, and (c) research are mandatory before a student submits a dissertation prospectus and is admitted as a doctoral candidate.

The student’s program of study will include a minimum of twenty-four hours in Educational Psychology as the major area. The program will also include a minor area of study, which will contain a minimum of eighteen hours of appropriate course work. The College of Education and Human Services required five-course Research Methods Core must also be completed with many of those courses being Educational Psychology courses (EdP 612, 613, 614 or SCFD 715, SCFD 615, and one advanced research methods course chosen by the student in consultation with the advisor and doctoral committee).

If a student enters the program with a master’s degree, a maximum of thirty hours (of the seventy-two) of relevant course credit from the student’s master’s degree program may be included in the doctoral program of studies.

Each student will complete the following core courses as part of the doctoral program of studies that also includes the College Research Core of five research methods courses:

1) One Professional Seminar (EdP 794C)
2) EdP 710 Seminar in Educational Research
   (PR EdP 613)
3) EdP 740 Principles of Instruction
4) A selection of two of the following courses in the area of Learning and Development (others may be approved by the student’s advisor and committee):
   EdP 700 Psychological Foundations of Learning
   EdP 701 Memory
   EdP 702 Human Development and Behavior
   EdP 703 The Adult Learner

A student must have an average grade of B for all courses in the program and make satisfactory progress toward the completion of the program competencies to remain in good standing.

Doctoral Committee

Each student’s doctoral committee shall be composed of a minimum of five members, the majority of who are regular graduate faculty members. At least two members of the committee (including the permanent advisor), but no more than three must be members of the Educational Psychology Faculty. At least one member of the doctoral committee must be from the student’s minor area of study. No more than one person may be a non-member of the Graduate Faculty of WVU. One member of the committee, who has professional relevance to the program of study, must be from outside the program area. The Doctoral Program Coordinator, the Chair of the Department, and the Dean of the College must approve the composition of the doctoral committee.

The duties of the doctoral committee are to: (1) discuss and review the program of study, (2) monitor progress in the program of study, (3) review changes to the approved program of study, (4) evaluate the competency products, (5) approve the dissertation prospectus and admit the student to candidacy, and (6) supervise and approve the dissertation.

The student with the approval of the student’s permanent advisor may initiate changes in committee membership. Such a change must be agreed to by the member being replaced (if still available to serve), the student, the major advisor, the new committee member, and the Dean. After approval of any committee membership change, a record of the new committee composition shall be filed in the CEHS Office of Student Advising and Records and in the Educational Psychology Program student file.

Competency Requirements

As an integral part of the Doctoral Program in Educational Psychology, students are required to demonstrate mastery of competencies by producing written products that require them to make use of the work in their formal program of study. The student’s committee in collaboration will describe the
specific nature of how these competencies will be demonstrated with the student. The competencies are met through satisfactory completion of projects, activities, and/or other experiences.

Competency outcomes will be assessed through three competency products developed by students in the program. These products are in the areas of (a) learning and development, (b) instruction, and (c) research. These products will be developed and assessed according to specifications created by a subcommittee organized by the student’s adviser. The student and his/her adviser will select two members for each subcommittee from the members of the student's doctoral committee. The third member of each subcommittee will be appointed by the Graduate Committee (in consultation with the student and his/her adviser) and must have expertise in the area being assessed. Recommendations for the third member from the student and his/her adviser are welcomed.

Dissertation

Students are to meet the competency requirements before submitting a dissertation prospectus to the doctoral committee. The prospectus must be prepared, in consultation with the doctoral committee chairperson, on a topic in the major field, showing a potential for contribution to existing knowledge. Once the doctoral committee chairperson approves the prospectus, the student will schedule a meeting of the full doctoral committee to have the prospectus examined. The committee may accept, reject, or require modification of the prospectus. Each committee member will sign an approved prospectus, including all modifications specified by the committee. The approved prospectus will be filed in the Office of Student Advising and Records and in the Educational Psychology Program student file.

A final oral defense of the completed dissertation shall be held. All doctoral committee members (or approved substitutes) shall be present for the dissertation defense. A committee member other than the student’s advisor may serve as dissertation chairperson if the person is a regular member of the graduate faculty and if the student and all members concur in writing. Meetings of the doctoral committee are open to the public, except when in executive session.

Instructional Design and Technology

Degrees Offered

- Master of Arts in Instructional Design and Technology (IDT)
- Doctor of Education in Instructional Design and Technology (IDT)

FACULTY

DOCTORAL COORDINATOR
- Terence C. Ahern - Ph.D. (Pennsylvania State University)
  Instructional Systems Design

MASTER’S COORDINATOR
- Ugur Kale - Ph.D. (Indiana University Bloomington)
  Instructional Technologies, Instructional Design, Professional Development, Online Communication, Teacher Education, Content Analysis, Social Network Analysis

PROFESSOR
- R. Neal Shambaugh - Ph.D. (Virginia Polytechnic Institute and State University)
  Professor, Instructional Design, Instructional Technology Integration, Cognition, Visual Literacy

ASSISTANT PROFESSOR
- Mete Akcaoglu - Ph.D. (Michigan State University)
  Instructional Design Integration, Game-Design, Problem-Solving, STEM

PROFESSORS EMERITI
- Paul W. DeVore
- David L. McCrory - Ph.D. (Case Western Reserve University)
- Edward C. Pytlik - Ph.D. (Iowa State University)

Entrance Requirements - M.A.

- GRE or MAT scores must be no older than five years or a summary of at least two years of professional experiences
- TOEFL 79 minimum (for international students)
• Cover letter explaining your interest and motivation for an IDT master’s degree
• Three letters of reference

Entrance Requirements
• GRE 320 minimum; or MAT 424 minimum (or a score of 60 on the older version)
• GRE or MAT scores must be no older than five years old
• TOEFL: 79 minimum (additional requirement for international students)
• Master’s degree
• Letter of application explaining your purpose, motivation, and research interests for an IDT Ed.D. degree
• Three letters of references
• Scholarly writing sample
• Vita
• Optional interview

Program Students
Students in the MA program are typically teachers, trainers, and professionals in college support units wanting to learn how to design educational settings. Thirty-six course hours are prescribed (a University policy when no thesis is required). All courses are required. A two-year sequence is visualized below for those taking a full-time load (nine hours):

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EDP 600</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>EDP 617</td>
<td>Program Evaluation</td>
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<td>EDP 640</td>
<td>Instructional Design</td>
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</tr>
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<td>IDT 600</td>
<td>IDT Theories and Models</td>
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<td>IDT 610</td>
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Competency Courses

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<th>Course Title</th>
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<td>IDT 620</td>
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<td>Instructional Delivery Systems</td>
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<td>Multimedia Learning</td>
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<td>IDT 670</td>
<td>Digital Tools and Web</td>
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<tr>
<td>IDT 693</td>
<td>SPTP: User Gnrtd Media App-H Ed</td>
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<tr>
<td>IDT 720</td>
<td>Instructional Systems Design</td>
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<tr>
<td>IDT 735</td>
<td>Technology Integration</td>
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<tr>
<td>IDT 740</td>
<td>Design Studio</td>
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<tr>
<td>IDT 750</td>
<td>Protptype Studio</td>
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Total Hours 36

Suggested Plan of Study

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<th>First Year</th>
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<tr>
<td>Fall</td>
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<tr>
<td>IDT 610</td>
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<td>IDT 640</td>
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<th>Second Year</th>
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<td>Fall</td>
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<tr>
<td>IDT 620</td>
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<td>IDT 740</td>
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</table>
DOCTOR OF EDUCATION

The Ed.D. program is designed to allow a student to immediately apply knowledge and skills to pragmatic needs in education. Knowledge and skill-building are designed into the courses and are developed over the length of the program, and specifically address three areas of concern in educational settings, including interconnectivity, instructional design, software and multimedia design, and deployment. Research is framed around the pragmatic needs of students, programs, and institutions. Information concerning program requirements, structure, and advising sequence is available.

Program Features

- The seventy-two-hour doctoral IDT program (not counting dissertation) requires forty-two hours past the master’s degree.
- Students are encouraged to identify topics of interest and to develop an appropriate topic for inquiry as one takes 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 TLTC, and internships in corporate settings in the Morgantown/Fairmont area.

Program Components

- Common Core: foundations and seminars (twelve hours)
- CEHS Research Core: (fifteen hours) required for all college Ed.D. programs
- Competencies/Constituencies: (twenty-seven hours) Competencies across three areas: interconnectivity (nine hours), instructional design (nine hours), and software and multimedia design and deployment (nine hours)
- Specializations: courses within CEHS and across the University (eighteen hours), subject to approval by your doctoral committee

Curriculum Requirements

72-HR. ED.D.

<table>
<thead>
<tr>
<th>Specialization Electives</th>
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<tr>
<td>EHS Research Core</td>
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<td>EDP 612 Introduction to Research</td>
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<td>EDP 613 Statistical Methods 1</td>
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<td>EDP 614 Statistical Methods 2</td>
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<td>EDP 617 Program Evaluation</td>
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<td>EDP 640 Instructional Design</td>
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<td>SCFD 615 Qualitative Research Methods</td>
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<td>IDT 620 Social Network Media</td>
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<td>IDT 630 Instructional Delivery Systems</td>
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<td>IDT 640 Visual Literacy</td>
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<td>IDT 660 IDT Authoring Systems</td>
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<td>IDT 715 School Networks</td>
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<td>IDT 720 Instructional Systems Design</td>
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<td>IDT 740 Design Studio</td>
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<td>IDT 750 Prototype Studio</td>
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<tr>
<td>Interconnectivity</td>
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</tr>
<tr>
<td>Software and multimedia design and deployment</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Hours 78
Benjamin M. Statler College of Engineering and Mineral Resources

Contact Information
Website: http://www.statler.wvu.edu
E-mail: statler-info@mail.wvu.edu
Phone: (304) 293-0395

Degrees Offered

- Masters of Science, Aerospace Engineering
- Masters of Science, Chemical Engineering
- Masters of Science, Civil Engineering
- Masters of Science, Computer Science
- Masters of Science, Electrical Engineering
- Masters of Science, Energy Systems Engineering
- Masters of Science, Engineering
- Masters of Science, Industrial Engineering
- Masters of Science, Industrial Hygiene
- Masters of Science, Mechanical Engineering
- Masters of Science, Mining Engineering
- Masters of Science, Petroleum and Natural Gas Engineering
- Masters of Science, Safety Management
- Masters of Science, Software Engineering
- Doctor of Philosophy, Aerospace Engineering
- Doctor of Philosophy, Chemical Engineering
- Doctor of Philosophy, Civil Engineering
- Doctor of Philosophy, Computer Science
- Doctor of Philosophy, Computer Engineering
- Doctor of Philosophy, Electrical Engineering
- Doctor of Philosophy, Industrial Engineering
- Doctor of Philosophy, Mechanical Engineering
- Doctor of Philosophy, Mining Engineering
- Doctor of Philosophy, Occupational Safety and Health
- Doctor of Philosophy, Petroleum and Natural Gas Engineering

Degree Programs

The Benjamin M. Statler College of Engineering and Mineral Resources graduate programs are administered through the Departments of Chemical Engineering, Civil and Environmental Engineering, the Lane Department of Computer Science and Electrical Engineering, Industrial and Management Systems Engineering, Mechanical and Aerospace Engineering, Mining Engineering, and Petroleum and Natural Gas Engineering. The Masters of Science degree in Energy Systems Engineering and the Masters of Science in Engineering are degrees administered by the Statler College and available to students from any of its academic units. Statler College facilities are primarily housed on the Evansdale campus in three buildings: the Engineering Sciences, the Mineral Resources, and the Engineering Research. 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 college offers a doctor of philosophy in most disciplines. The Ph.D. programs prepare graduates for leadership in industrial, governmental, or academic fields. The areas of specialization in engineering are aerospace, chemical, civil, computer, electrical, industrial, mechanical, mining, and petroleum and natural gas. In addition, the college offers a Ph.D. in computer Science and a Ph.D. in occupational safety and health.

Designated master’s degree programs in engineering are offered in aerospace, chemical, civil, electrical, industrial, mechanical, mining, petroleum and natural gas, software, and computer Science. A master’s of Science in engineering (M.S.E.) degree is offered to qualified students as determined at the departmental level. The college offers two accredited master’s of Science degrees in industrial hygiene and safety management. These programs are accredited by the Applied Science Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).
Currently, the college offers graduate certificate programs in computer forensics, information assurance and biometrics, and software engineering. For specific information about a program, students should review research and graduate studies information on the college website.

**SPECIAL REQUIREMENTS**

No credits which are reported with a grade lower than C are acceptable toward an advanced degree. To qualify for an advanced degree, the graduate student must have a grade point average of at least 3.0 based on all courses acceptable for graduate credit for which the student has received a grade from WVU. Graduate students in the college must also comply with the regulations of their major department.

Departments may establish more stringent requirements than those adopted for the college as a whole. These departmental requirements are contained in the individual program sections of the graduate catalog.

**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. Permission to carry a heavier load must be obtained in writing from the dean.

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**ADMINISTRATION**

**DEAN**

- Eugene V. Cilento - Ph.D. (University of Cincinnati)
  Glen H. Hiner Dean

**ASSOCIATE DEAN FOR ACADEMIC AFFAIRS**

- Warren R. Myers - Ph.D. (West Virginia University)

**ASSOCIATE DEAN FOR ADMINISTRATION**

- Royce J. Watts - M.S. (West Virginia University)

**ASSOCIATE DEAN FOR RESEARCH**

- Pradeep P. Fulay - Ph.D. (University of Arizona)

**ASSISTANT DEAN FOR FRESHMAN EXPERIENCE**

- Robin A. Hensel - Ed.D. (West Virginia University)

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 student must apply for admission through the Office of Admissions to the department housing the student's choice of major. Acceptance will depend upon review of the student's academic background and available facilities in the major program's department.

An applicant with a baccalaureate degree, or its equivalent, from a program accredited by the ABET, Computer Science Accreditation Board (CSAB), or an internationally recognized program in engineering or computer Science will be admitted on the same basis as engineering or computer Science graduates of WVU. Lacking these qualifications, an applicant must first fulfill any special requirements of the department in which the student is seeking an advanced degree.

**Masters Program**

There are three types of degrees granted within the Statler College of Engineering and Mineral Resources:

- M.S. in an engineering discipline (e.g. M.S.I.E., M.S.E.E., etc.)
- M.S. in engineering (e.g. M.S.E)
- M.S. in an applied science area (i.e., M.S. I.H., M.S.S.M., M.S.S.E., M.S.C.S.)

The M.S. degree in an engineering discipline requires an undergraduate degree in the same discipline. The master's in engineering degree is intended for students who want an engineering master's degree but do not have an undergraduate degree in the same field or a closely-allied field. The applied science programs are intended for students wishing to obtain a master's in these non-engineering disciplines.

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. Note: The admissions requirements are set by the individual department and program areas.
Students wishing to pursue a master’s of science degree that do not hold a correspondingly named bachelor’s degree may be admitted into either a discipline-designated program (including the M.S. degrees in computer science, industrial hygiene, safety management, and software engineering) or the undesignated Master of Science in Engineering Degree Program, depending on their credentials. For engineering degree programs, such 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 M.S. degree program. The degree designation and additional course requirements will be determined by the department admitting the student.

### Entrance and Classification

Students admitted to the master’s degree program will be classified in one of three categories:

1. **Regular** – To be admitted as a regular graduate student, an applicant must have a grade point average (GPA) of 3.0 or better (out of a possible 4.0) in all previous college work and must meet all other requirements set by the department.

2. **Provisional** – An applicant not qualifying for the regular graduate student admission status, either due to insufficient GPA, incomplete credentials, or inadequate academic background, may be admitted as a provisional student. Any applicant with a GPA below 2.75 in any of his previous college work cannot be admitted without approval from the dean or designate. Requirements for attaining regular student status must be determined by the regularly constituted Admissions Committee and stated in a letter or form sent to the student by the department or program area prior to registration for coursework. The letter or form should include the following:
   - Reason not qualified for regular admission (e.g., deficient prerequisites, GPA, or both)
   - Coursework deficiencies, if any, and courses at WVU to correct the deficiencies (which must be passed with a “C” or better)
   - Notification that the student must attain at least a 3.0 in his or her first nine hours of graduate coursework
   - Notification that the student cannot graduate until all coursework deficiencies has been remediated

   The student should be asked to sign the form or letter in acknowledgment that he or she received it. A copy of the form should be given to the student and another placed in the student’s file.

   Additionally, the proposed plan of study for provisional students, including courses to remove deficiencies and courses to be counted for graduate degree credit, must be such that a decision regarding qualification for change of status to regular student can be made at the end of the semester in which the eighteenth credit hour is completed. It should be noted that the student may still be required to take additional regular courses upon attainment of regular student status.

3. **Non-degree** – A student who is not deemed qualified for admission to regular or provisional status, or 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. These students may later request a change of status (see Section 3, Classification Change, and Section 12, Status Change).

### Program Options

For all master’s degree students, an advisory and examining committee (AEC) consisting of at least three faculty members will be appointed. A plan of study must be jointly prepared and approved by the student and all members of the student’s AEC, the department chair, and the dean or dean’s designate, either at the end of the second semester of the student’s attendance or at the completion of the twelfth course credit hour, whichever is later. The college is authorized to grant master’s degrees under each of the following three options:

- **Thesis Option** – This option requires a minimum of twenty-four credit hours of coursework and at least six credit hours of research leading to the thesis.
- **Problem Report Option** – This option requires a minimum of thirty credit hours of coursework and at least three credit hours of a research or design project leading to a formal written report.
- **Coursework Option** – This option requires a minimum of thirty-three credit hours of coursework. There are two ways this option is implemented. First, although rarely permitted, this option is open to students who have practical engineering experience and/or 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 chair. Second, a department can choose to offer students within a designated program the coursework-only option. Normally, for each option the coursework required is greater than that required for a student doing a thesis or problem report. In addition, the department must require successful completion of a written or oral comprehensive examination.

### Advisory and Examining Committee

Each department will form an advisory and examining committee (AEC) for each of its master’s degree students, consisting of at least three members (with one member clearly designated as chairperson). The chair of the AEC and the majority of its members must be regular members of the graduate faculty and must have a primary faculty appointment in CEMR. The majority of the AEC members must be tenure track CEMR faculty. No more than one person may be a non-member of the graduate faculty.

The committee must be formed by the end of the second semester of attendance by the student or by the completion of the twelfth course credit hour applicable to the master’s degree requirements, whichever is later. Otherwise, the student will not be allowed to register for the following semester.
Plan of Study
A plan of study must be prepared by the student and the AEC chair. This plan must be approved by the student, all members of the AEC, the graduate program coordinator, the department chair, and the dean, before the end of the second semester of the student’s attendance or before the completion of the twelfth course credit hour applicable to the master’s degree requirements, whichever is later. This plan must also include a preliminary thesis research topic or problem report topic, if applicable.

Any revisions to a plan of study (including any changes to the AEC) will necessitate submission of a revised plan which incorporates all approved signatures. 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. In addition, the removal of any member of the AEC requires submission of a Plan of Study Attachment.

Time to Completion
All requirements for the master’s degree must be completed within eight years preceding the student’s graduation.

Application for Transfer of Graduate Credit
A student wishing to apply graduate credit earned at another institution to a master’s degree at WVU must complete an application for transfer of graduate credit to WVU and have an official transcript submitted to the WVU Office of Admissions from the external institution. A maximum of twelve semester hours from other institutions may be acceptable for credit at WVU in master’s degree programs in Statler College. Departmental programs may choose to accept fewer transfer credit hours with the restriction that only courses with grades of A or B may be considered for transfer.

Doctoral Program
Admission as a graduate student is required of all applicants for admission to a program of study and research leading to the degree of Ph.D. To be eligible for admission into a doctorate program in any engineering field, a candidate is expected to hold or to receive by time of enrollment a B.S. or an M.S. degree in one of the following fields:

- 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/mineral resources
- Mathematics and physical sciences (as specified by individual programs)

To be eligible for admission into the doctoral program in the field of computer science, a candidate is expected to hold a B.S. or an M.S. degree in one of the following fields:

- Computer science
- Engineering
- Mathematics and physical sciences (as specified by the program)

To be eligible for admission into the doctoral program in the field of occupational safety and health, a candidate is expected to hold a B.S. or an M.S. degree in one of the following fields:

- Industrial hygiene
- Safety
- Engineering
- Mathematics and physical and life sciences (as specified by the program)

Although a bachelor’s degree is the minimum requirement, applicants are normally encouraged to hold a master’s degree in a relevant discipline. Admission to graduate study does not necessarily assure entrance into the college’s doctoral program. For complete details about admission criteria and other governance details of the doctor of philosophy programs please refer to the Guidelines for Doctor of Philosophy Programs which can be found on the college’s home page.

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 his or her goals are not perceived to match the current needs and resources of 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 towards a doctoral degree even though the student has completed all required coursework successfully.

Students admitted to the Ph.D. program will be classified in one of two categories:
1. Regular - To be admitted as a regular graduate student, an applicant must have an equivalent grade point average (GPA) of 3.0 or better (out of a possible 4.0) in all previous college work, and must meet all other requirements set by the department and program, including minimum GRE scores. Any exceptions to the stated requirements must be approved by the dean.

2. Provisional - An applicant not qualifying for the regular graduate student admission status, either due to insufficient GPA, insufficient GRE scores, incomplete credentials, or inadequate academic background, may be admitted as a provisional student. Any applicant with a GPA below 2.75 in any of his/her previous college work cannot be admitted without a special approval from the dean. Applications will be returned to the program coordinator if the application shows a GPA less than 2.75 unless it is accompanied by a signed approval from the dean. Students are notified of their provisional status by Admissions and Records. The admitting college program is responsible for communicating to the student the requirements they must meet before attaining regular status.

Note: Admission to the graduate program does not confer or guarantee candidacy for the Ph.D., which requires a separate decision.

Advisory and Examining Committee

Each department will form an advisory and examining committee (AEC) for each of its doctoral-level students, consisting of a minimum of five members. The dean and the department chair each have the right to appoint one member to this committee. At least one of the members of the committee must be from outside the department. The majority of the members of the AEC must be regular members of the graduate faculty. No more than one person may be a non-member of the graduate faculty. The committee must be formed by the end of the third semester of attendance by the student or by the completion of the twelfth course credit hour applicable to the doctoral degree requirements, whichever is later. Otherwise, the student may be refused permission to register for the following semester.

The chair of the AEC should be selected by the student in consultation with the graduate program coordinator or the chair of the department. Normally, the AEC chair should be a member of the degree-granting program. The chair must be a regular member of the college graduate faculty. Non-tenure track faculty may serve as chair if they are a regular member of the graduate faculty. Members should be selected by the student in consultation with the chair of the committee. The chair and 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 members of the AEC must be listed on the plan of study, which must be signed by the graduate coordinator, chair of the department, and the dean to gain approval.

Program Requirements

RESIDENCY

Full-time attendance on campus is required for two consecutive semesters consisting of a minimum of nine credit hours each. A full summer, consisting of registration in both sessions and completion of a minimum of nine credit hours over both sessions, is considered equivalent to one semester of residence. However, an alternative plan by which the student can get an equivalent education experience may be followed if approved in the plan of study.

COURSE REQUIREMENTS

Specific course requirements are determined by the student’s advisory and examining committee. However, a minimum of eighteen semester hours of coursework at WVU is required at the 500 and higher-levels with an average of 3.0 or better.

REQUIREMENTS FOR 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 department 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 successful outcome of this exam will demonstrate the student has the following:

• A grasp of the important phases and problems of the field of study and an appreciation of their relation to other fields of human knowledge and accomplishments
• The ability to employ the instruments of research developed in the student's area of interest

The AEC may approve the research proposal conditioned upon stipulated changes to the proposal. In such cases, the chair of the AEC should ensure that the required changes to the proposal are made by the student before signing the Approval of Candidacy. The chair of the AEC 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. 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 for admission to candidacy are terminated at the end of that semester and may not reenter the program.
RESEARCH REQUIREMENTS

The faculty of the college believe that the experience gained in performing and reporting a research endeavor should be over a prolonged period. Therefore, the Ph.D. in engineering and the Ph.D. in occupational safety and health degrees require a minimum of twenty-four credit hours of research at the Ph.D. level leading to a dissertation, while the Ph.D. in computer science requires eighteen research hours.

CREDIT REQUIREMENTS

The degree of doctor of philosophy is not awarded solely on the basis of the accumulation of course credits and completion of a definite residence requirement. The amount and nature of the coursework undertaken by a doctoral student will be established for each individual student with the objective of ensuring a reasonable and coherent progression of academic development beyond the baccalaureate and/or master’s degree.

Application for Transfer of Graduate Credit

A student wishing to apply credit earned at another institution to a doctoral degree program at WVU must submit an application for transfer of graduate credit to WVU and have an official transcript from the institution forwarded to the WVU Office of Admissions. The approval of transfer credit is at the discretion of the student’s AEC with the restriction that only courses with grades of A or B may be considered for transfer.

Department of Chemical Engineering

Degrees Offered

- Masters of Science in Chemical Engineering
- Masters of Science in Engineering with a major in Chemical Engineering
- Doctor of Philosophy with a major in Chemical Engineering

The Department of Chemical Engineering, with fourteen active tenure-track faculty members, approximately 130 undergraduates, and thirty-four graduate students, has one of the oldest doctoral-granting programs in the university. From the initial doctoral degree in 1932, the graduate course program has been based on advanced chemical engineering fundamentals, while the research program has reflected a balance of fundamental research areas and their application to relevant technological areas such as biomedical, bioengineering, catalysis, coal conversion, energy, fuels, materials, polymer processing, systems control, and dynamic simulation.

Degree Programs

The department is authorized to admit students to the following degree programs: master’s of science in chemical engineering (M.S. Ch.E.), master’s of science in engineering (M.S.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 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.

Program Outcomes

Holders of graduate degrees will understand the advanced principles of chemical engineering, which include reaction engineering, transport phenomena, and thermodynamics.

- Holders of graduate degrees will have an expert-level understanding of the background and theory/principles of their research topics.
- Holders of Ph.D. degrees will be able to initiate research ideas in order to solve specific problems and to write research proposals on these ideas.
- Holders of Ph.D. degrees will have furthered a novel research idea.
- Holders of graduate degrees will be able to plan research projects, to perform the tasks, and to draw conclusions based on sound scientific and engineering principles.
- Holders of graduate degrees will be able to write technical articles for publication in refereed journals and to make oral and poster presentations at technical meetings.
- Holders of graduate degrees will demonstrate initiative in research planning and management, including safety and environmental issues.
- Holders of graduate degrees will be technically prepared for a lifetime of continuing education.
- Holders of graduate degrees will understand professional and ethical responsibilities.

Areas of Research

The Chemical Engineering faculty are presently involved in a broad spectrum of research areas which include biomedical and biochemical engineering, systems biology, cancer, bionanotechnology, biomaterials, stem cell technology, dynamic simulation, control systems, molecular dynamics, polymers and biopolymers, catalysis, energy, hydrates, fuels, fuel cells, low-dimensional and high-temperature electronic materials, and reaction 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 variety 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. They routinely participate in national and international conferences and advisory meetings. In addition, faculty members have taught short courses throughout the United States and abroad.

FACULTY

CHAIR
• Rakesh Gupta - Ph.D. (University of Delaware)  
Berry Professor and Chair, Polymer Processing, Rheology, Composite Materials

PROFESSORS
• Eugene V. Cilento - Ph.D. (University of Cincinnati)  
Dean, Physiological Transport Phenomena, Biomedical Engineering, Image Analysis, Mathematical Modeling
• Dady B. Dadyburjor - Ph.D. (University of Delaware)  
Catalysis, Reaction Engineering, Micellization, Fuels and Chemicals from Synthesis Gas, Synthesis Gas from Coal
• Pradeep Fulay - Ph.D. (University of Arizona)  
Associate Dean for Research, Advanced Electronics, Magnetic Materials and Devices, Flexible Electronics, Synthesis and Processing of Nanomaterials
• Edwin L. Kugler - Ph.D. (Johns Hopkins University)  
Catalysis, Partial Oxidation, Fischer-tropsch Processing, In-situ Reaction Studies
• Richard Turton - Ph.D. P.E. (Oregon State University)  
Bolton Professor, Fluidization, Chemical Process Design, Particle Processing, Powder Processing
• John W. Zondlo - Ph.D. (Carnegie Mellon University)  
Coal Enhancement and Utilization, Carbon Science, Fuel Cells

ASSOCIATE PROFESSOR
• Brian J. Anderson - Ph.D. (Massachusetts Institute of Technology)  
GE Materials Professorship, Natural Gas Hydrates, Sustainable Energy Development, Molecular Dynamics, Quantum Chemical Calculations
• Debangsu Bhattacharyya - Ph.D. (Clarkson University)  
• David J. Klinke - Ph.D. (Northwestern University)  
Systems Biology, Kinetics, Cellular Signal Transduction Pathways, Immunology, Mathematical Modeling, Bioengineering
• Charter D. Stinespring - Ph.D. (West Virginia University)  
Semiconductor Growth and Etching, Surface Kinetics, Thin Films, Electronic Materials

ASSISTANT PROFESSOR
• Cerasela Z. Dinu - Ph.D. (Dresden University of Technology)  
Nanomaterials, Bionanotechnology, Biomimetics, Synthetic and Molecular Biology
• Fernando V. Lima - Ph.D. (Tufts University)  
• Yong Yang - Ph.D. (Ohio State University)  
Stem Cell Technology, Polymer Micro/Nanotechnology, Biomaterials

RESEARCH ASSISTANT PROFESSOR
• Sushant Agarwal - Ph.D. (West Virginia University)  
Polymer Processing, Rheology, Nano-composites, Dispersions
• Ruifeng (Ray) Liang - Ph.D. (Chinese Academy of Science)  
Polymer Processing and Modeling, Smart Materials, Composites

TEACHING ASSISTANT PROFESSOR
• Robin S. Hissam - Ph.D. (University of Delaware)  
Biomaterials, Polypeptides, Drug delivery, Bioengineering and materials science
ADJUNCT PROFESSORS

• Deepak Doraiswamy - Ph.D. (University of Delaware)
• Joseph D. Henry - Ph.D. (University of Michigan)
  Energy Management, Science and Technology Policy
• Charles M. Jaffe - Ph.D. (University of Colorado)
  Theoretical Chemistry, Molecular and Atomic Physics, Nonlinear Dynamics, Astrodynamics, Forensics
• George E. Keller, II - Ph.D. (Pennsylvania State University)
  Separations, Commercial Practice
• Mahesh Padmanabhan - Ph.D. (University of Minnesota)
  Foods, Polymer Science, Rheology
• David L. Walker - Ph.D. (West Virginia University)
  Signal Analysis, Neural Nets, Forensics
• Robert H. Wildi - B.Ch.E. (Cleveland State University)
  Polymer Extrusion

ADJUNCT ASSOCIATE PROFESSOR

• Bingyun Li - Ph.D., (Chinese Academy of Sciences)
  Associate Professor of Orthopedics, Bioengineering and Advanced Biomedical Devices, Nanotechnology Sorbents, Coatings and Capsules

PROFESSORS EMERITUS

• Eung H. Cho - Ph.D. (University of Utah)
  Mineral Processing, Leaching, Solvent Extraction, Environmental Science
• Alfred H. Stiller - Ph.D. (University of Cincinnati)
  Physical/Inorganic/Solution Chemistry, Coal Liquefaction, Carbon Science

Masters Admission Requirements

Students holding baccalaureate degrees in chemical engineering, other engineering fields, mathematics, or basic sciences are eligible for admission to the Master of Science in Chemical Engineering (M.S.Ch.E.) Program. Students not holding a B.S.Ch.E. will be required to take a series of six junior-level courses. Alternatively, these students have the option of obtaining a master of science in engineering (M.S.E.). The M.S.E. requires fewer junior-level courses and enables students to begin their research within the first semester. A maximum of twelve semester hours from other institutions may be accepted at WVU for credit toward the master’s degree. The Chemical Engineering Department may require Graduate Record Examination (GRE) scores or other evidence to assist in judging a student’s chances for success in a graduate program. To be eligible for admission as a regular student, an applicant must have a baccalaureate degree as specified above and a grade point average (GPA) of 3.0 (on a 4.0 scale) in all previous college work. Students entering the program without a B.S.Ch.E. will receive a letter specifying the additional course work which they must take in the first two semesters. To remain in good-standing, a regular student must achieve and maintain a minimum overall 3.0 GPA in all graduate level courses as well as in all junior level courses. Applicants who cannot meet these conditions may be considered for admission in a conditional category. Students admitted with deficiencies in their undergraduate programs are required to take some chemical engineering courses as prerequisites for graduate courses. International students must demonstrate proficiency in communicating in English (a minimum TOFEL score of 550, or iBT score of 79, or IELTS score of 6.5). International students must also provide Graduate Record Examination (GRE) scores. These requirements are stated as a condition for admission.

Doctoral Admission Requirements

Admission to the Ph.D. program is open to students who qualify as regular graduate students and who have obtained a B.S. or M.S. degree in science or engineering. Students admitted must have demonstrated an excellent academic record in previously completed college coursework with a minimum cumulative grade point average of 3.0 (on a 4.0 scale). Three letters of recommendation and GRE scores (international students only) are required by the department. International students must demonstrate proficiency in communicating in English (a minimum TOFEL Score of 550, or iBT Score of 79, or IELTS Score of 6.5). A maximum of twelve semester hours from other institutions may be accepted at WVU for credit towards the Ph.D. degree.

Masters Programs

PLANNED PROGRAMS

For students with a B.S.Ch.E., twenty-four months are typically required to complete the M.S.Ch.E. degree work. For students without a B.S.Ch.E., the time to complete the M.S.Ch.E. is typically thirty-six months, while the time to complete the M.S.E. is typically thirty months. All M.S. degree candidates are required to perform research and will follow a planned program which conforms to either of the following outlines:

• A minimum of thirty semester credit hours, excluding seminar and any required junior level courses; not more than six of which are in research leading to an acceptable thesis
A minimum of thirty-three semester credit hours, excluding seminar and any required junior level courses; not more than three of which are in research leading to an acceptable problem report.

A pure coursework M.S.Ch.E. degree option is not presently offered by the Department of Chemical Engineering.

CURRIUCLUM REQUIREMENTS

A minimum GPA of 3.0 is required in all courses

A minimum GPA of 3.0 is required in all CHE courses

A grade of C or higher must be earned in all required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CHE 615</td>
<td>Transport Phenomena</td>
<td>3</td>
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<tr>
<td>CHE 620</td>
<td>Adv Ch E Thermodynamics</td>
<td>3</td>
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<tr>
<td>CHE 625</td>
<td>Chemical Reaction Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CHE 697</td>
<td>Research</td>
<td>6</td>
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Full-time Students are required to take a Seminar course each semester 4-10

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<thead>
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<th>Hours</th>
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<tbody>
<tr>
<td>CHE 796</td>
<td>Graduate Seminar</td>
<td>4-10</td>
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</table>

Select from the following based on degree path:

- Any CE courses 400-799
- Any CHE courses 400-799
- Any CHEM courses 400-799
- Any IENG courses 400-799
- Any MAE courses 400-799
- Any MATH courses 400-799
- Any PNGE courses 400-799
- Any PHYS courses 400-799
- Any SAFM courses 400-799
- Any STAT courses 400-799

Total Hours 34-40

For students without a B.S.Ch.E., the junior level courses may include:

- CHE 310 Process Fluid Mechanics (depending on degree option) 3
- CHE 311 Process Heat Transfer (depending on degree option) 3
- CHE 312 Separation Processes (depending on degree option) 4
- CHE 315 CHE Transport Analysis 3
- CHE 320 CHE Thermodynamics 3
- CHE 325 Chemical Reaction Engineering 3

Total Hours 19

*M.S.E. students take only CHE 315, CHE 320, CHE 325

The research advisor, in conjunction with an advisory and examining committee (AEC) to be designated by each student, will be responsible for following departmental guidelines to determine the plan of study appropriate to the student's program.

RESEARCH PROPOSALS

A written thesis research proposal and oral presentation of this proposal is required of all M.S. students. 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.

FINAL EXAMINATION

All students are required to pass a final oral examination, administered by their AEC, covering both the thesis or problem report (depending on the program selected) and related course material.

Doctor of Philosophy

The doctor of philosophy degree is administered through the college’s interdisciplinary program; chemical engineering may be the major. A candidate for the degree of doctor of philosophy must comply with the rules and regulations outlined in the general requirements of the Statler College of Engineering.
and Mineral Resources. 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 Chemical Engineering.

Students who are interested in pursuing a Ph.D. degree in the Department of Chemical Engineering should contact the department for specific information. A program with a major in chemical engineering, designed to meet the needs and objectives of each student, will be developed in consultation with the student’s research advisor and advisory and examining committee (AEC). It should be emphasized that the Ph.D. degree is primarily a research degree, and therefore the research work for a 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. Students in the Ph.D. program should expect to complete the requirements in three to four years.

**CURRICULUM REQUIREMENTS**

A minimum GPA of 3.0 is required in all courses
A minimum GPA of 3.0 is required in all CHE courses
A grade of C or higher must be earned in all required courses

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<td>3</td>
</tr>
</tbody>
</table>

Select form the following based on degree path: *

| Any CE courses 500-799
| Any CHE courses 500-799
| Any CHEM courses 500-799
| Any IENG courses 500-799
| Any MAE courses 500-799
| Any MATH courses 500-799
| Any PNGE course 500-799
| Any PHYS course 500-799
| Any SAFM course 500-799
| Any STAT course 500-799

Full-time Students are required to take one Seminar course each semester 4-10

<table>
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<th>Graduate Seminar</th>
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<tr>
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<td>CHE 797</td>
<td>Research</td>
</tr>
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</table>

Student must complete Research hours 24

| CHE 797 | Research |

Students must complete a Qualifying Exam

| Students must complete a Candidacy Exam
| Students must complete a Final Exam

**Total Hours** 46-52

* Courses numbered 795, 796 and 797 do not count toward the 18 required hours.

Students must complete a minor consisting of a minimum of nine semester hours of a coherent set of courses taken outside of the department. These courses may be 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. Students must complete graduate courses with an overall coursework average of 3.0 or better (exclusive of research credits) and complete all chemical engineering courses with an overall grade point average of 3.0 (exclusive of research credits). A minimum of twenty-four credit hours in dissertation research is required. Also, two semesters of full-time attendance at the Morgantown campus is required to complete the residency requirement.

**QUALIFYING EXAMINATION**

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.

**RESEARCH PROPOSAL**

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.

**RESEARCH AND DISSERTATION**

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.

**Department of Civil and Environmental Engineering**

**Degrees Offered**

- Master of science in civil engineering
- Master of science in engineering with a major in civil engineering
- Doctor of philosophy with a major in civil engineering

The 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.

**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.

**Areas of Emphasis**

There are four major areas of interest of the faculty and graduate studies:
• Environmental and hydro-technical engineering, 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

The Department of Civil and Environmental Engineering has a full-time faculty of twenty-three who 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.

FACULTY

CHAIR

• Radhey Sharma - Ph.D. (University of Oxford)
  Sustainable Infrastructure, Geotechnical Engineering and Geoenvironmental, Energy Engineering

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

• Udaya B. Halabe - Ph.D., P.E. (Massachusetts Institute of Technology)

• David R. Martinelli - Ph.D. (University of Maryland)
  Transportation Engineering, Traffic Operations, Systems Analysis, Infrastructure Management

• Hema J. Sirirwadane - Ph.D., P.E. (Virginia Polytechnic Institute and State University)
  Geomechanics/Geotechnical Engineering, Finite Element Method, Computer Applications

• John P. Zaniewski - Ph.D., (University of Texas)
  Asphalt Technology Professor, Pavement Materials, Design, Construction, Maintenance, Infrastructure Management

ASSOCIATE PROFESSOR

• Karl Barth - Ph.D. (Purdue University)
  Jack H. Samples Distinguished Professor of Structures, Steel Structures, Bridge Design and Rehabilitation, Connections, Stability Analysis, Experimental Mechanics

• Lian-Shin Lin - Ph.D., P.E. (Purdue University)
  Physiochemical and Biological Treatment, Innovative Wastewater Technologies, Emerging Coaminants, Sustainable Development, Watershed Pollution

ASSISTANT PROFESSORS

• 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
• Antarpreet Jutla - Ph.D. (Tufts University)
• John D. Quaranta - Ph.D., P.E. (West Virginia University)
• Avinash Unnikrishnan - Ph.D. (University of Texas, Austin)
  Transportation Network Analysis and Planning, Freight Network Analysis and Logistics, Intelligent Transportation Systems
• P.V. Vijay - Ph.D. (West Virginia University)
  Concrete Structures; P Composite Structures for Bridges, Buildings, and Pavements; Aging of Structures and Rehabilitation, Recycled Polymers for Infrastructure, Analytical Modeling
• Jennifer L. Weidhaas - Ph.D., PE (University of California-Davis)
  Biotechnology, Bioenergy Production, Remediation of Emerging Contaminants in Soils and Ground Water
• Yoojung Yoon - Ph.D. (Purdue University)
  Infrastructure Asset Management, Risk Management in Construction, Project Management and Control, Construction Equipment Management

RESEARCH ASSISTANT PROFESSORS
• Eduardo Sosa - Ph.D. (University of Puerto Rico)
• Gergis William - Ph.D., P.E. (West Virginia University)
  Civil Infrastructure, Bridge Design and Diagnosis, Thermal Stress Analysis, Nonlinear Finite Element Analysis, Advanced Materials and Structures

PROFESSORS EMERITUS
• Ronald W. Eck - Ph.D. (Clemson University)
• Donald Gray - Ph.D. (Purdue University)
• W. Joseph Head - Ph.D. (Purdue University)
• Charles R. Jenkins - Ph.D. (Oklahoma State University)
• Larry D. Luttrell - Ph.D. (Cornell University)
• William A. Sack - Ph.D. (Michigan State University)

ASSOCIATE PROFESSORS EMERITUS
• Robert N. Eli - Ph.D. (University of Iowa)
• Darrell R. Dean, Jr. - Ph.D. (Purdue University)

Admission
To be eligible for admission into the M.S.C.E. degree program, a candidate must fulfill either of the following:

• Hold or expect to receive a B.S.C.E. degree from either an accredited ABET curriculum or an internationally recognized program
• Have a superior academic record and a baccalaureate degree in another engineering field, mathematics, or science

Candidates with a baccalaureate degree in another field of engineering, mathematics, or science are also eligible for admission into the M.S.E. degree. 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.

To be eligible for admission into a doctorate of engineering program, a candidate is expected to hold or expect to receive a B.S. or an M.S. degree or equivalent in the following:

A discipline of engineering from an institution which has an ABET accredited program in that discipline which has an internationally recognized program in engineering, or mathematics and sciences (as specified by individual programs).

The other requirements for admission into the graduate programs of the department are summarized as follows:

• 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.
• Three reference letters; at least two of the three references should be from the institution the applicant last attended.
• International students must demonstrate proficiency in communicating in English (a minimum TOFEL score of 550, or iBT score of 79, or IELTS score of 6.5) (Students who have completed a recent four-year bachelor’s degree in the USA need not submit these scores.)
• All applicants are encouraged to submit GRE scores for fellowship and funding options. Applicants who have not received their undergraduate degree in the United States are required to submit GRE General Test scores with the Engineering Subject Test score being optional.

Provisional Admission

An applicant who is not qualified for regular graduate student admission status, due either to insufficient grade-point average, incomplete credentials, or inadequate academic background, can be admitted as a provisional student. Requirements for attaining regular student status must be stated in the letter of admission. Provisional students must sign a contract, which lists these requirements in detail, no later than their first registration.

Masters of Science in Civil Engineering

Students must comply with rules and regulations as outlined in the general requirements for graduate work. Each candidate will, with the approval and at the discretion of the graduate committee, follow a planned program which must conform to one of the following outlines:

• A minimum of thirty semester credit hours, not more than six of which are in research leading to an acceptable thesis
• A minimum of thirty-three semester credit hours, not more than three of which are in research leading to an acceptable problem report
• A minimum of thirty-six semester credit hours, with no thesis or problem report required (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 advisory and examining committee (AEC), the graduate program coordinator, and the department chairperson.)

No rigid curricula are prescribed for the degree of master of science in civil engineering. Graduate-level work in mathematics, mechanics, or other appropriate areas of science is customary; however, at least fifteen semester hours of credit should normally be selected from graduate civil engineering courses.

Thesis and Problem Report

A thesis or problem report is normally required of all candidates. While required credit in research (CE 697) is devoted to the thesis or report preparation, the thesis or problem report is not automatically approved after the required number of semester hours of research work has been completed. The thesis or problem report must conform with the general WVU requirements for graduate study and to any additional requirements established by the department.

Examinations

A candidate shall be required to pass an examination which may be written or oral or both, to be administered by the student’s advisory and examining committee. The examination shall cover course material and the thesis or problem report, depending upon the program followed.

Master of Science in Engineering

The master of science in engineering program is available to students approved for the graduate program who possess a baccalaureate degree in a technical area other than civil engineering. Students entering this graduate program must complete appropriate undergraduate work as specified by the advisory and examining committee. In addition to fulfilling the required undergraduate work, the M.S.E. program must follow a planned program meeting one of the three options for the M.S.C.E. as specified above. No rigid curricula are prescribed for the degree of master of science in engineering. Graduate-level work in mathematics, mechanics, or other appropriate areas of science is customary; however, at least fifteen semester hours of credit should normally be selected from graduate civil engineering courses. This degree program is administered by the Statler College of Engineering and Mineral Resources; the program may emphasize civil engineering.

Doctor of Philosophy

The doctor of philosophy degree is administered through the college’s interdisciplinary program; civil engineering may be the major. A candidate for the degree of doctor of philosophy must comply with the rules and regulations outlined in the general requirements of the Statler College of Engineering and Mineral Resources. 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.

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 second 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.
REQUIRED COURSEWORK
Specific course requirements are determined by the student’s advisory and examining committee (AEC) with approval of the graduate coordinator and department chairman. A minimum of eighteen semester hours of course work at WVU is required at the 500 and higher-levels with an average of 3.0 or better. A minimum of twenty-four credit hours in research leading to an acceptable dissertation are required. The coursework and research requirements are in addition to a master’s degree; civil engineering does not currently have a direct Ph.D. program.

QUALIFYING EXAMINATION
All Ph.D. students must pass the qualifying examination given in their first year at WVU. This examination is designed to assess the fundamental knowledge of students in the field of civil engineering and to determine their intrinsic ability to undertake independent research.

RESEARCH PROPOSAL
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. Each student must satisfy the university and the college Ph.D. program requirements.

Lane Department of Computer Science and Electrical Engineering

Degrees Offered
- Master’s of science in computer science
- Master’s of science in engineering with a major in computer science
- Master’s of science in electrical engineering
- Master’s of science in engineering with a major in electrical engineering
- Master’s of science in software engineering
- Master’s of science in engineering with a major in software engineering
- Doctor of philosophy in engineering with a major in computer engineering
- Doctor of philosophy in engineering with a major in electrical engineering
- Doctor of philosophy in computer science

Graduate Certificates Offered
- Graduate certificate in software engineering
- Graduate certificate in computer forensics
- Graduate certificate in biometrics & information assurance
- Graduate certificate in interactive technologies & serious gaming

Overview of Programs
The Lane Department of Computer Science and Electrical Engineering offers master’s programs leading to a master’s of science in computer science (M.S.C.S.), a master’s of science in electrical engineering (M.S.E.E.), and a master’s of science in software engineering (M.S.S.E.). It also participates in the College of Engineering and Mineral Resources interdisciplinary program offering the master’s of science in engineering (M.S.E.). Master of science students must comply with the rules for master’s degrees as set forth by the college in the Guidelines for Masters Degree Programs Offered in the College of Engineering and Mineral Resources and by the Department in the Masters of Science Program Guidelines.

The department also offers programs leading to the doctor of philosophy (Ph.D.) in computer science and the doctor of philosophy (Ph.D.) in engineering with specialization in electrical engineering or computer engineering. Ph.D. in electrical or computer engineering students must comply with the rules set forth by both the College’s Doctor of Philosophy Program Guidelines and by the Department in the Doctor of Philosophy Program Guidelines. Ph.D. students in computer and information sciences must comply with the rules set forth in the Handbook for Computer Science Graduate Students.

The department also offers four graduate certificates which may be completed as part of a degree program or as a certificate only.

Program Educational Objectives and Outcomes
The common educational objectives of all the graduate programs in the Lane Department 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. The requirements and outcomes of specific degree and certificate programs are described in the catalog pages specific to those programs.
Facilities and Centers
The Lane Department of CSEE has its main office, instructional lab, and research lab space on the Evansdale campus occupying four floors of the Engineering Sciences Building and one floor of 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 (APERC).

The university is also designated as a Center of Excellence in Information Assurance Research by the National Security Agency and Department of Homeland Security. The department and college host a modern 4000 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. An additional laboratory by Hewlett-Packard supports large databases and medical informatics. Students have access to a rich set of software packages and tool suites available either on department systems or the College of Engineering and Mineral Resources systems. All department, college, and university computing resources are fully networked via Ethernet and FDDI with a campus-wide ATM backbone enabling interface to the statewide ATM network. 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.

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

FACULTY
CHAIR
- Brian Woerner - Ph.D. (Purdue University)
  Wireless Communications and Networking

PROFESSORS
- Donald Adjeroh - Ph.D. (Chinese University of Hong Kong)
  Graduate Coordinator for Computer Science, Multimedia Information Systems (Image, Video, and Audio), Distributed Multimedia Systems
- Hany Ammar - Ph.D. (University of Notre Dame)
  Risk Assessment, Software Engineering, Biometrics, Performance and Dependability Analysis, Modeling and Evaluation of Parallel and Distributed Systems
- Muhammad Choudhry - Ph.D. (Purdue University)
  Graduate Coordinator for CPE & EE, Power System Control, DC Transmission, Stability, Power Electronics
- Bojan Cukic - Ph.D. (University of Houston)
  Software Engineering, High-Assurance Systems, Computational Intelligence, Fault-Tolerant Systems, Biometrics
- Parviz Famouri - Ph.D. (University of Kentucky)
  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
- Lawrence Hornak - Ph.D. (Rutgers University)
  Optics, Integrated Optics, Micro/Nano Structures and Devices, Biosensors, Biometrics
- Powsiri Klinkhachorn - Ph.D. (West Virginia University)
  Microprocessor Applications, Computer Architecture, Binary and Non-Binary Logic
- Tim Menzies - Ph.D. (University of New South Wales)
  Software Engineering, Data Mining
• Afzel Noore - Ph.D. (West Virginia University)  
  VLSI Design and Testing, Software Engineering, Information Assurance and Biometrics
• Roy Nutter Jr. - Ph.D., P.E. (West Virginia University)  
  Neural Networks, Microprocessor Systems, Computer Architecture, Computer Forensics
• Y. Ramana Reddy - Ph.D. (West Virginia University)  
  Artificial Intelligence, Knowledge-based Simulation, Computer Graphics

ASSOCIATE PROFESSORS
• Xian-An Cao - Ph.D. (University of Florida)  
  Nanofabrication, Opto-electronic Devices
• Elaine Eschen - Ph.D. (Vanderbilt University)  
  Graduate Coordinator for CS Ph.D. CCDM Program, Design and Analysis of Algorithms, Graph Theory, Combinatorics
• Katerina Goseva-Popstojanova - Ph.D. (University Sv. Kiril i Metodij)  
  Software Reliability Engineering, Distributed Systems, Computer Security, Dependability, Performance and Performability Assessment
• David Graham - Ph.D. (Georgia Institute of Technology)  
  Analog Signal Processing
• Mark Jerabek - Ph.D., P.E. (Purdue University)  
  Solid State Devices and Sensors, Electromagnetics
• Dimitris Korakakis - Ph.D. (Boston University)  
  Semiconductor Growth, Nanotechnology, Photonic Devices, Biosensors
• Xin Li - Ph.D. (Princeton University)  
  Image Processing, Computer Vision, Pattern Recognition
• James Mooney - Ph.D. (Ohio State University)  
  Associate Chair, Operating Systems, Computer Architecture, Software Portability and Standards, Computer Security and Forensics
• Daryl Reynolds - Ph.D. (Texas A&M)  
  Statistical Signal Processing for Communications, Iterative (Turbo) Processing, Transmitter Pre-coding, Space-time Coding and Processing
• Natalia Schmid - Ph.D. (Washington University)  
  Estimation and Detection, Biometrics, Information Theory, Statistical Signal and Image Processing
• Krishnamurthy Subramani - Ph.D. (University of Maryland)  
  Scheduling, Computational Biology, Computational Complexity, Polyhedral Combinatorics
• Matthew Valenti - Ph.D. (Virginia Polytechnic Institute and State University)  
  Communication Theory, Wireless Systems, Error Control Coding
• Frances VanScoy - Ph.D. (University of Virginia)  
  Programming Languages and Compilers, Multisensory Computing, High Performance Computing

ASSISTANT PROFESSORS
• Thirimachos Bourlai - Ph.D. (University of Surrey)  
  Biomedical Image Processing, Pattern Recognition
• Gyungsu Byun - Ph.D. (University of California, Los Angeles)  
  Digital Electronic Devices
• Yaser Fallah - Ph.D. (University of British Columbia)  
  Cyber Physical Systems, Computer and Wireless Networks, Intelligent Transportation, Embedded Systems
• Guodong Guo - Ph.D. (University of Wisconsin, Madison)  
  Computer Vision, Biometrics, Human Computer Interaction
• Vinodkrishnan Kulathumani - Ph.D. (The Ohio State University)  
  Wireless Sensor Actuator Networks, Scalable and Fault Tolerant Distributed Systems
• Yuxin Liu - Ph.D. (Louisiana Tech University)  
  Biotechnology/Bioengineering, BioMEMS and Microfluidics, Cellular Sensor, Tissue Engineering
• Sarika Khushalani Solanki - Ph.D. (Mississippi State University)  
  Power/Energy Conversion, Power Systems; Controls, Signals, and Systems
• Yanfang Ye - Ph.D. (Xiamen University)  
  Cybersecurity, Machine Learning

RESEARCH ASSOCIATE PROFESSORS
• Alan Barnes - Ph.D. (California Institute of Technology)  
  Ion Surface Interactions, Materials Growth and Automated Document Analysis
• Sumitra Reddy - Ph.D. (West Virginia University)
  Healthcare Informatics, Componentware, Intelligent Systems, Information Technology Evolution

RESEARCH ASSISTANT PROFESSORS
• Jeremy Dawson - Ph.D. (West Virginia University)
  Nanotechnology
• Jignesh Solanki - Ph.D. (Pennsylvania State University)
  Tissue Engineering, Spinal Cord Injury Repair, Stem Cells, Molecular Neurobiology

VISITING AND ADJUNCT PROFESSORS
• Nancy Lan Guo - Ph.D. (West Virginia University)
  Medical Information Systems
• V. Jagannathan - Ph.D. (Vanderbilt University)
  Distributed Intelligent Systems, Internet and Security Technologies
• Arun Ross - Ph.D. (Michigan State University)
  Statistical Pattern Recognition, Biometrics
• Stephanie Schuckers - Ph.D. (University of Michigan)
  Signal Processing, Biometrics

LECTURERS
• Camille Hayhurst - M.S.C.S. (West Virginia University)
  Programming Languages
• Raymond Morehead - M.S.C.S. (West Virginia University). M.D. (Northwestern University)
  Biomedical Systems, Databases
• Cynthia Tanner - M.S.C.S. (West Virginia University)
  Graduate Coordinator for Software Engineering

PROFESSORS EMERITI
• John Atkins - Ph.D. (University of Pittsburgh)
• Wils Cooley - Ph.D., P.E. (Carnegie Mellon University)
• William Dodrill
• Ron Klein - Ph.D. (University of Illinois)
  power systems, control, maglev technology
• Robert McConnell - Ph.D. (University of Kentucky)

Admission Requirements for All Programs
All Masters and Ph.D. programs require applicants to provide the items below to be considered for admission. Specific programs may have additional requirements. Exception: These requirements do not apply to nontraditional students in the Certificate of Software Engineering program and M.S.S.E. program (see certificate program and M.S.S.E. program for more information):

• A minimum cumulative grade point average of 3.0 or equivalent, based on a 4.0 system.
• Three letters of reference.
• International students must demonstrate proficiency in communicating in English (a minimum TOFEL Score of 550, or iBT Score of 79, or IELTS Score of 6.5). (Students who have completed a recent four-year bachelor’s degree in the USA need not submit these scores.)
• All graduate degree programs require the GRE general test, with a suggested score of either the 80th percentile on the quantitative part or 80th percentile total (verbal + quantitative + analytical).
• All graduate degere programs require an appropriate bachelors or master’s degree for entry. Students lacking some foundational courses appropriate to a particular degree program may be assigned some remedial coursework as a condition of admission.
• See: Certificate in Software Engineering; Master of Science in Software Engineering for alternative admission requirements to those programs for working professionals.

Regular, Provisional, and Non-Degree Admission
Students admitted into a program are designated as regular status or provisional. The department also admits students to non-degree status in the College of Engineering and Mineral Resources, but these students are not admitted to any specific program. Regular status is given to students who are qualified for unconditional admission to a specific program. Provisional status is given to students who have deficiencies to make up such as incomplete
credentials or other reasons as identified by the graduate coordinator. In all cases, the student’s letter of admission will state what must be done to attain regular status.

Provisional students must complete the requirements for transfer to regular status by the end of the semester in which they complete eighteen credit hours. Usually provisional students are not considered for graduate assistantships or tuition waivers.

Non-degree status is granted upon request to students meeting the minimum admission requirements. A non-degree student is one who wishes to take courses without seeking a formal degree. Non-degree students require permission of the instructor to take courses that are restricted to specific majors. There is no guarantee of eventual acceptance into a degree program, and in no case may more than twelve hours be transferred to a degree program.

Non-degree students may not be offered graduate assistantships or tuition waivers.

Graduate Certificates

The Lane Department of Computer Science & Electrical Engineering offers four graduate certificates, which are typically completed as part of a graduate degree program but can be completed as a separate credential. Brief descriptions of the certificate programs are given here. More detailed information on procedures for the certificate programs may be found on the main department web page.

GRADUATE CERTIFICATE IN SOFTWARE ENGINEERING

Details for the Graduate Certificate in Software Engineering are found on the graduate catalog section devoted to the Master of Science in Software Engineering degree program.

GRADUATE CERTIFICATE IN COMPUTER FORENSICS

The Lane Department of Computer Science and Electrical Engineering (LDCSEE) offers a Graduate Certificate in Computer Forensics (CF). By providing systematic graduate courses in this field, our graduates and others should be better prepared to assist business, industry, government, and academia in attaining a new level of protection from cyber-criminals.

The graduate certificate program consists of fifteen credit hours of required courses. Admission to the graduate certificate program in Computer Forensics requires admission to the M.S. Computer Science or M.S. Electrical Engineering (with Computer Engineering major). One wishing to complete only the Certificate must still be admitted to the M.S.C.S. or M.S.E.E. programs.

The purpose of the certificate program is to:

1. Provide further education to computer professionals with technical undergraduate degrees to enable them to track and protect institutional computer and cyber crime. This knowledge in corporate settings should lead to better protection of company computer assets, company intellectual property, and company data and financial assets. These professionals should be able to support law enforcement in detection and prosecution of cyber-crime when needed.

2. Provide further education for those technical individuals who work in law-enforcement. It is expected that these would be highly technical people with bachelor’s degrees in either computer science, computer engineering, or software engineering.

Many (if not most) of the students expected will be full time and pursuing a Masters of Science degrees in Computer Science or Computer Engineering. Other students may come from industry and law enforcement. These students will achieve the Certificate as another resume item that will improve employability while supplying a demand for computer people with such backgrounds. Some students may choose to pursue the Certificate with no intent of completing a Masters degree but will have achieved significant competence in this field.

The Certificate requires fifteen credit hours through required core curriculum courses. In addition to the fifteen credit hours upon course completion, the student will be required to complete a capstone project. The following are the fifteen credits hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPE 435</td>
<td>Computer Incident Response</td>
<td>3</td>
</tr>
<tr>
<td>CPE 536</td>
<td>Computer Data Forensics</td>
<td>3</td>
</tr>
<tr>
<td>CPE 538</td>
<td>Intro-Computer Security Mangmn</td>
<td>3</td>
</tr>
<tr>
<td>CS 539</td>
<td>Computer Forensics &amp; the Law</td>
<td>3</td>
</tr>
<tr>
<td>CS 568</td>
<td>Computer Network Forensics</td>
<td>3</td>
</tr>
</tbody>
</table>

These five courses cover the major areas of study. The first is an overview of the entire area; two will be taught with an emphasis throughout on vulnerabilities and counter-measures. One course emphasizes management practices and oversight required to maintain the best defense against attacks in organizations and how to respond to them. The final course deals with the law and cases governing the area of computer crime, its detection and prosecution, keeping in mind the constraints placed on security by the rights of citizens.

GRADUATE CERTIFICATE IN BIOMETRICS & INFORMATION ASSURANCE

The graduate level Information Assurance and Biometrics Certificate Program at West Virginia University (WVU) provides a student-centered learning environment to educate and train professionals to meet the changing needs of the industry, government, and academia in West Virginia and the nation.
This program is offered to WVU students, government personnel (military and civilian), and contractor personnel who meet the program acceptance requirements. Potential career options for students completing this certificate program are in security related fields, most likely in the military, banking industry, or within various law enforcement agencies.

The graduate level Information Assurance and Biometrics Certificate Program offered at WVU provides a broad overview of the information assurance and biometrics field and addresses relative and recent advances and current research issues. It is interdisciplinary in nature and covers many educational materials. Included are the elements of biometrics technology, system security engineering, and principles of trusted systems. The course content of this program emphasizes ethical, economic, social, and legal impacts of biometrics technologies and information assurance techniques.

The goal of the graduate level fifteen Credit Hour Information Assurance and Biometrics Certificate Program is to provide students with the following:

- A solid understanding of biometrics technology, system security principles, and their scientific foundations, and
- An awareness of the social, psychological, ethical, and legal policies and requirements in the field of information assurance and biometrics (IAB), and
- The ability to communicate with professionals in the wide range of public services, including law enforcement, military, science, and those who employ the principles and techniques of IAB.

The coursework includes fifteen credit hours of classes. As part of the certificate coursework, students will be expected to take four required classes and choose the fifth class between two approved electives.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM 426</td>
<td>Biometric Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 465</td>
<td>Introduction-Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>STAT 516</td>
<td>Forensic Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOM 693</td>
<td>SPTP: Advanced Biometrics</td>
<td>3</td>
</tr>
<tr>
<td>CS 665</td>
<td>Computer System Security</td>
<td>3</td>
</tr>
<tr>
<td>EE 465</td>
<td>Intro to Digital Image Process</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
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</tr>
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</tr>
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<td>3</td>
</tr>
<tr>
<td>EE 465</td>
<td>Intro to Digital Image Process</td>
<td>3</td>
</tr>
</tbody>
</table>

A capstone project will be required as part of the Advanced Biometrics course. Advanced Biometrics is a required capstone course taken after BIOM 426, CS 465, and STAT 516. This course includes a once-a-week advanced topics seminar series and a three-hour laboratory. The laboratory will have both formal laboratory exercises and time devoted to the project. The project will provide the students with an opportunity to integrate the knowledge gained from the core courses to the program.

**GRADUATE CERTIFICATE IN INTERACTIVE TECHNOLOGIES AND SERIOUS GAMING**

A graduate certificate in Interactive Technologies and Serious Gaming recognizes that interactive computer software such as games are both a programmed artifact and a cultural object, and careers in computer gaming - whether in academia or in industry - require a broad range of skills. The purpose of this program is to:

1. Give graduate students the skills required to conduct advanced research in gaming and interactive technologies.
2. Prepare students for careers in the gaming industry.
3. Foster a local gaming and interactive technologies program in West Virginia.

Admissions requirements for this certificate program are the same as the admission requirements for the M.S.C.S. degree program.

The Interactive Technologies and Serious Gaming Certificate Program will normally be completed over two years. Requirements for completion of the degree are eighteen credit hours of coursework and completion of a final project. The eighteen credit hours of coursework will include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 572</td>
<td>Adv Artificial Intelligence Tech</td>
<td>3</td>
</tr>
<tr>
<td>CS 570</td>
<td>Interactive Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CS 593X</td>
<td>Special Topics (Design of Immersive Media)</td>
<td>3</td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Prior to completion of the Certificate, students will complete a significant project, suitable for inclusion in their portfolio. The aim of the project is to synthesize and combine the student’s prior study into an innovative product.

**Computer Engineering**

**Degree Offered**

- Doctor of Philosophy
Program Description

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 web page at http://www.csee.wvu.edu for information. If additional information is needed, contact the graduate coordinator of electrical and computer engineering.

Program Educational Objectives & Outcomes

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.

Admissions

As a first step, students must satisfy provisions under the “Admission Requirements for All Programs” of the main catalog entry for the Lane Department of Computer Science and Electrical Engineering and must submit a statement of purpose.

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.

REMOVING DEFICIENCIES

Prior to the first week of classes, new Ph.D. students must meet with the graduate coordinator to select classes. This interview determines if the student needs remedial 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 specified during the interview or later.

During the second semester, students must form their Advisory and Examining Committee (AEC) and write a plan of study. The AEC may also identify additional deficiencies to be removed, but this is rare since deficiencies should have been identified earlier in the student's career.

Program Requirements

PRELIMINARY COURSEWORK

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 Masters 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.

GRADUATE COMMITTEE

During the second semester as a regular doctoral student, students must form their Advising and Examining Committee (AEC) and prepare a plan of study. Students planning to first complete an M.S.E.E. degree must be admitted as an M.S.E.E. student, form a Masters AEC consisting of three or more members, and follow the requirements for the M.S.E.E. as discussed in the section of the catalog pertaining to the M.S.E.E. degree. In all other cases, or when the M.S.E.E. degree has been completed, students should form a Doctoral AEC of at least five members in consultation with the graduate coordinator. This committee must conform to all University and college requirements set forth in other sections of this catalog.

COURSEWORK

Students who have successfully passed the qualifying examinations must then take, additionally, eighteen hours of advanced graduate coursework at the doctoral level. Students with the help of their Graduate Committee should select courses that will develop expertise in the student’s area of interest, and that will strengthen knowledge of other areas supporting their research endeavors. For all majors, Ph.D. course work must include at least six credit hours of 600 or higher level courses. Up to six of the eighteen credit hours may be in directed study. All other hours must be in regular courses.

EXAMINATIONS

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.

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.

After the student completes the research (at least twenty-four credit hours) and prepares a dissertation, the final examination consists of a public defense of the dissertation. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

RESEARCH
Research work for the doctoral dissertation must represent a significant contribution to engineering. It may entail a fundamental investigation into a specialized area or a broad and comprehensive system analysis or design. A minimum of twenty-four credit hours of research (CPE 797 or EE 797) is required.

PROGRAM LENGTH
A typical Ph.D. program requires four to five years beyond the baccalaureate degree, although scholarly achievements are more important than length of program.

Computer Science

Degrees Offered

• Master of Science in Computer Science
• Doctor of Philosophy in Computer Science

Program Description
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 & Outcomes
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.

Admissions
Students who satisfy the departmental graduate admission requirements given on the main departmental section will be considered for admission. Additional criteria may be considered in making a final decision. All applicants must submit three letters of reference and complete an Applicant Information Form.
REMOVING DEFICIENCIES

The minimum background expected of any student entering the M.S.C.S. program is coursework equivalent to the following:

- One year of calculus (MATH 155 and MATH 156).
- One course in probability and statistics (STAT 215).
- Knowledge of introductory programming in a high-level programming language (STAT 215).

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 M.S.C.S. 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 111</td>
<td>Introduction-Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CS 220</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CS 221</td>
<td>Analysis of Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CS 230</td>
<td>Intro to Software Engineering</td>
<td>4</td>
</tr>
<tr>
<td>CS 310</td>
<td>Principle-Programming Language</td>
<td>3</td>
</tr>
<tr>
<td>CS 350</td>
<td>Computer System Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

As demand justifies and resources permit, the department will offer accelerated courses to assist graduate students in satisfying deficiencies.

Masters Program Requirements

Students may choose the thesis option, problem report option, or coursework option.

- The thesis option requires thirty credit hours: twenty-four hours of formal coursework and six hours of research. At most, nine hours of 400-level undergraduate coursework may be included. This option requires writing a thesis that represents research suitable for publication in a refereed journal. All theses are submitted to the University’s Electronic Thesis and Dissertation program.
- The problem report option requires thirty-three credit hours: thirty hours of formal coursework and three hours of research. Again, at most, nine hours of 400-level undergraduate coursework may be included. The problem report option requires writing an acceptable report describing a research project carried out by the student.
- The coursework option requires thirty-five credit hours: thirty-three hours of formal coursework and at least two semesters of graduate seminar. A coursework defense must be completed by the student and committee in order to complete the degree.

The department or the student’s Graduate Committee may designate additional courses, including doctoral-level courses that may meet these requirements.

Graduate Committee

Before the end of the second semester as a regular Masters student, each student must form an Advisory and Examining Committee (AEC) of at least three members. The chair of this committee must have regular graduate faculty status. For a committee overseeing a thesis, the majority of the members must also have regular graduate faculty status.

The role of this committee is to guide the student both in selection of courses and in research. At the time the AEC is formed, the student submits for approval a preliminary plan of study listing the courses that have been taken or will be taken. The choice of thesis or problem report option should also be indicated on the plan of study, along with a tentative title for the thesis or problem report.

Research and Final Defense

After formation of the AEC and approval of the preliminary plan of study, the student may register for research using course number CS 697. Research may begin at the same time that the coursework is being completed. However, students should normally plan on the equivalent of one semester of full-time effort to complete a problem report or two semesters to complete a thesis.

All Masters students must defend their thesis or problem report at an oral exam, attended by all members of the committee. The exam consists of two parts. The first part is a period of oral questioning on the student’s coursework. This questioning is intended to ensure that the student has learned the general concepts of the courses he or she has taken. The coursework part must be completed satisfactorily before the research defense can take place. A student who fails the coursework part may have one additional attempt during the same semester. The second part is presentation of the research and a defense of this research by answering questions from the committee. This defense may occur directly after the coursework questions or at a later time. It cannot be held until the coursework questions are answered satisfactorily.
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.

Program Length

Normally, a student who has attained regular Masters status should expect to spend two to three semesters plus an additional semester or summer session to complete the M.S.C.S. degree.

Doctorial Program Requirements

PRELIMINARY COURSEWORK

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.

GRADUATE COMMITTEE

During the second semester as a regular Doctoral student, students must form their Advisory and Examining Committee (AEC) and prepare a plan of study. Students planning to first complete an M.S.C.S. degree must be admitted as an M.S.C.S. student, form a Masters AEC consisting of three or more members, and follow the requirements for the M.S.C.S. as discussed in the section of the catalog pertaining to the M.S.C.S. degree. In all other cases, or when the M.S.C.S. degree has been completed, students should form a Doctoral AEC of at least five members in consultation with the graduate coordinator. This committee must conform to all University and college requirements set forth in other sections of this catalog.

COURSEWORK

Students who have successfully passed the qualifying examinations must then take, additionally, eighteen hours of advanced graduate coursework at the doctoral level. Students with the help of their Graduate Committee should select courses that will develop expertise in the student’s area of interest, and that will strengthen knowledge of other areas supporting their research endeavors. For all majors, Ph.D. course work must include at least six credit hours of 600 or higher level courses. Up to six of the eighteen credit hours may be in directed study. All other hours must be in regular courses.

EXAMINATIONS

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 coursework, 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.

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.

After the student completes the research (at least twenty-four credit hours) and prepares a dissertation, the final examination consists of a public defense of the dissertation. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

RESEARCH

Research work for the doctoral dissertation must represent a significant contribution to engineering. It may entail a fundamental investigation into a specialized area or a broad and comprehensive system analysis or design. A minimum of twenty-four credit hours of research (CS 797) is required.

PROGRAM LENGTH

A typical Ph.D. program requires four to five years beyond the Baccalaureate degree, although scholarly achievements are more important than length of program.
COMBINATORIAL COMPUTING AND DISCRETE MATHEMATICS (CCDM) OPTION

An area of emphasis in Combinatorial Computing and Discrete Mathematics (CCDM) is offered within the CS Ph.D. program. The CCDM Ph.D. program offers students the opportunity to pursue multidisciplinary studies across theoretical computer science, discrete mathematics, and statistics. Applicants are expected to satisfy the admission requirements for all programs as given previously. In addition, for regular admission, applicants must satisfy certain CCDM specific prerequisites, and hold a Masters degree in Computer Science, Statistics, Mathematics, or a closely related field, or have completed equivalent graduate coursework. An applicant that does not meet all of these requirements may be admitted provisionally. Note that a CCDM Ph.D. student is not required to have or obtain the equivalent of a Bachelors or Masters degree in computer science. The CCDM Entrance Exam replaces the CS Ph.D. Qualifying Exam. Coursework requirements differ from those of the CS Ph.D. program, but are not in conflict with any CIS Ph.D. requirements.

Electrical Engineering

Degrees Offered

• Masters of Science in Electrical Engineering
• Masters of Science in Engineering with a major in Electrical Engineering
• Doctor of Philosophy in Engineering with a major in Electrical Engineering

Program Description

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.

Masters Program Educational Objectives & Outcomes

The objective of the Master of Science in Electrical Engineering (M.S.E.E.) 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:

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 or thesis defense.

Doctorial Program Educational Objectives & Outcomes

The objective of the Ph.D. Program in Electrical Engineering 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:

1. Achieve a depth of understanding in Electrical Engineering, as demonstrated by completion of core Ph.D. courses and examination on that material through the Qualifying Examination process.
2. Achieve a breadth of understanding of the Electrical Engineering discipline, as demonstrated by completion of remaining doctoral coursework and participation in graduate seminar.
3. Demonstrate the ability to conduct independent research by completion and defense of a dissertation.

Masters Admissions

Students admitted into a program are designated as regular, provisional, or non-degree status. Regular status is given to students who are granted unconditional admissions. Provisional status is given to students who have deficiencies to make up such as incomplete credentials or other reasons as identified by the graduate coordinator. In all cases, the student’s letter of admission will state what must be done to attain regular status, and students must sign and date this letter no later than the first registration. Non-degree status is granted case-by-case by the graduate coordinator. Basically, a non-degree student is one who may take courses but sometimes with no plan of study or any guarantee for attaining provisional status.
Doctorial Admissions
As a first step, students must satisfy provisions under the “Admission Requirements for All Programs” and must submit a statement of purpose. Students who hold an M.S.E.E. or M.S.E. (or equivalent) degree will be considered for admission with regular status into the Ph.D. program. Students who hold a master’s 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.

REMOVING DEFICIENCIES
Prior to the first week of classes, new Ph.D. students must meet with the graduate coordinator to select classes. This interview determines if the student needs remedial 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 specified during the interview or later.

During the second semester, students must form their Advisory and Examining Committee (AEC) and write a plan of study. The AEC may also identify additional deficiencies to be removed, but this is rare since deficiencies should have been identified earlier in the student’s career.

Masters Program Requirements
There are three options available for students to gain a master’s degree: coursework only, thesis option, or problem report option.

- Students following the coursework option must take thirty-three credit hours of formal course-work plus two hours of graduate seminar. This option is open only to professionals employed full-time in local industry. At most, nine hours of 400-level coursework may count.
- Students following the problem report option must take thirty-five credit hours: thirty hours of formal coursework, three hours of research, and two hours of graduate seminar. At most, nine hours of 400-level undergraduate coursework may count.
- Students following the thesis option must take thirty-two credit hours: twenty-four hours of formal coursework, six hours of research, and two hours of graduate seminar. At most, nine hours of 400-level undergraduate coursework may count. Students supported by research assistantships are expected to pursue this option.

Students pursuing either the thesis or problem report option leading to the M.S. degree must have the thesis or problem report approved by the student’s advisory and examining committee (AEC) before it can be accepted. The student must also pass a final oral examination and defense of the thesis or problem report administered by the AEC.

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.

Master Options
Three options are available to EE master’s students for degree completion:

- **Thesis Option:** Total hours: thirty-two. Eight three-credit courses, at least two hours of graduate seminar, plus six credits of research leading to successful thesis defense.
- **Problem Report:** Total hours: thirty-five. Ten three-credit courses, at least two hours of graduate seminar, plus three credits of research/independent study leading to successful problem report completion.
- **Coursework Option:** Total hours: thirty-five. Eleven three-credit courses and at least two hours of graduate seminar

Doctorial Program Requirements
PRELIMINARY COURSEWORK
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.

GRADUATE COMMITTEE
During the second semester as a regular doctoral student, students must form their Advising and Examining Committee (AEC) and prepare a plan of study. Students planning to first complete an M.S.E.E. degree must be admitted as an M.S.E.E. student, form a Masters AEC consisting of three or more members, and follow the requirements for the M.S.E.E. as discussed in the section of the catalog pertaining to the M.S.E.E. degree. In all other cases, or when the M.S.E.E. degree has been completed, students should form a Doctoral AEC of at least five members in consultation with the graduate coordinator. This committee must conform to all University and college requirements set forth in other sections of this catalog.
COURSEWORK

Students who have successfully passed the qualifying examinations must then take, additionally, eighteen hours of advanced graduate coursework at the doctoral level. Students with the help of their Graduate Committee should select courses that will develop expertise in the student’s area of interest and that will strengthen knowledge of other areas supporting their research endeavors. For all majors, Ph.D. course work must include at least six credit hours of 600 or higher level courses. Up to six of the eighteen credit hours may be in directed study. All other hours must be in regular courses.

QUALIFYING EXAMINATIONS

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.

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.

After the student completes the research (at least twenty-four credit hours) and prepares a dissertation, the final examination consists of a public defense of the dissertation. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

RESEARCH

Research work for the doctoral dissertation must represent a significant contribution to engineering. It may entail a fundamental investigation into a specialized area or a broad and comprehensive system analysis or design. A minimum of twenty-four credit hours of research (CPE 797 or EE 797) is required.

PROGRAM LENGTH

A typical Ph.D. program requires four to five years beyond the baccalaureate degree, although scholarly achievements are more important than length of program.

Software Engineering

Degrees Offered

• Masters of Science in Software Engineering
• Masters of Science in Engineering with a major in Software Engineering

Program Description

The Lane Department of Computer Science and Electrical Engineering offers professionally oriented Masters of Science in Software Engineering (M.S.S.E) degree program, as well as a graduate Certificate in Software Engineering. The M.S.S.E. provides graduate educational opportunities to working professionals. The M.S.S.E. degree is a unique extended learning program which provides graduate level software engineering expertise to individuals who are currently working in the computer and information technology industry. The program aspires to serve both adult learners from the local computer and information technology industry and extended learning students taking the course from remote locations. The typical M.S.S.E. student is a full time information technology professional who wishes to augment his work experience with additional academic background.

Program Educational Objectives & Outcomes

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.

More specifically, after completing five core courses, students will achieve the following outcomes:
• 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.

Students will complete their degree requirements with five elective courses which will deepen their understanding of aspects of software engineering relevant to their careers.

Admissions

Students seeking admission to the M.S.S.E. program must fall into one of two categories to be considered for admission. The categories are:

TRADITIONAL STUDENTS WITH RELATED UNDERGRADUATE DEGREE

Students who have recently completed a Bachelor’s degree in Computer Science, Computer Engineering, Software Engineering, or a closely related field will be considered for admission with regular status if they satisfy the following requirements:

• Cumulative GPA of 3.0 (on a 4-point scale) or better within the major. Official transcripts showing completion of the Bachelor’s degree must be provided in all cases.
• Submission of satisfactory scores in quantitative reasoning for the GRE General Test or Revised General Test. Official scores must be submitted prior to acceptance.

NONTRADITIONAL STUDENTS

Students who do not meet the above requirements but have work experience related to software development will be considered for admission if they meet the following requirements:

• Hold a four-year Bachelor’s degree in any field from an accredited University, with a GPA of at least 2.75. Official transcripts showing degree completion must be provided in all cases.
• Submit a resume documenting at least one year of software development experience.
• The GRE is not required for this option.

Nontraditional students are initially admitted as Provisional students. Students desiring to initially earn the Certificate in Software Engineering are initially admitted as non-degree students. They may enroll in core courses in the M.S.S.E. program, and must earn a grade of at least B in each of the first four courses. Upon meeting this requirement, these students may apply for transfer to the regular M.S.S.E. program. At the time of transfer, they must meet the following additional requirements:

• Submit a resume documenting at least three years of software development experience.
• Submit three letters of reference from persons familiar with the student’s professional work.

Program Requirements

The M.S.S.E. degree provides graduate-level software engineering expertise to individuals who are either currently working in the computer and information technology industry or have academic credentials that provide a foundation to begin graduate work in software engineering. The M.S.S.E. program aspires to serve both adult learners from the local computer and information technology industry, and traditional, resident full-time graduate students. This program is offered online at evening times convenient for the working professional.

Students pursuing an M.S.S.E. degree may elect a coursework only option, a problem report option, or a thesis option. The coursework option and the problem report option require completion of a total of thirty-three graduate credit hours: thirty-three hours of formal coursework, or thirty hours of formal coursework and three hours of research (SENG 697). The thesis option requires a total of thirty credit hours: twenty-four hours of formal coursework and six hours of research.

Certificate in Software Engineering

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. Courses taken for the certificate program earn credit towards the master’s degree.

Energy Systems Engineering

The Master of Science in Energy Systems Engineering is designed for students with undergraduate degrees or a closely related STEM discipline. The program will provide students opportunities to expand and strengthen their scholastic background and skills relative to the production, conversion, transmission, and utilization of energy storage, modeling and simulation of energy systems, and critical materials for energy generation and utilization.

Students enrolled and graduating from this program will fulfill a need for specially trained professionals to satisfy growing needs of governmental agencies and industrial companies in West Virginia, the region and the country for technical personnel with advanced training in specialized areas of energy systems and energy supply-chain management. The program will produce Masters level students who are able to function at the highest levels of expertise in their chosen sub-discipline of energy, and who are well versed in the overall concepts of getting energy to consumers.

The Degree can be used as a terminal degree or prepare students, with unique perspectives in the field of energy, for prospective study in existing Ph.D. programs at WVU and other universities nationally and internationally.

Admissions

To enter the degree program, students are required to have, as a minimum, a B.S. degree in engineering or a closely related STEM discipline, single- and multi-variable calculus, calculus based introductory probability and statistics, and a course in thermodynamics.

All students must submit a completed application accompanied by 3 letters of reference/recommendation.

• Students not having sufficient mathematics or calculus based probability and statistics on thermodynamics coursework will only be admitted as provisional students and will not be admitted to regular student status until they meet these minimum coursework requirements.
• Applicants having a grade point average (GPA) of 3.0 or better (out of a possible 4.0) in all previous college work, and who meet all other admissions requirements will be admitted as regular graduate students.
• Applicants having a GPA less than 3.0 but greater than 2.75 in previous college work and who meets all other admission requirements may be admitted as provisional students.
• Applicants having a GPA below 2.75 in previous college work cannot be admitted without approval from the Dean or designate. If admission would be granted, it would be a provisional admission.

Students admitted to provisional status must maintain a 3.0 GPA or better in their first semester.

The Graduate Record Examination (GRE) is not required for admission, however high scores on the GRE will provide additional evidence that the applicant is qualified for Admission.

A minimum score of 213 (equivalent to 550 on the former scale) on the Test of English as a Foreign Language (TOEFL) is required for all applicants from countries where the native language is not English. This requirement will be waived for students who have completed a recent four-year Bachelors degree in the United States. In some cases, it may be possible to consider applications from students who lack the adequate TOEFL scores but who will enroll in West Virginia University Intensive English Program.
**Curriculum Requirements**

**Extraction**

Examples include:

- MINE 411 Rock Mechanics/Ground Control
- MINE 505 Integrated Mining Systems
- MINE 611 Adv Ground Control Coal Mine

or any other approved course in the area of extraction

**Conversion**

Examples include:

- CHE 414 Coal Conversion Engineering
- MINE 427 Coal Preparation
- MAE 438 Introduction to Gas Dynamics
- MAE 528 Intro Fuel Cell Technology
- MINE 627 Advanced Coal Preparation

or any other approved course in the area of conversion

**Distribution/storage**

Examples include:

- EE 533 Comp Appls-Power Syst Analysis
- PNGE 471 Natural Gas Production/Storage

or any other approved course in the area of distribution/storage

**Utilization**

Examples include:

- MAE 424 Applications in Heat Transfer
- MAE 425 Internal Combustion Engines
- MAE 427 Heating/Ventilating/Air Cond
- MAE 521 Advanced Thermodynamics 1
- MAE 525 Heavy Duty Vehicle Emissions

or any other approved course in the area of utilization

**Research**

Technical Electives selected from the table of technical electives below. A minimum of 12 credit hours of the 18 credit hours of technical elective course work must be taken in the Statler College.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ARE 445</td>
<td>Energy Economics</td>
<td>3</td>
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<td>WDSC 444</td>
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</tr>
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<td>3</td>
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<td>RESM 440</td>
<td>Foundations of Applied GIS</td>
<td>2</td>
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<td>RESM 480</td>
<td>Environmental Regulation</td>
<td>3</td>
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<td>FOR 670</td>
<td>Human Dimnsions-Natl Rsrc Mang</td>
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<tr>
<td>BADM 511</td>
<td>Managerial Economics</td>
<td>3</td>
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<td>BADM 531</td>
<td>Operations/Supply Chain</td>
<td>3</td>
</tr>
<tr>
<td>BADM 532</td>
<td>Corporate Finance</td>
<td>3</td>
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</tbody>
</table>

**TECHNICAL ELECTIVES**

Any 400 level or higher CE course dealing with issues related to extraction, conversion, distribution/storage, and utilization of energy.

Any 400 level or higher CHE course dealing with issues related to extraction, conversion, distribution/storage, and utilization of energy.

Any 400 level or higher CPE course dealing with issues related to extraction, conversion, distribution/storage, and utilization of energy.

Any 400 level or higher EE course dealing with issues related to extraction, conversion, distribution/storage, and utilization of energy.

Any 400 level or higher IENG course dealing with issues related to extraction, conversion, distribution/storage, and utilization of energy.

Any 400 level or higher MAE course dealing with issues related to extraction, conversion, distribution/storage, and utilization of energy.

Any 400 level or higher MINE course dealing with issues related to extraction, conversion, distribution/storage, and utilization of energy.

Any 400 level or higher PNGE course dealing with issues related to extraction, conversion, distribution/storage, and utilization of energy.

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ILR 511 Human Capital Management 3
LAW 613 International Environmental Law 2-3
LAW 604 Natural Resources 3
LAW 630 Energy Law 3
LAW 689D Sem: Environmental Law 2
LAW 689W Sem: Issues in Energy Law 2

SUGGESTED PLAN OF STUDY

First Year

<table>
<thead>
<tr>
<th></th>
<th>Hours</th>
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<td>Critical Subject Area Courses</td>
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<td>Technical Elective Courses</td>
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<td>Technical Elective</td>
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<tr>
<td>Research</td>
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<td>3</td>
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<tr>
<td>Total credit hours</td>
<td>15</td>
<td>15</td>
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Department of Industrial and Management Systems Engineering

Degrees Offered

- Master of science in industrial engineering
- Master of science in engineering with a major in industrial engineering
- Master of science in industrial hygiene
- Master of science in safety management
- Doctor of philosophy with a major in industrial engineering
- Doctor of philosophy with a major in occupational safety and health

One of the defining attributes in the success of the department is the dedication and talent of its fifteen faculty and three staff members. The aggregate careers of our faculty and staff represent over 300 years of service to students at WVU. In these 300 years of service is embodied the wisdom and experience to successfully prepare industrial engineers and occupational health and safety professionals for the 21st century. The faculty and staff typically educate nearly 300 undergraduate, 100 to 120 M.S., and fifteen to twenty-five Ph.D. students. The department is in the unique position in the United States of having two complimentary graduate programs in industrial hygiene and safety accredited by the Applied Science Accreditation Commission (ASAC) of the Accreditation Board for Engineering and Technology (ABET). The combined resources and faculty talents of these two programs create synergies that provide our students with outstanding academic and research experiences in the field of occupational safety and health. Excellent academic and research opportunities are also available for students in the areas of operations research, decision sciences, manufacturing, and ergonomics.

Degree Programs

MASTERS OF SCIENCE IN INDUSTRIAL ENGINEERING AND MASTERS OF SCIENCE IN ENGINEERING WITH A MAJOR IN INDUSTRIAL ENGINEERING

A graduate of these master’s programs 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 these master’s programs 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

MASTERS OF SCIENCE IN INDUSTRIAL HYGIENE

A graduate of the Industrial Hygiene Masters program will be prepared to:

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 health.
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 Hygiene to be proficient in his or her chosen field or doctoral studies.

In order to meet the educational objectives of the Industrial Hygiene program, students must be able to meet the following educational outcomes at the time of their graduation:

1. An ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice such as:
   • Principles and methods of industrial hygiene
   • Principles and methods of ergonomics
   • Principles and methods of safety
   • Principles of environmental sciences (Environmental elective)
   • Principles of epidemiology and biostatistics
   • Principles and methods of control of physical and chemical hazards
2. The ability to apply knowledge of math, science, and Industrial Hygiene;
3. The ability 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, in teams, and/or in multi-disciplinary teams to identify, formulate, and solve problems using Industrial Hygiene, safety, and ergonomics knowledge, skills, and tools;
5. An ability to formulate or design a system, process, or program to meet desired needs;
6. An understanding of professional and ethical responsibility and the broad education and a 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; and
8. The professional characteristics expected of a successful Industrial Hygienist.

MASTERS OF SCIENCE IN SAFETY MANAGEMENT

A graduate of the Safety Management Masters 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.

In order to meet the educational objectives of the Safety Management program, students must be able to meet the following educational outcomes at the time of their graduation:

1. Demonstrate knowledge and skills to build a comprehensive Safety and Health Program based on loss control and regulations.
2. Demonstrate knowledge and skills to use analytical techniques in the Safety and Health function.
3. Demonstrate knowledge and skills with federal, state, and non-governmental Safety and Health Program standards and best practices.
4. Demonstrate skills in communications, written and oral, at the level of professionals in safety and health positions.
5. Demonstrate knowledge and skills in writing and evaluating safety and health research proposals.
6. Demonstrate knowledge and skills in using management tools to implement and evaluate safety, hygiene, and environmental programs.
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.

DOCTOR OF PHILOSOPHY WITH A MAJOR IN OCCUPATIONAL SAFETY AND HEALTH

A graduate of the Occupational Safety and Health doctoral program will be prepared to:

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.

In order to meet the 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.

Faculty Research

The department has quality research laboratories in manufacturing, robotics and vision systems, CAD/CAM, operations research, production planning and control, decision sciences, ergonomics, industrial hygiene, and safety. Graduate students are encouraged to utilize these resources to explore and develop their capabilities. Research initiatives and on-going funding opportunities are available to students in the areas of: ergonomics, operations research, production planning and control, decision sciences, manufacturing, occupational safety and health, artificial intelligence, and respirator research.

Required Courses

Required courses are determined by the student’s degree program and area of emphasis. Specific course information by program area is available at the following website: http://www.imse.cemr.wvu.edu/courses/.
FACULTY

CHAIR
• Wafik Iskander - Ph.D., P.E. (Texas Tech University)

PROFESSORS
• Rashpal Ahluwalia - Ph.D., P.E. (Western Ontario University)
  Manufacturing Systems, Quality and Reliability Engineering, Robotics and Automation
• Jack Byrd Jr. - Ph.D., P.E. (West Virginia University)
• Robert Creese - Ph.D., P.E. (Pennsylvania State University)
  Manufacturing Processes/Systems, Foundry Engineering, Cost Engineering
• Bhaskaran Gopalakrishnan - Ph.D., P.E., CEM. (Virginia Polytechnic Institute and State University)
• Steven Guffey - Ph.D., C.I.H. (North Carolina State University)
  Ventilation Systems Theory and Design, Noise Measurement and Control, Exposure Assessment
• Majid Jaridi - Ph.D. (University of Michigan)
  Statistics, Quality Control, Forecasting and Transportation Research
• Warren Myers - Ph.D., C.I.H. (West Virginia University)
  Associate Dean for Academic Affairs, Industrial Hygiene and Safety, Worker Exposure Assessment and Modeling, Aerosol Filtration, Occupational Respiratory Protection Design and Testing
• Gary Winn - Ph.D. (Ohio State University)
  Construction Safety, Transportation Safety and Program Evaluation, Total Quality Management, Theory of Paradigm Shifts

ASSOCIATE PROFESSOR
• Alan McKendall, Jr. - Ph.D. (University of Missouri, Columbia)
  Operations Research, Meta-heuristics, Facilities Layout and Materials Handling, Project Scheduling, Integrated Production Systems
• Feng Yang - Ph.D. (Northwestern University)
  Simulation, Applied Statistics, Stochastic Processes

ASSISTANT PROFESSORS
• Michael Klishis - Ph.D. (West Virginia University)
  Safe Behaviors and Loss Control, Training, Instructional Development, Mine Safety and Health
• Ashish Nimbarte - Ph.D. (Louisiana State University)
  Work Related Musculoskeletal Disorders, Occupational Biomechanics and Biomechanical Modeling
• Xiaopeng Ning - Ph.D. (Iowa State University)
  Safety Engineering, Biomechanics, Ergonomics, Human Factors Engineering

PROFESSOR EMERITUS
• Ralph Plummer - Ph.D., P.E. (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 and Environmental Health, 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

Admission
To qualify as a regular graduate student, applicants must have as a minimum the equivalent of a 3.0 GPA. Applicants with a minimum 2.75 GPA (or the equivalent) may be admitted on a provisional basis. Applicants with GPA below 2.75 would need approval of the dean or his designee. International students must demonstrate proficiency in communicating in English (a minimum TOFEL Score of 550, or IBT Score of 79, or IELTS Score of 6.5). Students must comply with the rules and regulations as outlined in this catalog for graduate work in the College of Engineering and Mineral Resources.

• For admission into the M.S.I.E. and M.S.E. programs, applicants must have a bachelor of science degree from an engineering department, or from physics, chemistry, computer sciences, mathematics, or a similar technical or science program. In general, a degree in one of the “hard” science programs is required with at least two years of calculus or equivalent mathematics.

• For admission into the M.S. Industrial Hygiene Program, applicants must meet ABET/ASAC prerequisite course requirements which are currently a minimum of 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. Applicants not meeting all of the listed requirements may be considered for admission as provisional students.

• For admission into the M.S. Safety Management Program, applicants must meet ABET/ASAC prerequisite course requirements, which are currently a minimum of 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. In addition, students must have a minimum of twenty-one hours of social sciences, humanities, and/or communications. On an individual basis, the faculty may identify additional prerequisite coursework. Applicants will be advised about their specific requirements at the time of admission. Applicants not meeting all of the listed requirements may be considered for admission as provisional students.

• For admission into the Ph.D. program, applicants should have, at a minimum, a 3.4 GPA (or equivalent) in their graduate work. They must also meet all the entrance requirements stated above for the Master’s programs. Typically, a Master’s degree is required for admission into the Ph.D. program.

Applicants to graduate programs in the IMSE department are required to provide the following.

• A completed application submitted to the WVU Admissions Office
• Official transcripts of all previous college course work
• TOEFL scores for international students as stated above
• GRE General Test scores (not required for the M.S. in Safety Management Program)
• Three letters of recommendation (required for the Ph.D. programs only).

Specific programs may have additional requirements.

Masters Degree Programs
Graduate programs in industrial and management systems engineering are designed to give students experience in developing innovative solutions to real problems by implementing creative ideas. Students can expect to develop their creative abilities in order to be effective in innovative environments while improving their abilities to communicate and implement new ideas.
Four degrees are offered at the master’s level: M.S.I.E., M.S.E., M.S. in industrial hygiene, and M.S. in safety management. See our graduate webpage at http://www.imse.cemr.wvu.edu/grad/degrees.php.

- The M.S. industrial engineering degree program is appropriate for students with a B.S. in industrial engineering or other engineering disciplines.
- The M.S. engineering degree program is designed for students having a baccalaureate degree in a technical field other than industrial engineering who wish to pursue a broader, more interdisciplinary program of graduate studies. An undergraduate degree in either another engineering field or the basic sciences is required for admission to the M.S.E.
- The M.S. in industrial hygiene is accredited by the Applied Science Accreditation Committee (ASAC) of the Accreditation Board of Engineering and Technology (ABET). Suitable undergraduate degrees include engineering, chemistry, biology, medical sciences, animal sciences, and the physical sciences. The three disciplines that form the basis of hygiene are industrial hygiene, industrial safety, and ergonomics.
- The M.S. in safety management degree program is accredited by the Applied Science Accreditation Committee (ASAC) of the Accreditation Board of Engineering and Technology (ABET). It is designed for students trained in the areas of animal sciences, chemical and biological sciences, engineering and technology sciences, medical sciences, the physical sciences, and business and economic sciences who have an interest in safety management.

Thesis

When a student elects the thesis or problem report option, the thesis or problem must conform to the general requirements of the university and to the written requirements of the Department of Industrial and Management Systems Engineering.

Graduation Requirements

The M.S.I.E. or M.S.E. degree requirements for the thesis option include completion of a minimum of twenty-four credit hours, plus a six-hour thesis; or candidates may take thirty-three credit hours and complete a three-hour problem report. The M.S.I.H. degree requires a total of a minimum forty-one hours, not including credits for a thesis or a problem report. A candidate for the M.S.I.E., M.S.E., or M.S.I.H. degrees must pass an oral examination on coursework and the thesis or problem report. M.S. in safety management degree candidates may opt to complete a minimum of thirty credit hours, plus a six-hour thesis, or they may opt to complete a minimum of thirty-three credit hours and a problem report, or a thirty-six-credit-hour all coursework program. Candidates who take the thirty-six-hour option are also required to pass a final comprehensive written examination. All graduate students must have a final grade point average of at least 3.0.

Doctor of Philosophy

The Doctor of Philosophy degree is administered through the college’s interdisciplinary program; industrial engineering or occupational safety and health may be the major. A candidate for the degree of doctor of philosophy must comply with the rules and regulations outlined in the general requirements of the Statler College of Engineering and Mineral Resources. 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 or occupational safety and health.

To be accepted in the Ph.D. program, applicants should have, at a minimum (or equivalent), a 3.4 GPA in their graduate work. They must also meet all the entrance requirements stated earlier for the master’s programs. Each student will develop a program with a major in industrial engineering or occupational safety and health designed to meet his/her needs and objectives in consultation with an advisor and the advisory and examining committee (AEC).

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 or occupational safety and health. The research work for the doctoral dissertation may entail a fundamental investigation or a broad and comprehensive investigation into an area of specialization.

Early in the doctoral program, the student must pass an examination to demonstrate master’s-level proficiency in industrial engineering or occupational safety and health subject matter. Upon completion of the coursework, the student must pass a written examination in order to be admitted to candidacy. An acceptable dissertation must be written and defended.

Department of Mechanical and Aerospace Engineering

Degrees Offered

- Master of science in mechanical engineering
- Master of science in engineering with a major in mechanical engineering
- Master of science in aerospace engineering
- Master of science in engineering with a major in aerospace engineering
- Doctor of philosophy in engineering with a major in mechanical engineering
- Doctor of philosophy in engineering with a major in aerospace engineering
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.

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.

Faculty

Faculty members in the 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 Engineering Sciences Building Annex 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 wind tunnel laboratory, and the aircraft test 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.

Graduate Programs

The objectives of the departmental graduate-level programs are as follows:

1. To provide masters-level education for students in or entering the engineering profession
2. To provide an advanced graduate educational experience for students pursuing the doctoral degree

Three master’s degrees are offered in the department: master’s of science in aerospace engineering (M.S.A.E.), master’s of science in mechanical engineering (M.S.M.E.), and master’s of science in engineering (M.S.E.) with a major in mechanical engineering or aerospace engineering. The department also offers the doctor of philosophy (Ph.D.) degree with majors in mechanical engineering or aerospace engineering.

Courses

Only courses with grades of C or higher are acceptable for graduate credit, although all coursework taken will be counted in establishing the student’s grade point average. No more than nine hours of 400-level credit can be counted toward meeting the coursework requirements for the M.S. degree. Only 400-level courses that are approved for math credit (see the following section) and only 400-level courses approved as technical electives for the B.S. degree in an engineering discipline are acceptable for course credit towards the M.S. degree. The technical elective(s) must not have been used to satisfy the B.S. degree. The absolute minimum requirement set by the department for coursework credit towards a Ph.D. degree is eighteen hours beyond the master’s degree at the 500-level or higher taken at WVU. However, the actual minimum number of coursework credits is set by the student’s advisory and examining committee and is based on the student’s background and the area of his/her Ph.D. dissertation. No more than twenty percent of the coursework beyond the minimum of eighteen credit hours required by the college for a doctoral degree can be at the 400-level. A minimum of twenty-four semester hours of research credit at the Ph.D.-level is required to meet dissertation requirements. Two consecutive semesters of full-time attendance at the WVU campus in Morgantown are necessary to meet the residency requirements of the Ph.D. program.

Math Requirements

The Department of Mechanical and Aerospace Engineering requires that the graduate coursework include six hours of advanced mathematics for the M.S. programs of study and a minimum of six additional hours of mathematics for the Ph.D. programs. A list of mathematics courses approved for graduate credit can be obtained from the graduate program director of the department.
Time Limitations

All requirements for a master's degree must be completed within eight years preceding the student's graduation. All students pursuing an M.S. degree in the MAE department are required to engage in research, and complete and defend successfully an M.S. thesis. They should identify a subject for their M.S. thesis research, form a three-member advisory and examining committee, 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 and six credit hours of M.S. thesis research is required for the M.S. degree. Students must pass a final examination administered by their advisory and examining committee before being certified for the degree.

Academic Areas

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. Students who are pursuing an advanced degree in either mechanical or aerospace engineering may perform their thesis or dissertation research and specialize in any one of these areas.

FLUIDS 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, shock tubes, 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. 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. The research in high-speed aerodynamics deals with viscous-inviscid interactions in transonic, supersonic, and hypersonic flow.

SOLID MECHANICS AND STRUCTURES

The solid mechanics and structures 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 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.

DESIGN AND CONTROLS

The system control and design area offers instructional and research opportunities for students who seek to attain the expertise required to design or 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; parametric, stochastic, and integrated design methods; elastodynamic analysis, computer-aided design (CAD); and modeling, design, and analysis of energy management systems. The research endeavors of the faculty reflect a close association with current industrial-type, real-life situations.

THERMAL SCIENCES

The thermal sciences and engineering 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 moire interferometric equipment, a lung acoustic impedance measurement system; and modern orthopedic, rehabilitation, and computer research laboratories.

MATERIALS SCIENCE AND ENGINEERING
The materials 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.

FACULTY
CHAIR
• Jacky Prucz - Ph.D. (Georgia Institute of Technology)
  Structural Design, Composite Materials, Solid Mechanics

PROFESSORS
• Richard Bajura - Ph.D. (University of Notre Dame)
  Director NRCCE, Energy Sciences
• Larry Banta - Ph.D. (Georgia Institute of Technology)
  Automation, Controls, Energy Management
• Ever Barbero - Ph.D. (Virginia Polytechnic Institute and State University)
  Materials, Experimental and Computational Mechanics
• Ismail Celik - Ph.D. (University of Iowa)
  Fluids Engineering, Fuel Cell Technology
• Nigel Clark - Ph.D. (University of Natal, South Africa)
  Associate VP for Academic Strategic Planning, Multiphase Flows, I.C. Engines and Emissions
• Russel Dean - Ph.D. (West Virginia University)
  Senior Associate Provost, Engineering Education
• Bruce Kang - Ph.D. (University of Washington)
  Experimental Mechanics, Advanced Materials
• John Kuhlman - Ph.D. (Case Western Reserve University)
  Fluid Mechanics
• Kenneth Means - Ph.D., P.E. (West Virginia University)
  Kinematics, Dynamics and Stability, Friction and Wear
• Gary Morris - Ph.D. (West Virginia University)
  Fluid Mechanics, Combustion, Aerodynamics
• Victor Mucino - Ph.D., P.E. (University of Wisconsin, Milwaukee)
  Mechanical Engineering Design, CAD, Finite Element Applications
• Marcello Napolitano - Ph.D. (Oklahoma State University)
  Aircraft Stability and Control, Feedback Control, Dynamics, Unmanned Airborne Vehicles (UAVs)
• Samir Shoukry - Ph.D. (Aston University, Birmingham UK)
  Pavement Modeling, Non-destructive Evaluation, Structural Dynamics, Neural Nets, Instrumentation
• Nithi Sivaneri - Ph.D. (Stanford University)
  Structural Mechanics, Composite Materials, FEM, Numerical Methods
• James E. Smith - Ph.D. (West Virginia University)
  Mechanical and Aeronautical Design
ASSOCIATE PROFESSORS

• Darran Cairns - Ph.D. (University of Birmingham, UK)
  Materials Science
• Wade Huebsch - Ph.D. (Iowa State University)
  Fluid Mechanics, CFD, Numerical Methods
• Hailin Li - Ph.D. (University of Calgary)
  Combustion, Emissions, Fuel efficiency of vehicles and internal combustion engines
• Xingbo Liu - Ph.D. (University of Science and Technology, Beijing)
  Materials Science
• Osama Mukdadi - Ph.D. (University of Colorado)
  Bioengineering, Acoustics, Solid mechanics and materials
• Mario Perhinschi - Ph.D. (Polytechnic Institute Bucharest, Romania)
  Aircraft Stability and Control, Flight Simulation
• Gregory Thompson - Ph.D. (West Virginia University)
  Thermodynamics, Machine Design.
• W. Scott Wayne - Ph.D. (West Virginia University)
  Machine design, Alternative fuels
• Nianqiang Wu - Ph.D. (Zhejiang University, China)
  Materials Science and Engineering

ASSISTANT PROFESSORS

• Vyacheslav Akkerman - Ph.D. (Umea University, Sweden)
  Turbulent combustion and flame turbulization, Propulsion and combustion instabilities in rocket engines
• Patrick Browning - Ph.D. (West Virginia University)
  Aerodynamics, Aircraft Design
• Marvin Cheng - Ph.D. (Purdue University)
  Mechatronics, Dynamic Systems and Control
• John Christian - Ph.D. (University of Texas, Austin)
  Spacecraft Design, Spacecraft Navigation, Estimation theory
• Jason Gross - Ph.D. (West Virginia University)
  Unmanned aerial vehicle avionic systems and flight testing
• Yu Gu - Ph.D. (West Virginia University)
  Robotic Systems, Sensor Fusion
• Alfred Lynam - Ph.D. (Purdue University)
  Space mission design, Orbital perturbations
• David Mebane - Ph.D. (Georgia Institute of Technology)
  Fuel cells, Multi-scale Simulation of chemical and electrochemical systems
• Terrance Musho - Ph.D. (Vanderbilt University)
  Nanoscale thermal and electrical transport, Direct energy conversion
• Andrew Nix - Ph.D. (Virginia Polytechnic Institute and State University)
  Turbines, Engines and Emissions
• Edward Sabolsky - Ph.D. (Pennsylvania State University)
  Materials, Ceramic Science
• Konstantinos Sierros - Ph.D. (University of Birmingham, United Kingdom)
  Flexible optoelectronic devices, Tribology, Materials for renewable energy
• Xueyan Song - Ph.D. (Zhejiang University, China)
  Materials Science, Electron Microscopy

RESEARCH PROFESSORS

• Eric Johnson - Ph.D. (University of Wisconsin-Madison)
  Multiphase Flow, Combustion-Gasification, Coal Cleaning
• Donald Lyons - Ph.D., P.E. (Georgia Institute of Technology)
  Manufacturing Systems Engineering, Instrumentation, Engines and Emissions
• John Sneckenberger - Ph.D. (West Virginia University)
  System Design and Controls, Distributed Power Generation and Smart Electric Grids
RESEARCH ASSOCIATE PROFESSORS

• David Lewellen - Ph.D. (Cornell University)
  Fluid Dynamics, Turbulence

RESEARCH ASSISTANT PROFESSORS

• Arvind Thiruvengadam - Ph.D. (West Virginia University)
  Exhaust of heavy-duty internal combustion engines
• Jay Wilhelm - Ph.D. (West Virginia University)
  Unmanned aerial systems, Wind turbine modeling
• Hui Zhang - Ph.D. (Beihang University)
  Materials, Physics, Chemistry
• Yu Chen - Ph.D. (Universidade Tecnica de Lisboa)
  Material science, Metal hydrides, Cathode material development
• Thomas Evans - Ph.D. (West Virginia University)
  Solid Mechanics, Structures
• Pete Gall - Ph.D. (West Virginia University)
  Aerospace systems design.
• Derek Johnson - Ph.D. (West Virginia University)
  Alternative fuels engines and emissions
• Nathan Weiland - Ph.D. (Georgia Institute of Technology)
  Fuel-flexible Combustion, Coal/Biomass Co-gasification, Biomass Pyrolysis

VISITING AND ADJUNCT PROFESSORS

• Alberto Ayala - Ph.D. (University of California, Davis)
  Energy, Engine Emissions
• Mark Bright - Ph.D. (West Virginia University)
  Materials Engineering, Pyrotech Inc.
• Renguang Dong - Ph.D. (Concordia University)
  Biomechanics, Human Vibrations, NIOSH
• Mridul Gautam - Ph.D. (West Virginia University)
  Alternative fuels, engines and emissions
• Luis Godoy - Ph.D. (University of London)
  Structural Stability
• Frank Goodwin - Sc.D. (Massachusetts Institute of Technology)
  Materials Engineering, ILZRO
• Nabil Hakim - Ph.D. (Wayne State University)
  Alternative Fuels Engines and Emissions
• Paul E. King - Ph.D.
  Materials engineering, NETL
• Stephen Kukureka - Ph.D. (University of Birmingham)
• Alejandro Lozano-Guzman - Ph.D. (Newcastle University)
  Dynamic Systems (CICATA-IPN Mexico)
• Eugene McKenzie - Ph.D. (West Virginia University)
  Mechanical Engineering Design, NIOSH
• Chris Menchini - Ph.D. (West Virginia University)
  Computational fluid dynamics, Fire modeling
• Koorosh Mirfakraie - Ph.D.
• Vincenzo Mulone - Ph.D. (University of Rome, Tor Vergata)
  Engine Emissions
• John Nuzkowski - Ph.D. (West Virginia University)
  Alternative fuels and engine emissions, UNF
• Ming Pei - Ph.D.
  Tissue Engineering
• Steven Raque - B.S. (Virginia Polytechnic Institute and State University)
  Space vehicle design
• Alberto Traverso - Ph.D.
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 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.

ADMISSION TO THE DIRECT-TRACK TO PH.D. DEGREE OPTION

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 first a thesis research for a master of science (M.S.) degree. To qualify for the direct track degree option, a candidate must have earned a cumulative grade point average (GPA) of 3.5 or higher if they commence their graduate studies in the department as Ph.D. students or must have a cumulative grade point average of 4.0 if they transfer from the M.S. degree program by the end of their first year of graduate studies in the department.

International students must demonstrate proficiency in communicating in English (a minimum TOEFL Score of 550, or IBT Score of 79, or IELTS Score of 6.5). (This requirement will be waived for applicants who have completed a recent four-year bachelor’s degree in the USA.) All international applicants who have not received their undergraduate degree in the USA are required to submit GRE general test scores with the engineering subject test score being optional. The GRE scores required for admission as a regular graduate student in the department need to be seventy-fourth percentile 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.

An applicant not qualifying for the admission status of regular graduate student, either due to marginally insufficient grade point average or GRE performance, incomplete credentials, or inadequate academic background, may be admitted as a provisional student at the discretion of the Admissions Committee of the department. Requirements for attaining regular student status must be stated in a letter of admission. Provisional students must sign a contract, which lists in detail all requirements that have to be met for attaining regular student status, typically no later than the end of the first semester at WVU.

All of the graduate degree programs offered by the department require the student to attain an overall grade point average of 3.0 or higher both in all the courses required for the degree program and in all the courses taken at WVU in order to meet graduation requirements. The cumulative grade point average (GPA) is calculated on the basis of courses only, and excludes credit for research, for which the received grade can be either S (satisfactory), or U (unsatisfactory) . Note: A grade of U in research is equivalent to a grade of F in a regular course and it can decrease drastically the GPA of a graduate student.

ADMISSION TO DOCTOR OF PHILOSOPHY PROGRAM

To be eligible for admission into the doctor of philosophy degree program with a major in aerospace or mechanical engineering, a candidate 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.
seventy-fourth percentile in the quantitative section of the GRE by the end of their first two semesters of graduate studies at WVU. Students admitted into the direct track option are considered to be Ph.D. students in the MAE department.

**Master of Science in Mechanical Engineering**

Students wishing to pursue a program leading to a M.S.M.E. degree are required to have a B.S.M.E. or B.S.A.E. from an accredited ABET curriculum or its equivalent. Students with an engineering background other than mechanical or aerospace engineering normally will be required to strengthen their background.

The plan of study must include at least six hours of advanced mathematics beyond a first course in differential equations, and twelve total hours of courses from at least two areas of study in mechanical engineering. Students are normally required to write a thesis. On occasion, part-time off-campus students may be given permission to substitute a problem report for a thesis when they can present compelling evidence of equivalent experience. A maximum of six hours of research credit is counted toward meeting degree requirements for the thesis option; a maximum of three hours of research credit is counted for the problem report option. The student’s plan of study is formulated jointly with his/her advisory committee based upon the interests and educational goals of the student. Students not completing a thesis will be required to include six hours of methods courses in their programs of study.

**Master of Science in Aerospace Engineering**

Students wishing to pursue a program leading to a M.S.A.E. degree are required to have a B.S.A.E. or B.S.M.E. from an accredited ABET curriculum or the equivalent. Students with an engineering background other than aerospace or mechanical engineering normally will be required to strengthen their background. Programs of study must comply with the rules and regulations as outlined in the general requirements for graduate work in the College of Engineering and Mineral Resources. The student’s program of study is formulated jointly by the student and his/her committee. Normally, a thesis is required of all candidates for the degree of master of science in aerospace engineering.

The plans of study for the M.S.A.E. degree must include six semester hours of advanced mathematics beyond a first course in differential equations and at least twelve semester hours of courses taken from any two areas of the department. The remainder of the coursework may consist of other courses from mechanical and aerospace engineering, other departments in the College of Engineering and Mineral Resources, or advanced course work in mathematics, chemistry, and physics. A maximum of six hours of research credit is counted toward degree requirements for thesis work. Students not completing a thesis will be required to include six hours of methods courses in their plans of study.

**Graduation Requirements**

The M.S.M.E. and M.S.A.E. degrees require completion of twenty-four hours of coursework (with a minimum cumulative grade point average of 3.0/4.0) plus six hours of research leading to a thesis. The coursework must include six hours of mathematics from an approved list and twelve hours of courses from Mechanical and Aerospace Engineering, of which six hours must be selected in sets of two courses from any of the five following areas:

1. Solid mechanics and structures
2. Design dynamics and controls
3. Fluids and aerodynamic
4. Thermal sciences and systems
5. Material science and engineering

**Doctor of Philosophy**

The doctorate is a research degree which requires the accumulation of eighteen credit hours of coursework taken at WVU at the 500-level or higher and twenty-four credit hours of research, also taken at WVU. The remaining requirements for the degree are as follows: (1) passing successfully the qualifying examination, (2) admission to candidacy, (3) one-year residency on campus, (4) completion of dissertation research, and (5) defense of a research dissertation. 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 second 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.

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. However, one has a maximum of five years to complete all the requirements for Ph.D. from the date of admission to candidacy.
Ph.D. Qualifying Exam

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. 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.

Ph.D. Degree

Students intending to pursue a doctoral program in the College of Engineering and Mineral Resources with an emphasis in mechanical or aerospace engineering should have earned a M.S. degree in some engineering discipline. Qualified candidates holding a M.S. degree in applied sciences can also be considered for admission into the Ph.D. program. Eligible students holding a B.S. degree are permitted to enroll directly in the Ph.D. program through the direct track from B.S. to Ph.D. degree option. 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.

Department of Mining Engineering

Degrees Offered

- Master’s of science in mining engineering
- Master’s of science in engineering with a major in mining engineering
- Doctor of philosophy with a major in mining engineering

Program Objectives

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 impactful 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 mine systems, rock mechanics and ground control, mine health and safety, mineral/coal processing, mine pollution control, and mine ventilation.

FACULTY

CHAIR
- Christopher J. Bise - Ph.D. (Pennsylvania State University)
  Robert E. Murray Chairman

PROFESSOR
- Keith Heasley - Ph.D. (Colorado School of Mines)
  Charles T. Holland Professor, Numerical Modeling, Rock Mechanics

ASSOCIATE PROFESSOR
- Vladislav Kecojevic - Ph.D. (University of Belgrade)
  Surface Mining, Aggregates Production, Mine Materials Handling Systems
• Yi Luo - Ph.D. (West Virginia University)  
  Surface Subsidence, Ventilation
• Felicia F. Peng - Ph.D. (West Virginia University)  
  Coal Preparation, Coal Utilization, Process Control, Plant Design

ASSISTANT PROFESSOR
• Brijes Mishra - Ph.D. (West Virginia University)  
  Theoretical and Experimental Rock Mechanics, Time Dependent Deformation of Rock and Salt, Mathematical Modeling in Rock Mechanics
• Aaron Noble - Ph.D. (Virginia Tech)  
  Mineral Processing, Froth Flotation, Physical Separations

Admission Requirements
The Masters of science in the mining engineering program admits students who have met the following requirements:

• A grade point average (GPA) of 3.0/4.0 or above from an ABET-accredited B.S.Min.E. 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. Transfer students must have at least a GPA of 3.0/4.0 for the graduate programs at similar institutions.
• International applicants must submit a GRE score and demonstrate proficiency in communicating English. For applicants whose native language is not English, this requirement may be fulfilled by a TOEFL-pBT test score of 550 or better, or an iBT score of 79, or an IELTS score of 6.5.
• 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.

The same review process is used for M.S. and Ph.D. applications. In both cases, the completed application packets are circulated to the graduate faculty. Initial evaluations consider whether:

1. The applicant should or should not be accepted; and
2. The reviewing faculty member is or is not willing to provide support.

If multiple positive responses are produced, the assignment of the potential graduate student is resolved at a meeting of the faculty according to specific needs and interests.

Masters of Science in Mining Engineering
Students desiring to take courses for graduate credit at the master’s level in the Statler College of Engineering and Mineral Resources must first apply for admission and state a major field.

Applicants with a baccalaureate degree from institutions other than WVU in Mining Engineering will be admitted on the same basis as graduates of WVU. Lacking these qualifications, the applicant must first fulfill the requirements of the Department of Mining Engineering.

Doctor of Philosophy
The doctor of philosophy degree is administered through the college's interdisciplinary program; mining engineering may be the major. A candidate for the degree of doctor of philosophy must comply with the rules and regulations outlined in the general requirements of the Statler College of Engineering and Mineral Resources. 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.

The principal objective of the doctor of philosophy program in mining engineering is the education and training of graduates so that they are capable of providing original scholarly contributions at the highest levels in the mineral engineering profession. The three areas of specialization are as follows:

• Mine systems
• Rock mechanics and ground control
• Mineral/coal processing

The Ph.D. program in mining engineering consists of a minimum of eighteen hours of coursework and twenty-four hours of independent research beyond a master's degree in mining engineering. The successful completion of a written qualifying examination, dissertation-proposal defense, and an approved dissertation are also required.
Department of Petroleum and Natural Gas Engineering

Degrees Offered

- Master of science in petroleum and natural gas engineering
- Master of science in engineering with a major in petroleum and natural gas engineering
- Doctor of philosophy in engineering with a major in petroleum and natural gas engineering

The Petroleum and Natural Gas Engineering (PNGE) graduate programs are designed for students who have already completed a basic petroleum engineering curriculum.

Degree Programs

The Department of Petroleum and Natural Gas Engineering admits students to the following degree programs: master of science in petroleum and natural gas engineering (M.S.P.N.G.E.) and petroleum and natural gas engineering major under the college of engineering and mineral resources’ interdisciplinary doctor of philosophy (Ph.D.). Students in these programs must comply with the rules and regulations as presented in the general requirements for graduate work in the College of Engineering and Mineral Resources.

Program Objectives

The objective of the Petroleum and Natural Gas Engineering (PNGE) graduate programs is to educate and train men and women 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.

Student Learning Outcomes

- 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.

Areas of Research

- Development of the Unconventional Oil and Gas Resources
- Drilling and Completion
- Reservoir Engineering
- Formation Evaluation
- CO₂ Sequestration and Enhanced Oil Recovery
- Reservoir Simulation
- Artificial Intelligence

FACULTY

CHAIR

- Samuel Ameri - M.S.Pet.E., P.E. (West Virginia University)
  Formation Evaluation

PROFESSORS

- Kashy Aminian - Ph.D. (University of Michigan)
  Natural Gas Engineering, Reservoir Engineering
- Shahab Mohaghegh - Ph.D. (Pennsylvania State University)
  Intelligent Systems
ASSOCIATE PROFESSOR
• H. Ilkin Bilgesu - Ph.D., P.E. (Pennsylvania State University)
  Drilling Engineering

ASSISTANT PROFESSOR
• Ebrahim Fathi - Ph.D. (University of Oklahoma)
  Unconventional Gas Recovery
• Ali Takbiri Boroujeni - Ph.D. (Louisiana State University)
  Enhanced Oil Recovery

ADJUNCT PROFESSOR
• Alan Brannon - Ph.D. (West Virginia University)
  Natural Gas Engineering
• Pramod Thakur - Ph.D. (Pennsylvania State University)
  Coalbed Methane Development

Masters Admission
A candidate for the M.S.P.N.G.E. program must meet the following requirements:

• B.S. degree in engineering from an ABET-accredited, or an internationally-recognized engineering program or equivalent with a grade point average (GPA) equal to, or greater than, 3.0 (on a 4.0 scale) (Applicants who cannot meet this condition may be considered for provisional admission.)
• International students must demonstrate proficiency in communicating in English (a minimum TOEFL score of 550, or IBT score of 79, or IELTS score of 6.5).
• At least three recommendation letters (One letter must be from the applicant’s academic advisor or equivalent.)

Doctoral Admission
A candidate for the degree of Doctor of Philosophy (Ph.D.) must comply with the rules and regulations as outlined in the general requirements for graduate work in engineering and the specific requirements stated in the departmental guidelines.

A candidate for the degree of Doctor of Philosophy (Ph.D.) must meet the following requirements:

• B.S. or M.S. degree in petroleum engineering from an ABET-accredited, or an internationally-recognized petroleum engineering program or equivalent with a grade point average (GPA) equal to, or greater than, 3.0 and 3.2, respectively
• A score of at least seventy-fifth percentile for Graduate Record Examination (GRE) quantitative analysis
• International students must demonstrate proficiency in communicating in English (a minimum TOEFL Score of 550, or IBT Score of 79, or IELTS Score of 6.5).
• At least three recommendation letters (One letter must be from the applicant’s previous thesis advisor or an academic equivalent.)

Master of Science in Petroleum and Natural Gas Engineering
A candidate for the M.S. degree in petroleum and natural gas engineering (PNGE) must comply with the rules and regulations as outlined in the general requirements for graduate work in engineering and the specific requirements stated in the departmental guidelines.

STUDY PROGRAMS
All M.S. degree candidates are required to perform research and follow a planned program of study. The research advisor, in conjunction with the Advising and Examining Committee (AEC) — appointed with the consent of the student — 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 tools to carry out his/her thesis research and prepare him/her for his/her career.

The program must contain a minimum of twenty-four hours of coursework and six hours of research (PNGE 697) leading to a master’s thesis or thirty hours of coursework and three hours of research (PNGE 697) leading to a comprehensive problem report. At least sixty percent of the course credits must be from 500 through 700-level courses while the remainder can be made up of 400-level courses. All students are required to take PNGE 796 for each semester enrolled. 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.

Students who do not hold a baccalaureate degree in petroleum and natural gas engineering are required to take a set of undergraduate petroleum and natural gas engineering courses above and beyond the minimum coursework requirements.
RESEARCH PROPOSALS
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.

FINAL EXAMINATION
All students are required to pass a final oral examination, administered by their AEC, covering both the thesis or problem report (depending on the program selected) and related course material.

Doctor of Philosophy in Petroleum and Natural Gas Engineering
The doctor of philosophy degree is administered through the college’s interdisciplinary program; petroleum and natural gas engineering may be the major. A candidate for the degree of doctor of philosophy must comply with the rules and regulations outlined in the general requirements of the Statler College of Engineering and Mineral Resources. 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.

STUDY PROGRAM
Each student must conduct research and follow a planned program of study prepared by the research advisor, in consultation with the student, and approved by the student’s advisory and examining committee (AEC) - appointed with the consent of the student. The underlying principle of the planned program is to accommodate and facilitate the students such that they are well prepared for their dissertation research and their career. A minimum of fifty-four hours of coursework and thirty hours of independent research beyond a bachelor’s degree, or thirty hours of coursework and twenty-four hours of independent research beyond an M.S. degree are required. All students are required to take PNGE 796 Graduate Seminar for each semester enrolled. 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.

EXAMINATION
All students must take and pass a written qualifying examination no later than one semester after completion of eighteen credit hours toward doctoral degree. In order to be admitted to candidacy, the student must pass the candidacy exam, which is designed to evaluate the student’s overall ability to engage in high-level research. At the completion of the dissertation research, the candidate must prepare a dissertation and pass the final oral examination (defense) administered by their AEC.
Law

WVU 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.

West Virginia University 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 WVU Law experience different 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 can be found supervising student articles for publication, assisting in obtaining prestigious federal judicial clerkships, or providing guidance for student-led symposia exploring cutting-edge and relevant 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 commitment to individual student success and to improving the profession by producing the leaders of the future, the West Virginia University 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 a global economy in the 21st century.

About the College of Law

Misson Statement: 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.

Established: 1878

The West Virginia University College of Law was accredited by the AALS in 1914 and by the ABA in 1923.

The West Virginia University 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, 750 North Lake Shore Drive, Chicago, IL 60611, Phone: (312) 988-6738, Fax: (312) 988-5681, and website: http://wwwabanetorg/legaled.

ADMINISTRATION

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  William J. Maier, Jr. Dean and Thomas R. Goodwin Professor of Law

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  Associate Dean for Academic Affairs, Professor of Law
- Gregory Elkins - Ed.D. (Texas Tech)
  Associate Dean for Administration and Finance
- Anne M. Lofaso - Ph.D. (University of Oxford)
  Associate Dean for Faculty Research and Development, Professor of Law

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• Keith Walton - B.S. (West Virginia University)
  Law School Technology

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  Career Services
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  College of Law

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  Advisor

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• Vincent P. Cardi - LL.M. (Harvard University)
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  President Emeritus, West Virginia University (1995-2007)
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  Steptoe and Johnson Professor of Law and Technology
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  Charles H. Haden II Professor of Law
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  Robert L. Shuman Professor of Law
• Dale P. Olson - LL.M. (Yale University)
• John E. Taylor - J.D. (University of North Carolina)
• Grace J. Wigal - J.D. (West Virginia University)
  Director of Academic Excellence Center

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  Deputy Director of the Clinical Law Program; Chair of the West Virginia Innocence Project
• Atiba R. Ellis - J.D. (Duke University)
• Joshua Fershee - J.D. (Tulane University)
• Kendra Fershee - J.D. (Tulane University)
• David L. Krech - J.D. (Cornell University)
  Director of Appellate Advocacy
• Jena Martin - LL.M. (University of Texas)
• Thomas O. Patrick - J.D. (West Virginia University)
• Alison Peck - LL.M. (University of Arkansas)
• William Rhee - J.D. (Northwestern University)
• Camille M. Riley - J.D. (St. Louis University)
• Arthur Rizer - LL.M. (Georgetown University)
• Hollee S. Temple - J.D. (Duke University)
  Director of Legal Research and Writing
• Matthew Titolo - J.D. (University of California)
• Shine (Sean) Tu - J.D. (University of Chicago)
• James Van Nostrand - LL.M. (Pace University)
  Director of the Center for Energy and Sustainable Development

VISITING FACULTY
• Michael Blumenthal - J.D. (Cornell University)
  Co-Director of the Immigration Law Clinic
• Barton Z. Cowan - J.D. (Harvard University)
• Jessica A. Haught - J.D. (West Virginia University)
• Bradley A. Smith - J.D. (Harvard University)
  Copenhaver Chair
• Larry V. Starcher - J.D. (West Virginia University)
• Suzanne M. Weise - J.D. (West Virginia University)
  Director of the Child and Family Law Clinic
• Joshua Weishart - J.D. (University of California)

PROFESSORS EMERITI
• Forest J. Bowman - J.D. (West Virginia University)
  Jackson and Kelly Professor of Law Emeritus
• Franklin D. Cleckley - LL.M. (Harvard University)
• 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

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 Assistant Registrar for the College of Law and/or the Associate Dean for Academic Affairs at any time for advice as to any policy contained in the student catalog.

Janet Long Armistead - Assistant Dean for Student Affairs
NOTE: REFER TO THIS CATALOG FOR YOUR ENTIRE LAW SCHOOL CAREER

Frequently Asked Questions

• What academic honors can I earn while in law school?

• What does it mean to be on academic probation?

• 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://law.wvu.edu/student-life/student-orgs)’ homepage.

• What is the law school’s grade point average system?
  See the ‘Academic Policies and Procedure - Grading Information/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?
  Addresses are updated online via MIX / STAR (https://mix.wvu.edu/cp/home/loginf). Once there, click on the ‘Personal Information’ link. Also, visit the ‘Current Students (http://registrar.wvu.edu/current_students/#add)’ link on the OUR homepage (http://registrar.wvu.edu) for additional information.

• What is DegreeWorks?
  DegreeWorks (http://registrar.wvu.edu/dw) is an online check sheet (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 DegreeWorks, 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 Assistant Registrar for the College of Law (http://www.law.wvu.edu/faculty-staff/administration) or the Associate Dean for Academic Affairs (http://www.law.wvu.edu/faculty-staff/administration).

• 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 Affairs.

• 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 ‘Non-Academic Policies and Procedure - Social Justice 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 Assistant Registrar for the College of Law. 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.

• 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 ‘Student Orgs, Guidelines, and Services - Student Travel’ in the College of Law catalog for instructions for going online for individual travel approval, how to provide original receipts on your return for reimbursement, etc. 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 Student Resources' link under the 'Academics' tab.

• How do I know what classes to register for?

The College of Law J.D. curriculum is separated into required courses and electives 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 (http://www.law.wvu.edu/r/download/184421)' 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 per 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?

In 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.

• 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), (2) determine what is going to be on your state’s July exam, and (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). 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.

• Upon graduation, how do I assure that I pass the exam the first time I take it in July?

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

A. DOCTOR OF JURISPRUDENCE

1. First-Year Curriculum
2. Required Courses after the First-Year Curriculum
3. Upper-Level Electives
4. Other Academic Requirements
5. Areas of Emphasis
6. Part-Time Program

B. DUAL-DEGREE PROGRAMS

1. Master’s of Business Administration
2. Master’s of Public Administration
C. LL.M. IN ENERGY & SUSTAINABLE DEVELOPMENT LAW

1. Admission Requirements
2. Program Objectives
3. Curriculum
4. Graduation Requirements

A. DOCTOR OF JURISPRUDENCE

1. First-Year Curriculum
2. Required Courses after First-Year Curriculum
3. Upper-Level Electives
4. Other Academic Requirements
5. Areas of Emphasis
6. Part-Time Program

Students at the West Virginia University College of Law must earn ninety-one credit hours with a cumulative grade point average (GPA) of at least 2.20 in order to graduate. Students must maintain a cumulative GPA of at least a 2.20 after the second semester 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.

A.1 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 and the skills of legal research, reasoning, and writing. The Practice courses you will take are Civil Procedure (both Jurisdiction and Rules) and two semesters of Legal Reasoning, Research, and Writing.

<table>
<thead>
<tr>
<th>First-Year Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 700 Legal Analysis/Rsch/Writing 1</td>
<td>2</td>
</tr>
<tr>
<td>LAW 703 Contracts 1</td>
<td>4</td>
</tr>
<tr>
<td>LAW 705 Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 706 Civil Procedure: Jurisdiction</td>
<td>2</td>
</tr>
<tr>
<td>LAW 707 Property</td>
<td>4</td>
</tr>
<tr>
<td>LAW 709 Torts 1</td>
<td>4</td>
</tr>
<tr>
<td>LAW 711 Legal Analysis/Rsch/Writing 2</td>
<td>2</td>
</tr>
<tr>
<td>LAW 722 Civil Procedure: Rules</td>
<td>3</td>
</tr>
<tr>
<td>LAW 725 Constitutional Law 1</td>
<td>4</td>
</tr>
<tr>
<td>LAW 793A Special Topics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31</td>
</tr>
</tbody>
</table>

**Legal Reasoning, Research, and Writing** (four credits). First-year students must pass both LRRW I and LRRW II with an average grade of C (2.0) or better over the two semesters in order to satisfy the Legal Reasoning, Research, and Writing (LRRW) course requirement. The vast majority of students will satisfy the requirement by making grades of C or better in both semesters of LRRW. 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 one or both semesters of LRRW must repeat the course.

Students who fail to obtain an average of C or better in the first-year LRRW program have a second opportunity to satisfy the LRRW requirement in a second taking of the two-semester, first-year sequence of LRRW I and LRRW II. (In some years, an LRRW III class will be offered in the fall semester for such students to take in lieu of retaking LRRW I and II.) Students who fail to make a C or better in their second attempt to satisfy the LRRW 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 LRRW 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: if a student receives an F in LRRW I, the student may drop LRRW II with the permission of the Associate Dean for Academic Affairs. Part-time students must take LRRW during their first year of law school.

Successful completion (an average grade of C or better) of the first-year LRRW 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 LRRW course; all policies will be in effect for the duration of the course.

### A.2 REQUIRED COURSES AFTER THE FIRST-YEAR CURRICULUM

#### Upper-Level Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 715</td>
<td>Appellate Advocacy (C or better)</td>
<td>2</td>
</tr>
<tr>
<td>LAW 742</td>
<td>Professional Responsibility</td>
<td>3</td>
</tr>
<tr>
<td>Seminar</td>
<td>any 688, 689, or 794 course</td>
<td>2-3</td>
</tr>
<tr>
<td>Perspective</td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>Capstone</td>
<td></td>
<td>4-14</td>
</tr>
</tbody>
</table>

**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” in the course title and are numbered as “LAW 688, 689 or 794.” Seminars have a common structure: small-class discussions geared toward the production of a substantial (i.e. at least 8,000 words (~ 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, therefore, 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:

#### Perspective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 601</td>
<td>Lawyers/Poets/Poetry</td>
<td>3</td>
</tr>
<tr>
<td>LAW 602</td>
<td>Lawyers and Film</td>
<td>3</td>
</tr>
<tr>
<td>LAW 614</td>
<td>Jewish/Islamic Comparative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 621</td>
<td>Lawyers as Leaders</td>
<td>3</td>
</tr>
<tr>
<td>LAW 689B</td>
<td>Sem: Judicial Power/Restraint</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689H</td>
<td>Sem: Bioethics and the Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689I</td>
<td>Sem: Environmental Justice</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689K</td>
<td>Sem: Civil Disobedience</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689M</td>
<td>Sem: Race/Racism/American Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689P</td>
<td>Sem: Gender and Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689S</td>
<td>Sem: Law/Socioeconomics</td>
<td>2</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>LAW 689T</td>
<td>Sem: Comprt/Intrntnl Wrkplc Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 701</td>
<td>International Human Rights</td>
<td>3</td>
</tr>
<tr>
<td>LAW 712</td>
<td>Analytical Methods for Lawyers</td>
<td>3</td>
</tr>
<tr>
<td>LAW 739</td>
<td>American Legal History</td>
<td>3</td>
</tr>
<tr>
<td>LAW 744</td>
<td>Law &amp; Economics</td>
<td>3</td>
</tr>
<tr>
<td>LAW 746</td>
<td>Lawyers and Literature</td>
<td>3</td>
</tr>
<tr>
<td>LAW 752</td>
<td>Jurisprudence</td>
<td>3</td>
</tr>
<tr>
<td>LAW 768</td>
<td>International Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 781</td>
<td>Postmodern Jurisprudence</td>
<td>3</td>
</tr>
<tr>
<td>LAW 791K</td>
<td>Advanced Topics</td>
<td>3</td>
</tr>
<tr>
<td>LAW 794G</td>
<td>SEM: Sexuality and Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Additional Approved Courses**

- Comparative Law (Common Law v Civil)
- Comparative Law: European Union
- Justice: A Philosophical Inquiry
- Law & Psychiatry
- Lawyer as Storyteller
- Lawyers, Justice & Literature
- Memoir and Legal Education
- Narrative Jurisprudence
- Practical Moral Philosophy for Lawyers
- Sem: American Const History (NEW)
- Sem: Comparative Con Law
- Sem: Democratic Transitions
- Sem: Econ Justice: Race, Gender & Class
- Sem: Empirical Legal Methods
- Sem: Genetic Property & the Law
- Sem: Lawyers & Literature
- Sem: Sustainable Development (NEW)

**Capstone Requirement.** Capstone courses provide students with opportunities to critically synthesize and apply knowledge and skills they have developed during law school. The following course(s) satisfy the capstone requirement:

**Capstone**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 627</td>
<td>Land Use/Sustnbl Devlp Cln 1</td>
<td>4-6</td>
</tr>
<tr>
<td>LAW 628</td>
<td>Land Use/Sustnbl Devlp Cln 2</td>
<td>4-6</td>
</tr>
<tr>
<td>LAW 650</td>
<td>Entrepreneurship Clinic 1 (and)</td>
<td>4</td>
</tr>
<tr>
<td>LAW 651</td>
<td>Entrepreneurship Clinic 2</td>
<td>5</td>
</tr>
<tr>
<td>LAW 677</td>
<td>US Supreme Court Clinic 1 (and)</td>
<td>4</td>
</tr>
<tr>
<td>LAW 678</td>
<td>US Supreme Court Clinic 2</td>
<td>4</td>
</tr>
<tr>
<td>LAW 756</td>
<td>Trial Advocacy (C or better)</td>
<td>4</td>
</tr>
<tr>
<td>LAW 779</td>
<td>Business Transactions Drafting</td>
<td>4</td>
</tr>
<tr>
<td>LAW 780</td>
<td>Federal Judicial Externship 1 (and)</td>
<td>2-8</td>
</tr>
<tr>
<td>LAW 780A</td>
<td>Federal Judicial Externship 2</td>
<td>6-11</td>
</tr>
<tr>
<td>LAW 782</td>
<td>Legal Clinic 1 (and)</td>
<td>7</td>
</tr>
<tr>
<td>LAW 783</td>
<td>Legal Clinic 2</td>
<td>7</td>
</tr>
</tbody>
</table>

In addition to the above-listed capstone courses, students may also fulfill the capstone requirement by completing the following:

- When available: writing a 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)
- By petition only: an interdisciplinary project supervised by a law faculty member and a university faculty member who is not a law faculty member.
Prerequisite Requirement for Some Capstone Courses. The course in Evidence is a prerequisite to taking Trial Advocacy, the Clinical Law Program, 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, the Academic Standards Committee may exempt a student from taking a required course or may permit a student to take a course out of sequence.

A.3 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.

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 (http://www.law.wvu.edu/academics/course-schedule-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 (http://www.law.wvu.edu/academics/course-schedule-and-student-resources/course-classifieds-fall-2014)" 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.4 OTHER ACADEMIC REQUIREMENTS

Study Outside the Classroom. The American Bar Association 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, Moot Court, and Lugar Trial Association), independent study, courses in other graduate departments, summer abroad programs, and distance education programs that rely on teaching outside the classroom setting.

Distance Education. No student may take more than four credits per term in any class taught through distance education as defined by Standard 306 of the American Bar Association. First and second summer sessions count as “one term” for purposes of this rule. Standard 306 states that distance education is “an educational process characterized by the separation, in time or place, between instructor and student” and includes courses offered via “technological transmission” (e.g., internet, closed circuit TV), “audio or computer conferencing,” “video cassettes or discs,” and correspondence.

No student may take more than twelve credits during his/her law school career in classes taught through distance education as defined by Standard 306. No student may take any distance education course until that student has completed at least twenty-eight credits in law school. Students should be aware that under ABA standards, the status of “asynchronous” courses (i.e., “online” or “web” courses) is uncertain. The College of Law sometimes offers a small number of web-based courses during the summer, but constantly monitors such courses to maintain educational quality and does not guarantee that any will be offered in the future. 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 see whether similar rules have been adopted there.

ABA Requirement. The American Bar Association accredits U.S. law schools. A Juris Doctorate (J.D.) degree from an ABA-accredited law school entitles you to take the bar examination in any state (other individual state requirements, such as character, being met). The WVU College of Law has been fully accredited by the ABA since 1924. The ABA standards for Approval of Law Schools are published annually and can be accessed at www.abanet.org. Of these standards, there are four particular ABA requirements worth noting here:

• Standard 304(c): The J.D. degree must be “completed no earlier than twenty-four months and no later than eighty-four months after a student has commenced law study.”

• Standard 304(d): “A Law School shall require regular and punctual class attendance.”

• Standard 304(e): “A Law School shall not permit a student to be enrolled at any time in coursework that, if successfully completed, would exceed twenty percent of the total coursework required by that school for graduation . . . .”

• Standard 304(f): “A student may not be employed more than twenty hours per week in any week in which the student is enrolled in more than twelve class hours.”

Full-Time Status and Tuition/Fees. West Virginia University treats nine hours per semester as full-time status for graduate and professional students. That means you 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.)
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.

Maximum Credits Per Semester. As noted above, ABA Accreditation Standard 304(e) 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 are only two exceptions to the eighteen-hour per semester cap:

• Credit for academic extracurriculars (i.e. Law Review, Moot Court, Lugar, and Jessup)
• Students in joint-degree programs

Students who have no more than eighteen hours in regular courses and need to add an academic extracurricular should contact the Assistant Registrar for the College of Law.

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 two Areas of Emphasis: (1) Energy and Sustainable Development Law and (2) Public Interest Law.

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.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 630</td>
<td>Energy Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 764</td>
<td>Administrative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 789</td>
<td>Law-Environmental Protection</td>
<td>3</td>
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</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 604</td>
<td>Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>LAW 612</td>
<td>Agriculture/Rural Land Use</td>
<td>3</td>
</tr>
<tr>
<td>LAW 613</td>
<td>International Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 627</td>
<td>Land Use/Sustainable Develop Cln 1</td>
<td>4-6</td>
</tr>
<tr>
<td>LAW 689D</td>
<td>Sem: Environmental Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689E</td>
<td>Sem: Land Transactions</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689I</td>
<td>Sem: Environmental Justice</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689W</td>
<td>Sem: Issues in Energy Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 737</td>
<td>Land Use Planning</td>
<td>3</td>
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<tr>
<td>LAW 766</td>
<td>Coal/Oil and Gas</td>
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</tr>
<tr>
<td>LAW 791A</td>
<td>ADTP: Energy Law/Practice</td>
<td>3</td>
</tr>
<tr>
<td>LAW 791M</td>
<td>ADTP: Energy Bus: Law &amp; Strategy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 791O</td>
<td>ADTP: Environmental Law/Policy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 791Q</td>
<td>ADTP: Agriculture &amp; Food Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 791T</td>
<td>ADTP: Energy Permit &amp; Siting</td>
<td>3</td>
</tr>
<tr>
<td>LAW 793C</td>
<td>SPTP: Renewable Energy/Alt Fuel</td>
<td>3</td>
</tr>
<tr>
<td>LAW 793M</td>
<td>SPTP: Nuclear Law &amp; Policy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 793S</td>
<td>SPTP: Land Use/Sustainable Developmnt</td>
<td>3</td>
</tr>
<tr>
<td>LAW 793T</td>
<td>SPTP: Science/Technology-Energy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 794E</td>
<td>Sem: Hydraulic Fracturing</td>
<td>2</td>
</tr>
<tr>
<td>LAW 794M</td>
<td>Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>
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. Qualifying paper in any elective course listed above.
4. Independent study overseen by an Area of Emphasis faculty member.

• 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 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 and approved by the Area of Emphasis administrator
3. Other clinic or simulation course, with approval of the Area of Emphasis administrator

• A student may fulfill the experiential learning requirement through an alternative method with the consent of the Area of Emphasis administrator.

Other Requirements. Students must also meet the following requirement:

1. 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).

PUBLIC INTEREST LAW AREA OF EMPHASIS

The objective of the Area of Emphasis in Public Interest Law is to prepare students to work to further the interests of the general public using the legal process through the representation of individuals and organizations who might otherwise be underrepresented.

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).

Required Courses (choose one)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 620</td>
<td>The Legislative Process</td>
<td>3</td>
</tr>
<tr>
<td>LAW 750</td>
<td>Alternative Dispute Resolution</td>
<td>3</td>
</tr>
<tr>
<td>LAW 756</td>
<td>Trial Advocacy</td>
<td>4</td>
</tr>
<tr>
<td>LAW 788</td>
<td>Legal Interviewing/Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 604</td>
<td>Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>LAW 609</td>
<td>Child Protection and the Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 612</td>
<td>Agriculture/Rural Land Use</td>
<td>3</td>
</tr>
<tr>
<td>LAW 615</td>
<td>Elder Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 625</td>
<td>Nonprofit Organizations</td>
<td>3</td>
</tr>
<tr>
<td>LAW 629</td>
<td>Adv Family Law Advocacy</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689F</td>
<td>Sem:Lawyers &amp; Legislation</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689I</td>
<td>Sem:Environmental Justice</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689J</td>
<td>Sem:Civil Rights Litigation</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689K</td>
<td>Sem: Civil Disobedience</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689N</td>
<td>Sem:Refugee &amp; Asylum Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 689V</td>
<td>Sem:Juvenile Justice</td>
<td>2</td>
</tr>
<tr>
<td>LAW 717</td>
<td>Domestic Violence &amp; The Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 723</td>
<td>Immigration Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 759</td>
<td>Civil Rights</td>
<td>3</td>
</tr>
</tbody>
</table>
Writing Requirement. Students must produce a written paper 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 overseen by an Area of Emphasis faculty member.

Experiential Learning. Students must meet the following experiential learning requirement of no less than 3 credits. No more than 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 interests of the general public 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.

Other Requirements. Students must also meet the following requirement:

1. 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 hours per semester in order to amass ninety-one credits in six 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, that in the eyes of the 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 (2.20), and specific required courses. Per ABA requirements, part-time students have to 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 Admissions 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. Written applications for part-time status are required, and selection is based 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 must consult with the Associate Dean for Academic Affairs as per section in this catalog’s Academic Policies and Procedures. Students who have completed the first-year curriculum (see "First-Year Curriculum" above) may become part-time students by advising 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 in their first year of law school. Typically, part-time students take two courses in addition to LRRW 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. Exceptions to this rule may be granted for good cause by the Associate Dean for Academic Affairs.

Scheduling of Classes. Part-time students must consult the Associate Dean for Academic Affairs in scheduling.

Probation and Dismissal. 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.
B. DUAL-DEGREE PROGRAMS

1. Masters of Business Administration
2. Masters of Public Administration

Students may enroll in an approved joint degree program with another College of the University. At present, there are two such programs: a joint J.D./M.B.A. (Masters of Business Administration) and a joint J.D./M.P.A. (Master of Public Administration).

B.1 MASTERS OF BUSINESS ADMINISTRATION (M.B.A.)

A J.D./M.B.A. student may earn law school credit pursuant to the joint degree requirements approved by the faculties of the College of Law and the College of Business and Economics and published to students admitted to that program. (See below for program requirements.) J.D./M.B.A. students received twelve credits toward the J.D. degree if the M.B.A. degree is awarded before or concurrently with the J.D. degree, which means that at least 79 J.D. credit hours are required. Grades earned in business school classes do not affect the cumulative law school GPA. Professor Jena Martin and Barton Cowan are the College of Law contact persons for the J.D./M.B.A. program.

Required J.D. Curriculum

<table>
<thead>
<tr>
<th>First-Year Curriculum</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 715</td>
<td>Appellate Advocacy</td>
</tr>
<tr>
<td>LAW 742</td>
<td>Professional Responsibility</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Seminar</th>
<th></th>
</tr>
</thead>
</table>

Upper-Level Requirements

|  |
|----------------------|---|
| LAW 621 | Lawyers as Leaders (**)
| LAW 633 | International Business Transactn (**) |
| LAW 719 | Income Taxation 1 |
| LAW 729 | Business Organizations |
| LAW 764 | Administrative Law |
| LAW 776 | Sales & Secured Transactions (**) |
| LAW 779 | Business Transactions Drafting |
| LAW 784 | Securities (**) |
| LAW 785 | Federal Corporate Taxation |

Electives***

|  |
|----------------------|---|

Required M.B.A. Courses (BADM 600-level coursework)

*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 advised (but not required) to take the Entrepreneurship Clinic (4-8 hours) as part of their J.D./M.B.A. electives.

B.2 MASTERS OF PUBLIC ADMINISTRATION (M.P.A.)

A J.D./M.P.A. student may earn law school credit for one M.P.A. course (up to four hours) if that course is taken after the student has entered the College of Law. In addition, if the M.P.A. degree is awarded before or concurrently with the J.D. degree, an M.P.A. student may receive an additional two hours of law school credit for courses included in the M.P.A. degree that the student takes while enrolled in the College of Law. Grades earned in Public Administration do not affect the cumulative law school GPA. Professor John Taylor is the College of Law contact person for the J.D./M.P.A. program.

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C. LL.M. IN ENERGY AND SUSTAINABLE DEVELOPMENT LAW

1. Program Objectives
2. Admission Requirements
3. Curriculum

4. Graduation Requirements

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.

C.1 PROGRAM OBJECTIVES

The College of Law’s objectives in establishing an LL.M. in Energy and Sustainable Development Law 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.

C.2 ADMISSION REQUIREMENTS

WVU Law’s LL.M. in Energy and Sustainable Development Law 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.

C.3 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.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 630 Energy Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 764 Administrative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 789 Law-Environmental Protection</td>
<td>3</td>
</tr>
<tr>
<td>LL.M. Seminar</td>
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<tr>
<td>LL.M. Capstone</td>
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</table>

In addition to the required courses, 10 credits must be completed from the Electives and/or Related Courses.

<table>
<thead>
<tr>
<th>Electives</th>
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<tbody>
<tr>
<td>LAW 604 Natural Resources</td>
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<tr>
<td>LAW 612 Agriculture/Rural Land Use</td>
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<td>LAW 613 International Environmental Law</td>
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<td>LAW 627 Land Use/Sustainable Development</td>
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### ENERGY LAW PROGRAM

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<tr>
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<tr>
<td>LAW 628</td>
<td>Land Use/Sustnbl Devlp Clnc 2</td>
<td>4-6</td>
</tr>
<tr>
<td>LAW 689W</td>
<td>Sem:Issues in Energy Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 766</td>
<td>Coal/Oil and Gas</td>
<td>3</td>
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<td>LAW 791A</td>
<td>ADTP:Energy Law/Practice</td>
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<td>LAW 791M</td>
<td>ADTP:Energy Bus:Law &amp; Strategy</td>
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</tr>
<tr>
<td>LAW 791T</td>
<td>ADTP:Energy Permit &amp; Siting</td>
<td>3</td>
</tr>
<tr>
<td>LAW 793C</td>
<td>SPTP:Renewable Energy/Alt Fuel</td>
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</tr>
<tr>
<td>LAW 793M</td>
<td>SPTP: Nuclear Law &amp; Policy</td>
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<td>SPTP:Land Use/Sustnbl Dvlpmnt</td>
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<td>LAW 793T</td>
<td>SPTP:Science/Technology-Energy</td>
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<td>LAW 794M</td>
<td>Seminar</td>
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### Related Courses

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>LAW 620</td>
<td>The Legislative Process</td>
<td>3</td>
</tr>
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<td>LAW 633</td>
<td>Internatnl Business Transactn</td>
<td>3</td>
</tr>
<tr>
<td>LAW 689X</td>
<td>Sem:National Security Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 719</td>
<td>Income Taxation 1</td>
<td>3</td>
</tr>
<tr>
<td>LAW 729</td>
<td>Business Organizations</td>
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<td>LAW 734</td>
<td>Intellectual Property</td>
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<td>LAW 755</td>
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<td>LAW 768</td>
<td>International Law</td>
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<td>LAW 771</td>
<td>Labor Law</td>
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<td>Local Government</td>
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<td>LAW 778</td>
<td>Trade Regulation</td>
<td>3</td>
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<td>LAW 779</td>
<td>Business Transactions Drafting</td>
<td>4</td>
</tr>
<tr>
<td>LAW 784</td>
<td>Securities</td>
<td>3</td>
</tr>
</tbody>
</table>

### Class Work

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

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

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

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

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)

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.

C.4 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.

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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 (http://www.law.wvu.edu).

A.2 SCHEDULING
The Associate Dean for Academic Affairs and the Assistant Registrar for the College of Law complete the master course schedule. The Assistant Registrar for 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 via the Internet.

A.3 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 successfully audit the course. (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 for the class in the STAR system, selecting “audit” as the grading mode. A class may not be audited if it has reached its enrollment capacity.

A.4 WITHDRAWAL FROM THE PROGRAM
There are three types of withdrawals that are governed by this rule: (a) partial withdrawal from some part of a student’s course work; (b) in-semester withdrawal from all College of Law courses in which a student is registered; and (c) between-semester withdrawal after the completion of one semester and before the start of the next semester. Any student considering withdrawing from school must see the Associate Dean for Academic Affairs. 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 wishing to withdraw must also see the Assistant Registrar for the College of Law and withdraw according to guidelines set by the College of Law and by the University. 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.
Partial Withdrawal (a.k.a. dropping some, but not all, courses for a semester):

Reduction in the First Year. Because the first-year curriculum must be completed 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. 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.

Courses Dropped Before the "Last Day to Drop" Deadline. Until the "last day to drop a course" on the law school's academic calendar, students are free to drop most courses by simply logging into STAR and dropping. The exceptions to this policy are clinical courses and Practical Legal Writing II. Slots in such courses are limited, and the student who drops them after the first week has wasted an opportunity sought by others. Students may drop these courses only with the permission of the instructor and the Associate Dean for Academic Affairs, and such permission shall be given only for very strong reasons. 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), 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 no exceptions can be made.

In-Semester Withdrawal from All Classes:

Withdrawal during First Twelve Weeks. During the first twelve weeks of any semester, a student may withdraw totally from the West Virginia University College of Law by obtaining permission from the Associate Dean for Academic Affairs, and any student withdrawing from the West Virginia University College of Law during this period receives a grade of "W" in all courses dropped pursuant to this withdrawal. Students who withdraw completely within the first six weeks of class may be eligible for a partial refund of tuition and fees according to the University Refund Schedule. See website (http://studentaccounts.wvu.edu/refunds/reduction_schedule).

Withdrawal after First Twelve Weeks. After the first twelve weeks of a semester, a student may be permitted to withdraw totally from the West Virginia University College of Law only with the permission of 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 the final day of class, as marked on the College of Law Academic Calendar.

Between-Semester Withdrawal. After the end of a semester and prior to the start of the next semester, a student may withdraw from the West Virginia University College of Law. In all such cases, the West Virginia University 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.

Resumption of Studies:

First Semester, First Year. A student who withholds withdrawal from the West Virginia University College of Law before completing the first semester of the first year must, except as herein provided, be readmitted by making application for an initial admission to the West Virginia University 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 West Virginia University 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 West Virginia University College of Law applies only for admission for the beginning of the next academic year. An adverse decision by the Dean on granting this privilege may be appealed to the Faculty.

Other Students. Any student who withholds 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 West Virginia University 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 scratch" 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 West Virginia University College of Law, and any other factors deemed relevant. A readmitted student may be required to repeat, without credit, work previously done, or may be required 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 normally permitted to return only at the beginning of a spring semester.

A.5 TRANSCRIPTS

Official transcripts can be obtained only by contacting the University Registrar’s office. Information on requesting transcripts can be found on the College of Law website (http://www.law.wvu.edu/academics/transcripts) as well as the University Registrar 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.

A.6 RULES GOVERNING CERTAIN SPECIAL SITUATIONS

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. An independent study must produce an academic research paper that would be acceptable in a research seminar, and it must involve 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. This plan should be presented to the faculty supervisor and to the Chair of the Academic Standards Committee, who must approve the project. A second faculty reviewer must approve the grade given for an independent study. The Associate Dean for Academic Affairs has the forms to be submitted to the Chair of the Committee. Independent study does not satisfy the seminar requirement. As stated in the rule on “Deficiencies After Three Years” (1.4.5), independent study courses are offered only during the fall and spring semesters and are not available during the summer.

Graduate and Post-Graduate Students. Graduate and post-graduate students from other colleges, schools, and divisions within the university may enroll in WVU 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.

Transient Students - Incoming. 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 the Associate Dean for Academic Affairs.

A.7 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 one graduate level course in another discipline at WVU. No student may receive more than four credits under this rule. The student must obtain prior approval from the Associate Dean for Academic Affairs. Grades earned in other WVU colleges do not affect the student’s law school GPA. When possible, students should choose the pass/fail option when registering to take courses in other WVU colleges so that grades for these courses are not included in the cumulative GPA on the student’s professional school transcript.

Law students may also register for courses in other WVU colleges (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 Assistant Registrar for the College of Law 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 West Virginia University College of Law, the West Virginia University College of Law J.D. will be awarded. 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 West Virginia University 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 required courses (as listed on pages 1-4 of this Handbook) for credit at other law schools are not eligible for election to Order of the Coif at the West Virginia University 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. Applications are reviewed by the Associate Dean for Academic Affairs and must comply with the “Criteria for Student Study at a Foreign Institution” promulgated by the American Bar Association. Their 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.

A.8 TRANSFER STUDENTS - INCOMING
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 West Virginia University College of Law.

The College of Law accepts transfer students only from other law schools accredited by the American Bar Association. Starting in the summer of 2012, the College of Law will no longer accept transfer applicants from law schools that do not award letter grades (or their numerical equivalent) during the first year.

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, the last thirty credit hours for transfer students must be earned 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; only in exceptional cases will credit be given 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 2.20 or better on courses taken at the College of Law. Transfer students are not eligible for election to Order of the Coif at the West Virginia University College of Law.

A.9 ADMISSIONS POLICIES FOR TRANSFER STUDENTS
The deadline for transfer applications is July 1. The West Virginia University College of Law has established the following guidelines for the Admissions Committee to use in reviewing transfer applications.

• In reviewing applications for advanced standing, the Admissions Committee will give preference to West Virginia residents.
• Applicants must have completed at least one academic year of studying 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 include the following coursework to be considered for transfer:
  1. Civil Procedure I & II
  2. Contracts I
  3. Torts I
  4. Constitutional Law
  5. Criminal Law
  6. Property I
• 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.

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 Admissions 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.

A.10 SUMMER SCHOOL
Summer credits may be earned only at the West Virginia University College of Law, other ABA-accredited law schools, or their ABA- approved programs abroad. Students who are on academic probation may earn summer school 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.

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5. Grade Appeal

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B.1 EXAMINATIONS

Attendance and Exam Eligibility. The faculty subscribes to the principle that class attendance is important and necessary to the successful study of law. Therefore, 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 as many as twenty-five percent 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), the faculty member may permit a student who is denied permission to sit for an examination to withdraw from the course or may assign that student a failing grade. 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 may not be scheduled during the last week of classes. In addition, the due date for take-home exams cannot be during the last week of classes.

Exam Numbers. The West Virginia University College of Law Assistant Registrar randomly selects and assigns official student examination numbers for students’ anonymity in the grading process. Prior to the examination period, the Assistant Registrar notifies students that they may pick up their numbers. The Assistant Registrar protects the anonymity of student examination numbers 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 Sunday 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 Assistant Registrar for the College of Law 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. All such requests must be in writing, must be directed to the faculty member teaching the course in question, and must be substantiated 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.

**When Request Is Denied or Extended Deferment Sought.** If any request made under section 4 above is denied, or if a student requests a deferment for reasons or to a time that would not comply with section 4, 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 in section 4, 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 is 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.** It is the policy of the faculty of the College of Law that each faculty member either be in the law school building during his or her classroom examination or find a substitute.

**Grade Recording Error.** In the unlikely event that a computer or data entry error results in the reporting of an incorrect grade, the error will be corrected 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.

### B.2 GRADES

**Grading Scale.** The College of Law grading scale is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.3 quality points</td>
</tr>
<tr>
<td>A</td>
<td>4.0 quality points</td>
</tr>
<tr>
<td>A-</td>
<td>3.7 quality points</td>
</tr>
<tr>
<td>B+</td>
<td>3.3 quality points</td>
</tr>
<tr>
<td>B</td>
<td>3.0 quality points</td>
</tr>
<tr>
<td>B-</td>
<td>2.7 quality points</td>
</tr>
<tr>
<td>C+</td>
<td>2.3 quality points</td>
</tr>
<tr>
<td>C</td>
<td>2.0 quality points</td>
</tr>
<tr>
<td>C-</td>
<td>1.7 quality points</td>
</tr>
<tr>
<td>D+</td>
<td>1.3 quality points</td>
</tr>
<tr>
<td>D</td>
<td>1.0 quality points</td>
</tr>
<tr>
<td>F</td>
<td>0.0 quality points</td>
</tr>
</tbody>
</table>

**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 West Virginia University 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 West Virginia University 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 WVU colleges or at other law schools are not included in the student’s cumulative law school GPA.

**Grade Normalization.** The faculty members in the first-year sections, as well as the Associate Dean for Academic Affairs, shall review the respective grades in each section before the grades are finalized, in order to detect and avoid any substantial disparity in the grading patterns of the faculty members. The grades in Appellate Advocacy also shall be monitored to detect significant disparities and are subject to this process.
B.3 PASSING GRADES AND GRADUATION CREDIT

To satisfactorily complete most courses and to earn credit toward graduation, a student must receive a grade of D or better. However, in the following courses, a student must receive a grade of C (2.0) or better to earn credit toward graduation: Legal Reasoning, Research, and Writing; Appellate Advocacy; a required seminar; and Trial Advocacy.

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 for the Trial Advocacy credits to count toward graduation.

B.4 GRADES OF “INCOMPLETE” IN NON-EXAMINATION COURSES

Granting an “Incomplete.” A student may request an “Incomplete” in any non-examination course. The faculty member teaching the course shall determine whether an “Incomplete” is appropriate.

Time Limit. By university policy effective for the Fall 2011 semester and beyond, a student has one semester in which to complete the requirements for any non-examination course in which he or she has been given an “Incomplete.” More specifically, a student receiving an incomplete for a fall semester class must complete the work by the end of the final day of classes of the following spring semester. A student receiving an incomplete for a spring semester class must complete the work by the end of the final day of classes of the following fall semester. A student receiving an incomplete for a summer class must complete the work by the end of the final day of classes of the following fall semester.

Shortening Time Limit. A faculty member who assigns an “Incomplete” to a student may shorten the completion deadline to an earlier date than those specified in the last paragraph, but may not extend the deadline beyond that limit.

Failure to Complete. If the student does not complete the course requirements within the required time period, the “I” automatically converts to an “F.”

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 of this subsection and the “Deferment of Exams or Assignment Deadlines” subsection apply in the case of such a student on probation.

B.5 GRADE APPEAL

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 pursuant to the West Virginia University College of Law Grade Appeal Policy and Procedure. Students with questions about the grade appeal policy or procedure should consult the Administrative Assistant to the Associate Dean for Academic Affairs. Students who fail to begin the grade appeal process by meeting with the instructor 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 meet 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.)

B.6 GRADE APPEAL PROCEDURE

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 or if the instructor is not available, or if the nature of the complaint makes discussion with the instructor inappropriate, the student shall notify the Associate Dean. 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 from when the complaint is first lodged, 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 professor’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 will forward the complaint to the instructor’s Dean. (See Step III.)
Step III. Within fifteen calendar days of receipt of the complaint, 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 person outside the instructor’s discipline.

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 to 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.
C. ACADEMIC STANDING

1. Academic Difficulty
2. Academic Probation & Dismissal

C.1 ACADEMIC DIFFICULTY

Good Academic Standing. A student is in good academic standing if that student has not been dismissed and is not on academic probation as those terms are defined in this catalog.

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. 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.

Receiving Credit for Less Than an Entire Course. No credit is given for less than an entire course.

Grade Changes. A student may request a grade review anytime during the academic month following the student’s receipt of the grade. A faculty member may not change a grade following the last day of classes in the semester following that in which a grade was awarded. Any proposed grade change must be submitted in writing by the faculty member to the Associate Dean for Academic Affairs with stated reasons for the change. Grade changes proposed because of arithmetic errors will be approved by the Associate Dean. Grade changes proposed because of changes in evaluation must be approved by the full faculty.

C.2 ACADEMIC PROBATION & DISMISSAL

Notification. The Associate Dean for Academic Affairs notifies 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 notice is sent 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. A student is in good academic standing if that student has not been dismissed and is not on academic probation as those terms are defined in this Handbook.

Summary of 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. The following is a summary of the probation and automatic dismissal rules:

• End of First Semester. Students whose first semester grades fall below 2.20 receive a letter from the Associate Dean’s Office to that effect, offering consultation and referral to the Academic Excellence Program. Such students must participate in the Academic Excellence Program in the second semester.

• End of Second Semester Only. Any student whose cumulative average is below 1.85 at any time after his or her second semester in law school is automatically dismissed. A student whose cumulative grade point average falls between 1.85 and 2.20 any time after his or her third 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 grade point average to 2.20. Failure to meet this requirement will result in dismissal. Under no circumstances will a student be allowed to graduate unless his or her cumulative grade point average is 2.20 or better.

• End of Third through Sixth Semesters:

1. Cumulative Grade Point Average. Any student whose cumulative grade point average is below 1.85 at any time after his or her third semester in law school is automatically dismissed. A student whose cumulative grade point average falls between 1.85 and 2.20 any time after his or her third 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 grade point average to 2.20. Failure to meet this requirement will result in dismissal. Under no circumstances will a student be allowed to graduate unless his or her cumulative grade point average is 2.20 or better.

2. Semester Grade Point Average.

*General Rule. Any student who fails to attain a grade point average of 2.20 in any individual semester of his or her second or third year in law school is placed on academic probation, regardless of his or her cumulative grade point average. 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, first and second summer sessions count as a single semester. Accordingly, a student who took eleven or more graded hours across two summer sessions and whose GPA in those courses fell below 2.20 would be placed on academic probation under this rule.

*Part-Time Students. A student who earns a semester grade point average lower than 2.20 over fewer than eleven letter-graded credit hours per semester for two consecutive semesters after the first year of law school is placed on academic probation, regardless of his or her cumulative grade point average. For purposes of this rule, first and second summer sessions count as a single semester. Students with a semester grade point average lower than 2.20 over fewer than eleven letter-graded credit hours for one semester must meet with the Associate Dean for Academic Affairs.

A student placed on academic probation under "General Rule" or "Part-Time Students" will be dismissed for failure to meet academic requirements, regardless of his or her cumulative grade point average, if he or she fails to attain a semester grade point average of 2.20 or 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.

• Failing a Majority of Credit Hours. Any student who, after completing the first-year curriculum in the West Virginia University College of Law, 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 grade point average is for the semester in question, nor does it matter what the student’s cumulative grade point average might be. However, this rule does not apply to students taking two or fewer courses in a semester.

• Transfer Students with a West Virginia University College of Law Grade Point Average below 2.20. A transfer student cannot graduate from the West Virginia University College of Law if the cumulative grade point average of the grades that the student earned at the West Virginia University College of Law is less than 2.20.

• Readmission. Students seeking readmission should file petitions with the Chair of the Academic Standards Committee, and the petitions should demonstrate that the reasons for the student’s academic deficiencies no longer exist. The Committee shall review each petition based upon this standard. If the Committee denies 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. A student may petition for readmission for the semester immediately following the semester he or she is dismissed. To do so, the student must deliver a petition for readmission to the Chair of the Academic Standards Committee within ten days of his or her receipt of notification of dismissal from the Registrar. If the tenth day is a weekend or holiday, then the student must deliver the petition on the next business day. A student also may petition for readmission after two academic semesters have passed following the student’s dismissal (even if the student has already petitioned immediately after his or her dismissal). For purposes of this rule, summer sessions shall not count as academic semesters.

• Permanent Dismissal. The West Virginia University 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 grade point average up to 2.20, as follows: (1) if the readmitted student fails to earn a 2.20 or better grade point average for the first semester following readmission, the student is permanently dismissed and is not eligible for readmission and (2) if that semester’s grade point average is 2.20 or better but the cumulative grade point average remains below 2.20, the student has one additional semester in which to bring the cumulative grade point average up to 2.20. If, after that second semester following readmission by petition to the Academic Standards Committee a 2.20 cumulative grade point average has not been attained, the student is permanently dismissed and is not eligible for readmission.

D. HONORS

1. Class Rank
2. Order of the Coif
3. Order of the Barristers
4. Patrick Duffy Koonetz Award

D.1 CLASS RANK

The following rules apply to class rank:

Top 25%. Students in the top 25% of each class are individually informed of their class ranks. These rankings are not publicly announced. Students who graduate in the top 25% have their class ranks noted on their university transcripts.

Second Quarter. Students falling between the top 50% and top 25% of each class are permitted access to their individual class ranks. In other words, they can learn their class ranks if they ask the Associate Dean’s office or the Assistant Registrar for the College of Law. Students outside the top 50% of the class are not ranked.
Grade Point Averages. The grade point averages that demarcate the top 25%, 33%, and 50% are publicly announced.

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,” pp. 1-4) at the WVU 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 West Virginia University 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
2. Hours to Graduate
3. College of Law Graduation/Hooding Website

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 MIX 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, 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.
- 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). These courses count towards the total number of degree hours and GPA.
- 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 Assistant Registrar for the College of Law and/or the Associate Dean of 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 Assistant Registrar for the College of Law and/or the Associate Dean of Academic Affairs. For additional information on Degree Works, please visit the website (http://registrar.wvu.edu/dw) of the University Registrar.

### 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 2.20 or above in order to graduate from the College of Law.

### E.3 COLLEGE OF LAW GRADUATION/HOODING WEBSITE

The Graduation/Hooding website for the College of Law goes live each year in March. This contains all forms and information for College of Law graduates.

## Externships & Pro-Bono

### A. EXTERNSHIPS/PRO-BONO

1. Externship Program Guidelines
2. Pro-Bono

### A.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, 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. In addition to supervision at their placement, students are also supervised by a faculty member and are required to enroll in a one-hour 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 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 or Federal Agency 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 environmental protection agencies, colleges, legislatures and legislative committees, and other non-profit or public service organizations.

Full-time Federal Judicial Externships may be performed with any federal judge at the district or circuit court level. Full-time Federal Agency Externships may be performed at any approved federal agency. Full-time federal agency sites have included the National Labor Relations Board, the Securities and Exchange Commission, and the Mine Safety and Health Administration. Please see the Director of the Center for Law and Public Service for a list of approved local sites.

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 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 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 the Director of the Center for Law and Public Service or the Teaching Professor for the course.

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, 6 are graded and 7 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.

2. Full-time Federal Judicial 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, 6 are graded and 7 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.

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 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.

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<th>Placement/Field Work Credits</th>
<th>Total Hours of Work Required</th>
<th>Approx. Hours of Work Per Week</th>
<th>Total Credit Including Course Component</th>
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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 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 online via TWEN to facilitate student communication and foster experiential learning;
• bi-weekly 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 the Director of the Center for Law and Public Service or the Teaching Professor for the course. 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 TWEN 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 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. The final evaluation form must also include a certification of hours from the Field Placement Supervisor.

A.2 PRO-BONO

The Center for Law and Public Service 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 supervised by a licensed attorney and will be tracked by the Center for Law and Public Service.

For more information about pro bono opportunities and guidelines, see the Pro Bono Handbook. If you have questions about or suggestions for a pro bono project, please see Jennifer Powell, Director of the Center for Law and Public Service.

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

A. PROFESSIONAL RESPONSIBILITY

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.

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.
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://studentlife.wvu.edu/r/download/180235). Should you have any questions or concerns, please contact Dr. Melanie Cook or LiDell Evans, or the Office of Student Conduct at 304-293-8111. In case of conflicts, the Law Student Code of Professional Responsibility controls.

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

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;
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.

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

C. BAR ADMISSION

1. Admission to Practice
2. The Bar Exam
3. Action Checklists for Law Students
An ex-president of West Virginia University who now teaches at the College of Law likes to remind incoming law students that they are not going TO law school, but rather THROUGH law school.1 He is right. New law students should realize that the first day of law school is actually the first day of a career as a lawyer. The first thousand days of that career (approximately) will be spent in studying how to be a lawyer and making strategic choices that help assure successful completion of a state bar exam and successful admission to practice.

1 Professor David Hardesty.

C.1 ADMISSION TO PRACTICE

A lawyer may not practice without a license. Because each state establishes its own licensing procedures, the admission to practice process 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.

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.

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 and administers 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) (three 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.

Almost every state’s bar exam also has 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 state’s 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 by the exam. 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 July 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
- Criminal Law
- Criminal Procedure
- Evidence
- Real Property
- Contracts/Sales
- Torts
- Federal Civil Procedure (beginning in 2015)

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)

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.
• 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 and Barbri. 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 Assistant Dean for Student Affairs and produce the information in written form for your student file. The Board of Bar Examiners will expect the information they gather regarding your record to match what the College has on record in your student file.

Non-Academic Policies and Procedures

A. SOCIAL JUSTICE POLICIES

1. Non-Discrimination and Equal Opportunity
2. Missing Class Due to Illness
3. Students with Disabilities
4. Sexual Harassment

B. LAW CENTER FACILITIES POLICY AND PROCEDURE

1. Building Hours
2. Parking
3. Parking on Football Saturdays
4. Safety
5. Student Lounge
6. Vending Machines, Microwave Ovens, and Refrigerator
7. Mailboxes
8. Lockers
10. Tobacco Policy
11. Emergency Phone Numbers
12. Emergency Procedures

A. SOCIAL JUSTICE POLICIES

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A.1 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.
A.2 MISSING CLASS DUE TO ILLNESS

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 right away! 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 Affairs, Janet Armistead (Janet.Armistead@mail.wvu.edu) is always available to help you find the best solution.

A.3 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 Assistant Registrar for the College of Law, who shall arrange appropriate accommodation. A student seeking accommodation in a given semester must complete this process four weeks before the end of the semester. If the disability arises from an emergency illness or injury, the student shall notify the Associate Dean as soon as the emergency occurs and shall complete the process under the direction of the Associate Dean. No student may receive retroactive accommodation for any disability.

A.4 SEXUAL HARASSMENT

The College of Law liaison for sexual harassment for faculty, staff, and students is Janet Long Armistead (Janet.Armistead@mail.wvu.edu), Assistant Dean for Student Affairs. 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.

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7. Mailboxes
8. Lockers
10. Tobacco Policy
11. Emergency Phone Numbers
12. Emergency Procedures

B.1 BUILDING HOURS

The College of Law building hours coincide with the Law Library hours. Students should not be in the building when the building is officially closed unless they have permission from the Dean’s Office. WVU Public Safety Officers or custodial staff may ask individuals to leave if the building is closed.

Any building problems should be reported to Renee Sulipeck, Administrative Assistant, or, in her absence, Greg Elkins, Associate Dean for Administration and Finance.

B.2 PARKING

The paved and gravel parking lots surrounding the Law Center are University permit parking areas only. Contact the Parking Management Office for fees at 304-293-5502 or visit its website (http://transportation.wvu.edu). These parking permits will be valid August 1 through July 31 annually. Permits must be purchased by the first day of classes from the Parking Management Office located at 1112 Van Voorhis Road, directly across the four-lane highway from Starbucks. Each student must present a valid vehicle registration card to receive a parking permit. Vehicles parked in any of the parking

West Virginia University
lots (gravel or paved) without a valid area parking permit displayed on the windshield will receive a $20.00 parking ticket. Vehicles parked in the gravel lots may not block the entrances or exits. Vehicles must park facing bumper blocks and follow all traffic/parking signs and regulations.

B.3 PARKING ON FOOTBALL SATURDAYS

West Virginia University Parking Management Office regulations state that parking permits are required for all campus parking areas between the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday. On home football Saturdays, West Virginia University utilizes most Evansdale Campus parking areas exclusively for football-related parking. At the Law Center, the Continuing Legal Education office purchases the paved lot (Area 42) for attorneys attending CLE seminars at the Law Center on home football Saturdays. The gravel lot (Area 76) is used by WVU for press parking on home football Saturdays. On home football Saturdays, a parking office attendant will be stationed at the bottom of the hill. You will be allowed to park at the Law Center only if you have a Red Lot parking pass. Students who desire to use the library on home football Saturdays may be able to find alternative parking on side streets in the vicinity of the Law Center. The paved Law Center parking lot will be open when the game ends.

This policy affects the entire University, including the Medical Center, and we have no control over it. The University community directly benefits from the purchase of football parking passes. Funds derived from parking fees are used to maintain and improve parking facilities at the University, including the Law Center parking lots.

B.4 SAFETY

An emergency telephone is located in the parking lot on the stadium side of the building. Just picking up the receiver will cause the phone to automatically dial and connect you to 911. Notice the evacuation plans posted on the walls of the building. These show exits to use in case of fire or other evacuation emergency. All planned fire alarm tests will be announced. Evacuation of the building at the sound of an alarm is mandatory except for pre-announced planned testing.

B.5 STUDENT LOUNGE

The student lounge located on the second floor of the Law Center, Room 200, is available for student use during the hours in which the Law Center is open. A television is available in the lounge. The lounge was furnished and decorated with funds provided by West Virginia University and a private donor. No funds exist to repair or replace this furniture should it be damaged. Accordingly, the College of Law urges students to make full use of the lounge in a responsible manner.

B.6 VENDING MACHINES, MICROWAVE OVENS, AND REFRIGERATOR

Vending machines are available in the student lounge, operated by coin, bill, or Mountaineer Card (your student ID). Please report loss of money resulting from machine malfunction to the receptionist in Room 100. A refrigerator and microwave ovens are available for student use in the kitchen off the student lounge. Students are responsible for cleaning the refrigerator, which is emptied each Friday.

B.7 MAILBOXES

Student mailboxes are located in the student lounge. The mailboxes are for internal College of Law communications only. Please do not use the College of Law as your mailing address. The College of Law lacks the staff and resources to sort and deliver personal student mail.

B.8 LOCKERS

Lockers are available in the second floor hallway across from Room 232. Locker preference will be given to third-year and second-year students on a first-come/first-served basis. Third-year and second-year students will be allowed to sign up for their lockers during the summer preceding the academic year until August 31. First-year students must wait until September 1 to begin locker sign-up. If there happens to be a shortage of locker space, first-year students will be asked to share lockers. Please give the receptionist at the main desk your name, class year, and the number of the locker you have chosen.

The College of Law does not provide locks; students must furnish their own. Therefore, it is impossible for the College of Law to retrieve any material from lockers.

The College of Law is not responsible for lost or stolen items. All locks must be removed from lockers held by third-year students by July 1. After this date, locks will be cut off in order to allow the area to be cleaned. Any materials found in the lockers will be stored for a short period of time and may be claimed during the summer. After October 1, the materials become property of the College of Law and will be disposed of appropriately.

If you wish to continue to use the locker from the previous year, you must let the receptionist know before leaving for the summer. Unregistered locks will be cut off.
The locker arrangement is a service provided by the Law School. Abuse of this area will result in the area being closed to students or the establishment of rental charges to meet maintenance costs.

**B.9 BULLETIN BOARDS**

**Administrative Office Bulletin Boards.** The glass-enclosed bulletin boards located next to the door of the reception area are for important notices and announcements from the administration.

**Main Lobby Bulletin Boards.** The largest enclosed glass bulletin board is used for posting class assignments and other announcements, such as class cancellations, make-ups, and new assignments. Students are responsible for checking the assignment board daily. The other enclosed glass bulletin board marked “Registrar’s Office” is for general information relating to course schedules, examinations, and academic regulations.

**Meredith Career Services Center Bulletin Boards.** Announcements for overseas educational opportunities, as well as summer and full-time job opportunities, will be posted outside the Meredith Career Services Center. Job opportunities are posted also in the glass-enclosed bulletin board in the hallway opposite the administrative reception area.

**Student Lounge Bulletin Boards.** There are multiple bulletin boards in the student lounge designated for student organization and general use, as well as a board designated for each Law School class. Do not post material on the doors, windows, or walls of the Law School. It is a violation of University regulations, and notices posted on glass and doors will be removed.

**B.10 TOBACCO POLICY**

The College of Law abides by the West Virginia University Tobacco Free Campus Policy, which prohibits tobacco use on campus. (Smoking is prohibited in all areas of the Law Center.) For additional information, please refer to the West Virginia University Board of Governors Policy 57 (http://bog.wvu.edu/r/download/132148) (Tobacco Free Campus).

**B.11 EMERGENCY PHONE NUMBERS**

All Emergencies from Campus Telephone (including fire). ................. 9-911

All Emergencies from Off-Campus Telephone. ................. 911

University Security (non-emergency). ................. 293-3136

State Police (non-emergency). ................. 285-3200

Local Hospitals

1. Ruby Memorial Hospital Emergency Room. .............. 598-4171

2. Monongalia General Hospital Emergency Room... 598-1460

3. Morgantown EMS. ......................................... 296-1190

**B.12 EMERGENCY PROCEDURES**

We ask that all members of the College of Law community be aware of the procedures you should follow if there is an emergency in the building. Please take the time to read the attached procedures. There are instructions for general building evacuation (in the event of a fire) and for special circumstances: shelter-in-place emergency (in the event of earthquake, tornado, or high winds), active human threat in the building, and hazardous materials released in the building.

Please be sure to sign up for the WVU Alert notice at the WVU website (http://emergency.wvu.edu). WVU Alert will only notify that an emergency is happening and its location. You can check other sources for more detailed information such as the WVU website (http://www.wvu.edu) or local radio stations (WVAG at FM 101.9; WCLG at FM 100.1; U92 at FM 92 and WAJR at AM 1440). Notices will also be posted on MIX, Twitter, and E-News (for faculty and staff).

**Emergency Assembly Areas**

**All Students:** Assemble at the gravel parking lot facing the football stadium regardless of where you were immediately prior to evacuation.

**First Floor Offices Including Bookstore:** Assemble at the gravel parking lot to the right of the flag pole if your office or primary workspace is on the first floor.
Second Floor and Ground Floor Offices Including Library and Clinics: Assemble at the paved parking lot closest to the loading dock area if your office or primary workspace is on the ground or second floors.

General Evacuation Procedures—If you hear the fire alarm or are instructed to leave the building:

1. Immediately obey evacuation alarms and orders. Tell others to evacuate.
2. No one may remain inside a building when an evacuation is in progress.
3. Classes in session must evacuate.
4. Close doors as rooms are vacated.
5. Assist those who need help, but do not put yourself at risk attempting to rescue trapped or injured victims.
6. Note location of trapped and injured victims and notify point persons.
7. Walk calmly but quickly to the nearest emergency exit.
8. Use stairways only. Do not use elevators.
9. Keep to the right side of corridors and stairwells as you exit.
10. Proceed directly to your designated Emergency Assembly Area(s). Stay away from the immediate area near the building you evacuated. (See Above For Emergency Assembly Areas)
11. Remain in Emergency Assembly Area(s) until Roll Call is taken and instructions are given.
12. Do not reenter the building until authorized fire, police, or administrative personnel give the “All Clear” instruction that you may return to the building.

Special Circumstances Procedures and Locations:

1. In the event of a natural hazard (earthquake, tornado, high winds)
   A. Always seek shelter away from glass windows, panels, and dividers.
   B. SHELTER IN PLACE in the Library. The Library Staff has a first aid kit and will assist in providing directions for Shelter In Place. For earthquakes, the second floor is the safest. For tornados and high winds, the Ground and First Floors are the safest.
   C. Since the only entrance to the library is on the second floor and there may not be time to get there, seek shelter against any of the building’s interior walls. Be prepared to kneel facing a wall and cover your head.
   D. If you are unable to get to an interior wall, seek shelter under a desk or in a doorway.
   E. Any occupant who encounters a physically disabled individual should assist that person if possible. Any occupant who encounters a student, employee, or visitor should direct that person to take appropriate actions.
   F. After getting to a safe location and without jeopardizing your safety, try and obtain additional clarifying information by all possible means (e.g. WVU Homepage, TV, radio, email, etc.).

2. In the event of a human threat (intruder, active shooter)
   A. Leave the area/building if you can do so safely.
   B. If you cannot leave the area/building, seek shelter in any available room or office on any floor. Turn out the lights, lock the door, and keep quiet. Hide under or behind a desk or in a corner.
   C. Any occupant who encounters a physically disabled individual should assist that person if possible.
   D. After getting to a safe location and without jeopardizing your safety, try and obtain additional clarifying information by all possible means (e.g. WVU Homepage, TV, radio, email, etc.).
   E. Report any suspicious activity if you can do so without jeopardizing your safety. Call 911 if possible.

3. In the event of a hazardous materials incident
   A. Exit the building by the nearest exit and proceed upwind to allow the wind to carry the hazards away from you. Once 300 feet away from the building, assemble into groups and remain upwind.
B. Do not use the elevators as they may pump air into or out of the building.

C. Any occupant who encounters a physically disabled individual should assist that person if possible. Any occupant who encounters a student, employee, or visitor should direct that person to take appropriate actions.

D. After getting to a safe location and without jeopardizing your safety, try and obtain additional clarifying information by all possible means (e.g. WVU Homepage, TV, radio, email, etc.).

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
5. Constitution of the Student Bar Association of West Virginia University College of Law

B. STUDENT TRAVEL

C. BUDGET GUIDELINES

1. Expenditure Guidelines
2. Approval Procedures

D. COLLEGE OF LAW SERVICES

1. Academic Excellence Program
2. Professional Writing Center
3. Meredith Career Services Center
4. College of Law Bookstore and Cafe
5. Financial Aid
6. Scholarships
7. Technology Services
8. Communications
9. Web Information

E. 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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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 Janet Armistead or Joy Fryson.

Assistant Dean for Student Affairs
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, which are awarded in the third year.

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 all the requirements for Lugar membership are awarded three credit hours in spring of the third year.

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 three credit hours when they have completed all the requirements.

No member of the Moot Court Board may be a member of the West Virginia Law Review. Students who successfully complete all the requirements for Moot Court Board membership receive three hours of academic credit in spring of the third year.
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 a two-credit, graded class in the 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 taken and passed or be currently enrolled in International Law.

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. Full descriptions of the organizations and their purpose can be found on the College of Law website (http://www.law.wvu.edu/student-life/student-orgs).

2013-2014

• ACLU - American Civil Liberties Union
• ADR - Alternative Dispute Resolution Society
• American Constitution Society
• Animal Law Society (WVU College Chapter of SALDF)
• BLSA - Black Law Students Association
• Christian Legal Society
• Class of 2015
• Class of 2016
• Class of 2017
• Defense Trial Council of West Virginia
• Democratic Law Caucus
• Energy Law Association
• Environmental Law Society
• Ethics Council
• Federalist Society
• Intellectual Property Association
• International Law Society/International Law Student Association
• International Law Society of American Lawyers (ISOAL)
• J.D./M.B.A. Club
• Labor Law Society
• Law Justice Group
• M.E. Lugar Trial Association
• Moot Court Board
• OUTlaw (formerly GLASS)
• Phi Alpha Delta Law Fraternity International
• Public Interest Advocates
• Real Estate Law Society
• Republican Law Caucus
• Sports and Entertainment Law Society
• Student Bar Association
• Student Association for Justice (formerly WV Student Trial Lawyers Association)
• Veteran’s Law Caucus
• WV Intellectual Property
• WV Law Review
• Women’s Leadership Council

A.3 DIRECTORY OF ADMINISTRATIVE PERSONNEL FOR STUDENT ORGANIZATIONS

Joyce McConnell
William J. Maier, Jr. Dean and Thomas R. Goodwin Professor of Law
Phone: 304-293-3199
Janet Long Armistead
Assistant Dean for Student Affairs
Phone: 304-293-7320
Email: janet.armistead@mail.wvu.edu
Room: 100F
Dean Armistead is the administrative liaison for student organizations. See Dean Armistead for official recognition and about elections, student organization files, budget, and other issues. She is the cosigner on checking accounts.

Joy Fryson
Student Affairs/Career Services Assistant
Phone: 304-293-6819
Email: joy.fryson@mail.wvu.edu
Room: 130
Ms. Fryson is the liaison between law school organizations and the WVU Student Organizations Office. See Joy for forms pertaining to official recognition.

Lisa Berry
Payroll Representative
Phone: 304-293-7250
Email: lisa.berry@mail.wvu.edu
Room: 223
Ms. Berry is responsible for ordering office supplies. Copier maintenance issues may also be discussed with Lisa.

Angie Haught
Receptionist
Phone: 304-293-5301
Email: angie.haught@mail.wvu.edu
Room: 100A
Organizations may see Angie for assistance in reserving rooms for meetings and activities. The master building key sign-out log is also maintained at the front desk.

Renee Sulipeck
Administrative Assistant
Phone: 304-329-6502
Email: renee.sulipeck@mail.wvu.edu
Room: 100D
Ms. Sulipeck is responsible for distributing keys. Building maintenance issues may also be discussed with her.

Stenja McVicker
Business Planning Officer
Phone: 304-293-7357
Email: stenja.mcvicker@mail.wvu.edu
Room: 222
Ms. McVicker serves as the Dean’s Budget Officer and monitors all Student Organization expenditures.

Joan Gibson
Accounting Assistant II
Phone: 304-293-7691
Email: joan.gibson@mail.wvu.edu
Room: 223
Ms. Gibson serves as the Procurement Card Coordinator and Travel Coordinator for the College of Law and the Law Library.

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” to Joy Fryson in the College of Law Career Services office. A copy of the Petition and Officer Update Form, as well as additional information, is also available at the University Student Organization Services (SOS) website (http://sos.wvu.edu/sos_forms).
2. Recordkeeping. The College of Law’s Assistant Dean for Student Affairs 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. Checking Accounts. For those organizations that have a checking account, monthly statements from the financial institution must be kept and passed on to the succeeding officers. The Assistant Dean for Student Affairs or the student organization’s faculty advisor must be a signatory on all checks. A FEIN number for the account may be applied for online (http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Employer-ID-Numbers-(EINs)-).

4. Elections. Elections for new class officers must be held before February 28 each year. Election results must be delivered to the Assistant Dean for Student Affairs within two days of the election. The third-year class president runs the ballot box for the selection of Professor and Staff Member of the year. This election must be held three weeks before Honors Weekend.

5. Class Presidents. During a law school class’s second academic year, the class President is responsible for ordering the class composite picture for display in the Law Center.

6. Websites. All student organizations are required to keep their websites current and to name a Webmaster each academic year. The Webmaster is responsible for maintaining on that student organization’s website a current list of officers, the constitution, a descriptive paragraph of the purpose of the organization, news items, and any other updates or corrections on the Student Organizations portion of the College of Law website. For assistance, please contact Keith Walton, Director of Law School Technology, in Room 225. Keith’s phone number is 304-293-8556, or you may email him at keith.walton@mail.wvu.edu. For other web assistance, contact Kristin Brumley at 304-293-7220, or you may e-mail her at kristin.brumley@mail.wvu.edu.

7. Other. The new SBA president is responsible for recruiting students for appointment to faculty committees and working with the Assistant Dean for Student Affairs to accomplish this. The SBA also is responsible for providing the Assistant Dean for Student Affairs with information for the College of Law’s summer newsletter.

Rooms/Equipment

1. Room Reservations. The master College of Law room schedule is maintained online at http://wvulaw.wvu.edu/calendar. All classes, meetings, and events are listed on this schedule. Organizations may access this schedule to reserve a room for meetings and events. Please review the schedule for possible conflicts with other activities in order to make the most of your scheduled meetings. Faculty and administration have priority in reserving rooms; all other reservations are on a first-come, first-served basis.

If you need assistance in scheduling a room, please see Angie Haught in the reception area. If your reservation request is approved, you will receive a confirmation email. DO NOT ASSUME THAT YOU HAVE A RESERVATION UNTIL YOU RECEIVE THIS CONFIRMATION. 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 Lewis Mackley in Room 168 or phone 304-293-7543. You may also email him at lewis.mackley@mail.wvu.edu. Any audio-visual problems should be reported to Lewis. Available equipment includes TVs, VCRs, camcorders, computers, LCD projectors for presentations, etc. Questions concerning information technology may be addressed to Keith Walton in Room 225.

3. Furniture/Equipment Needs. A few 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 Renee Sulipeck in Room 100D 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.

Law Center 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). Students should not be in the building after the library has closed unless they have written permission from the Dean’s Office. 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 Renee Sulipeck (Room 100D) 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

Stenja McVicker, in Room 222, is the designated budget officer for the College of Law under West Virginia University rules and regulations. Basic office supplies are available from Lisa Berry in room 223. If your organization has need to make long distance calls or use the mail services, see Stenja McVicker. 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.

A.5 CONSTITUTION OF THE STUDENT BAR ASSOCIATION OF WEST VIRGINIA UNIVERSITY COLLEGE OF LAW

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 referred to as the “SBA,” of the West Virginia University College of Law, hereinafter referred to as the “Law School” or the “College of Law.”

Article II: Constituency. All students enrolled in the Law School are members of the SBA and shall be represented by and permitted to participate in SBA meetings. All students enrolled in the Law School are permitted to vote in SBA elections.

Article III: Composition of the Council. The SBA Council shall be composed of the Organizational Board, the Executive Board, and a representative from four of the five standing committees: the Fund-raising Committee, the Community Services Committee, the Social Activities Committee, and the Ethics Committee. The SBA Executive Board shall have the authority to assess dues, propose a budget and make all necessary expenditures. All other business of the SBA, including approval of the budget, shall be conducted by the Council.

Article IV: Organization Board

Section 1: The Organizational Board shall consist of representatives from the active student organizations of the Law School. Each organization shall be represented in the SBA Council by one member to be determined by the respective organization.

Section 2: The Organizational Board shall elect from within its membership two Council Representatives to serve on the Executive Board.

Section 3: It is the responsibility of each organization to send a representative to each regularly scheduled SBA meeting. Two consecutive absences or four absences in one semester shall result in that organization being placed on inactive status. The SBA Council quorum requirement shall be reduced accordingly. Organizations having assumed a nonactive status seeking reinstatement must comply with the requirements contained in Section 4 of this article.

Section 4: Organizations attempting to attain representation in the SBA must comply with the following:

1. Submittance of a proposal of representation stating the group’s objectives, membership and compliance with the requirements for student organizations pursuant to the West Virginia University Student Handbook; And at a meeting subsequent thereto:

2. Approval by two-thirds of the total membership of the SBA Council.

Article V: Executive Board

Section 1: The Executive Board shall consist of nine officers to be elected annually as follows:

1. An SBA President shall be elected by the entire student body. The President’s duties shall consist of the following:
   a) Calling of and precedence at all scheduled and emergency meetings of the SBA and Executive Board;
   b) Attendance at all Faculty meetings and representation of the SBA thereto;
   c) Liaison to the Student Administration of West Virginia University;
   d) Appointment of student members to law school student-faculty committees; appointment of officers to any vacancy on the Executive Board; all with the advice and consent by the majority of the SBA Council;
   e) Appointment of various SBA committees as the need arises; and all other ceremonial and administrative functions ordinarily assumed by the President.

2. A Vice-President shall be elected by the entire student body. The Vice-President duties shall consist of the following:
   a) Accession to the Presidency in the event of the President’s death, removal, or withdrawal during the President’s term of office;
   b) Attendance at all SBA and Executive Board meetings and preside at such meetings in the event of absence of the President;
   c) Representation of the President at any ceremonial or administrative functions at the President’s request;
   d) Management of all SBA funds; and
e) Presentation of the SBA’s financial report at all SBA and Executive Board meetings.

3. A Secretary shall be elected by the entire student body. The Secretary’s duties shall consist of the following:
   a) Attendance at, recordation and dissemination of the minutes of all SBA and Executive Board meetings;
   b) Assistance to the President in formulation of meeting agendas and advance notice to the student body thereof;
   c) Personal notice to all Executive Board members of the scheduling of emergency Executive Board meetings; and
   d) Conducting all official correspondence of the SBA and Executive Board.

4. A Third-Year Class President shall be elected exclusively by the members of the third year class. The Third-Year Class President’s duties shall be as follows:
   a) Attendance at all SBA and Executive Board meetings; and
   b) All other functions traditionally assumed by the Third-Year Class President.

5. A Second-Year Class President shall be elected exclusively by the members of the second-year class. The Second-Year Class President’s duties shall be as follows:
   a) Attendance at all SBA and Executive Board meetings; and
   b) All other functions traditionally assumed by the Second-Year Class President.

6. A First-Year Class President shall be elected exclusively by the members of the first-year class. The First-Year Class President’s duties shall be as follows:
   a) Attendance at all SBA and Executive Board meetings; and
   b) All other functions traditionally assumed by the First-Year Class President.

7. Two Organizational Representatives shall be elected by and from the Organizational Board. The Organizational Representative’s duties shall consist of the following:
   a) Accession of one representative to the Vice President in the event of the Vice President’s death, removal, withdrawal or accession to the Presidency during the Vice President’s term of office; this representative to be chosen of the two representatives by the SBA President, all with the advice and consent of the SBA council.
   b) Attendance at all SBA and Executive Board meetings and preside at such meetings in the event of absence of the President and Vice President; and
   c) The Organizational Representative shall be elected by the Organizational Board at the first meeting of the SBA held in October.

Section 2: Removal of SBA Officers. This section shall apply to SBA officers and elected committee members. Impeachment proceedings may be initiated by one of two methods: 1) Absolute majority vote of the SBA Council; or 2) a petition including the signatures of one-quarter of all Law School students. If either of these two alternatives occurs, the officer will face public trial before the full SBA Council. For removal to occur, 75% of all SBA Council members must vote in favor of removal.

Section 3: The Executive Board shall assume all other duties not previously detailed as may be delegated to the Board by the SBA, Faculty or Administration of the Law School.

Section 4: There shall be five standing committees which report directly to the Executive Board.

1. A Social Activities Committee which will consist of a Chairperson elected from the entire student body and one representative from each class. The duties of the Social Activities Committee shall consist of the following:
   a) Planning all social functions sponsored by the SBA; and
   b) Presenting timely reports on their activities to the Executive Board.

2. An American Bar Association/State Bar Association/Law Student Division Committee which shall consist of three officers of the ABA Chapter. Their duties shall consist of the following:
   a) Be a liaison with the ABA and the State Bar;
   b) Promotion and coordination of their activities;
c) Membership and recruitment to these organizations; and

d) Other duties as defined by the chapter bylaws.

3. An Ethics Committee which shall consist of nine members, three members elected from each class. Their duties, including the election of the Chairperson, shall be defined by the Ethics Committee in accordance with the Student Code of Professional Responsibility.

4. A Community Services Committee which will consist of a Chairperson elected from the entire student body and one representative from each class. The duties of the Committee shall consist of the following:
   a) Planning all community services sponsored by the SBA; and
   b) Presenting timely reports on their activities to the Executive Board.

5. A Fund Raising Committee which will consist of a Chairperson elected from the entire student body and one representative from each class. The duties of the Fund Raising Committee shall consist of the following:
   a) Planning all fund raising activities sponsored by the SBA; and
   b) Presenting timely reports on their activities to the Executive Board.

**Article VI: Meetings**

**Section 1:** The SBA Council shall meet not less than once monthly for a minimum of eight meetings during the academic year.

1. Scheduled meetings of the SBA shall be announced at least three days in advance.

2. Emergency meetings of the SBA shall be announced at least twenty-four hours in advance, the subject matter of which shall be limited to one topic.

3. Fifty percent of the SBA Council plus one member shall constitute a quorum.

4. Meetings shall be conducted pursuant to Robert’s Rules of Order.

**Section 2:** The Executive Board shall meet independently of the SBA not less than once monthly for a minimum of eight meetings.

1. Scheduled meetings of the Executive Board shall be announced at least twenty-four hours in advance.

2. Emergency meetings of the Executive Board shall be called with reasonable notice to all Executive Board Members.

**Section 3:** Officers of the SBA must attend all meetings. Removal procedures shall be initiated against any SBA Executive Board officer who misses two consecutive meetings or three meetings within one semester.

**Section 4:** All matters shall be decided by a simple majority vote unless otherwise stipulated in the Constitution.

**Section 5:** All meetings shall be open to the public.

**Article VII: Elections**

**Section 1:** The SBA Council Officers, with the exception of the Organizational Board, shall be elected by the entire student body annually in the first half of the spring semester, and they shall assume their duties at the end of the semester.

**Section 2:** The class officers and committee representatives for each incoming first-year class will be elected within the latter half of the first full month of the fall semester and shall assume their duties within two weeks of the election’s certification. The class officers for the prospective second- and third-year classes shall be elected by their respective classes in the first half of the spring semester, and they shall assume their duties at the end of the semester.

**Section 3:** Election proceedings shall begin with the opening of nominations in the last full week of February. The proceedings shall run as follows:

1. The Friday before nominations, posters will be placed to announce an election schedule to include the nomination period, campaigning period, forum, election, and run-off dates.

2. Nominations will be accepted on Wednesday, Thursday and Friday of the last full week of February. Each candidate may be nominated for only one office. Nominations will be closed at 4:30 p.m. on Friday.

3. At the close of nominations, campaigning will begin. Each candidate will be permitted two posters of no greater size than 12 x 18 inches. Hand billing is to be encouraged through the use of the student mailboxes.

4. During the following week on Monday during the noon hour, a candidate forum must be held.
5. The following Wednesday, elections will be held. Polling hours will be from 10:00 a.m. to 2:00 p.m. Polling will be conducted in the lobby. While the polls are open, candidates will not be allowed to solicit in the lobby. Violations will be ruled on by the Ethics Committee. If found guilty of violations, the candidate will be removed from the office, and the runner-up installed in his/her place.

6. In the event that no candidate receives a majority of the vote (50% plus one vote) in the first balloting, a run-off will be held on Friday following the election. The run-off will be between the two candidates with the most votes. In the event of a tie, there may be three or more candidates.

7. In the run-off, the candidate who receives the most votes will be the winner.

Section 4: The Executive Board shall conduct all elections, prepare all ballots, and approve all voters. The Ethics Committee shall certify all results pursuant to procedures and policies adopted by that Committee.

Section 5: No student may run for SBA office, if, at the time of nominations, that student holds a grade point average which is less than 2.0.

Section 6: After the election is complete, all candidates have a right to review all election results.

Article VIII: Amendments

Section 1: Amendments to the Constitution may be proposed:

1. By presentation to the SBA of a petition bearing the proposed amendment and the signature of at least twenty-five percent of the student body; or

2. By passage of an amendment resolution by the SBA. Such a resolution must receive approval of at least two-thirds of the members of the SBA Council.

Section 2: This Constitution shall be amended upon the approval of the proposed amendment described in the preceding paragraph and the support of at least a majority of the students voting in the election to be held at least one week after its approval in Section 1.

Article IX: Autonomy. All student organizations shall enjoy political, physical, and administrative autonomy. The SBA is not empowered to control the member organizations' internal affairs in any way.

ARTICLE X: Honor Code. The SBA, as an organization, its officers, and members agree to abide by the Honor Code of the College of Law.

ARTICLE XI: Non-Discrimination. The SBA shall not discriminate against any person on any basis prohibited by the United States Constitution or the Constitution of the State of West Virginia.

Ratified: February 24, 1993

B. STUDENT TRAVEL

Travel must be approved by Dean Armistead in advance of making travel arrangements. Please submit requests for travel via the College of Law’s online request form (http://wvulaw.wvu.edu/travel).

In order to be reimbursed the following documentation is required for each of the following elements of travel:

- Airfare - Original invoice with itinerary detailing the method of payment.
- Rental Car - Original invoice/receipt detailing the method of payment.
- Personal Car - Mileage will be reimbursed at about $.047 per mile. This amount is subject to change per state guidelines.
- Ground Transportation (taxi, metro, bus, limo, etc.) - Original receipts.

*Please note that the most cost effective mode of transportation will dictate the amount of transportation reimbursement, i.e., if the cost of renting a vehicle is less than the standard mileage rate, you will be reimbursed only for the rental car cost. A mileage calculator (http://pcps.wvu.edu/for_departments/for_travelers/wvu_travel_forms) can assist you in determining the most cost effective form of travel.

Lodging. An original receipt in the traveler’s name showing a zero balance must be submitted. The invoice must show itemized charges. The following items will not be reimbursed: in-room movies, honor bar charges, laundry/dry-cleaning charges.

If the traveler’s spouse/guest stayed in the hotel room and there was a difference between the hotel’s single- and double-occupancy rate, the traveler will receive reimbursement only for a single-occupancy rate. Official documentation from the hotel of the difference in the single and double rates must be attached to the reimbursement request.
Meals. Meal reimbursement will be based on per diem authorized by the Federal Authorized Daily Rate (ADR). The ADR is dependent upon the location of travel and ranges from $46 to $71 per day. Partial per diem will be paid for the first and last day of travel. No meals will be paid for single day trips. No reimbursements will be made for alcoholic beverages.

Registration Fees. Documentation for event dates and location must be provided. Proof of payment (i.e. cleared check or zero balance receipt) must be submitted. Late fees/charges will not be reimbursed. GRATUITIES, TOLLS, PHONE CALLS, AND PARKING will be reimbursed at a reasonable rate. Receipts must be provided if available.

C. BUDGET GUIDELINES

1. Expenditure Guidelines
2. Approval Procedures

Submit your budget to Dean Janet Armistead and the SBA President by email by the deadline designated by the Office of Student Affairs.

C.1 EXPENDITURE GUIDELINES (WHAT DO I INCLUDE IN MY BUDGET?)

REMEMBER: If an expense is not included in your request, it will not be part of your allocation!

Preparation. Expenditure Requests must be prepared carefully and include all necessary items. Budgets are used for planning purposes only. The “Expenditure Guidelines” that follow provide a list, as well as brief descriptions, of line items that may be part of your request. Please remember that Stenja McVicker (room 222) is available to assist you with the preparation of your expense budget. These requests are submitted to the President of the Student Bar Association (SBA) and the Executive Council. A “Student Organization Funding Request and Event Proposal Form” is attached as “Appendix C.” The form is also available on the SBA TWEN site, which also includes a sample completed form.

Travel. Include all expenses related to travel. Travel requires approval prior to incurring expenses. See “Approval Guidelines.” Students must complete travel approval request online thirty days prior to the event.

Printing Costs. Include expenditures for printing costs related to programs, invitations, certificates, awards, etc. Printing requires approval prior to incurring expenses. See “Approval Guidelines.”

Special Events/Receptions. Expenses for events include food, beverages (no alcohol), supplies, speaker expenses, copying of flyers or invitations, etc. Special Events require approval prior to incurring expenses. See “Approval Guidelines.”

Special Supplies, Telephone, and Mail/Postage. Budgets should include all general office supplies, as well as special supply needs. Supply requests must be submitted to Lisa Berry in Room 223. Supply purchases made by students will not be reimbursed.

If your event requires special office supplies or an increased use of telephone and postage, please include this cost in your event budget. This cost may be hard to estimate, but please try to calculate a reasonable figure.

C.2 APPROVAL PROCEDURES (HOW DO I RECEIVE APPROVAL TO SPEND MY BUDGET?)

Once you have completed the form(s) and submitted to SBA, your request will either be approved or denied. Approvals may indicate some changes or a decrease in the funding request and are given to the Assistant Dean for Student Affairs for approval. The Assistant Dean for Student Affairs will indicate approval in writing, give to the Business Office staff, and they will forward a copy to the student organization officer making the request. If a proposal is denied either by SBA or the Assistant Dean, a justification will be provided.

Prior to making any expenditures, please see Joan Gibson, room 223, or in her absence, Stenja McVicker, room 222, several weeks in advance of your event. You will be able to discuss your expenditure requests and the best processes and procedure. For example, it may be possible that some items can be direct billed.

Please keep in mind that the College of Law’s Business Office must have original itemized receipts for any reimbursements. Again, please work with the Business Office staff if you have any questions.

D. COLLEGE OF LAW SERVICES

1. Academic Excellence Program
2. Professional Writing Center
3. Meredith Career Services Center
4. College of Law Bookstore and Cafe
5. Financial Aid and Scholarships
6. Technology Services
7. Communications
8. Web Information

D.1 ACADEMIC EXCELLENCE PROGRAM

Grace Wigal, Teaching Professor and Program Director
Academic Excellence Center
Phone: 304-293-7774
Email: grace.wigal@mail.wvu.edu
Room: 112

Fall Programs for Incoming Students. 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.

Additionally, an early orientation and Fall Study Session Program is conducted for incoming students who would benefit from additional support activities. Enrollment in the Fall Study Session Program (FSSP) is limited and participation is by invitation only. Several factors are considered in choosing students to participate, e.g., whether the student has been out of school for a significant time, has a nontraditional background for law, has learning disabilities, speaks English as a second language, or has a GPA or LSAT score below the average of the incoming class. The goal of FSSP is to assist students in achieving maximum performance in legal writing assignments and casebook examinations.

Spring Study Session Program for At-Risk Students. A different kind of AEP program is offered in the spring for students whose first-semester GPA is at 2.2 or below. Because first-time bar passage has been statistically linked to performance in law school, the common goal of the College of Law and AEP is to improve analytical and writing skills of students before the end of the first year of law school. The Spring Study Session Program (SSSP) therefore concentrates on the Property, Civil Procedure, Legislation and Regulation, and Constitutional Law classes that first-year students are taking in second semester (content areas tested by the bar examination).

Students who participate in SSSP attend weekly study sessions that provide opportunities for review of important legal concepts covered in the spring courses, as well as guidance about how to create strong study outlines and write exams. Specially trained student teaching assistants, known as Deans Fellows, lead these small study sessions (six - ten students per session). The Deans Fellows work closely with the course professors to lead the study group through review materials and practice tests.

Third – Year Bar Preparation Courses

Practical Legal Writing I: This course is open to all third-year students in the spring semester and provides one hour of class credit. The course addresses the content of the bar exam, how to study for the exam, how to spot issues in essay questions, and how to write essay responses and performance test documents. The goal is to provide a “jumpstart” on the traditional bar review course taken by students when they graduate.

Practical Legal Writing II: This course provides an additional hour of credit for students who would benefit from an additional hour of practice each week. Participation is by invitation only.

D.2 PROFESSIONAL WRITING CENTER

West Virginia University
College of Law
Jean Dailey, Writing Specialist
Phone: 304-293-2414
Email: jean.dailey@mail.wvu.edu
Room: 228

In collaboration with the director of the Academic Excellence Program, the writing specialist in the Professional Writing Center provides a full array of academic support services to students of all abilities, in all stages of their law school careers, and at all stages of the writing process. Assistance is available through both workshops and individual conferences in the writing center.
If students have questions about any aspect of their writing, the writing specialist is available to provide assistance. With the professor’s permission, students may consult with the writing specialist about grammar, punctuation, and sentence structure on appellate advocacy papers, on seminar papers, and on LRRW papers. Also, the specialist will work with students on resumes and letters of application. Writing workshops presented throughout the year are open to all law students.

The Professional Writing Center, room 228, is open from 8 a.m. until noon Monday through Friday. The writing specialist can be reached in person at the center, by phone, and via e-mail.

D.3 MEREDITH CAREER SERVICES CENTER

Meredith Career Services Center’s website (http://law.wvu.edu/career-services)

Assistant Dean
L. Amber Brugnoli, M.S., M.A., J.D.
Phone: 304-293-6792
Email: amber.brugnoli@mail.wvu.edu
Room: 130

Assistant Director
Rosalind Lister, M.S.Ed.
Phone: 304-293-7750
Email: rosalind.lister@mail.wvu.edu
Room: 100J

Administrative Assistant
Joy Fryson
Phone: 304-293-6819
Email: joy.fryson@mail.wvu.edu
Room: 130

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. The Assistant Dean for Career Service’s office is in room 130. The Assistant Director’s Office is room 100J.

Students must register with the Career Services Center to use its services and participate in on-campus interviews. First-year students will register at the Career Services Orientation program held in mid-October. The forms are on the College of Law’s website. Students must complete the forms to provide Career Services with current contact information and to 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/editing and cover letter writing/editing
* 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
* Employer information talks

Many of these workshops are co-sponsored and given by the hiring partners of local law firms, public interest organizations, and corporations.

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, and the Career Services Center will provide handouts on writing a resume,
writing effective cover letters, preparing for spring interview season, and organizing a job search. 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 full-time positions. On-campus interview season occurs in the fall semester for second- and third-year students, and generally runs from the last of August through October. The spring on-campus interview season generally features employers seeking first-year students and runs from February through April. Many employers come to campus to interview students; others ask to review student credentials through a resume mailing 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.

Students should participate in on-campus interviewing but should also consider alternative methods of finding a job as well. 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 each semester and follow traditional application/hiring procedures.

3. Job Research. The Career Services Center has many Web-based and print resources for student use. Handouts and books are available for students to use in Room 130. 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.

D.4 COLLEGE OF LAW BOOKSTORE AND CAFÉ

Manager
Mary Jo Fugera
Phone: 304-293-2492
Email: bkswvulaw@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 5:00 p.m., Monday through Thursday and 8:00 a.m.-4:00 p.m. on Friday. Summer hours are 8:00 a.m. to 4:00 p.m.

The Bookstore is also open the Saturday prior to the first day of class and prior to home football games. 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://wvulaw.bncollege.com/webapp/wcs/stores/servlet/CategoryDisplay?catalogId=10001&storeId=15066&categoryld=40003&top=Y&langId=-1). 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 are also available, offering great savings on selected titles. Contact the Store Manager for details.

D.5 FINANCIAL AID AND SCHOLARSHIPS

Financial Aid Counselor
Eric Meadows
Phone: 304-293-5302
Email: eric.meadows@mail.wvu.edu
Room: 100-G

The College of Law Financial Aid Office hours are as follows:

- Monday, Wednesday, and Friday: 1:00pm-4:45pm
- Tuesday and Thursday: 8:15am-11:45am

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 (http://www.fafsa.ed.gov) 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 and federal work study. Financial aid awards are to be viewed, accepted, declined, or reduced online through the WVU STAR System. Each student will receive a letter 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. Alternative loans must be applied for through the organizations offering the loan.

Deadlines for financial aid are as follows:

1. Federal Work Study: March 1
A written request must be submitted to the Financial Aid Office.

2. Scholarships: March 1

FAFSA results must be received by WVU by March 1 for first-round scholarship consideration.

3. 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 30 to insure timely processing. Graduating students must complete a Loan Exit Interview if they borrowed from the William D. Ford Federal Direct Loan program.

Financial Aid Processing is a detail-oriented process. Please keep the following eight steps in mind when applying for and receiving financial aid:

1. Make sure all your 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 your financial aid completely processed:

   a. Submit all required documents so that your file is complete, which generally 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 send you a verification form 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 Grad Plus Loan, which is completed online (https://studentloans.gov).

   c. If you are a first-time borrower, sign your master promissory note and complete entrance counseling. Both can be done online at studentloans.govcounseling.

4. Mail all correspondence for financial aid to: WVU College of Law, Financial Aid Office, P.O. Box 6130, Morgantown, WV 26506-6130

NOTE: Any correspondence sent to other financial aid offices at West Virginia University will delay the processing.

5. The Financial Aid Office may be contacted at the address, email, and phone numbers listed above, or you may use Eric Meadows’s mailbox located in the reception area.

6. Be sure to notify the Registrar’s Office of all address changes. This is particularly important during the summer months when financial aid correspondence is being sent (i.e., award letters and any notifications). 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 also request Direct Deposit for your refund by calling PNC Bank at 800-745-7577.

7. 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.

8. 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.

A list of scholarships offered at the College of Law is available online (http://law.wvu.edu/admissions/financial-aid). Scholarships available from outside sources can be found at www.fastweb.com and other helpful sites.

D.6 TECHNOLOGY SERVICES

Director, Law School Technology
Keith Walton
Phone: 304-293-8556
Email: keith.walton@mail.wvu.edu
Room: 225

Information Technology Consultant
Lewis Mackley
Phone: 304-293-7543
Email: lewis.mackley@mail.wvu.edu
Room: G2A

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 Information
Technology Consultant 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.

D.7 COMMUNICATIONS

Director of Marketing and Communications
James Jolly
Phone: 304-293-7439
Email: james.jolly@mail.wvu.edu
Room: 234B

Integrated Marketing Specialist
Kristin Brumley
Phone: 304-293-7220
Email: kristin.brumley@mail.wvu.edu
Room: 234

Public Relations Specialist
Kaylyn Christopher
Phone: 304-293-0457
Email: kaylyn.christopher@mail.wvu.edu
Room: 234

The Director of Communications for the College of Law is responsible for assisting the administration, faculty and/or other personnel, and student organizations with integrated communication activities via the internet, print, radio, television, and any other key media, in order to enhance the prestige and goodwill of the institution and to ensure that its needs and reputation are optimized.

D.8 WEB INFORMATION

The College of Law website (http://www.law.wvu.edu) offers a wealth of information. Also available are a full description of scholarships; professors’ curricula vitae, publications, and other information; student organization details; academic and event calendars; current news; student legal clinic information; continuing legal education offerings; and much more.

E. UNIVERSITY SERVICES

1. General Information
2. Health Services
3. Student Activities and Organizations

E.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 Affairs website (http://studentaffairs.wvu.edu).

E.2 HEALTH SERVICES

Illness. Student Health Service offers medical assessment, treatment, referrals, family planning services, and educational programs for tuition and fee-paying WVU students. Students make a co-payment for each visit. Student Health is located on the ground floor of the Robert C. Byrd Health Sciences Center, next to Ruby Memorial Hospital and near the Law School. Students should enter through the Mary Babb Randolph Cancer Center and follow the blue signs that say “Student Health Service.” To make an appointment, call 304-293-2311. For more information, see the Student Health Service website (http://www.well.wvu.edu). This is an extremely helpful website.

Mental Health and Counseling Services. Students who seek personal counseling may call the Carruth Center on the main campus at 304-293-4431 for appointments. Counseling services are also available at Student Health Psychiatry in the basement of the Health Science Center. To make a psychiatric appointment, call 304-293-6972.

Please contact the College of Law’s Assistant Dean for Student Affairs at 304-293-7320 if you need assistance in making an appointment.
Insurance. For information on University insurance programs, call 304-293-2315 or visit the web (http://www.well.wvu.edu/medical/insurance).

Alcoholism, Drug Prevention, Rape and Domestic Violence. For specialized help in any of these areas, call 304-293-6972.

E.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://apply.wvu.edu/life/studentActivities.aspx). Information regarding student organizations at the College of Law is available online (http://www.law.wvu.edu/student-life/student-orgs).

Library Guide

A. LAW LIBRARY GUIDE

1. Schedule
2. Location of Materials
3. Law Library Policy/Regulations
4. Borrowing Law Library Materials
5. Services

A.1 SCHEDULE

FALL AND SPRING SEMESTER HOURS
Monday – Thursday 8:00 a.m. – 12:00 a.m.
Friday 8:00 a.m. – 10:00 p.m.
Saturday 9:00 a.m. – 8:00 p.m.
Sunday 10:00 a.m. – 12:00 a.m.
*Extended hours for law student study are maintained during exam periods.
*The Law Library will be closed on all home football game Saturdays.

SUMMER HOURS
Monday – Friday 9:00 a.m. – 8:00 p.m.
Saturday 9:00 a.m. – 6:00 p.m.
Sunday 12:00 noon – 6:00 p.m.

HOLIDAY AND INTERSESSION HOURS
Generally, 9:00 a.m. to 6:00 p.m.
*The Law Library is closed on New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas. It also may be closed additional days throughout the year in accordance with the University holiday schedule.

A.2 LOCATION OF MATERIALS

Top Floor. Reference Collection, United States Core Collection, National Reporter System, West Virginia Core Collection, Periodicals Indices, Bound Journals

Middle Floor. General Books on American Law and Other Subjects: (A-KF), Anglo-American Collection, Foreign and International Collection

Bottom Floor. State Codes, Reports, and General Books on States’ Laws, West Virginia Collection, General Books on American Law & Other Subjects: (KFA-Z), Government Documents
A.3 LAW LIBRARY POLICY/REGULATIONS

Food and tobacco products are not allowed in the library. Drinks are permitted in containers with lids.

Cell phones should be used only in the stairwells of the library. Cell phones should be kept on vibrate mode.

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 three weeks. Books may be renewed three times. Renewals may be made by calling the Law Library Circulation Desk at 304-293-5300, in person at the circulation desk, through MountainLynx, or by email to wvulawbooks@mail.wvu.edu.

Overdue Fines. 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. The Law Library collects $1.00 per day as a fine for overdue material from the general collection. Overdue fines for reserve and course reserve materials are $.01 per minute. If material is lost or damaged, the amount of the fine will be equal to the replacement price plus a $10.00 processing fee.

Unpaid overdue fines will result in suspension of your borrowing privileges at all West Virginia University Libraries.

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.

A.5 SERVICES

Reserve. The Reserve Collection contains commercial study aids, AV material, course reserve materials, and frequently used titles.

WVU College of Law Examinations. Copies of some exams that are administered in the College of Law courses are compiled and placed on reserve, at the discretion of individual professors. The exams, which may be used by students as study aids, are available for photocopying.

MountainLynx. MountainLynx is the WVU Library’s online catalog and information network. The holdings of all campus libraries are included in MountainLynx. Library materials are accessible by author, title, keyword, and Library of Congress subject heading. MountainLynx is available anywhere you have internet access.

Microfiche. The Law Library catalog and the serials list may indicate that a title is available in microfiche. The microfiche is kept in cabinets that are located on the bottom floor of the library. Some microfiche sets have printed indexes located on top of the cabinets. A microfiche reader is available next to the cabinets, and a reader/printer is located behind the Circulation Desk.

Computers. The Law Library provides forty networked computers. Each computer is connected to the Internet, networked to a laser printer, and contains the latest versions of commonly used software. Wireless access is also available throughout the Law Library.

Computer-Assisted Legal Research. The BloombergLaw, LexisNexis, and Westlaw legal research databases are available free to all law students, including home access. Documents accessed on LexisNexis may be printed free of charge on the LexisNexis printers, which are located inside the Law Library in Room 201B (to the left of the main entrance) and in the Student Lounge.

Photocopying. One photocopier is located on the main floor of the Law Library, to the left of the front door outside Room 201B. The machine will accept Mountaineer ID cards. Funds can be deposited to your card online.

Carrels. Study carrels may be reserved by College of Law students. Carrels are assigned at the beginning of the fall semester, and the assignment is effective for the academic year.

The order of preference for assignment of carrels is

1. Third-year students
2. Second-year students
3. First-year students

Applications are available at the Circulation Desk during the first week of classes.

Interlibrary Loan. The Law Library staff is able to borrow materials not found in our collection from other libraries. The staff can usually get requested books within two weeks and articles within several days. Inquiries concerning this service can be made at the Circulation Desk. Patrons will be notified when the material arrives.
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.

Printers and Other Machines. There are several printers available in the Law Library, which are connected to the university's paid printing system (Pharos). These printers will accept your WVU ID card. There is also a large format poster printer on the bottom floor of the law school. The Law Library has three digital scanners; two scanners are located on the top floor of the library by the Reference Desk, and one is on the bottom floor.
Reed College of Media

Degrees Offered

- Master of Science in Journalism
- Master of Science in Integrated Marketing Communications

The College of Media is located on the downtown campus in Martin Hall, WVU’s oldest building (constructed in 1870).

Today the college has state-of-the-art electronic reporting and editing systems as well as modern broadcast news facilities. Graduate faculty, having educational and professional backgrounds in mass communications studies and media-related experiences, are highly qualified to teach mass communications at both the undergraduate and graduate levels. About one-half have earned terminal degrees and/or have worked professionally in their areas of expertise.

The master’s program has granted more than 250 degrees since its first in 1962. The College of Media, established in 1939 and one of the oldest in the United States, is one of approximately 100 such programs accredited by the Accrediting Council on Education in Journalism and Mass Communications. The college has nearly 4,600 graduates, the majority of whom have careers in newspaper journalism, broadcasting, advertising, public relations, or related fields.

Master of Science in Journalism Program

The master’s program offers students the choice of two tracks: the teaching research track for persons who wish 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 each student reach his/her potential as a practitioner, teacher, or scholar in mass communications, prepares a graduate not only for a first job but also for long-term productive career development through the study of mass communications and related fields. Skills acquired allow the student to excel in his/her chosen profession.

College faculty are developing more specialized curricula for persons who aspire to become integrated marketing communications (IMC) practitioners, news specialists, or public relations specialists in such fields as business, energy and the environment, science, social relations, education, government, international affairs, and sports.

Assistantships

Assistantships available in and through the college each year pay stipends, health insurance, and tuition remission. Graduate assistants supervise broadcast and computer laboratories, advise undergraduates, and assist professors with teaching courses, service learning, and research projects. Some graduate students work in media-related positions in their own and in other WVU programs.

ADMINISTRATION

DEAN
- Maryanne Reed - M.S. (Northwestern University) Professor

DIRECTOR OF GRADUATE STUDIES
- Steve Urbanski - Ph.D. (Duquesne University) Associate Professor

DIRECTOR OF ONLINE PROGRAMS
- Chad Mezera - M.S. (West Virginia University)

Admission

Those interested in learning about and applying to the master’s program should contact the Director of Graduate Studies via e-mail (steve.urbanski@mail.wvu.edu). Graduate students specifically seeking information about the IMC Online Graduate Program should contact the IMC coordinator or visit http://www.imc.wvu.edu. Those wishing to pursue either the general master’s degree or the IMC Certificate may access WVU graduate information at http://www.wvu.edu/~graduate. The WVU Admissions online catalog is available at http://admissions.wvu.edu/graduate. 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 College of Media telephone number is (304) 293-3505.
Integrated Marketing Communications

Master of Science in Integrated Marketing Communications

The Integrated Marketing Communications (IMC) graduate program (http://imc.wvu.edu) is offered exclusively online with no on-campus classroom attendance required.

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. Students earn a practical, customizable graduate education that is designed to equip them with the skills to emerge as leaders in the field. One hallmark of the WVU IMC program is its "learn-it-today, use-it-tomorrow" focus that is built into the curriculum. Students are able to take the knowledge they gain in the classroom and immediately apply it to the challenges in their professional lives.

The program is taught by a diverse faculty – from marketing directors to academics to entrepreneurs – who are recognized leaders in their fields.

The IMC program is also renowned for its flexibility. Most 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 the INTEGRATE conference annually in Morgantown, WV to provide students and faculty an opportunity to network and explore the latest innovations in the ever-changing IMC world. Information on the conference can be found on the IMC program’s INTEGRATE webpage (http://imc.wvu.edu/integrate).

Graduate Assistantships

Effective Fall 2014, 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 of University tuition for IMC 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 (http://grad.wvu.edu/funding/assistantships).

Admissions

Like all premier academic programs, admission to the IMC online graduate program at West Virginia University is highly competitive and the total number of available seats for each entry term is limited. Admission to the program is based on a holistic, case-by-case analysis of the applicant’s WVU Graduate Application for Admission, academic record (undergraduate transcript), GRE or GMAT scores*, years of relevant professional experience (resume), writing ability and intent (personal statement) and references (letters of recommendation).

*The GRE/GMAT admission requirement may be waived for interested applicants who meet certain professional or educational conditions. Please submit your information to the IMC Review Dropbox to have your credentials evaluated for the GRE/GMAT waiver and to receive more information about the program.

Students are admitted to the IMC program three times per year, in the Early Fall (August), Early Spring (January), and Summer (August) admission terms. All applications received by the application priority deadline will be considered, and accepted students will be notified by the corresponding priority acceptance notification date. However, the IMC program operates on a rolling admissions basis and qualified applicants may be accepted earlier than the priority acceptance notification date.

<table>
<thead>
<tr>
<th>Admission Term</th>
<th>Application Priority Deadline</th>
<th>Priority Acceptance Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer (May)</td>
<td>March 15</td>
<td>April 15</td>
</tr>
<tr>
<td>Early Fall (August)</td>
<td>June 15</td>
<td>July 15</td>
</tr>
<tr>
<td>Early Spring (January)</td>
<td>October 15</td>
<td>November 15</td>
</tr>
</tbody>
</table>

Visit the IMC website for comprehensive information about the online graduate program, including faculty biographies, curriculum and course information, details on the application and admissions process, and to register for a free online information session.

Also, the IMC program hosts its annual INTEGRATE conference in Morgantown, WV. Our conference is the largest professional Integrated Marketing Communications (IMC) conference offered by a university program. INTEGRATE is your opportunity to talk about the hottest topics in IMC, build your professional network, and learn more about our graduate program. To register and learn more about the conference visit the INTEGRATE website.

Degree Information

The master of science (M.S.) degree in Integrated Marketing Communications requires thirty-three hours of coursework, and each course is three credit hours (a total of eleven courses are required). The program’s academic year consists of five nine-week terms: Early Fall (August–October), Late Fall (October–December), Early Spring (January–March), Late Spring (March–May) and Summer (May–July).

Students are limited to no more than nine credit hours in the Fall and Spring semesters and six credit hours in the Summer semester. However, students are not required to take the full-time, nine credit hour load and can opt for fewer credits than the limit in any semester. Students are
encouraged to select a course schedule that fits their life, opting for zero, one or two courses in any IMC term, as long as the maximum credit hours are not exceeded in any semester. Students generally complete the master’s degree within two years.

Those who wish to experience the program without making a full commitment are invited to apply to the five-course IMC certificate program; up to six credits taken in the certificate program may be transferred for full credit should a student decide to pursue the full master’s degree. At the completion of two courses (six credit hours), students may opt to transfer into the full master’s degree program with no loss of completed course credit.

The IMC program requires all enrolled students to maintain a minimum grade point average (GPA) of 2.75 to remain in good standing in the program. Furthermore, a minimum cumulative GPA of 2.75 for all courses attempted in the program is required for graduation from the IMC program. Students who do not have at least a 2.75 GPA at time of completion of all coursework will not be able to graduate. A student must achieve a grade of at least C- in a course in order to pass. Courses in which grades of D or F are earned must be retaken until a passing grade (C- or better) is achieved.

**Degree Requirements**

Students complete the IMC 610 course in their first term in the program. Following successful completion of IMC 610, students are able to take courses in virtually any order, ensuring a fully customized path of study.

**IMC 610**  
Introduction to IMC (Program Prerequisite - Completed in Student’s First Term)  
3

All students complete the following four core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMC 611</td>
<td>Marketing Research &amp; Analysis</td>
<td>3</td>
</tr>
<tr>
<td>IMC 612</td>
<td>Audience Insight</td>
<td>3</td>
</tr>
<tr>
<td>IMC 613</td>
<td>Brand Equity Management</td>
<td>3</td>
</tr>
<tr>
<td>IMC 619</td>
<td>Emerging Media and the Market</td>
<td>3</td>
</tr>
</tbody>
</table>

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 618, direct marketers are encouraged to opt out of IMC 616, and creative/graphic designers are encouraged to opt out of IMC 615. All students must complete two of the following three core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMC 615</td>
<td>Creative Strategy &amp; Execution</td>
<td>3</td>
</tr>
<tr>
<td>IMC 616</td>
<td>Direct Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 618</td>
<td>PR Concepts &amp; Strategy</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the core courses, students must select at least three IMC elective courses from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMC 614</td>
<td>IMC Media Analysis</td>
<td>3</td>
</tr>
<tr>
<td>IMC 617</td>
<td>Consumer Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>IMC 620</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>IMC 621</td>
<td>Current Topics in IMC</td>
<td>3</td>
</tr>
<tr>
<td>IMC 622</td>
<td>Multicultural Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 624</td>
<td>Cause Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 625</td>
<td>Advanced Creative Concepts</td>
<td>3</td>
</tr>
<tr>
<td>IMC 626</td>
<td>B2B Direct Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 627</td>
<td>Healthcare Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 628</td>
<td>Applied Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>IMC 629</td>
<td>Mobile Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 630</td>
<td>Sports Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 631</td>
<td>Crisis Communication</td>
<td>3</td>
</tr>
<tr>
<td>IMC 632</td>
<td>Political Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 633</td>
<td>Entrepreneurship in IMC</td>
<td>3</td>
</tr>
<tr>
<td>IMC 634</td>
<td>Digital Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>IMC 635</td>
<td>Visual Information Design</td>
<td>3</td>
</tr>
<tr>
<td>IMC 637</td>
<td>Internal Brand Communication</td>
<td>3</td>
</tr>
<tr>
<td>IMC 641</td>
<td>Social Media and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>IMC 642</td>
<td>Web Metrics and SEO</td>
<td>3</td>
</tr>
<tr>
<td>IMC 643</td>
<td>Digital Video Production</td>
<td>3</td>
</tr>
<tr>
<td>IMC 693N</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
</tbody>
</table>
IMC 693S  Special Topics  1-6
IMC 693V  SPTP: Environmental Marketing  1-6

IMC students are able to take more than 33 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 636).

Upon successful completion of IMC 636 in the student’s final term, the student will graduate from the program.

IMC 636  IMC Campaigns (Program Capstone Course - Completed in Student’s Final Term)  3

Master of Science in Journalism

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 advanced study in mass communication; 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

Approximately five assistantships are available in the College of Media each academic term. Graduate assistants teach laboratories and assist professors with their courses and research. Interns work in mass communications-related jobs on campus to obtain solid professional experience.

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 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.

Emphases

The College of Media offers two areas of emphasis—the teaching/research track and the professional track—within the M.S.J. program.

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, statistics, and 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, the core courses of the program will have to be re-taken. After ten years, students will be required to begin the program anew.
Requirements

For the master's degree in journalism, the student must meet the following requirements:

Teaching/Research

A minimum of thirty hours of acceptable graduate credit, including a thesis for six hours. As part of the thirty hours, a minimum of eighteen hours, including the thesis, must be College of Media courses. Included in the thirty hours, students may take nine hours in a minor outside the College of Media.

Professional

A minimum of thirty hours of acceptable graduate credit, including a professional project for six hours. As part of the thirty hours, a minimum of eighteen hours, including the professional project, must be College of Media courses. Included in the thirty hours, students may take nine hours in a minor conducted outside the College of Media. In either program, the candidate is allowed to take more than the minimum required number of hours.

Maintenance of Scholarship

A journalism graduate student must maintain satisfactory progress toward his/her M.S.J. 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 3.0 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 skill. 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), and 79 (internet test).

Admission

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 3.0 cumulative grade point average (GPA) on a 4.0 scale. Each applicant 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.

An applicant who does 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.

Students applying for admission to the M.S.J. program are encouraged to send nonreturnable supporting material to the College of Media Director of Graduate Studies. A list of these materials can be found at: http://journalism.wvu.edu/graduate/master-of-science-journalism.

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://app.applyyourself.com/AY ApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad.

All Students

The following courses are required for all journalism graduate students:

A minimum GPA of 3.0 is required in all courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRL 600</td>
<td>Intro to Graduate Studies</td>
<td>1</td>
</tr>
<tr>
<td>JRL 604</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JRL 620</td>
<td>Advanced JRL Writing/Research</td>
<td>3</td>
</tr>
<tr>
<td>JRL 689</td>
<td>Ethics-Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>
and each M.S.J. candidate must take these courses in the following sequence over a three-term period:

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRL 600</td>
<td>1</td>
</tr>
<tr>
<td>JRL 604</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRL 620</td>
<td>3</td>
</tr>
<tr>
<td>JRL 689</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives*</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Total credit hours: 18

* Various electives. In both programs, sixty percent of the graduate credits submitted for the degree (eighteen credits) must be in courses numbered 500–799

Nine additional credit hours must be taken in the College of Media. All remaining credit hours should be taken outside of the School. Students should note that the majority of credits submitted for the degree must be in courses numbered 500 or above.

Every graduate student must complete coursework with a minimum 3.0 grade point average. 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 twelve 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 theses/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 and/or colloquium 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 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 theses 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.). Students may attend the meetings at which their proposals are discussed. 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 or to reject a proposal. The student whose proposal is approved works closely with a committee 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. Students also should make certain that they file their thesis/project signature form with the director of graduate studies (and the University Library) 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.

Master’s candidates should follow APA or another 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.
School of Medicine

 Degrees Offered

• M.D., Doctor of Medicine
• M.D./Ph.D., Joint Doctor of Medicine and Doctor of Philosophy
• Ph.D., in Biochemistry and Molecular Biology
• Ph.D. in Cancer Cell Biology
• Ph.D. in Cellular and Integrative Physiology
• M.S. in Clinical and Translational Science
• Ph.D. in Immunology and Microbial Pathogenesis
• Ph.D. in Neuroscience
• M.H.S. in Pathologists’ Assistant
• B.S., M.S., Ph.D., Exercise Physiology
• M.S. in School Health Education
• B.S. in Medical Laboratory Science
• M.O.T., Master of Occupational Therapy
• D.P.T., Doctor of Physical Therapy
• Ph.D., Pharmaceutical and Pharmacological Sciences
• M.D./M.P.H., Doctor of Medicine and Master of Public Health
• M.S., Biomedical 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 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 Morgantown campus, students have access to a full range of research and clinical facilities, including a new 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 trauma center, children’s hospital, cancer center, a psychiatric hospital, primary care and specialty clinics, a rehabilitation hospital, and many other patient care facilities.

Biomedical sciences graduate programs (in collaboration with School of Pharmacy) offer training in seven areas: biochemistry and molecular biology; cancer cell biology; cellular and integrative physiology; exercise physiology; immunology and microbial pathogenesis; neuroscience; and pharmaceutical and pharmacological sciences. Biomedical sciences graduate students take a common core curriculum the first year and match with a faculty mentor and self-select into their specialty areas in year two.

Students in professional programs, such as the M.D. degree program in the School of Medicine, may obtain a master’s of public health degree through several options available in collaboration with the School of Public Health. There is also a combined M.D./Ph.D. joint degree option for students interested in pairing medical and basic science education at the doctoral level.

The Department of Human Performance and Applied Exercise Sciences offers graduate degrees in the clinical areas of exercise physiology, physical therapy, and occupational therapy. There is also a master’s of health sciences degree (M.H.S.) for the pathologist’s assistant available through the Department of Pathology. All graduate and professional programs in the School of Medicine complement other existing programs in health professions offered through other schools (dentistry, nursing, and pharmacy and public health) which are part of the Health Sciences Center.

 ADMINISTRATION

 DEAN
• Arthur J. Ross III - M.D. (Case Western Reserve University School of Medicine)

 VICE DEAN FOR MEDICAL EDUCATION & ACADEMIC AFFAIRS
• Norman D. Ferrari III - M.D. (West Virginia University School of Medicine)

 VICE DEAN FOR CLINICAL SERVICES & CMO WVU HEALTHCARE
• Judie Charlton - M.D. (West Virginia University School of Medicine)
ASSOCIATE DEANS

- Scott A. Cottrell - Ed.D. (West Virginia University School of Medicine)
  Student Services and Curriculum
- Barbara Ducatman - M.D. (Albany Medical College)
  Faculty Services
- James P. Griffith - M.D. (West Virginia University School of Medicine)
  Charleston Campus Student Services
- Maria Kolar - M.D. (West Virginia University School of Medicine)
  Veterans Affairs
- Rosemarie Cannarella Lorenzetti - M.D. (West Virginia University School of Medicine)
  Eastern Campus Student Services
- Timothy Palencik - M.B.A.
  Finance
- James M. Stevenson - M.D. (West Virginia University School of Medicine)
  Development

ASSISTANT DEANS

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  Charleston Campus
- James Brown - M.D. (Meharry Medical School)
  Eastern Campus
- Hannah Hazard - M.D. (West Virginia University School of Medicine)
  Admissions
- Fred L. Minnear - Ph.D. (Oregon Health Sciences University)
  Graduate Studies
- Jamal Mustafa - Ph.D. (Lucknow University, India)
  Research
- James O’Donnell - Ph.D. (University of Chicago)
  Research
- David Wilks - M.D. (University of Pittsburgh School of Medicine)
  Medical Education Technology

ASSOCIATE DEAN FOR PROFESSIONAL AND UNDERGRADUATE PROGRAMS

- MaryBeth Mandich - Ph.D. (West Virginia University School of Medicine)
  Professional & Undergraduate Programs

ASSOCIATE VICE PRESIDENT FOR HEALTH SCIENCES

- Clark Hansbarger - M.D. (Medical College of Virginia School of Medicine)
  Dean, Charleston Campus
- Konrad Nau - M.D. (West Virginia University School of Medicine)
  Dean, Eastern Campus

SENIOR ASSOCIATE DEAN/CHIEF ADMINISTRATIVE OFFICER

- John Worth - M.B.A. (State University of New York, Buffalo)

Doctoral Degrees

All doctoral students will be required to present a minimum of six one-hour graduate seminars to faculty and students before graduating. Doctoral students who desire to obtain additional teaching will be able to obtain this as part of their training. Students are expected to present their research data at national meetings and publish their data in appropriate peer-reviewed journals prior to graduation. However, the student’s faculty advisor must give approval before any research or scholarly material is submitted for presentation or publication, and the material must recognize all appropriate co-authors and grant sources.

Required Research Participation

Because the doctorate is a research degree, students will be expected to be involved in research from the beginning of their programs. Doctoral students will participate in three research rotations with faculty in exercise physiology during the first two semesters of enrollment. Students are expected to choose a dissertation chair and a dissertation committee by the end of the first year of enrollment. Students should work with their dissertation advisor
to design appropriate pilot studies and with that 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 exercise physiology.

Research is conducted throughout the doctoral program with a goal of having at least three manuscripts published or submitted to a journal for peer
review before graduation. Students should strive to present their research findings at a minimum of one national/international meeting annually
beginning no later than the second year of enrollment in the doctoral program. A minimum of one peer-reviewed manuscript that is derived from the
student’s dissertation research must be published before graduation.

Directed Research

All preliminary research must be collected under the supervision and approval of the dissertation chair. The student is expected to engage in directed
research under the supervision of the dissertation chair 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 grant proposal and dissertation topic as part of the requirements for completing Part
II of the Comprehensive Examination.

Comprehensive/Qualifying Examination

The comprehensive (qualifying/candidacy) examination will evaluate a student’s readiness for advancement to doctoral candidacy. This will consist of a
written and an oral component to determine that the student is qualified to complete the doctoral dissertation and conduct independent research.

Requirements of the Qualifying/Candidacy Examination

Graduate students will be admitted to Ph.D. candidacy after successfully completing all coursework and passing a candidacy examination. The purpose
of the candidacy examination is to evaluate a student’s readiness for advancement to doctoral candidacy. The candidacy examination will consist of
writing and orally defending a dissertation proposal. Advancement to candidacy means that in the judgment of the faculty, the doctoral student has an
adequate knowledge of exercise physiology, knows how to use academic resources, and has potential to do original research autonomously. In other
words, the student is qualified to complete the doctoral dissertation. In addition, no student with a grade point average of less than 3.0 will be eligible to
take this examination.

The qualifying examination should be taken after completion of the formal coursework as defined by the student’s dissertation committee and chair/
advisor of the dissertation committee in conjunction with the Director for Graduate Studies. When a student has passed the candidacy/qualifying
examination, he/she will be admitted to candidacy for the Ph.D.

The following are prerequisites for advancement to the qualifying examination:

• The student must have a dissertation advisor and a dissertation committee.
• The student must have demonstrated competent research skills.
• The student must have a suitable dissertation topic that is approved by the dissertation committee.
• The student must be in good academic standing as defined in the doctoral program and have satisfactorily completed the first two years of course
requirements (including those specified by the student’s advisory committee) with at least six credit hours (or equivalent) of laboratory research
experience.

Appropriate (recommended) lengths for each section of the qualifying examination/research proposal (single spaced) are as follows:

• Specific aims: one page
• Background and significance: two to three pages
• Preliminary studies and pilot data: three to five pages
• Research design and methods: six to seven pages
• Budget and justification: two to four pages including justification pages
• References: three to four pages

Oral Examination of Research Proposal

Normally, the oral examination is set within two to four weeks following the acceptance of the written examination. However, the oral exam component
can only be scheduled if the members of the dissertation committee judge the written submission to be acceptable (or acceptable pending minor
revisions). If the written proposal is acceptable by the members of the dissertation committee, the chair of the dissertation committee will schedule the
oral portion of Part II of the examination.
The following guidelines should be reviewed by the student and his/her dissertation committee before scheduling the oral examination.

In the oral examination, the student will make a professional formal presentation (using PowerPoint computer slides or similar media) that clearly identifies the research area, hypotheses, and questions that they wish to pursue as part of his/her Ph.D. dissertation and pilot data that they have obtained (about forty to forty-five minutes). The chair of the dissertation committee will also chair Part II of the examination. The chair will permit members of the audience (faculty, graduate students, etc.) to ask questions of the graduate presenter for approximately ten to fifteen minutes. Thereafter, the guests will be dismissed and the meeting will be closed except for the members of the student’s dissertation committee and other invited (i.e., non-voting) members of the graduate faculty that have been approved by the chair of the dissertation committee.

Failure to successfully complete the comprehensive examination after two attempts is grounds for dismissal. Students will be permitted due process and the division chair will convene the graduate faculty as a whole, who will consider written appeals from any student who has been dismissed by virtue of failing the qualifying/candidacy examination.

Temporary Committee Substitutions

- Membership on a doctoral dissertation committee signifies the highest level of commitment to all phases of the student's doctoral training. All committee members must therefore be present for the oral research design exam. If all the members of the committee are not present at the beginning of the oral defense for Part II, the oral examination cannot continue. Absence of a committee member from the exam is only acceptable in the event of illness or some other serious unforeseen problem.
- If a committee member is unexpectedly unable to participate in a scheduled oral examination, the examination should be rescheduled for another time within the next two weeks when all members can be present. The student may request that the examination not be rescheduled, provided that a substitute committee member can be found (if one is needed to meet minimal dissertation committee requirements). Requests for member substitution will be granted in only very rare and exceptional circumstances. The division chair must approve any temporary substitutions.
- The substitute must have adequate time to read the written proposal and prepare for the examination. The substitute must be a suitable graduate faculty with established expertise in an area previously represented by the absent committee member. It is not appropriate to substitute one faculty with another if a different research expertise would be represented by the substitution. Any substitute must be acceptable to both the student and the dissertation advisor, and the substitute must meet the requirements for dissertation committee membership. The substitute member will be considered a full-voting member of the dissertation committee for the purpose of administering and grading the examination. The substitute member will also be provided copies of the student’s written responses for Parts I and II. The final examining committee may contain no more than one substitute member, and the students’ advisor (normally dissertation committee chair) may not be substituted.

Qualifications for Advancement to Ph.D. Candidacy

The student must demonstrate the following:

- A wide base of knowledge in exercise physiology
- An ability to think independently
- Integration of existing knowledge into a practical research question by identifying what is known, what is not known, etc.
- Critical evaluation of literature
- Problem-solving skills
- Acceptable written and oral communication skills including the ability to “think on one’s feet”

Submission of Written Research Proposal to a Funding Agency

The written candidacy examination also serves an additional purpose. Graduate students are expected to submit at least one grant proposal to an external granting agency by the end of his/her second year of enrollment. Constructing the proposal is a part of the requirements for graduation. The candidacy examination provides the graduate student the opportunity to complete these requirements for submitting the grant proposal while also preparing for the qualifying examination and assembling ideas for the dissertation project.

The student should wait until successfully negotiating the candidacy examination (both written and oral components) and revise the grant according to the suggestions of his/her dissertation chair and dissertation committee. Graduate students should not submit a grant proposal without input, feedback, and approval of the committee chair and dissertation committee. It is acceptable and appropriate for the student to obtain feedback from all members of the dissertation committee before submitting it to a funding agency.

The submission of the grant proposal to a funding agency should be used to: (a) seek a graduate student stipend and other research supplies as allowed by the external source, (b) seek funding for travel to national/international meetings if it is permitted by the funding agency, (c) obtain independent external review of the student’s research proposal/dissertation project, and/or (d) obtain experience in writing grants for external funding. The student should also notify the Director of Graduate Studies of the grant submission. This will be accomplished by submitting a copy of the front page of the grant proposal (with the title, signatures, etc.) and the budget page of the grant to the Director of Graduate Studies.
General Dissertation Requirements

The purpose of the dissertation is to provide experiences that will assist the student in becoming an independent investigator and constructing manuscripts from the data collected in the research process. Typical dissertation projects will be about three years in length.

The student must complete a dissertation in which they have obtained original data that makes a novel and important contribution to knowledge in the broad field of exercise physiology and submit all manuscripts containing these data to peer-reviewed journals. Students must pass an oral examination based upon his/her 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 hypothesis that were tested. The typical doctoral dissertation will yield three to five peer-reviewed manuscripts. To optimize feedback from the co-authors and to ensure timely publication, the manuscripts originating from dissertation work should be submitted for peer review prior to graduation, and some manuscripts may be published before the student graduates. Proper acknowledgment for funding of the research should be noted in both the dissertation and the manuscripts obtained from dissertation work. It is expected that several of these manuscripts that will be included in the dissertation will have been published before graduation. It is further expected that all of the manuscripts will be submitted to a peer-reviewed journal for consideration for publication before graduation. The student must have published a minimum of one manuscript as a first author from the completed dissertation work prior to graduation. The process of writing the chapters as journal manuscripts will facilitate this process.

Student Evaluations

Students will be formally evaluated by the program faculty on a yearly basis with respect to courses, research, teaching, professional development, and progress through the program. The student will be asked to fill out an activity report encompassing these areas and submit it to the Chair of the Division of Exercise Physiology. The chair will convene the program faculty to evaluate each student. The chair will provide the students a written assessment of their progress.

Biochemistry and Molecular Biology

lsalati@hsc.wvu.edu

Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

The disciplines of biochemistry and molecular biology seek to understand biology by exploring the functions of the molecular components of cells. A major goal of this 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. Our goal is to develop independence as a scientist.

The hallmarks of graduate training in biochemistry and molecular biology 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.

Faculty research in the program can provide the student with training in multiple basic sciences areas:

- Regulation of gene expression
- Chromatin silencing
- RNA processing
- Cell survival mechanisms
- Intermediary metabolism
- Regulation of signal transduction by nutrients and metabolites
- Nutritional biochemistry
- Cell proliferation and cell cycle regulation
- Cell adhesion
- Ion channel biochemistry
- Kinases and phosphatases in signal transduction mechanisms involved in cancer cell metabolism
- Spirochete biology
- Oxidant-induced cellular stress
- Structure/function relationships of proteins
• Molecular genetics of visual and auditory development
• G protein-mediated signaling in retina photoreceptors
• Molecular basis of age-related blindness

These research areas provide fundamental knowledge toward both the normal health-state and the amelioration of multiple diseases: atherosclerosis, blindness, cancer, deafness, diabetes, and metabolic disorders.

FACULTY
GRADUATE PROGRAM DIRECTOR
• Lisa Salati - Ph.D. (University of Minnesota)

Doctor of Philosophy

A major goal of the doctoral program in Biochemistry and Molecular Biology is to foster the student’s ability for independent thought, in preparation for a career as an independent scientist. To that end, faculty cultivate an open, collegial relationship with each other and graduate students which facilitates the sharing of ideas and open inquiry. Emphasis on use of scientific literature and laboratory research characterize the curriculum after successful completion of the undifferentiated first year. 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.

Students have access to training in multiple topics related to the field. For a more comprehensive list, please visit the department web site at: http://medicine.hsc.wvu.edu/Biochemistry/Education/Graduate

Completion of the Ph.D. program is realized when the student successfully presents the research results to both the department and their graduate advisory committee. Typically, four to five years are required to realize this goal.

Biomedical Sciences Integrated Core Curriculum

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the second year. The plan of study developed by the graduate committee, in consultation with the student, is the definitive curriculum necessary for award of the graduate degree. The courses listed below include the required courses of the undifferentiated first year and a representation of electives necessary for the student to finalize their plan of study. As the student enters years 3-5 of their graduate education and transfers most of their study to work in the laboratory of their doctoral mentor, repetitive enrollments in research, seminars and colloquia are typical and will determine total hours necessary for degree completion.

BMS 700 Scientific Integrity 1
BMS 705 Cell Structure/Metabolism 1-4
BMS 710 Fund Integrated Systems 1-4
BMS 715 Molecular Genetics 1-3
BMS 720 Scientific Writing 2
BMS 791 ADTP:Biomedical Sci Rotations 1-6
BMS 796 Graduate Seminar 1
BMS 797 Research 1-6
BMS 799 Graduate Colloquium 1-6

Electives from at least TWO of the courses below
BMS 730 Cancer Cell Biology 2-3
BMS 732 Cardiovasc/Respiral Biol 3
BMS 734 Cell Signaling Metabolism 3
BMS 736 Immunology & Microbial Patho 3
BMS 738 Muscle Structure/Function 2-3
BMS 740 Neuroscience 2 2-3
BMS 793 SPTP:Transltnl Cardiovsclr Sci 1-6

BIOCHEMISTRY AND MOLECULAR BIOLOGY CURRICULUM

Select one of the following:
BIOC 750 Protein Chemistry/Enzymology
BIOC 751 Advance Molecular Biology

One additional Advanced Course
Required every semester beginning in Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOC 785</td>
<td>Biochem Mol Bio Journal Club</td>
</tr>
<tr>
<td>BIOC 797</td>
<td>Research</td>
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</tbody>
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**SEMINARS AND RESEARCH FORUM**

The student will present three seminars during their graduate study. One seminar will be the dissertation proposal which is the background and proposed research for the dissertation project.

**JOURNAL CLUB**

Students are required to enroll in Journal Club each semester. The course involves 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 work with a dissertation advisor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation advisor.

**PHD CANDIDACY AND DISSERTATION**

Admission to candidacy occurs following successful completion of the qualifying exams, which have both written and oral components. The written qualifying exam is given prior to beginning the second year of study. The dissertation proposal is completed by the end of the third year of study.

**DISSERTATION PREPARATION, SEMINAR, AND DEFENSE**

Students will not be allowed to defend their dissertation without a minimum of one paper in press in a peer-reviewed journal, on which the student is first author. The final examination for the PhD will consist of presenting a dissertation seminar before the advisory committee and others before continuing on with the dissertation defense before the advisory committee. Satisfactory performance in the oral defense will result in recommendation for granting of the PhD.

**Biomedical Sciences**

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pphilips@hsc.wvu.edu

**Overview**

The WVU Health Sciences Center offers biomedical research training leading to the Ph.D. and M.S. degrees and the joint M.D./Ph.D. degree. Our Ph.D. and M.S. students matriculate into a common, integrated core curriculum including research laboratory rotations. This integrated first year allows students to build competence in key areas of contemporary science, gain exposure to our seven training programs, and network scientifically and socially. In the second semester, students customize their coursework by selecting from an array of program-specific electives. By April of year one, students have acquired the necessary didactic and research knowledge to make an informed selection of a research advisor and one of our seven degree-granting programs. M.D./Ph.D. scholars take the first two years of medical school, do research for three to four years in one of our seven training programs or the Ph.D. program in public health sciences under the guidance of a graduate faculty mentor, and then complete the last two years of medical school.

Our seven graduate training programs are as follows: biochemistry and molecular biology; cancer cell biology; cellular and integrative physiology; exercise physiology; immunology and microbial pathogenesis; neuroscience; and pharmaceutical and pharmacological sciences.

Successful completion of the Ph.D. degree requires a 3.0 GPA, satisfactory grades in research, passages of the qualifying examination, research proposal defense, and dissertation defense, and at least one first-author manuscript, based on the Ph.D. dissertation research, accepted in a peer-reviewed journal before the formal defense of the dissertation.

The goal of all seven biomedical sciences Ph.D. programs is to train highly qualified students for academic, research careers and for careers that make a positive contribution to science. The program provides the instructional and research background needed to enable doctoral candidates to complete an original Ph.D. project that advances the field and is acceptable for publication in peer-reviewed journals. This doctoral training serves as a foundation for further career development, which usually leads to postdoctoral research training.

**FACULTY**

**ASSISTANT VP FOR GRADUATE EDUCATION**

- Fred L. Minnear - Ph.D. (Oregon Health Sciences University)
  M.D./Ph.D. Scholars Program
CHAIR
• Scott Weed - Ph.D. (Yale University)

ASSISTANT DIRECTOR FOR GRADUATE STUDIES
• To Be Named

STAFF ASSISTANT
• Penny Phillips  
  M.D./Ph.D. Scholars Program

Ph.D. Undifferentiated First Year

ADVANTAGES OF AN UNDIFFERENTIATED FIRST YEAR:
• Students acquire a fundamental yet in-depth exposure to relevant contemporary science.
• Students have one year to select a specific training program and research advisor.
• There are larger numbers of available graduate faculty to select from for a research advisor.
• Students develop important intellectual and social connections.
• It enhances future collaborations among research laboratories.

IN YEAR ONE, STUDENTS:
• Take a six-day Boot Camp during orientation featuring sessions on time management, good laboratory practice and safety, reading, critiquing, and presenting journal articles, and writing; meetings on individual development plans (IDP) with faculty advisors; and adventure activities, and social/dinners.
• Take an integrated core curriculum that focuses on contemporary science and scientific integrity
• Take specialized areas of science that align with the research strengths of the graduate faculty
• Rotate through four active research laboratories

FIRST SEMESTER:
The two main courses, Cellular Structure and Function and Fundamentals of Integrated Systems, have been combined and integrated across topical areas starting in the fall of 2014. Journal clubs are incorporated in the course and complement the didactic information, emphasizing discussions of literature articles led by students and facilitated by the faculty. Cellular Methods focuses on the main methods utilized by cell biologists and is taught by senior graduate students. Students take Discussions on Scientific Integrity that meets weekly, is led by individual faculty, and incorporates small and large group discussions of ethical issues presented as scientific case studies.

SECOND SEMESTER:
Molecular Genetics, which also incorporates a journal club, is required of all students. In addition, students help design their own curriculum. Each of the seven graduate programs offers a module taught primarily from the current literature with an emphasis on discussions among students and faculty. Each student, with assistance from the graduate directors, selects two or three of these modules.

By April of year one, students are provided the necessary didactic and research experiences to make an informed selection of a research advisor and one of the seven graduate training programs.

In the first summer, students research in the laboratory of their chosen faculty mentor.

In October of the second year, students and faculty participate in Research Induction Ceremony established at Health Sciences in 2006. The Ceremony marks the successful completion of first-year core course work and the transition to the research laboratory. The main feature of the Ceremony is the presentation of a laboratory coat to each student by their faculty mentor. A distinguished alumnus gives a short inspiring talk to the students and faculty as well as family and friends who are invited to the Ceremony.

In the second summer, students take Scientific Writing. Students attend weekly lectures and complete assignments in two separate writing skills, an NIH pre-doctoral fellowship grant and a scientific journal article.

M.D./Ph.D. Scholars Program
The WVU School of Medicine’s M.D./Ph.D. Scholars Program prepares students for academic careers that combine the practice and teaching of clinical medicine with laboratory investigation of disease mechanisms. The goal is to train independent investigators who can function in the future as physician-scientists. This joint training program requires at least seven years to complete.
Medical School, Years One and Two

Students enter the program in July before beginning medical school with an orientation to the various areas of research. Students choose one six-week research rotation before medical school starts in August. In years one and two, trainees take the integrated medical school basic science curriculum. All M.D./Ph.D. trainees participate in monthly research forums. At these forums, students present their research, learn from physician-scientist role models, and discuss academic career opportunities. During the summer of year one, trainees complete a rotation in one additional research laboratory to facilitate their final selection of a specific graduate program and research advisor by April of year two.

Ph.D. Training

After successful completion of years one and two of the medical curriculum and step one of the United States Medical Licensing Examination (USMLE), students enter the research portion of their Ph.D. training. There are two M.D./Ph.D. training programs: biomedical sciences and public health sciences. The research opportunities in these two training programs are numerous and include cell and molecular biology, integrative physiology, immunology, exercise physiology, cardiovascular sciences, receptor biochemistry, bacterial pathogenesis, lung cell biology and environmental exposures, inflammation, molecular genetics, pharmacological sciences, neuroendocrine and reproductive biology, developmental biology, tumor invasion and angiogenesis, cancer cell biology, neurodegenerative disorders and stroke, functional brain imaging and cognitive behavior, learning and memory, as well as population-based outcomes and epidemiology studies relevant to public health. Before transitioning back to the clinical clerkships, students brush up on their clinical skills by shadowing physician, conducting physicals, and presenting case studies at the monthly M.D./Ph.D. forums.

Medical School, Years Three and Four

After the writing and successful defense of the doctoral dissertation, students complete years three and four of medical school at the Morgantown campus.

Cancer Cell Biology

sweed@hsc.wvu.edu

Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

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 chemotherapy on the bone marrow microenvironment, stem cell regulation, leukemia/stromal interactions, effects of the extracellular matrix on angiogenesis and tumor cell invasion.
- **Mechanisms of Metastasis**: Role of proteases in cell motility, regulation of the actin cytoskeleton in invadopodia formation and migration, 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.
- **Heavy Metals and Cancer**: Effects of heavy metals on signal transduction pathways governing angiogenesis and tumor cell motility.
- **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, lipid kinase signaling in angiogenesis.
- **Cancer Bioinformatics**: Biomarker classification in cancer, predictive models of carcinogenesis.

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, 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.

Qualifying Examination

The qualifying examination consists of two parts. The written portion is conducted at the end of the first year of study and is an evaluation of the student’s performance and aptitude conducted by the rotation mentors the student had during their first year. Students are judged on their competency at the bench, in-depth knowledge of each research topic they worked on, overall enthusiasm, and potential for success at the Ph.D. level. After
successful completion of the second academic year, the students take an oral examination that consists of the writing and defense of the student's research dissertation project in the format of a NIH grant proposal. Upon successful completion of both elements of the qualifying examination, the student is admitted to candidacy for the degree of doctor of philosophy.

FACULTY
GRADUATE PROGRAM DIRECTOR
• Dr. Scott Weed - Ph.D. (Yale University)

BIOMEDICAL SCIENCES INTEGRATED CORE CURRICULUM
NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the second year. The plan of study developed by the graduate committee, in consultation with the student, is the definitive curriculum necessary for award of the graduate degree. The courses listed below include the required courses of the undifferentiated first year and a representation of electives necessary for the student to finalize their plan of study. As the student enters years 3-5 of their graduate education and transfers most of their study to work in the laboratory of their doctoral mentor, repetitive enrollments in research, seminars and colloquia are typical and will determine total hours necessary for degree completion.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BMS 700</td>
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<tr>
<td>BMS 705</td>
<td>Cell Structure/Metabolism</td>
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<td>Scientific Writing</td>
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<td>BMS 791</td>
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<tr>
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<td>Graduate Seminar</td>
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<tr>
<td>BMS 797</td>
<td>Research</td>
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<td>Graduate Colloquium</td>
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<td>Electives from at least TWO of the courses below</td>
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<tr>
<td>BMS 732</td>
<td>Cardiovasc/Respirat Biol</td>
<td>3</td>
</tr>
<tr>
<td>BMS 734</td>
<td>Cell Signaling Metabolism</td>
<td>3</td>
</tr>
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<td>BMS 736</td>
<td>Immunology &amp; Microbial Patho</td>
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</tr>
<tr>
<td>BMS 738</td>
<td>Muscle Structure/Function</td>
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<td>BMS 740</td>
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<tr>
<td>BMS 793</td>
<td>SPTP:Transltnl Cardiovsclr Sci</td>
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</table>

CANCER CELL BIOLOGY CURRICULUM
In addition to required courses in the common core (see Biomedical Sciences page for a list of these courses), students wishing to pursue the degree in Cancer and Cell Biology take the following courses. The degree requirements are defined for individual students in their plan of study, developed in conjunction with their mentor and doctoral committee.

<table>
<thead>
<tr>
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<td>CCB 701</td>
<td>Biochemical/Oncogenic Signaling</td>
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<td>CCB 702</td>
<td>Cancer Pharmacol/Therapeutics</td>
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<td>BMS 730</td>
<td>Cancer Cell Biology</td>
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<td>Required every semester beginning in Year 2:</td>
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<tr>
<td>CCB 705</td>
<td>Journal Club</td>
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<td>CCB 796</td>
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<tr>
<td>CCB 797</td>
<td>Research</td>
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SEMINAR
Students register for one credit of seminar each semester in residence. The student will present three seminars during their graduate study. One seminar will be the dissertation proposal which is the background and proposed research for the dissertation project.
JOURNAL CLUB

Students are required to enroll in Journal Club each semester. The course involves 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 work with a dissertation advisor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation advisor.

PH.D. CANDIDACY AND DISSERTATION

Admission to candidacy occurs following successful completion of the qualifying exams, which have both written and oral components. The written qualifying exam is given prior to beginning the second year of study. The dissertation proposal is completed by the end of the third year of study.

DISSERTATION PREPARATION, SEMINAR, AND DEFENSE

Students will not be allowed to defend their dissertation without a minimum of one paper in press in a peer-reviewed journal, on which the student is first author. The final examination for the PhD will consist of presenting a dissertation seminar before the advisory committee and others before continuing on with the dissertation defense before the advisory committee. Satisfactory performance in the oral defense will result in recommendation for granting of the PhD.

Cellular and Integrative Physiology

rbrock@hsc.wvu.edu

Degrees Offered

• Master of Science
• Doctor of Philosophy
• Joint Doctor of Medicine and Doctor of Philosophy

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. Our program provides a multidisciplinary approach to modern life sciences, drawing on faculty expertise from several departments and centers in the School of Medicine.

The program’s participating research faculty consists of scientists from the Center for Cardiovascular and Respiratory Sciences, NIOSH/CDC, Center for Neuroscience, and the Blanchette Rockefeller Neurosciences Institute. As a result, this multidimensional program includes activities in the following:

• Integrative and systems physiology
• Pathophysiology
• Pharmacology
• Translational research
• Small animal physiology, biomedical engineering
• Biophysics

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:

• Hemodynamics and Cardiovascular Control in Health and Disease
• Microcirculation and Cellular Biophysics
• Respiratory Function and Control in Health and Disease
• Neuroendocrine Control of Reproduction
• Neural Control of Sensory Physiology

The goal of the cellular and integrative physiology graduate program 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. 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.
Qualifying Examination

After successful completion of their second academic year, students take a two-part qualifying examination. The exam consists of an oral examination covering the major areas of physiology followed by a written and oral research defense of the student’s research proposal. Upon successful completion of the qualifying examinations, the student is admitted to candidacy for the degree of doctor of philosophy. Our graduates obtain excellent postdoctoral research training opportunities in prestigious laboratories and develop productive and satisfying careers in academics, industry, and government. Graduates have become departmental chairs, industrial department heads, university vice presidents, and entrepreneurs.

FACULTY

GRADUATE PROGRAM DIRECTOR
• Dr. Robert W. Brock - Ph.D. (University of Western Ontario)

MAJOR REQUIREMENTS

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<tr>
<th>Major Requirements</th>
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<td>BMS 705 Cell Structure/Metabolism</td>
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<td>BMS 710 Fund Integrated Systems</td>
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<td>BMS 730 Cancer Cell Biology</td>
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<td>BMS 732 Cardiovasc/Respirat Biol</td>
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<td>PSIO 746 Neurophysiology</td>
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<td>PSIO 792 Directed Study</td>
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CANDIDACY EXAMINATION

Admission to candidacy occurs following successful completion of the qualifying exams, which have both written and oral components. The written qualifying exam is given at the end of the second year of study. The dissertation proposal defense is completed no later than six months after the oral qualifying exam.
EXTERNAL EXAMINER
An external examiner is required for all final examinations. The external examiner is an expert in the dissertation content who is not affiliated with West Virginia University but is appointed as a voting member of the final examination committee only.

DISSERTATION PREPARATION, SEMINAR, AND DEFENSE
The final examination for the Ph.D. will consist of presenting a dissertation seminar before the advisory committee and others before continuing on with the dissertation defense before the advisory committee. Satisfactory performance in the oral defense will result in recommendation for granting of the Ph.D.

SUGGESTED PLAN OF STUDY

First Year

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<tr>
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<th>Hours</th>
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Second Year

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Third Year

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Fourth Year

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Total credit hours: 101

Clinical and Translational Science

Overview
Clinical and Translational Science is a high priority for the National Institute of Health, otherwise known as 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 (WC-CTSI) which is funded in part from the NIH Institutional Development Award Program for Clinical & Translational Research (IDeA-CTR). The CTSI, 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 and the strategic plan of the WV Health Sciences Center. An overview of recent projects undertaken by the WV-CTSI is available at the following web site: [http://www.wvctsi.org/Pages/](http://www.wvctsi.org/Pages/).
As part of the CTSI, educational programs at the graduate level prepare students to participate in clinical and translational research. WVU offers a M.S. in Clinical & Translational Science which is designed to develop the next generation of clinical and translational scientists through education and mentored research training. Typically, students 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. Mentored research opportunities exist with faculty in the Health Sciences schools (Pharmacy, Nursing, Dentistry, Medicine & Public Health). The School of Medicine has a new department of Clinical and Translational Science to facilitate the recruitment and support of physician-scientists, who may serve as faculty mentors to students. Information on the master’s degree may be found at the program web site: http://www.wvctsi.org/pages/Programs/Clinical-Research-Education-Mentoring-Career-Devel/M-S-in-Clinical-Translational-Science.

A 15 credit graduate certificate in Clinical & Translational Science is also available (see http://www.wvctsi.org/pages/Programs/Clinical-Research-Education-Mentoring-Career-Devel/Certificate-in-Clinical-Translational-Science). Certificate coursework may be applied to the master’s degree should the student wish to apply and be accepted for the M.S. degree program after certificate completion.

Application and Admission

Priority for the master’s degree is given to faculty, clinicians, and health professional students at the WVU Health Sciences Center. The application requires 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, and a Curriculum Vitae. 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 students 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 http://grad.wvu.edu/admissions. 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.

Exercise Physiology

DEGREES OFFERED

• Bachelor of Science
• Master of Science
• Doctor of Philosophy
• Joint Doctor of Medicine and Doctor of Philosophy

John M. Hollander, Ph.D., Associate Professor and Director of Doctoral Graduate Studies, jhollander@hsc.wvu.edu; http://www.hsc.wvu.edu/ResOff/PhDPrograms/Biomedical-Sciences/pages/Graduate-Programs/Exercise-Physiology; http://medicine.hsc.wvu.edu/ep/Education/Program-Curriculum

Stephen E. Alway, Ph.D., Professor and Chair and Director of Graduate Studies Master’s Program, salway@hsc.wvu.edu; http://medicine.hsc.wvu.edu/ep/Education/Master-of-Science

Randall W. Bryner, Ed.D, Associate Professor, Vice Chair, and Director of Undergraduate Education, rbryner@hsc.wvu.edu; http://medicine.hsc.wvu.edu/ep/Education/Bachelor-of-Science

INTRODUCTION

The WVU Exercise Physiology Program was established in the Health Sciences Center’s School of Medicine in July 1993. The program offers a four-year curriculum leading to a bachelor of science degree in exercise physiology, a two-year program leading to a masters of science (clinical or thesis track), and a doctoral program leading to a Ph.D. in exercise physiology.
The Bachelor of Science program meets the knowledge, skill, and aptitude (KSA) requirements for students to be eligible to take the American College of Sports Medicine Health and Fitness National Examination and the National Strength and Conditioning Association Certified Strength and Conditioning Specialist Examination.

WHAT IS AN EXERCISE PHYSIOLOGIST?

Exercise physiology is the study of the biological and biochemical processes associated with exercise and overload that affects the underlying function of cells and organ systems in the human body. Exercise physiology is a rapidly evolving field that is becoming increasingly important in the delivery of healthcare. Exercise physiologists work to prevent or delay the onset of chronic disease in healthy participants or to provide therapeutic or functional benefits to patients with known disease. Services may be offered in a variety of medical settings such as hospitals, rehabilitation centers, and out-patient clinics; in community, corporate, commercial, and university fitness and wellness centers; in nursing homes and senior citizens centers; as well as in research and academic settings.

Research by scientists trained in exercise physiology have greatly expanded our understanding of the ways in which exercise affects cell function. Advances in research in exercise physiology have provided a foundation for many types of medical treatment in areas that include but are not limited to cardiovascular diseases, diabetes, aging, obesity, and disuse atrophy. Employment opportunities are expanding and increase with experience and level of education.

Exercise physiologists are trained to evaluate people in the areas of cardiovascular fitness, muscular strength and endurance, flexibility, neuromuscular integration, and body composition. They are also trained to provide exercise programs based on the results of these evaluations that are designed to increase the functional capacity of the participants.

Exercise physiologists work with athletes, patients, and healthy participants in the areas of disease prevention in wellness programs or rehabilitation in hospital settings. The bachelor of science program is a preparatory program for graduate school. Graduates of this program continue their studies in exercise physiology, physical therapy, medicine, or other health-related careers. Graduates of the master of science or doctoral program find employment in corporate wellness, hospital rehabilitation, higher education, or other research settings. Graduates of our Ph.D. program have obtained postdoctoral positions in prestigious universities and medical schools. Additionally, they may be employed in a wide variety of private, community, state, and national agencies. Exercise physiology is an evolving field that is becoming increasingly important with the integration of preventive medicine into the healthcare system. Employment opportunities are expanding and increasing with experience and level of education.

FACULTY

PROFESSOR
• Stephen E. Alway - Ph.D. (McMaster University)
  Sarcopenia, Muscle Wasting, Diabetes and Muscle Injury

ASSOCIATE PROFESSORS
• Randall W. Bryner - Ed.D. (West Virginia University)
  Diabetes, Exercise, and Cancer
• John M. Hollander - Ph.D. (University of Wisconsin)
  Cardiovascular Research in Diabetes
• Guyton W. Hornsby Jr. - Ph.D. (Louisiana State University)
  Diabetes and Depression

ASSISTANT PROFESSORS
• Paul D. Chantler - Ph.D. (Liverpool John Moores University)
  Metabolic Syndrome, Vascular Biology, the Effects of Aging and CV Diseases on Arterial and Ventricular Structure and Function
• Gregory Dick - Ph.D. (University of Missouri School of Medicine)
  Regulation of Ion Channels in Vascular Smooth Muscle
• David A. Donley - M.S. (West Virginia University)
  Obesity, Vascular Function
• Jean L. McCrory - Ph.D. (Pennsylvania State University)
  Biomechanics in Obesity and Pregnancy
• I. Mark Olfert - Ph.D. (Loma Linda University)
  COPD, Vascular Function, Angiogenesis
• Emidio Pistilli - Ph.D. (West Virginia University)
  Muscular Dystrophy, Muscle Injury, Cytokines
• Sergiy Yakovenko - Ph.D. (University of Alberta)
  Neuromuscular Integration of Movement
ADJUNCT ASSOCIATE PROFESSORS
• Robert W. Brock - Ph.D. (University of Western Ontario)  
  Renal Function in Diabetes  
• Jefferson C. Frisbee - Ph.D. (University of Guelph, Canada)  
  Alterations to Microvascular Structure and Function During Metabolic Syndrome Development  
• Ming Pei - Ph.D. (Beijing University, China)  
  Stem Cells, Cartilage Repair

Doctor of Philosophy
The graduate program in exercise physiology fosters a high degree of collaboration among faculty with interests in clinical medicine and basic research.

The faculty in exercise physiology have research expertise in exercise-induced adaptations and pathological tissue remodeling associated with aging, diabetes, and cardiovascular disease. Current areas of inquiry include the following:

• Aging and sarcopenia in skeletal muscle  
• Muscle stem cells  
• Mitochondria dysfunction and pathophysiological mechanisms of diabetic cardiomyopathy  
• The Metabolic Syndrome and right-left heart function  
• Immunology/cytokine/myokine responses of muscle to exercise and disease  
• Reactive oxygen species development in cardiac and skeletal muscles with aging and diabetes  
• Biomechanical and motor control for gait in stroke or spinal cord injury  
• Regulation of ion channels in vascular smooth muscle in cardiovascular disease  
• Microvascular dysfunction with the metabolic syndrome  
• Cardiac and skeletal muscle growth and function  
• Physiologic basis of lung disease  
• Exercise-induced angiogenesis  
• Extracellular matrix regulation and gene expression  
• Stem cell biology and mechanical signal and tissue regeneration

Our Ph.D. program is intended to give exceptional students knowledge in basic medical and scientific areas to prepare them for careers as effective and knowledgeable researchers and teachers in the broad field of exercise physiology/kinesiology. In the Division of Exercise Physiology, these goals are achieved by several means. Formal coursework in the sub-disciplines of exercise physiology, physiology, biochemistry, molecular biology, pharmacology and neuroscience provides the student with the opportunity to develop a solid foundation in basic subject matter of medical sciences that can be applied to aspects of exercise and disease. The student’s knowledge base will be further strengthened by participation in elective courses offered within the division, selected courses offered by other departments within the School of Medicine, and by departments in other colleges of West Virginia University.

PH.D. STUDENTS ARE EXPECTED TO:
• Take an array of courses in exercise physiology, physiology, biochemistry, molecular biology, and pharmacology  
• Conduct independent research, analyze and interpret the data, and defend the finding’s conclusions  
• Learn the process of writing and submitting grants  
• Present and discuss their research findings at national and international scientific meetings  
• Develop and improve teaching skills  
• Submit their dissertation research for publication prior to graduation

The Division of Exercise Physiology actively engages in both basic science and clinically-based research, with an emphasis on cardiovascular disease, aging, obesity, and diabetes.

Required Research Participation
Because the doctorate is a research degree, students will be expected to be involved in research from the beginning of their programs. Doctoral students will participate in three research rotations with faculty in exercise physiology during the first two semesters of enrollment. Students are expected to choose a dissertation chair and a dissertation committee by the end of the first year of enrollment. Students should work with their dissertation advisor to design appropriate pilot studies and with that 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 exercise physiology.

Research is conducted throughout the doctoral program with a goal of having at least three manuscripts published or submitted to a journal for peer review before graduation. Students should strive to present their research findings at a minimum of one national/international meeting annually.
beginning no later than the second year of enrollment in the doctoral program. A minimum of one peer-reviewed manuscript that is derived from the student’s dissertation research must be published before graduation.

Sample Curriculum

Students will follow the first year integrated curriculum that is common to all Ph.D. students in basic biomedical sciences. Students will begin the curriculum program in year two. Students should complete the requirements for the comprehensive examination by the end of the year. Students should take one of (or both) EXPH 786 and EXPH 787. Students should sign up for EXPH 799 every fall and spring semester that they are enrolled in the program. The majority of the hours should be spent on research after year two.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
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<tbody>
<tr>
<td>EXPH 786</td>
<td>Musculoskeletal Biology</td>
<td>3</td>
</tr>
<tr>
<td>EXPH 787</td>
<td>Cardiopulmonary Physiology</td>
<td>3</td>
</tr>
<tr>
<td>EXPH 797</td>
<td>Research</td>
<td>1-15</td>
</tr>
<tr>
<td>EXPH 798</td>
<td>Dissertation</td>
<td>1-3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>3-6</td>
</tr>
<tr>
<td>EXPH 799</td>
<td>Graduate Colloquium</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Master of Science

The master of science program in exercise physiology prepares students for careers in adult fitness, hospital or corporate-based wellness programs, or cardiac rehabilitation. This is a two-year program. We have a clinical track and thesis track. Clinical track students take coursework, obtain experience in various medical settings (e.g., cath lab, bariatric surgery etc.), and work with populations with varied health problems (heart disease, diabetes, metabolic syndrome, arthritis, etc.). The thesis track is also a two-year program, and it is designed for students who wish to engage in an intensive research training experience in preparation for further training in a Ph.D., M.D., or similar postgraduate program.

Students specialize by completing a clinical internship or a research thesis.

CLINICAL TRACK COURSES

A minimum GPA of 3.0 is required in all courses
A grade of B or higher must be earned in all required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EXPH 670</td>
<td>Lab Techniques &amp; Methods 2</td>
<td>3</td>
</tr>
<tr>
<td>EXPH 671</td>
<td>Stress Testing</td>
<td>3</td>
</tr>
<tr>
<td>EXPH 672</td>
<td>Professional Field Placement</td>
<td>1-18</td>
</tr>
<tr>
<td>EXPH 673</td>
<td>Exercise Prescription</td>
<td>3</td>
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<tr>
<td>EXPH 680</td>
<td>Adv Clinic Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>EXPH 682</td>
<td>Research Design and Methods</td>
<td>4</td>
</tr>
<tr>
<td>EXPH 691</td>
<td>Advanced Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>EXPH 691A</td>
<td>Advanced Topics</td>
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</tr>
<tr>
<td>EXPH 691B</td>
<td>Advanced Topics</td>
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</tr>
<tr>
<td>EXPH 691C</td>
<td>Advanced Topics</td>
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</tr>
<tr>
<td>EXPH 691D</td>
<td>Advanced topics</td>
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<tr>
<td>EXPH 691E</td>
<td>Advanced Topics</td>
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<tr>
<td>EXPH 691F</td>
<td>Advanced Topics</td>
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<tr>
<td>EXPH 696</td>
<td>Graduate Seminar</td>
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<tr>
<td>EXPH 693C</td>
<td>Special Topics</td>
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<tr>
<td>PSIO 743</td>
<td>Fundamentals of Physiology</td>
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<tr>
<td>STAT 511</td>
<td>Statistical Methods 1</td>
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THESIS TRACK COURSES

A minimum GPA of 3.0 is required in all courses
A grade of B or higher must be earned in all required courses

<table>
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<tr>
<td>STAT 511</td>
<td>Statistical Methods 1</td>
<td>3</td>
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<tr>
<td>AGBI 514</td>
<td>Animal Biotechnology</td>
<td>4</td>
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<tr>
<td>EXPH 567</td>
<td>Exercise Physiology 2</td>
<td>4</td>
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<tr>
<td>EXPH 682</td>
<td>Research Design and Methods</td>
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</tr>
<tr>
<td>EXPH 697</td>
<td>Research</td>
<td>1-15</td>
</tr>
</tbody>
</table>
Immunology and Microbial Pathogenesis

jbarnett@hsc.wvu.edu

Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

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
  - Effects of man-made pesticides and herbicides on the immune system
  - Effects of heavy metals on the immune system
  - Biochemistry of inflammatory cytokines
  - Immune response in bacterial and viral diseases
  - Regulation of signal transduction in immune responses
  - Molecular aspects of cell signaling as it relates to cancer chemotherapy and cell growth
  - Peptide and DNA vaccines for contraception
- Microbiology
  - Physiology of pathogenic microbes
  - Microbial genetics
  - Mechanisms of bacterial pathogenesis
  - Chemotaxis and motility
  - Interactions between microbes and their hosts
  - Molecular mimicry and structure-function relationship of bacterial virulence factors
  - Microbial biofilms

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. A major emphasis of the graduate program is extensive laboratory research in microbiology, immunology, microbial pathogenesis, and cell biology. Each student will complete an original, in-depth research investigation. The overall aim of the program is to produce students capable of designing and doing independent research and teaching.

Program Requirements

Every student must take the required courses in the first year common core curriculum. Once students acquire a strong foundation in the core biomedical concepts, we offer flexibility in choosing advanced coursework in specific areas of interest. The remainder of the coursework is selected by the student and the Advisory Committee. Enrollment in MICB 796 Graduate Seminar and MICB 785 Immunol Micro Journal Club is required each semester that the student is in residence. All full-time students in this graduate program are required to participate in teaching at least one semester a year for two years (MICB 790 Teaching Practicum).

FACULTY

GRADUATE PROGRAM DIRECTOR
- John Barnett - Ph.D. (University of Louisville)

PROFESSORS
- Nyles Charon - Ph.D. (University of Minnesota)
- Christopher Cuff - Ph.D. (Temple University)
• Thomas Elliott - Ph.D. (University of California San Diego)
• Laura F. Gibson - Ph.D. (West Virginia University)
• Kenneth Landreth - Ph.D. (University of Washington)
• Rajesh Naz - Ph.D. (All India Institute of Medical Sciences, New Delhi)
• Vazhaikkurichi Rajendran - Ph.D. (University of Madras)

ASSOCIATE PROFESSORS
• Slawomir Lukomski - Ph.D. (University of Lodz, Poland)
• Joan C. Olson - Ph.D. (Oregon Health Sciences University)
• Rosana Schafer - Ph.D. (Temple University)
• James M. Sheil - Ph.D. (University of Kentucky)

ASSISTANT PROFESSORS
• Kathy Brundage - Ph.D. (University of Pennsylvania)
• Ivan Martinez - Ph.D. (University of Pittsburgh)
• Valerie Watson - M.S. (West Virginia University)

ADJUNCT PROFESSOR
• David Weissman - Ph.D. (Northwestern University)

ADJUNCT ASSISTANT PROFESSORS
• Brett J. Green - Ph.D. (University of Sydney)
• David Klinke - Ph.D. (Northwestern University)

Doctor of Philosophy
After completion of the first-year, integrated core curriculum, the doctoral student takes additional coursework as determined by the student’s Graduate Research Advisory Committee. Students will be expected to complete at least two additional graduate-level courses (numbered 700 or above) beyond the basic required courses taken as part of the common core curriculum in the first year of graduate school and those listed above. Where appropriate, coursework in related subjects such as computer science, cell biology, biochemistry, physical chemistry, and statistics is required. MICB 796 Graduate Seminar is a required course each semester that the student is in residence. The doctor of philosophy program requires a dissertation representing the results of an original research investigation and the passing of a written qualifying and final oral examination. The qualifying examination is given at the end of the first year of study. The final oral examination is given after completion of research and an acceptable dissertation. All full-time students are required to participate in teaching at least one semester a year for two years.

For a description of faculty research interests, guidelines for graduate study in the graduate program of immunology and microbial pathogenesis, or additional information, visit our website at, http://medicine.hsc.wvu.edu/micro/.

All applications are accepted electronically and must be submitted via the official WVU Graduate Education application, available via the link below. Please read all instructions carefully and be sure to submit your application materials directly to the Office of Admissions at:

Office of Admissions
One Waterfront Place
PO Box 6009 | Morgantown, WV 26506-6009
Phone: 304-293-2121 | Fax: 304-293-8832
Email: wvuadmissions@mail.wvu.edu

The admissions application is available here:
https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=wvugrad

BIOMEDICAL SCIENCES INTEGRATED CORE CURRICULUM
NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the second year. The plan of study developed by the graduate committee, in consultation with the student, is the definitive curriculum necessary for award of the graduate degree. The courses listed below include the required courses of the undifferentiated first year and a representation of electives necessary for the student to finalize their plan of study. As the student enters years 3-5 of their graduate education and transfers most of their study to work in the laboratory of their doctoral mentor, repetitive enrollments in research, seminars and colloquia are typical and will determine total hours necessary for degree completion..

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>BMS 700</td>
<td>Scientific Integrity</td>
<td>1</td>
</tr>
<tr>
<td>BMS 705</td>
<td>Cell Structure/Metabolism</td>
<td>1-4</td>
</tr>
</tbody>
</table>
### IMMUNOLOGY AND MICROBIAL PATHOGENESIS CURRICULUM

Students wishing to pursue doctoral education in immunology and microbial pathogenesis will advanced coursework and courses from the following list. The definitive list of graduation requirements is the graduate plan of study, developed by the student in conjunction with their mentor and graduate committee.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICB 790</td>
<td>Teaching Practicum</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>At least two additional Advanced courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Required each semester beginning in Year 2:</td>
<td></td>
</tr>
<tr>
<td>MICB 785</td>
<td>Immunol Micro Journal Club</td>
<td>1-2</td>
</tr>
<tr>
<td>MICB 796</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MICB 797</td>
<td>Research</td>
<td>1-15</td>
</tr>
</tbody>
</table>

### JOURNAL CLUB

Students are required to enroll in the Journal Club each semester. The course involves 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 work with a dissertation advisor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation advisor.

### PH.D. CANDIDACY AND DISSERTATION

Admission to candidacy occurs following successful completion of the qualifying exams, which have both written and oral components. The written qualifying exam is given at the end of the second year of study. The dissertation proposal is completed during the third year of study.

### DISSERTATION PREPARATION, SEMINAR, AND DEFENSE

The final examination for the PhD will consist of presenting a dissertation seminar before the advisory committee and others before continuing on with the dissertation defense before the advisory committee. Satisfactory performance in the oral defense will result in recommendation for granting of the PhD.

### Medicine

#### Degrees Offered

- Doctor of Medicine
- Joint Doctor of Medicine and Doctor of Philosophy
- Joint Doctor of Medicine and Master’s in Public Health
- Joint Doctor of Medicine Jurisprudence Degree
- Joint Doctor of Medicine and MBA
The degree of doctor of medicine (M.D.) 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 M.D./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. An M.D./M.P.H. program is available for those interested in public health issues.

The following information applies only to students in the School of Medicine who are enrolled in the prescribed curriculum which culminates in the M.D. 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 M.D. 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 and makes recommendations to the dean. If a student has been found to have an unsatisfactory performance in any of the required courses, dismissal from the school may be recommended. In selected circumstances, the committee may recommend remedial work of all or a portion of the curriculum. Exceptions may be made only upon recommendation of the committee. The application of rules on dismissal is not automatically changed by removal of incomplete (I) grades or by the repetition of courses in other medical courses.

It is the policy of the School of Medicine that the departments conduct examinations to help in the overall evaluation of student progress. In addition to the departmental examinations, other examinations may be conducted for other purposes. At the end of each year, a comprehensive examination, designed on an interdepartmental basis, may be required as a test of readiness for promotion.

A student may be subject to remedial work or dismissal on recommendation of the Committee on Academic and Professional Standards to the dean even though no unsatisfactory (U) grade has been received in a required course. Such an unusual 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, recommendations of the Committee on Academic and Professional Standards.

Grading Policy

All 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 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 work of the second or subsequent year until all courses for the year before have been completed successfully.
United States Medical Licensure Examination (USMLE)

All states require that physicians be licensed to practice medicine. 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. The School of Medicine requires a passing grade on Step I and Step II for promotion and graduation. A failing grade will delay progress and require remediation. Students are limited to three attempts on each step.

Step I is required upon successful completion of all basic science coursework. A passing grade in Step I is required for promotion into the clinical rotations. Step II (clinical knowledge and clinical skills) is required after successful completion of third-year clinical rotations. A passing score on Step II 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.

Professional Standards Review

All non-disciplinary matters are governed by the concept of academic due process.

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 M.D. Degree Program at West Virginia University School of Medicine, which is available at the School of Medicine Student Services website.

Departure from Scheduled Work

Medical students are registered for all prescribed courses for each semester 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.

Interuption of academic work must be approved by Student Services.

Admission Requirements

The student preparing for any career in the health professions must have a keen interest in the sciences.

The following courses are required for consideration of an application to medical school:

• English: six semester hours (1 writing intensive course can be substituted)
• Biological sciences (with lab): eight semester hours
• Inorganic chemistry (with lab): eight semester hours
• Biochemistry with lab will be accepted instead of one semester of organic
• Physiology, three hours is highly recommended
• Organic chemistry (with lab): eight semester hours
• Physics (with lab): eight semester hours
• Social or behavioral sciences: nine semester hours

*Biochemistry and Cellular and Molecular Biology* are strongly recommended. A total of ninety semester hours, exclusive of ROTC and general physical education, as well as 3 years of undergraduate education is required. Computer skills are required. All required courses must be passed with a grade of C or better. All required classes must be completed prior to January 1 of the year of admission.

An excess of credit hours or higher degrees does little to offset the disadvantage of low grades when being considered for admission to the School of Medicine. Repeating courses to raise the grade is discouraged. Applicants who have been subject to suspension from WVU or other medical schools can be admitted only in very exceptional cases and at the discretion of the Admissions Committee.

Pre-Admission Tests

The score of the Medical College Admissions Test (MCAT) is one of the factors used by the Admissions Committee in considering an applicant for admission. It is recommended that students take the MCAT during the spring of their junior year in college. The MCAT must be taken by September of the year of application. MCATS taken in January of the year of admission will not be considered. The dates for beginning and closure of application acceptances are available through AMCAS and on our website.
Information concerning the time and place of the test can be obtained from your premedical advisor or the Office of Admissions at the Health Sciences Center.

Application Procedure

West Virginia University School of Medicine uses a Holistic Review for each application.

The admission process is initiated by completing the online American Medical College Application Service (AMCAS) forms. They are online at http://www.aamc.org.

Application for admission in August should be made at the end of the previous school year. The last date for filing an application through AMCAS is November 1. The applicant should file as early as possible, making certain that recent MCAT scores, current transcripts, and letters of recommendation are available to the Admissions Committee.

Admission preference is given to West Virginia residents and those non-resident applicants who have strong ties to the state or verifiable interests in rural and primary care. In a holistic review of an applicant, not one specific factor is used to determine admission. However, careful consideration is given to those personal qualifications which apply to the study and practice of medicine. The criteria for admission include academic performance, course load, letters of recommendation, MCAT scores, motivation, interpersonal skills, community service, health care experiences, and a personal interview. An early decision program is available for those residents and non-residents with strong grades and MCATs who wish only to apply and attend WVU.

No applicant is admitted before an interview by the Admissions Committee. Residency status is determined by the Board of Governors Policy Bulletin #36. Interviews and consideration of applicants begin in September. Acceptances are made on a rolling basis.

If an applicant is denied admission or does not enroll after acceptance, he or she must reapply in the regular manner for consideration in a subsequent year.

Advanced Standing

Advanced standing positions are considered only in very exceptional circumstances and only to students currently attending a medical school accredited by the Liaison Committee on Medical Education (LCME). A request for transfer is usually considered during the second year. The application must be received no later than April 1. The applicant must present certification of good academic and professional standing in the school from which he/she is transferring. An official transcript of all prior medical school work and recommendations are required from all medical schools attended. In addition, successful results of Step I of the United States Medical Licensure Examination must be available before action on an application can be finalized.

Conditions Following Acceptance

An applicant accepted into the first year or in advanced standing is expected to meet all entrance requirements and satisfactorily complete all undergraduate/medical school work in progress. Failure to do so may result in the withdrawal of the acceptance by the Admissions Committee.

The student must be aware that furnishing, or causing to be furnished, false or incorrect information for the purpose of the School of Medicine application constitutes grounds for disciplinary actions, including, but not limited to, expulsion or revocation of the acceptance.

A criminal background check is required and must be successfully passed prior to matriculation. Certain convictions negate an offer to attend medical school at WVU.

Students in the School of Medicine agree to abide by the provision of an integrity code, which requires ethical and moral standards of conduct in all situations. Each student is required to return a signed statement to the Office of Student Services, indicating the student has read and understands the Student Professional and Academic Integrity Code of the West Virginia University School of Medicine. The code and copies of the statement are available on the Student Services website.

Prior to entering medical school, all students must complete certain prescribed immunization and diagnostic procedures. Personal health insurance is required.

Medical Education Program of Study

On the most recent restructuring of medical education curriculum, the most significant changes include the following:

1. Students begin clinical experiences early in their first year of medical school.
2. The basic science disciplines have been integrated.
3. Incoming medical students are required to lease a laptop computer to use in the curriculum that incorporates information and academic technology in the delivery of instruction.
With these principles in mind, the old semester (college-like) schedule of the independent discipline-based courses, for example, physiology, gross anatomy, biochemistry, neurobiology, microanatomy, epidemiology, and psychiatry has been replaced.

**CURRICULUM**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>BMP 741</td>
<td>Clinical Clerkship: Psychiatry</td>
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<tr>
<td>CCMD 712</td>
<td>Public Health</td>
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<td>Physcl Diagnos/Clincl Intgrt 2</td>
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<td>PATH 801</td>
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<tr>
<td>SURG 741</td>
<td>Clin Clerk Surg Yr Cours</td>
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</table>

**FIRST YEAR**

Medical students’ first year is a thirty-seven-week academic year divided into three blocks (sixteen weeks, fifteen weeks, and seven weeks). There are approximately twenty-four scheduled instructional contact hours per week. Each block contains three courses: a basic science multidisciplinary course, public health (epidemiology, biostatistics, and preventive medicine) in the fall, and physical diagnosis and clinical integration (large group alternating every other week with small groups). While physical diagnosis and clinical integration runs throughout the year, the basic science component changes each block. The first block (sixteen weeks) contains a multidisciplinary run course: human function (physiology, biochemistry, and genetics). Second block (fifteen weeks) consists of human structure (gross anatomy, embryology, and microanatomy: large group and laboratory). Third block (seven weeks) consists of multidisciplinary neuroscience (ten hours large group, laboratory, and small group). A weekly problem-based learning group is maintained throughout the first year. Students also complete a summer selective experience for a total of 3 credit hours.

**SECOND YEAR**

Medical students’ second academic year is thirty-four weeks. The schedules of course material from Microbiology and Immunology, Pathology, Pharmacology, and Physical Diagnosis and Clinical Integration-two courses are integrated by organ system. Each course maintains its autonomy with respect to assessment of student performance. This integrated, yet independent, approach assists students in finding remediation courses if they experience academic difficulty in any one particular discipline. In addition to the integration of the schedule of these four courses, there is an additional course, Behavioral Science and Psychopathology, in the fall and Health Care Ethics in the spring. There are approximately twenty-six scheduled instructional contact hours per week.
CLINICAL YEARS

The last two years of study take place in the clinics, hospitals, and community settings where students have the opportunity to help diagnose and treat patients under supervision of the faculty and staff. All students will serve a significant portion of the clinical years training at an off-campus or rural site.

THIRD YEAR

In the third year, the student must spend a designated period of time in each of the major clinical disciplines: internal medicine, surgery, pediatrics, obstetrics and gynecology, psychiatry and neurology, and family medicine for a total of 48 weeks. This gives the student a foundation in history-taking, examination, patient relations, laboratory aids, diagnosis, treatment, and use of the medical literature in the major clinical disciplines. One month is spent in rural primary care.

Approximately one-third of each class completes third and fourth year at the Charleston Division of the Robert C. Byrd Health Sciences Center of West Virginia University. A smaller number of students will also complete their third and fourth year at the Eastern Division Campus.

FOURTH YEAR

The fourth year is a partially structured and partially elective year. Each student works with an advisor to select the program best suited to the individual's abilities and goals. Courses selected are subject to approval of an associate dean Student Services.

Three months of the senior year are committed to required clerkships at the home campus which include one month in internal medicine, family general medicine, surgery, or pediatric sub-internship; one month of acute care, and one month of rural community care. The remaining five months of the senior year are elective at approved teaching sites.

A catalog is available online that lists the approved electives and selection guidelines at http://medicine.hsc.wvu.edu/ms4catalog

Elective time must be spent in LCME (Liaison Committee on Medical Education) or JCAH (Joint Council of American Hospitals) accredited institutions. Foreign rotations, regardless of sponsorship, are limited to one month credit.

SUGGESTED PLAN OF STUDY

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
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<td>8 BMP 741</td>
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</table>
Neuroscience
aberrebi@hsc.wvu.edu

Degrees Offered
• Doctor of Philosophy
• Joint Doctor of Medicine and Doctor of Philosophy

The interdepartmental neuroscience graduate program 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, and leadership. 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. The program faculty’s expertise spans all neuroscience sub-disciplines, including structural, cellular, molecular, and developmental. After completion of core coursework, students conduct an original research project culminating in a doctoral dissertation.

CURRENT RESEARCH AREAS INCLUDE THE FOLLOWING:

For the most up to date information regarding West Virginia University’s multidisciplinary neuroscience degree program and activities, please visit the web site at http://www.hsc.wvu.edu/wvucn/


Cognitive Neuroscience: sound recognition, spatial hearing and sensory integration using fMRI, use-dependent plasticity in motor cortex after stroke, neurogenic communication disorders.

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: airway innervation and asthma, structural and functional changes in the hypothalamus of seasonal breeders, neurobiological pathways controlling food intake and obesity, plasticity in the amygdala, development of new compounds to treat neurological and psychiatric disorders, developmental aspects of sleep and sleep 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, developmental neurobiology of anxiety disorders, development of synaptic connections in the neocortex, developmental genetics of rodent behavioral mutants; neural basis of pulmonary diseases, especially asthma and occupational/environmental diseases; mechanisms regulating microcirculation under pathophysiological conditions.

Seminars and Journal Clubs
Students develop skills in formal presentation, critical thinking, and scientific analysis by participating in neuroscience seminars and journal clubs.

FACULTY

GRADUATE PROGRAM DIRECTOR
• Albert Berrebi - Ph.D. (University of Connecticut)
Ph.D. Candidacy

To be admitted to candidacy for the Ph.D. degree, the student must pass a preliminary examination and present a plan for the dissertation research project for approval by the candidate’s advisory committee.

Ph.D. Dissertation

To be recommended for the Ph.D. degree, each student must satisfactorily complete a dissertation based on original research and defend the dissertation at an oral examination. Success in the dissertation research is the core of the degree.

BIOMEDICAL SCIENCES INTEGRATED CORE CURRICULUM

NOTE: The graduate curriculum is finalized with a plan of study once the mentor and laboratory have been selected in the second year. The plan of study developed by the graduate committee, in consultation with the student, is the definitive curriculum necessary for award of the graduate degree. The courses listed below include the required courses of the undifferentiated first year and a representation of electives necessary for the student to finalize their plan of study. As the student enters years 3-5 of their graduate education and transfers most of their study to work in the laboratory of their doctoral mentor, repetitive enrollments in research, seminars and colloquia are typical and will determine total hours necessary for degree completion.

<table>
<thead>
<tr>
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<td>BMS 705</td>
<td>Cell Structure/Metabolism</td>
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<td>BMS 710</td>
<td>Fund Integrated Systems</td>
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<tr>
<td>BMS 715</td>
<td>Molecular Genetics</td>
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<td>BMS 720</td>
<td>Scientific Writing</td>
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<td>BMS 791</td>
<td>ADTP:Biomedical Sci Rotations</td>
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<tr>
<td>BMS 796</td>
<td>Graduate Seminar</td>
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<td>BMS 797</td>
<td>Research</td>
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<tr>
<td>BMS 799</td>
<td>Graduate Colloquium</td>
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Electives from at least TWO of the courses below

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<td>BMS 732</td>
<td>Cardiovasc/Respirat Biol</td>
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<td>BMS 734</td>
<td>Cell Signaling Metabolism</td>
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<td>BMS 736</td>
<td>Immunology &amp; Microbial Patho</td>
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<td>BMS 738</td>
<td>Muscle Structure/Function</td>
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<td>BMS 740</td>
<td>Neuroscience 2</td>
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<tr>
<td>BMS 793</td>
<td>SPTP:Transltnl Cardiovscl Sci</td>
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</table>

NEUROSCIENCE CURRICULUM

The requirements for graduation with the doctoral degree are ultimately set forth in the student’s plan of study. These requirements will be determined in consultation with the doctoral mentor and approved by the graduate committee. As the student moves into years three through five of graduate coursework, multiple enrollments in the following courses are typical.

<table>
<thead>
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<td>NBAN 795</td>
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<td></td>
</tr>
<tr>
<td>NBAN 797</td>
<td>Research</td>
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</tbody>
</table>

JOURNAL CLUB

Students are required to enroll in the Journal Club each semester. The course involves 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 work with a dissertation advisor during time in the program. Students register for research credits each semester, and their performance is graded by their dissertation advisor.
PH.D. CANDIDACY AND DISSERTATION

Admission to candidacy occurs following successful completion of the qualifying exams, which have both written and oral components. The written qualifying exam is given at the end of the second year of study. The dissertation proposal is completed during the third year of study.

DISSERTATION PREPARATION, SEMINAR, AND DEFENSE

The final examination for the PhD will consist of presenting a dissertation seminar before the advisory committee and others before continuing on with the dissertation defense before the advisory committee. Satisfactory performance in the oral defense will result in recommendation for granting of the PhD.

Occupational Therapy

Degree Offered

• Master of Occupational Therapy (MOT)

Introduction

In the fall of 1993, the West Virginia 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 approximately fifty to fifty-five hours of prerequisite courses, which in most instances will take two years to fulfill.

The Profession of Occupational Therapy

Occupational therapy is a health and rehabilitation profession which provides services to people of all ages, and addresses physical, cognitive, psychosocial, sensory, communication, and other areas of performance in various contexts and environments in every day life activities that affect health, well-being, and quality of life (AOTA, 2004). Occupational Therapy is a caring profession designed to help people regain and build skills that are important for health, well-being, security, and happiness. The purpose of occupational therapy is to help individuals achieve a maximum level of independence and function through engagement in occupation in order to lead independent, productive, and satisfying lives. The focus is on assisting and enabling individuals to develop the capacity to function in all activities (occupations) of daily life, including self-care, work, and leisure. Hence the name occupational therapy.

Occupational therapists work in schools, hospitals, rehabilitation centers, home health agencies, skilled nursing homes, and private practice.

Accreditation Status

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 4720 Montgomery Lane, Suite 200, Bethesda, M.D. 20814-3449. ACOTE’s phone number, c/o AOTA, is (301) 652-AOTA. The OT 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. ACOTE information may be accessed at 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., 12 South Summit Avenue, Suite 100, Gaithersburg, MD 20877-4150. 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). Most 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 take the NBCOT examination and/or obtain a state license. For further information on NBCOT’s Character Review Program, interested parties can obtain information from the licensing board in that particular state.

What to Expect

Like many professional programs, the curriculum in the entry-level master’s occupational therapy program is fairly fixed and intense. The first professional year, which begins in the summer, will include courses in basic sciences relevant to the profession and practice of occupational therapy and introductory professional courses. The second and third professional years will deal more specifically with training in occupational therapy theory and practice as administered across a wide variety of settings. The professional curriculum includes two off-campus, full-time clinical experiences known as Level II Fieldwork. Students are financially responsible for transportation, housing, and meal expenses related to clinical assignments. Students in the program are required to participate in 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.

All OT coursework must be completed with a grade of “C” or higher. Further, OT students must maintain an OT coursework GPA of 3.0 or higher while in the OT Program.
Students in the OT Program must complete all didactic coursework and all fieldwork 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.

FACULTY

CHAIR

• Randy P. McCombie - Ph.D., OTR/L (Loyola University, Chicago)
  Chair, Program Director, Associate Professor

ASSOCIATE PROFESSORS

• Anne Cronin - Ph.D., OTR/L, FAOTA (University of Florida)
• Steve Wheeler - Ph.D., OTR/L (Virginia Commonwealth University)

ASSISTANT PROFESSORS

• Amanda Acord-Vira - MOT, OTR/L (West Virginia University)
• Amanda Kessler - M.S., OTR/L (West Virginia University)
  Fieldwork Coordinator
• Amy Burt - MOT, OTR/L (University of Pittsburgh)
• Brandy Brown - O.T.D., OTR/L (Chatham University)
• Diana Davis - M.A., OTR/L (West Virginia University)
• Donna Colaianni - Ph.D., OTR/L, CHT (Duquesne University)
• Garth Graebe - MOT, OTR/L (West Virginia University)

Admission Standards

Normally, students apply to the program during their second year of college. They must have a minimum of fifty to fifty-five hours of college credit which includes the prerequisites listed previously. Students who already have a degree in another field are also eligible to apply. All applicants must meet the following criteria:

• Minimum GPA of 3.0, including overall GPA and prerequisite GPA, is normally required (a higher GPA may be necessary given the competitive nature of the program).
• Minimum of sixty (60) hours of volunteer experience with at least two licensed occupational therapists (Students should contact the Division of Occupational Therapy to determine the type of experience required. Students should keep a record of dates/hours, locations, and names of supervising occupational therapists. Forms to record volunteer/shadowing experiences can be found online at http://www.hsc.wvu.edu/som/ot/)
• Recommendations are required from two Occupational Therapists who supervised the volunteer/shadowing experience. These OTs must be from 2 different clinical facilities. Specific recommendation forms are available at the time of application.
• Completion of all prerequisite courses by the end of the semester of application (normally, second semester of sophomore year) is required. All OT prerequisite courses and WVU GEC courses must be completed by June 1st prior to starting the OT Program.
• *note: some OT prerequisite courses have their own course specific prerequisites. For example, physics courses at WVU require that students have completed college algebra and trigonometry.
• IMPORTANT NOTE: Applicants must have completed all but a maximum of 2 OT prerequisite courses by the end of their Fall semester prior to the close of the Spring application period. Those applying to the OT Program will not be considered in the application review process if they are taking more than two OT prerequisite courses in the Spring semester prior to their anticipated start of summer classes in the OT Program. In other words, for those applying to the WVU OT Program, all but a maximum of two OT prerequisite courses must be fully completed by end of the Fall semester. Thus, applicants who are taking three or more OT prerequisite courses in the Spring semester will not be considered for acceptance into the OT Program. Applicants must plan on taking no more than two OT prerequisite courses in the Spring semester prior to the summer start of the Program for which they are applying. This requirement does not apply to WVU non-OT prerequisite general education (GEC) course requirements. Note: Courses with a required lab, including those courses that have labs with a separate course number, may be considered one course for purposes of this requirement, i.e., a course plus its lab equal one course. Students are strongly urged to contact the Division of OT for clarification or if they have any questions on this requirement.

Application forms are available online on the program homepage at www.hsc.wvu.edu/som/ot. Questions regarding application materials may be directed to The Division of OT at (304) 293-8828 or to the OT Program Academic Advisor at (304) 293-1690. Application materials are traditionally available November 15 through February 15. The deadline for submission of application materials is typically February 15. The official deadline will be posted on the occupational therapy website and printed in the admissions packet.

Course information for the master of occupational therapy degree can be found on the following website: http://www.hsc.wvu.edu/som/ot.
OC cATIONAL THERAPY CURRICULUM PLAN

**Note:** This curriculum plan is subject to change without notice. All OT courses must be passed with a grade of "C" or higher. Further, students must maintain a GPA of 3.0 or higher while in the OT Program.

### Undergraduate Requirements

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<td>Professional Foundations</td>
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<td>OTH 493I</td>
<td>SPTP: Anatomy/Kinesiology-OT</td>
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<td>Functional Movement Across Lifespan</td>
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<td>OTH 304</td>
<td>Physical Impairment &amp; Function 1</td>
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<td>OTH 307</td>
<td>Neurobiologic Foundations</td>
<td>4</td>
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<td>OTH 308</td>
<td>Evaluation Procedures</td>
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<td>OTH 321</td>
<td>Developmental Life Tasks</td>
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<td>Research Methods in OT</td>
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<td>Professional Decision-Making</td>
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<tr>
<td>OTH 417</td>
<td>Occupational Therapy-Geriatrics</td>
<td>3</td>
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<td>OTH 419</td>
<td>Professional Values</td>
<td>3</td>
</tr>
<tr>
<td>OTH 430</td>
<td>Occupational Therapy-Mental Hlth</td>
<td>3</td>
</tr>
<tr>
<td>OTH 432</td>
<td>OT Interventions-Mental Health</td>
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</tr>
<tr>
<td>OTH 435</td>
<td>Therapeutic Activity</td>
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<tr>
<td>OTH 440</td>
<td>Cognition and Perception in OT</td>
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<tr>
<td>OTH 480</td>
<td>Current Topics-Occupatnl Thrpy (2 Separate Classes)</td>
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<tr>
<td>OTH 497</td>
<td>Research: Capstone (2 classes (Yr I Fall, Yr II Spr))</td>
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<tr>
<td>OTH 310</td>
<td>Critical Reasoning in OT</td>
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<tr>
<td>OTH 387</td>
<td>Level 1 Fieldwork 4</td>
<td>1.2</td>
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<tr>
<td>OTH 493G</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>OTH 493H</td>
<td>Special Topics</td>
<td>1-6</td>
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<tr>
<td>OTH 493J</td>
<td>SPTP: Principles-Occ Science</td>
<td>1-6</td>
</tr>
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### Graduate Courses

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<thead>
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<td>Health Care Issues in OT</td>
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<tr>
<td>OTH 501</td>
<td>Management for OT Practice</td>
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<td>OTH 503</td>
<td>Occupational Therapy-Pediatrics</td>
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<td>OTH 520</td>
<td>OT in the Work Environment</td>
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<tr>
<td>OTH 540</td>
<td>Level 2 Fieldwork 1</td>
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</tr>
<tr>
<td>OTH 550</td>
<td>Education in OT Practice</td>
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<tr>
<td>OTH 551</td>
<td>OT in Prevention &amp; Wellness</td>
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</tr>
<tr>
<td>OTH 570</td>
<td>Advanced Theory in OT</td>
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</tr>
<tr>
<td>OTH 594</td>
<td>Sem: Professional Development</td>
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</tr>
<tr>
<td>OTH 640</td>
<td>Level 2 Fieldwork 2</td>
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</tr>
<tr>
<td>OTH 697</td>
<td>Research ((Yr III Fall 2 credits, Spr 2 credits))</td>
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### Suggested Plan of Study

The following Plan of Study is based on two years of college prerequisite work, described elsewhere, followed by three years of OT Coursework.
### Second Year

**Summer**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTH 301</td>
<td>3</td>
</tr>
<tr>
<td>OTH 493I</td>
<td>1-6</td>
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**Third Year**

**Fall**

<table>
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<th>Course</th>
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<tbody>
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<td>OTH 304</td>
<td>4</td>
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<tr>
<td>OTH 360</td>
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<tr>
<td>OTH 493G</td>
<td>1</td>
</tr>
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<td>OTH 493J</td>
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**Spring**

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<td>OTH 310</td>
<td>3</td>
</tr>
<tr>
<td>OTH 321</td>
<td>3</td>
</tr>
<tr>
<td>OTH 480</td>
<td>1</td>
</tr>
<tr>
<td>OTH 493A (Foundations Cog &amp; Perc)</td>
<td>1</td>
</tr>
<tr>
<td>OTH 384</td>
<td>2</td>
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</table>

**Fourth Year**

**Summer**

<table>
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<th>Course</th>
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</tr>
</thead>
<tbody>
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<td>OTH 401</td>
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<td>OTH 417</td>
<td>3</td>
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<td>OTH 430</td>
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<tr>
<td>OTH 493H</td>
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<td>OTH 387</td>
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**Fall**

<table>
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<tr>
<td>OTH 480</td>
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<td>OTH 497</td>
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**Spring**

<table>
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<td>OTH 405</td>
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**Fifth Year**

**Summer**

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<tr>
<td>OTH 500</td>
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<td>OTH 503</td>
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<td>OTH 520</td>
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<td>OTH 541</td>
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<td>OTH 570</td>
<td>3</td>
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<td>OTH 697</td>
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**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>OTH 501</td>
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<td>OTH 550</td>
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<tr>
<td>OTH 594</td>
<td>1</td>
</tr>
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<td>OTH 697</td>
<td>2</td>
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</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTH 640</td>
<td>1</td>
</tr>
</tbody>
</table>

**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.

**Pathologists Assistant**

pa-info@hsc.wvu.edu

Cheryl Germain, MHS, PA (ASCP), Program Director

Justin Falcon, MHS, PA (ASCP), Clinical Coordinator

Jen Iacobucci, Program Specialist
Degree Offered

- Master of Health Science

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 physicians’ 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 B.S. 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 laboratories including the following:

- Ruby Memorial/West Virginia University Hospital and Medical Examiner’s Office, Morgantown, WV
- Allegheny General Hospital, Pittsburgh, PA
- UPMC Health System including Magee-Womens Hospital, UPMC Presbyterian, UPMC Shadyside and Children’s Hospital, Pittsburgh, PA
- University of Pittsburgh Health Sciences Tissue Bank at UPMC Shadyside, Pittsburgh, PA
- Thomas Memorial Hospital, Charleston, WV
- St. Francis Hospital, South Charleston, WV
- St. Clair Hospital, Upper St. Clair, PA

The WVU pathologists’ assistant program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Avenue, Suite 670, Chicago, IL 60631-3415, (773) 714-8880.

Graduates are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

Pathologists’ Assistant Program Essential Functions

In accordance with Section 304 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.

1. Candidates for the master’s degree in health science/pathologists’ assistant must have somatic sensation (sense of touch) and the functional use of the senses of vision and hearing.
2. Candidates’ diagnostic skills will also be lessened without the functional use of the sense of equilibrium, smell, and taste.
3. Additionally, they must have sufficient motor function to permit them to carry out the activities described in the sections that follow.
4. 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.
5. A candidate for the master’s degree in health science/pathologists’ assistant must have abilities and skills which include observation, communication, motor, conceptual, integrative, quantitative, behavioral, and social. Technological compensation can be made for some disabilities in certain 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.

- Observation: The candidate must be able to observe demonstrations, procedures, and instruments in the basic sciences and clinical courses. Observation necessitates the functional use of the sense of vision and somatic sensation. It is enhanced by the functional use of the sense of smell.
- Communication: A candidate should be able to speak, hear, and observe people in order to elicit information and perceive nonverbal communications. A candidate must be able to communicate effectively and efficiently in oral and written form with members of the health care team.
Motor: Candidates should have sufficient motor function to perform laboratory procedures. This action requires the coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

Intellectual—conceptual, integrative, and quantitative abilities: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem-solving requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand spatial relationships of structures.

Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of his/her judgment, the prompt completion of all responsibilities, and the development of mature, sensitive relationships with patients and coworkers.

Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that should be assessed during admissions and education process. In its evaluation of applicants to the West Virginia University Pathologists’ Assistant program, the Admissions Committee will approach each applicant with the following questions in mind.

When an applicant does not meet a non-academic standard as defined above, 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?

---

**FACULTY**

**PROGRAM DIRECTOR AND ASSISTANT PROFESSOR**

- Cheryl Germain - M.H.S. (Quinnipiac University)

**MEDICAL DIRECTOR AND ASSISTANT PROFESSOR**

- Tiffany Harper - M.D. (West Virginia University)

**CLINICAL COORDINATOR**

- Justin Falcon - M.H.S.

**CLINICAL INSTRUCTORS**

- Carie Coffindaffer - M.H.S. (West Virginia University)
- Michelle Costas - M.H.S. (Quinnipiac University)

**Admission to the Pathologists’ Assistant Program**

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
- A GPA (cumulative and pre-requisite courses) of at least 3.0 on a 4.0 scale is preferred
- Submit two letters of recommendation (electronic submission only as part of the application process)
- Complete a shadowing experience with a certified PA in 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 (Paper admissions application forms are not accepted, except for Direct Admit candidates from the WVU MLS programs.)

REQUIREMENT

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<th>Description</th>
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<td>College Prep</td>
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<td>Pre-requisite Courses</td>
<td>8 Hr. Biology with laboratory</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>8 Hr. College Chemistry with lab</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>4 Hr. CHEM 231, Organic Chemistry: Brief course or 4 Hr.</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>Biochemistry with laboratory or equivalent</td>
</tr>
<tr>
<td>Pre-requisite Courses</td>
<td>4 Hr. Microbiology with laboratory</td>
</tr>
<tr>
<td>Grade Point Average preferred</td>
<td>3.0 cumulative</td>
</tr>
<tr>
<td>Grade Point Average preferred</td>
<td>3.0 in the pre-requisite courses</td>
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<tr>
<td>Recommendations**</td>
<td>Two letters of recommendation</td>
</tr>
<tr>
<td>Interview**</td>
<td>A personal interview with the Pathologists' Assistant Program Admission Committee</td>
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</table>

Shadowing or Work Experience

Applicant must complete a shadowing experience with a practicing pathologists’ assistant 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 director 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 medical laboratory science with an emphasis in either clinical 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 B.S. 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 May 31 of the senior year. Admission is contingent upon satisfactory completion of the baccalaureate degree.

Performance Standards

Students are required to maintain a semester 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 January 1 and May 31 for the class beginning the following January. The application fee is sixty dollars. Each applicant must arrange for transcripts to be sent directly from all undergraduate institutions attended to the Office of Admissions. When the application is complete, the file is sent to the Pathologists’ Assistant Admissions Committee. A complete admissions packet contains the following: completed application form and personal statement, official transcripts, two references**, and the essential functions form. Please note that the Office of Admissions does not handle reference letters. Each application requires two letters of reference (one from a professor and one from a laboratory professional with whom you have worked). An interview will be granted to qualified applicants after a review of the application packets.

SUGGESTED PLAN OF STUDY

First Year

<table>
<thead>
<tr>
<th></th>
<th>Hours Spring</th>
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<th>Hours</th>
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<td></td>
<td>6 PATH 801</td>
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</tr>
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<td>MICB 702</td>
<td>5 PATH 625</td>
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<td>5 PATH 728</td>
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<td>PATH 620</td>
<td>2 FIS 493B</td>
<td></td>
<td>3</td>
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<td>PATH 465</td>
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PATH 605

Second Year

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<td>PATH 631</td>
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<tr>
<td></td>
<td>9</td>
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<td></td>
<td>9</td>
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</table>

Total credit hours: 75

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.

Physical Therapy

Degree Offered

- Doctor of Physical Therapy (D.P.T.)

Nature of 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, a specialized body recognized by the Council on Postsecondary Accreditation. The most recent accreditation was awarded in November of 2011 for ten years. 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 (D.P.T.) 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 promotes optimal health and function through the application of scientific principles to prevent, identify, assess, correct, or alleviate acute or prolonged movement dysfunction. The goal of physical therapy is to help individuals fully participate in all societal roles according to their capabilities.

Demand for physical therapy services is expected to continue over the next ten years. 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 professional organization represents therapists on healthcare issues and is working hard 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, rehabilitation nurses, psychologists, social workers, dentists, podiatrists, and 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.

FACULTY

CHAIR

- MaryBeth Mandich - Ph.D. (West Virginia University)
  Neuroscience, Pediatric Physical Therapy

PROFESSORS

- John J. Petronis - M.S. (West Virginia University)
  Orthopedic Physical Therapy
- Bill Stauber - Ph.D. (Rutgers University)
The Admissions Process

Courses recommended for high school students in preparation for the preparatory and professional physical therapy program include, but are not limited to, biological sciences (e.g. anatomy, advanced biology, physiology, etc.), chemistry, algebra/trigonometry and/or pre-calculus, physics, and social sciences. Computer literacy is highly recommended.

Because individualized instruction in laboratories and clinics is an essential component of the professional physical therapy program, enrollment must be limited. The physical therapy program selects forty students per year for entrance into the professional phase of the program. All students who wish to enter the program must apply for admission, must have a bachelor’s degree, and have completed or be enrolled in the prerequisite coursework detailed below. These courses are available at most colleges.

The following requirements must be met to apply to the WVU Division of Physical Therapy:

- Applicant must have a minimum cumulative GPA of 3.0. Applicant must have a minimum prerequisite science GPA of 3.0 which includes two general biology courses, two chemistry courses, two physics courses, statistics, anatomy, and human physiology.
- Applicants must have a minimum of sixty hours of clinical volunteer or work experience obtained from two different physical therapy settings. 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.
- Applicants must submit three letters of recommendation. Two letters must be from physical therapists with whom the student has worked or volunteered. These letters must be from licensed physical therapists; the Admissions Committee will not consider letters from non-physical therapists or relatives. The third letter must be from a professor in their undergraduate major.
- The form for the letters of recommendation is available with the electronic application.

- Applicant must take the Graduate Record Examination (GRE). No minimum score is required. Please note the Institution Code for reporting is 7639, which is different from the code used for other programs at WVU. Using this code will result in your official scores being sent to PTCAS, who will verify your scores and send them to WVUPT.
- Applicant must have a minimum grade of C in each prerequisite course.
- Applicant must have completed or be enrolled in the required courses listed below:

<table>
<thead>
<tr>
<th>Pre-requisite Courses</th>
<th>WVU Course Number</th>
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<tr>
<td>Biology with lab (8 hours)</td>
<td>BIOL101/103, 102/104</td>
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<tr>
<td>Course</td>
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<tr>
<td>Chemistry with lab (8 hours)</td>
<td>CHEM 115, 116</td>
</tr>
<tr>
<td>Physics with lab (8 hours)</td>
<td>PHYS 101, 102</td>
</tr>
<tr>
<td>General psychology (3 hours)</td>
<td>PSYC 101</td>
</tr>
<tr>
<td>Developmental psychology (3 hours), should include development across the human lifespan</td>
<td>PSYC 241</td>
</tr>
<tr>
<td>Introductory statistics (3 hours), must include descriptive and inferential statistics</td>
<td>STAT 211 or ECON 225</td>
</tr>
<tr>
<td>Human anatomy (3 hours)*</td>
<td>ATTR 219 (recommended) or NBAN 205</td>
</tr>
<tr>
<td>Human physiology (3 hours)**</td>
<td>PSIO 241 or PSIO 441</td>
</tr>
</tbody>
</table>

* 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 three-credit-hour course in human anatomy, ideally with a laboratory. A two semester, eight-credit sequence of combined human anatomy and physiology may be accepted; however, comparative and animal anatomy does not count towards this pre-requisite.

** Human physiology course with laboratory is preferred. A two-semester, eight-credit sequence of combined human anatomy and physiology may be accepted; however, animal or biology will not count towards this pre-requisite.

It is recommended that prerequisite courses in human anatomy and human physiology be completed within two years prior to admission.

WVU maintains an online Course Equivalency System (CES) (http://admissions.wvu.edu/admissions/university-requirements/transfer_equivalency) that lists course equivalencies at many institutions in the state/region.

Applicants who complete any of their prerequisites outside of WVU should check the CES to see if each prerequisite course transfers directly to WVU as the required WVU course. If your undergraduate institution is not listed in the CES, or if you have taken prerequisite courses that transfer in as open credit or not equivalent, you must submit a photocopy of the catalog description of the courses in question. Upon receiving your application, the Admissions Committee may request that you submit a copy of the course syllabus for further review.

**Baccalaureate Preparation**

Applicants must have earned a baccalaureate degree or plan on completing a baccalaureate degree by May of the year of entering the program. Students may apply with a number of different baccalaureate degrees; however, they must complete the prerequisites for the physical therapy program as described no later than the spring semester of the year of application.

Students who want careers in healthcare may find that physical therapy fulfills their goals. A recommended baccalaureate preparation is in the field of exercise physiology. At WVU, exercise physiology majors will be able to obtain all of the prerequisites listed above during their course of study. Another common baccalaureate major may be biology. As discussed above, these are merely suggestions and students can apply from any institution of higher education with any degree background as long as they meet the aforementioned prerequisites.

**Additional Information and Updates**

For updates, be sure to periodically check the WVU Division of Physical Therapy website at http://www.hsc.wvu.edu/som/pt. You may also contact the Program Manager for the Physical Therapy Program, Brenda Wolfe, at bwolfe@hsc.wvu.edu.

**Applications**

The physical therapy program participates in the national electronic physical therapy standard application system, known as PTCAS (Physical Therapist Centralized Application Service). The website for PTCAS is http://www.ptcas.org. Typically, PTCAS opens for applications in mid-July. Well qualified applicants who consider WVU their first choice professional DPT program can apply for early decision through PTCAS in late summer. They would be notified of acceptance in September and if they accept a place in the class the decision is binding and the student cannot consider offers from other programs. The deadline for all other applications is December 1st of the year before entry. Applicants should receive initial communication regarding their application within thirty-five days of the deadline. Please check the program website frequently for any updates on deadlines or the admissions process. These are often adjusted on an annual basis.

**Physical Therapy (PT)**

Course information for the doctor of physical therapy degree can be found on the following website: http://www.hsc.wvu.edu/som/pt.

**PHYSICAL THERAPY CURRICULUM**

Note: This is subject to change without notice.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>PT 705</td>
<td>Intro to Evidence Based PT</td>
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<td>PT 706</td>
<td>Advanced Clinical Anatomy</td>
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<td>PT 705</td>
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<td>PT 706</td>
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<tr>
<td>PT 711</td>
<td>Professional Roles 1</td>
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<tr>
<td>PT 713</td>
<td>Lifespan Functional Movement</td>
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<td>PT 714</td>
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<td>PT 715</td>
<td>Evidence Based PT 1</td>
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<td>PT 716</td>
<td>Kinesiologic Foundations</td>
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<td>PT 718</td>
<td>Evaluation Procedures</td>
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<td>PT 720</td>
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<td>PT 723</td>
<td>Developmental Life Tasks</td>
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<td>PT 724</td>
<td>Exercise Foundations</td>
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<td>PT 725</td>
<td>Evidence-Based Physcl Thrpy 2</td>
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<td>PT 727</td>
<td>Neurobiologic Foundations</td>
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<td>PT 728</td>
<td>Physical Therapy Procedures 1</td>
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<td>PT 730</td>
<td>Clinical Education Symposium 1</td>
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<td>PT 732</td>
<td>Physical Therapeutic Agents 1</td>
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<td>PT 733</td>
<td>Cardiopulmonary PT</td>
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<td>PT 757</td>
<td>Neurologic Physical Therapy</td>
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<td>PT 761</td>
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<td>PT 762</td>
<td>Health Care Issues in PT</td>
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<td>PT 763</td>
<td>Pediatric Physical Therapy</td>
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<td>PT 765</td>
<td>Evidence-Based PT 5</td>
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<td>PT 767</td>
<td>Neurologic Physical Therapy 2</td>
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<td>PT 768</td>
<td>Prosthetics and Orthotics 1</td>
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<td>PT 770</td>
<td>Clinical Education Symposium 3</td>
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<td>PT 771</td>
<td>Survey of Niche PT Practice</td>
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<td>PT 780</td>
<td>Clinical Education 4</td>
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<td>PT 795</td>
<td>Independent Study</td>
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<td>PT 797</td>
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<td><strong>Total Hours</strong></td>
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### Second Year

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### Third Year

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<td>2 PT 770</td>
<td>2</td>
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<tr>
<td>PT 761</td>
<td>3 PT 780</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>PT 762</td>
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<tr>
<td>PT 771</td>
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</tbody>
</table>

Total credit hours: 121

*The professional curriculum begins in summer before first year. Students should plan for these courses to begin on or around June 1st.*
School of Nursing

Degrees Offered

- Bachelor of Science in Nursing
- Master of Science in Nursing
- Doctor of Nursing Practice
- Doctor of Philosophy in Nursing

Introduction

The mission of the WVU School of Nursing is to lead in improving health in West Virginia and 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 mandate 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, graduate, and post-master’s programs of study. The baccalaureate program (BSN) is available for high school graduates who aspire to a career in nursing (basic students) and to registered nurses (RN) who are licensed graduates of associate degree or diploma nursing programs seeking to continue their career development. In addition, a BS/BA to BSN program is available for the college graduate seeking a BSN.

The master of science in nursing (MSN) prepares graduates for advanced practice roles in rural primary health care. These roles include family nurse practitioner, pediatric nurse practitioner, neonatal nurse practitioner, geriatric nurse practitioner, women’s health nurse practitioner, and nursing leadership.

Post-graduate nurse practitioner certification programs in these role specialties are available for those who already have an MSN. The RN to MSN program also has these role specialties available.

The doctor of nursing practice (DNP) prepares advanced practice nurses who will practice at the highest level of professional nursing and will advance the application of nursing knowledge for the purpose of improving healthcare for diverse populations.

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

Initial accreditation was received with graduation of the first class in 1964. The baccalaureate program in nursing is fully accredited by the Commission on Collegiate Nursing Education, a national accrediting agency.

Fees, Expenses, Housing, Transportation, and Immunization

Students enrolling at the Morgantown campus pay fees which are detailed at http://adm.wvu.edu/home/cost_of_attendance. 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 http://www.hsc.wvu.edu/fin/ 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 master of science in nursing program must undergo a criminal background check prior to clinical courses. Felony convictions and serious misdemeanors 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: http://nursing.hsc.wvu.edu/Employment/Home/Scholarship-Opportunities.

Additional Information
Visit the School of Nursing website at http://www.hsc.wvu.edu/son. 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

ADMINISTRATION

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  Professor

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- Alvita Nathaniel - Ph.D. (West Virginia University)
  Interim Chair, Coordinator FNP Track

INTERIM ASSOCIATE DEAN FOR RESEARCH AND PH.D. EDUCATION
- Joanne Duffy - Ph.D., RN, FAAN (Catholic University of America)
  Endowed WVU Evidence-Based Practice Research Professor

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  Associate Professor

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  Clinical Assistant Professor

VICE CHAIR-MORGANTOWN DEPARTMENT
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  Associate Professor
- Karl Sand-Jecklin - Ed.D. (West Virginia University)
  Associate Professor
- Martha Summers - DNP (West Virginia University)
  Clinical Assistant Professor

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- Georgia Narsavage - Ph.D. (University of Pennsylvania)
- Mary Jane Smith - Ph.D. (University of New York)

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• Ilana Chertok - Ph.D. (Ben-Gurion University of the Negev)
• Pamela Deiriggi - Ph.D. (University of Texas)

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• Alvita Nathaniel - Ph.D., RNC, FNP (West Virginia University)

  Interim Associate Dean for Graduate Practice Program, Coordinator FNP Track, Associate Professor, Charleston Division

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  Vice Chair, Tenure Track

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  Vice Chair, Teaching Track

• Elisabeth Shelton - Ph.D. (Widener University)

  Associate Dean for Undergraduate Programs

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• Susan Coyle - Ph.D. (West Virginia University)
• Stacey Culp - Ph.D. (University of Michigan)

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• Jennifer Mallow - Ph.D. (West Virginia University)
• Dottie Oakes - M.S.N. (Duke University)

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• Susan Pinto - M.S.N. (West Virginia University)
• Aletha Rowlands - Ph.D. (University of Virginia)
• Gail O’Malley Van Voorhis - M.S.N. (West Virginia University)

  Director - LRC

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• Roger Carpenter - Ph.D. (West Virginia University)

  Chair, Morgantown Department

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• Gina Maiocco - Ph.D. (University of Utah)
• Elizabeth A. Minchau - M.S.N. (University of Pittsburgh)
• Billie Murray - M.S.N. (West Virginia University)

  Coordinator NNP Track

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• Martha Summers - DNP (West Virginia University)

  Vice Chair, Clinical Track

• Suzy Walter - Ph.D. (West Virginia University)

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• Tina Antell-Keener - Ph.D. (West Virginia University)

• Lori Constantine - DNP (West Virginia University)
• Dana Friend - M.P.H. (West Virginia University)
• Kathy Linkous - M.S.N. (Bellarmine College)
• Patricia Joyce Maramba - DNP (West Virginia University)
• Diana L. McCarty - M.S.N. (West Virginia University)
• Joanne E. Watson - M.S.N. (University of Virginia)
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• Ashley Wilson - M.S.N. (West Virginia University)

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• Dennelle Parker - M.S.N. (West Virginia University)
• Angel Smothers - M.S.N. (West Virginia University)
• Barbara Summers - M.S.N. (Marshall University)

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• Lisa Hardman - DNP (Rush University)

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  Interim Chair and Interim Associate Dean for Graduate Practice Programs, Coordinator FNP Track
• Barbara Nunley - Ph.D. (University of Kentucky)

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• Sheila Stephens - DNP (University of Kentucky)

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• Crystal Sheaves - M.S.N. (West Virginia University)

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• Barbara Koster - M.S.N. (West Virginia University)
• Evelyn Martin - M.S.N. (Marshall University)
• Teresa Ritchie - DNP (West Virginia University)

COORDINATOR-GSC/WVU JOINT NURSING PROGRAM
• Alison Witte - M.S. (University of South Africa)
  Glenville State College, Assistant Professor

WVU TECH DIVISION-ASSISTANT PROFESSOR
• Peggy Fink - M.S.N. (West Virginia University)
Doctor of Nursing Practice Online Program

Program Description

The School of Nursing offers a program of study leading to the doctor of nursing practice (DNP) degree. Courses are offered via web-based modalities in real time. Courses are scheduled in the late afternoon at times convenient for working students and may require that students attend special sessions in Morgantown or Charleston. Dates of the special sessions are made available in advance so that students can plan their schedules in order to attend.

The DNP program offers a curriculum that allows students to enroll on a part-time basis. Graduate students are strongly recommended to limit their credit load if they are also involved in full-time work. Students employed in full-time work should enroll for no more than six hours of doctoral level
coursework in any one term. Throughout the curriculum, students are guided in the processes of self-development aimed at pursuing excellence in scholarly and professional endeavors.

At the completion of the program, the Doctor of Nursing Practice (DNP) graduate will be able to practice at the highest professional level to:

1. Use science-based theories and concepts to:
   1. Determine the nature and significance of health and healthcare delivery phenomena
   2. Describe actions and advance strategies to improve healthcare delivery
   3. Develop, deliver, and evaluate theory-based healthcare

2. Demonstrate organizational and systems leadership that emphasizes the primacy of clinical work, continually improving health outcomes, and ensuring patient safety

3. Use analytical methods and research to develop best practices and practice guidelines and to facilitate the evaluation of systems of care that will improve patient outcomes

4. Use information systems and technology-based resources that support clinical and administrative decision-making, care systems, nurse-sensitive outcomes, and quality improvement

5. Assume a leadership role in the development of healthcare policy

6. Establish, participate, and lead interprofessional teams

7. Utilize a strong conceptual foundation in clinical prevention and population health

8. Base practice on biophysical, psychosocial, sociopolitical, cultural, economic, and nursing science and ethics

9. Develop, implement, and evaluate practice and care delivery models, which are politically and culturally appropriate

### Admissions Criteria

1. Satisfy WVU requirements for admission to graduate study
2. Have a cumulative grade-point average of 3.0 or higher on a 4.0 scale on the MSN degree
3. Have a current, unrestricted RN license in at least one state
4. Hold the degree of master of science in nursing from a school of nursing program accredited by CCNE or NLNAC
5. Hold advanced practice certification in an area recognized for announcement of Advanced Practice by the WV Board of Examiners for Registered Professional Nurses
6. A competitive Graduate Record Exam (GRE) Competitive GRE scores in previous years have included:
   - **Prior to** August, 2011: a minimum score of 400 each on the verbal and quantitative, a total of the two sections of 1000, and an analytical writing score of 4.0.
   - **After** August, 2011: a minimum score of 150 on the verbal section, 142 on the quantitative section, a total of the two sections of 300, and an analytical writing score of 4.0.
7. Meet program pre-requisites including transcripted courses equivalent to WVU courses in:
   - Advanced Pathophysiology
   - Advanced Pharmacotherapeutics
   - Advanced Health Assessment
   - Research Process

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at http://nursing.hsc.wvu.edu.

### Application Process

The application process should be completed by February 1. The beginning sequence of courses in the DNP program starts in the summer semester only. Applicants to the DNP program need to complete the following steps in order to be considered for admission:

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://app.applyyourself.com/AYApplicantLogin/II_ApplicantConnectLogin.asp?id=wvugrad)
2. Supplemental Application for admission to DNP in the School of Nursing and DNP application checklist (available on the School of Nursing website at: http://nursing.hsc.wvu.edu/pages/Academic-Programs/Doctor-of-Nursing-Practice/DNP-Supplemental-Application) submitted electronically
3. Request an official transcript of records from each college or university attended. Transcripts should be sent directly to WVU Health Science Center, Office of Admissions, P.O. Box 9815, Morgantown, WV 26506-9815.
4. Three letters of reference should address the applicant’s expertise in the advanced practice of nursing and likelihood for success in doctoral work. One letter should be from a former professor of the applicant.
5. Submit a current curriculum vitae and evidence of national certification.

6. Submit GRE scores.

7. Submit a writing sample answering the following question: Identify a clinical practice problem of interest to you. How can the Essentials of Doctoral Education for Advanced Nursing Practice prepare you to address this clinical problem? Please limit your sample to two type-written, double-spaced pages.

For more information, visit the website at http://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.

Note: Application criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at http://nursing.hsc.wvu.edu.

Nursing Core Courses for Doctor of Nursing Practice

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 702</td>
<td>Population Health Promotion</td>
<td>3</td>
</tr>
<tr>
<td>NSG 703</td>
<td>Theory of Practice</td>
<td>3</td>
</tr>
<tr>
<td>NSG 704</td>
<td>Health Care Leadership</td>
<td>3</td>
</tr>
<tr>
<td>NSG 707</td>
<td>Evidence Based Practice</td>
<td>3</td>
</tr>
<tr>
<td>NSG 708</td>
<td>DNP Role Seminar</td>
<td>2</td>
</tr>
<tr>
<td>NSG 709</td>
<td>Health Care Informatics</td>
<td>3</td>
</tr>
<tr>
<td>NSG 710</td>
<td>Health Policy/Resource Mangmnt</td>
<td>3</td>
</tr>
<tr>
<td>NSG 711</td>
<td>Health Care Focus</td>
<td>3</td>
</tr>
<tr>
<td>NSG 713</td>
<td>DNP Role Application</td>
<td>1</td>
</tr>
<tr>
<td>NSG 724</td>
<td>Health Research Statistics 1</td>
<td>3</td>
</tr>
<tr>
<td>NSG 745</td>
<td>Clinical Immersion</td>
<td>1-8</td>
</tr>
<tr>
<td>NSG 760</td>
<td>DNP Clinical Project</td>
<td>3</td>
</tr>
<tr>
<td>NSG 763</td>
<td>DNP Capstone</td>
<td>1-6</td>
</tr>
</tbody>
</table>

TOTAL CREDITS: 40-44 (depending on numbers of clinical hours required at DNP level and length of time for capstone)

Doctor of Philosophy

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 http://www.hsc.wvu.edu/son. 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

Admission Criteria

1. Transcript of a nursing degree at the baccalaureate level or higher from a nationally accredited nursing program or equivalent.
2. Evidence of current license to practice nursing in the United States or home country.
3. Transcript of master’s coursework from an accredited program.
4. A grade of B or higher in graduate-level statistics and research courses.
5. Cumulative GPA of 3.0 in master’s degree work.
6. Competitive achievement on the GRE within the past five years:
   • For GRE scores earned prior to August 2011: a minimum score of 400 each on the verbal and quantitative sections, a total of the two section scores of at least 1000, and an analytical writing score of 4.0.
   • For GRE scores earned after August 2011: a minimum score of 150 on the verbal section, a minimum score of 142 on the quantitative section, a total of the two section scores of at least 300, and an analytical writing score of 4.0.
7. Examples of scholarly work. This can be a paper from master's work, a submitted article, or some other professional writing.

8. Interview to determine congruence between the applicant's career goals and program objectives and between the applicant's research interests and those of the faculty.

**Note:** Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at [http://www.hsc.wvu.edu/son](http://www.hsc.wvu.edu/son).

### Application Process

The application process is on a rolling basis. The beginning sequence of courses in the PhD in nursing program starts in the summer semester only. Class size and progression plans may be limited based on available faculty resources and space. Applicants to the PhD in nursing program need to complete the following steps in order to be considered for admission:

1. Complete two application forms as indicated below and return to the appropriate offices by the deadline
   - Application for Admission to Graduate Studies (available at: [http://apply.wvu.edu/](http://apply.wvu.edu/))
   - Supplemental Application of Admission to PhD in the School of Nursing and PhD application checklist (available at [http://hsc.wvu.edu/son](http://hsc.wvu.edu/son)).

   Students should be certain that all materials are sent to the following:
   WVU School of Nursing, Student Services Office
   P.O. Box 9600
   Morgantown, WV 26506-9600

2. Request an official transcript of records from each college or university attended. Transcripts and records should be sent directly to the following:
   WVU Health Science Center Office of Admissions
   P.O. Box 9815
   Morgantown, WV 26506-981

3. Send three letters of recommendation directly to the following:
   WVU School of Nursing Student Services Office
   P.O. Box 9600
   Morgantown, WV 26506-9600

   Letters should address the applicant’s expertise in nursing, skills in research and scholarly writing, and likelihood for success in doctoral work. One letter should be from a former professor of the applicant.

4. Submit a current curriculum vitae.

5. Submit one scholarly essay, describing the applicant’s research interests and career goals.

### Degree Requirements

The Ph.D. program is offered part-time in a combined in-person and distance learning format. In-person components are offered during the summer where students are required to attend class two days a week for six weeks and then complete the courses online during the remainder of the summer. Five to six credits of coursework must be taken for 3 summers in addition to regular semester online courses prior to dissertation. Students must also successfully complete a qualifying examination, participate in a monthly virtual journal club (during Fall and Spring semesters only) and attend two in-person scholarly events (2 days each Fall and Spring) throughout the program.

Three curricular components comprise the fifty-four credits of post-master’s coursework. These are core, cognate/electives, and research.

### Curriculum Requirements

**Core Requirements**

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td>NSG 704</td>
<td>Health Care Leadership</td>
<td>3</td>
</tr>
<tr>
<td>NSG 727</td>
<td>Contemporary Nursing Science</td>
<td>2</td>
</tr>
<tr>
<td>NSG 728</td>
<td>Theoretical Basis of Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NSG 732</td>
<td>Seminar in Nursing Scholarship</td>
<td>2</td>
</tr>
<tr>
<td>NSG 735</td>
<td>Principles: Nursing Education</td>
<td>3</td>
</tr>
<tr>
<td>NSG 736</td>
<td>Advanced Health Policy/Ethics</td>
<td>3</td>
</tr>
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</table>

**Cognate/Electives**

2 - 3 credit courses. One course must be an advanced methodology course and at least one of the two courses must be taken outside the School of Nursing.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NSG 724</td>
<td>Health Research Statistics 1</td>
<td>3</td>
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</table>

Research
NSG 725  Health Research Statistics 2  3
NSG 729  Quantitative Research Methods  4
NSG 731  Qualitative Research Methods  3
NSG 733  Research Grant Development  2
NSG 734  Use of Data  3
Three semesters of:  3-9
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NSG 781</td>
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<tr>
<td>NSG 783</td>
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<tr>
<td>NSG 795</td>
<td></td>
</tr>
<tr>
<td>NSG 797</td>
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</tbody>
</table>
Total Hours: 46-60

Academic Progression Standards

- Nursing courses are taken in the sequence specified in the School of Nursing PhD Progression Plan. All prerequisites from preceding semesters must be completed prior to registration for new courses.
- Students must maintain a 3.0 GPA to progress in the program and must achieve an overall academic GPA of 3.0 in all coursework to be applied toward the PhD degree.
- Students may carry forward one C grade in any course to be applied toward the PhD degree. A second C will result in dismissal from the program.
- Students with a grade of D or F in any course will be dismissed from the program.
- The grade of "I" is given when the instructor believes that the coursework is unavoidably incomplete or that a supplementary examination is justifiable. Resolution of the grade of "I" will occur in the semester following its issuance and before any graduate degree can be awarded. If the "I" grade is not removed within the following semester, the grade of "I" is treated and "F" (failure). When an "I" grade is replaced, the grade point average is recalculated on the basis of the new grade.

Suggested Plan of Study

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<th>First Year</th>
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<tbody>
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<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 NSG 704</td>
<td>3 NSG 728</td>
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<td>NSG 735</td>
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<td>3 NSG 725</td>
<td>3 NSG 732</td>
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<td>Fall</td>
<td>Hours</td>
<td>Summer</td>
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<tr>
<td></td>
<td></td>
<td>4 NSG 781</td>
<td>1-3 NSG 731</td>
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<tr>
<td>NSG 729</td>
<td></td>
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<td>3</td>
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<tr>
<td>NSG 727</td>
<td></td>
<td>2 Cognate</td>
<td>3 NSG 736</td>
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<th>Third Year</th>
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<td>Fall</td>
<td>Hours</td>
<td>Summer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 NSG 783</td>
<td>1 NSG 733</td>
</tr>
<tr>
<td>Cognate</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>NSG 781</td>
<td></td>
<td>1-3 Cognate (if not already complete)</td>
<td>NSG 734</td>
</tr>
<tr>
<td></td>
<td>5-15</td>
<td></td>
<td>1-3</td>
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<tr>
<td>NSG 795</td>
<td>1-9 NSG 797</td>
<td>1-9 NSG 781</td>
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<tr>
<td></td>
<td>2-10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours: 46-68

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.

Master of Science in Nursing Online Program Description

MSN Online Program

The School of Nursing offers a program of study leading to the master of science in nursing (MSN) degree. The major areas of study available in advanced practice nursing are family nurse practitioner (FNP), pediatric nurse practitioner (PNP), neonatal nurse practitioner (NNP), women's health nurse practitioner (WHNP), and nursing leadership. The school also offers post-master's programs in these areas for those who already hold an MSN.
The programs are offered at the university’s main campus in Morgantown and at the Charleston Division. Courses are offered via web-based modalities in real time. Courses are scheduled in the late afternoon at times convenient for working students and may require that students attend special sessions in Morgantown or Charleston. Dates of the special sessions are made available in advance so that students can plan their schedules in order to attend.

The master’s program offers a curriculum that allows students to enroll on a part-time or full-time basis. Graduate students are strongly recommended to limit their credit load if they are also involved in full-time work. Students employed in full-time work should enroll for no more than six hours of master’s-level coursework in any one term. Throughout the curriculum, students are guided in the process of self-development aimed at pursuing excellence in scholarly and professional endeavors. The program allows flexibility within the basic curricular structure through the individualization of learning experiences. The pattern and duration of the student’s study plan is determined in consultation with a faculty advisor and is based upon the student’s background and goals. The forty-four credit program can be completed in five semesters (including a summer session) of full-time study. The average full-time load is nine to twelve credit hours per semester. Part-time options are also available.

Graduates meet all requirements to sit for the national certification examination in their major area of family nurse practitioner, pediatric nurse practitioner, neonatal nurse practitioner, women’s health nurse practitioner, or nursing leadership. 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.

Goals of the Master’s Program:

1. Synthesize theories and research findings and broad-based perspectives for application in the advanced practice of nursing
2. Utilize systematic inquiry and refined analytical skills in the provision of health care services
3. Create a relationship with clients that builds and maintains a supportive and caring partnership
4. Articulate viewpoints and positions in order to improve the quality of healthcare delivery and outcomes of successful care
5. Consult and collaborate in interdisciplinary and interagency endeavors to advance culturally sensitive healthcare to clients, groups, and communities
6. Integrate prior and current learning as a basis for growth and accountability in enacting the role of the advanced practice nurse

Application Process

The application process should be completed by February 1. The beginning sequence of courses in the MSN program starts in the fall semester only. 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. Complete two application forms as indicated below and return to the appropriate offices by the deadline
2. Application for Admission to Graduate Studies (available at https://app.applyyourself.com/AY ApplicantLogin/fI_AppliedConnectLogin.asp?id=wvugrad)
3. Supplemental Application for Admission to Graduate Study in the School of Nursing (available on the School of Nursing website at http://nursing.hsc.wvu.edu/pages/Academic-Programs/Master-of-Science-in-Nursing-Program/MSN-Post-MSN-Supp-Application) submitted electronically
4. Request an official transcript of records from each college or university attended
   Transcripts and records should be sent directly to:
   WVU Health Science Center Office of Admissions
   P.O. Box 9815
   Morgantown, WV 26506-9815
5. Submit three letters of recommendation electronically
6. Request a copy of Graduate Record Exam or Miller Analogies
   Test scores be sent to:
   WVU Health Science Center Office of Admissions
   P.O. Box 9815
   Morgantown, WV 26506-9815
7. Submit a current curriculum vita or resume.
8. Submit a typewritten essay describing professional goals (limited to two type-written, double-spaced pages).

The parameters used for review of applicants include academic achievement, Graduate Record Exam or Miller Analogies Test scores, career goals, and recommendations.

For more information, visit the website at http://nursing.hsc.wvu.edu, or write to West Virginia University School of Nursing, P.O. Box 9600, Morgantown, WV 26506-9600, or call (304) 293-1386.
Admission Criteria

1. Satisfy WVU requirements for admission to graduate study
2. Have a cumulative GPA of 3.0 or higher on a 4.0 scale on all college work attempted
3. If taken before August, 2011: a minimum score of 350 each on the verbal and quantitative, with a minimum total of the two sections of 800, and an analytical writing score of 3.0.
   If taken after August, 2011: a minimum score of 143 on the verbal section, 138 on the quantitative section, a minimum total of the two sections of 286, and an analytical writing score of 3.0.
   OR a minimum Miller Analogies Test score of 400.
4. Have a current, unrestricted RN license in at least one state
5. Hold a bachelor of science degree in nursing from a school accredited by NLNAC or CCNE (A bachelor of science degree in nursing is mandatory.)
6. Have completed three credits of undergraduate statistics acceptable for transfer with a grade of C or better
7. Have completed a health assessment course, including physical examination skills, with a grade of B or better that is acceptable for transfer
8. Submit three letters of reference
9. Submit a typewritten essay describing professional goals (limited to two type-written, double-spaced pages) (A bachelor of science degree in nursing is mandatory.)

Applicants may be considered for provisional admission on an individual basis. The specific provisions which must be met for progression to regular status will be noted in the admission letter.

Note: Admission criteria and applications are subject to change. Please see the School of Nursing website for the most up-to-date criteria at http://nursing.hsc.wvu.edu.

Curriculum Requirements

In order to progress in the Master of Science in Nursing curriculum, a student must meet the following performance standards:

1. Achieve an overall academic Grade Point Average of at least 3.0 in all work attempted in the Master’s Program.
2. Carry forward only one C grade in a nursing course. A second C in a nursing course will result in dismissal from the program.
3. Maintain a 3.0 GPA. A student who falls below 3.0 on 9 or more credit hours will be placed on academic probation and has one semester to bring up the GPA to the 3.0 requirement.
4. Repeat only one nursing course and only one time.
5. Earn a letter grade (A, B, C) on all required courses. A grade of D or F in any course results in dismissal from the program.

Core Courses - Master's Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 622</td>
<td>Theory &amp; Disciplined Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>NSG 623</td>
<td>Concepts of Advanced Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NSG 624</td>
<td>Advanced Pathophysiology *</td>
<td>4</td>
</tr>
<tr>
<td>NSG 626</td>
<td>Lifespan Health Promotion *</td>
<td>2</td>
</tr>
<tr>
<td>NSG 627</td>
<td>Research/Systematic Analysis</td>
<td>5</td>
</tr>
<tr>
<td>NSG 628</td>
<td>Health Policy/Finance/Ethics</td>
<td>3</td>
</tr>
<tr>
<td>NSG 629</td>
<td>Advanced Practice/Families</td>
<td>2</td>
</tr>
<tr>
<td>NSG 685</td>
<td>Clinical Scholarship</td>
<td>1</td>
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</table>

* Neonatal NP Students will take NSG 654 and NSG 655 in place of NSG 624 and NSG 626.

Family NP Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NSG 631</td>
<td>Advanced Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>NSG 632</td>
<td>Advanced Assessment</td>
<td>2</td>
</tr>
<tr>
<td>NSG 633</td>
<td>Primary Care: Rural Families 1</td>
<td>3</td>
</tr>
<tr>
<td>NSG 634</td>
<td>Primary Care: Rural Families 2</td>
<td>4</td>
</tr>
<tr>
<td>NSG 635</td>
<td>Rural Family Hlth Practicum 1</td>
<td>5</td>
</tr>
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<td>NSG 636</td>
<td>Rural Family Hlth Practicum 2</td>
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Pediatric NP Courses

<table>
<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NSG 631</td>
<td>Advanced Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>NSG 644</td>
<td>Pediatric Primary Care 2</td>
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<td>NSG 645</td>
<td>Pediatric Practicum 1</td>
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<td>NSG 646</td>
<td>Pediatric Practicum 2</td>
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<tr>
<td>NSG 647</td>
<td>Assessment/Pediatric Care 1</td>
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Neonatal NP Courses

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<td>NSG 631</td>
<td>Advanced Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>NSG 654</td>
<td>Neonatal Pathophysiology</td>
<td>4</td>
</tr>
<tr>
<td>NSG 655</td>
<td>Neonatal Health Promotion</td>
<td>2</td>
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<tr>
<td>NSG 663</td>
<td>Neonatal Assessment/Care 1</td>
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<tr>
<td>NSG 664</td>
<td>Neonatal Care 2</td>
<td>4</td>
</tr>
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<td>NSG 665</td>
<td>Neonatal Practicum 1</td>
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<td>NSG 666</td>
<td>Neonatal Practicum 2</td>
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Women’s Health NP Courses

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<tbody>
<tr>
<td>NSG 683</td>
<td>Primary Care:Women/Girls 1</td>
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</tr>
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<td>NSG 684</td>
<td>Primary Care:Women/Girls 2</td>
<td>4</td>
</tr>
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<td>NSG 686</td>
<td>WHNP Practicum 1</td>
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Leadership Courses

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<tr>
<td>NSG 610</td>
<td>Leadership in Health Care</td>
<td>3</td>
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<tr>
<td>NSG 611</td>
<td>System Based Decision Making</td>
<td>2</td>
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<tr>
<td>NSG 612</td>
<td>Leading Health System Change</td>
<td>4</td>
</tr>
<tr>
<td>NSG 613</td>
<td>Managing Health Care Resources</td>
<td>3</td>
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<tr>
<td>NSG 614</td>
<td>Health Care Informatics</td>
<td>3</td>
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<tr>
<td>NSG 615</td>
<td>Program Planning/Evaluation</td>
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<tr>
<td>NSG 617</td>
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</tr>
<tr>
<td>NSG 618</td>
<td>Leadership Practicum 2</td>
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</tr>
<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>22-28</strong></td>
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</tbody>
</table>

Post-Master’s Certificate Program

The post-master’s certificate program requires a minimum of nineteen credit hours. The program prepares master’s prepared nurses to sit for the national certification examination in the selected area of focus (family nurse practitioner, pediatric nurse practitioner, neonatal nurse practitioner, women’s health nurse practitioner, and nursing leadership). To be considered for admission, the applicant must have a master’s degree in nursing from a program accredited by NLNAC or CCNE with a minimum cumulative GPA of 3.0 or better and an unrestricted RN license in at least one state. Students in the post-master’s certificate program must maintain a 3.0 GPA and receive satisfactory clinical ratings to progress. Each student’s program will be individualized based on educational and experiential background. For those interested in a Nurse Practitioner Post-MSN certificate, prerequisites to registration for the required clinical courses in the program are evidence of competence in advanced pathophysiology, advanced pharmacotherapeutics, and health promotion.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at http://nursing.hsc.wvu.edu.

The required courses for post-master's certification are as follows:

Required Courses for Post Master’s Family Nurse Practitioner

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NSG 632</td>
<td>Advanced Assessment</td>
<td>2</td>
</tr>
<tr>
<td>NSG 633</td>
<td>Primary Care: Rural Families 1</td>
<td>3</td>
</tr>
<tr>
<td>NSG 634</td>
<td>Primary Care: Rural Families 2</td>
<td>4</td>
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<tr>
<td>NSG 635</td>
<td>Rural Family Hlth Practicum 1</td>
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**Required Courses for Post Master’s Pediatric Nurse Practitioner**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>NSG 644</td>
<td>Pediatric Primary Care 2</td>
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<td>NSG 645</td>
<td>Pediatric Practicum 1</td>
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<td>NSG 646</td>
<td>Pediatric Practicum 2</td>
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<tr>
<td>NSG 647</td>
<td>Assessment/Pediatric Care 1</td>
<td>5</td>
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<tr>
<td><strong>Total Hours</strong></td>
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**Required Courses for Post Master’s Neonatal Nurse Practitioner**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NSG 654</td>
<td>Neonatal Pathophysiology</td>
<td>4</td>
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<tr>
<td>NSG 655</td>
<td>Neonatal Health Promotion</td>
<td>2</td>
</tr>
<tr>
<td>NSG 663</td>
<td>Neonatal Assessment/Care 1</td>
<td>5</td>
</tr>
<tr>
<td>NSG 664</td>
<td>Neonatal Care 2</td>
<td>4</td>
</tr>
<tr>
<td>NSG 665</td>
<td>Neonatal Practicum 1</td>
<td>5</td>
</tr>
<tr>
<td>NSG 666</td>
<td>Neonatal Practicum 2</td>
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<td><strong>Total Hours</strong></td>
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**Required Courses for Post Master’s Women’s Health Nurse Practitioner**

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<td>NSG 632</td>
<td>Advanced Assessment</td>
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<tr>
<td>NSG 683</td>
<td>Primary Care:Women/Girls 1</td>
<td>3</td>
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<tr>
<td>NSG 684</td>
<td>Primary Care:Women/Girls 2</td>
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<td>NSG 686</td>
<td>WHNP Practicum 1</td>
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<tr>
<td>NSG 687</td>
<td>WHNP Practicum 2</td>
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<tr>
<td><strong>Total Hours</strong></td>
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**Required Courses for Post Master’s Nursing Leadership**

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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NSG 610</td>
<td>Leadership in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>NSG 611</td>
<td>System Based Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>NSG 612</td>
<td>Leading Health System Change</td>
<td>4</td>
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<td>NSG 613</td>
<td>Managing Health Care Resources</td>
<td>3</td>
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<td>NSG 614</td>
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<tr>
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</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>22-28</strong></td>
</tr>
</tbody>
</table>

All students in post-master’s certificate programs will complete a minimum of 600 supervised clinical hours.
School of Pharmacy

Degrees Offered

• Doctor of Pharmacy (Pharm.D.)
• Doctor of Philosophy (Ph.D. in Pharmaceutical and Pharmacological Sciences)

Introduction

The mission of the West Virginia University (WVU) School of Pharmacy is to improve the health and well-being of West Virginians and society at large through pharmacy education, research, practice, and service.

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 in an accredited U.S. or Canadian college of arts and sciences.

Many pharmacy graduates enter practice in community or institutional pharmacies; postgraduate pharmacy residency programs offer the opportunity for additional training and experience in general pharmacy practice and in several areas of specialty practice. Positions are also available in 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 also may prepare for careers in teaching and research.

The WVU School of Pharmacy also offers Ph.D. programs in the pharmaceutical and pharmacological sciences and health outcomes research.

Accreditation

The School of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education, 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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Molly R. Ramsey - Pharm.D. (West Virginia University)
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  Assistant Dean for Patient Services
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• David Yoakum - Pharm.D. (West Virginia University)
• Jude Ziolkowski - Pharm.D.
• Yadranca R. Zurek - Pharm.D. (West Virginia University)

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• Matthew Brown - B.S. (West Virginia University)
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• Richard Buterbaugh - B.S. (Ohio Northern University)
• Paula Butterfield - B.S. (West Virginia University)
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• Jeff Carter - B.S. (West Virginia University)
• Shaun D. Carter - B.S. (West Virginia University)
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• Amy F. Cleghorn - B.S. (West Virginia University)
• Misty Collins - B.S.
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• George C. Cosmides - B.S. (West Virginia University)
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• Aldo W. Crisante - B.S. (Ohio Northern University)
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• Kelly Davis - M.S. (The Ohio State University)
• Mary O. Davis - B.S. (West Virginia University)
• Nancy Davis - B.S.
• Teresa Knight Davis - B.S. (West Virginia University)
• Tammy W. Davison - B.S. (West Virginia University)
• Daniel Deem - B.S.
• C. Michael Dickey - B.S. (West Virginia University)
• Sean T. Douglass - B.S. (The Ohio State University)
• Susan Drady - B.S. (University of Rhode Island)
• David Drennen - B.S. (West Virginia University)
• Nancy F. Drescher - B.S. (West Virginia University)
• Frank Dundee - B.S. (Ohio Northern University)
• Jennifer L. Dunlevy - B.S. (West Virginia University)
• David Dunson - B.S. (University of Mississippi)
• Karen Dusci-Famoso - B.S. (West Virginia University)
• M. Todd Echard - B.S. (West Virginia University)
• Natalie Elliott - B.S. (West Virginia University)
• John M. Ellison - B.S. (West Virginia University)
• Allyson Evans-Hott - B.S. (West Virginia University)
• Samia Farah - B.S. (Alexandria University Egypt)
• Tom Faulstick - B.S. (West Virginia University)
• Jeff Fenerty - B.S. (Philadelphia)
• Jeffrey S. Fisher - B.S. (West Virginia University)
• Kathleen Fitzpatrick - B.S. (Oregon State)
• Carl Fitzwater - B.S. (West Virginia University)
• David E. Flynn - B.S. (University of Pittsburgh)
• Cassandra Ford - B.S. (West Virginia University)
• Dennis Foreman - B.S. (West Virginia University)
• Robert L. Foster Jr. - B.S. (Auburn University)
• Ronald J. Franck - B.S. (University of Pennsylvania)
• Linda Frederick - B.S. (West Virginia University)
• Tamara Friel - B.S. (West Virginia University)
• Randy C. Fulk - B.S. (West Virginia University)
• A. Randon Fusco - B.S. (West Virginia University)
• Robert Gajewski - B.S. (Medical University of South Carolina)
• Kevin M. Gaughan - B.S. (Duquesne University)
• Rebecca Gaughan - B.S. (West Virginia University)
• Matthew Genin - B.S. (West Virginia University)
• Kathy Gibbs - B.S. (West Virginia University)
• Gregory S. Glover - B.S. (West Virginia University)
• Patrick J. Good - B.S. (West Virginia University)
• Vicki Green - B.S. (West Virginia University)
• Joseph F. Griffith - B.S. (West Virginia University)
• Ric Griffith - B.S. (University of Cincinnati)
• Amy Grogg - B.S. (West Virginia University)
• Elizabeth Grove - B.S. (West Virginia University)
• Robert F. Gruber - B.S. (West Virginia University)
• Susan Guthrie - B.S.
• Wilbur Hackett - B.S. (Medical College of Virginia/Virginia Commonwealth University)
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• Brenton R. Harman - B.S. (West Virginia University)
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• Kristin A. Harper - B.S.
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• Peter Kreckel - B.S.
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• Jeffrey Mikol - B.S. (West Virginia University)
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• Rhonda M. Rose - B.S. (West Virginia University)
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• Joshua Russell - B.S.
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• Nicholas J. Scrivo - B.S. (West Virginia University)
• Joann Seigel - B.S.
• Ronald J. Selders - B.S. (West Virginia University)
• Kevin Shafer - B.S. (West Virginia University)
• Nikki Shay - B.S. (West Virginia University)
• Paul Sheets - B.S. (West Virginia University)
• Alexandra Shillingburg
• Stephen Shrewsberry - B.S. (West Virginia University)
• Stephanie Shriver - B.S. (Ohio Northern University)
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• James Zawacki - B.S. (PCPS)
Pharmaceutical and Pharmacological Sciences

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.

Degrees Offered

- Doctor of Philosophy (Ph.D. in Pharmaceutical and Pharmacological Sciences)

Research interests are complementary to the focus of each of the two pathways in the program: pharmaceutical and pharmacological sciences, and health outcomes. Key areas of research interest and expertise in the pharmaceutical and pharmacological sciences pathway include: pharmaceutical sciences, pharmacology, cancer, neuroscience, nanoscience, and toxicology. Key areas of research interest and expertise in the health outcomes pathway include: health outcomes, health disparities, health services, health quality, pharmacoconomics, pharmacoepidemiology, patient reported outcomes, and health behavior.

Graduate Program Pharmaceutical and Pharmacological Science

The School of Pharmacy offers a doctor of philosophy (Ph.D.) degree in pharmaceutical and pharmacological sciences with two pathways aimed at training competent researchers and educators: health outcomes research, and pharmaceutical and pharmacological sciences. Both pathways in the graduate program provide interdisciplinary, research-oriented curricula designed to develop the interests, capabilities, and potential of the individual student.

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.

Admission Requirements

Applicants for admission into the graduate program must satisfy the WVU and Health Sciences Center general requirements for admission as a graduate student. The applicant must possess a baccalaureate degree, background in a suitable area of study, an overall grade point average of at least 3.0, and the aptitude and interest for graduate work in pharmaceutical and pharmacological sciences or health outcomes research to be admitted. Graduate Record Examination (GRE) scores in the verbal, quantitative, and analytic essay portions are required from all students planning on entering the graduate program. TOEFL scores are required of international students from countries where English is not the primary language.

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:

Office of Research and Graduate Programs
WVU School of Pharmacy
2036 Health Sciences Center North
P.O. Box 9500 Morgantown, WV 26506
Telephone: (304) 293-1480
e-mail: pgannett@hsc.wvu.edu

Doctor of Philosophy (Ph.D.)

The School of Pharmacy offers programs of study leading to the doctor of philosophy (Ph.D.) degree in the pharmaceutical and pharmacological sciences via two pathways: health outcomes research, and pharmaceutical and pharmacological sciences. Specialty areas of study include: pharmacology, drug metabolism, cancer cell biology, nanotechnology, health outcomes, epidemiology, and policy research.
Coursework and the suggested plan of study specific to each pathway are listed below.

For each pathway in the graduate program, 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 as well as 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.

For more specific information, please contact the associate dean for research and graduate programs:

Dr. Peter Gannett
Associate Dean for Research and Graduate Programs (Interim)
WVU School of Pharmacy
2036 Health Sciences Center North
P.O. Box 9500
Morgantown, WV 26506-9500
Telephone: (304) 293-1480
e-mail: pgannett@hsc.wvu.edu

Requirements for Ph.D. Degree

PHARMACEUTICAL AND PHARMACOLOGICAL SCIENCES PATHWAY

Students planning on enrolling in the pharmaceutical and pharmacological sciences pathway are admitted through the health sciences center interdisciplinary graduate program in biomedical science, through which they complete the first year of study. During the first year, students take a required set of courses and rotate through the laboratories of potential research mentors. At the end of the first year, students may formally enroll in the pharmaceutical and pharmacological sciences graduate program and select a research advisor.

Curriculum Requirements

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>BMS 700</td>
<td>Scientific Integrity</td>
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<td>Cellular Methods</td>
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<tr>
<td>Advanced Courses/Elective Modules</td>
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<td>PHAR 784</td>
<td>Pharmacology Journal Club</td>
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<td>PHAR 787</td>
<td>Drug Discovery &amp; Development</td>
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<td>Qualifying Exams</td>
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<tr>
<td>Proposal Defense</td>
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<tr>
<td>Total Hours</td>
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Advanced courses/Electives Modules

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<td>BIOC 791</td>
<td>Advanced Topics</td>
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<td>CHEM 335</td>
<td>Method:Structure Determination</td>
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<td>CHEM 346</td>
<td>Physical Chemistry</td>
<td>3</td>
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<td>CHEM 514</td>
<td>Mass Spec Principles &amp; Practic</td>
<td>3</td>
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<td>CHEM 531</td>
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<td>CHEM 532</td>
<td>Advanced Organic Chemistry 2</td>
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PCOL 743  Pharmacology 1  
PCOL 744  Pharmacology 2  
PCOL 745  Advanced Pharmacology 1  1-3  
PCOL 746  Advanced Pharmacology 2  1-3  
PHAR 711  Chemical Properties of Drugs  2  
PHAR 716  Chemistry of Drug Action 1  3  
PHAR 726  Chemistry of Drug Action 2  2  
PHAR 731  Biopharm & Pharmacokinetics  3  
PHAR 779  Drugs: Bench to Market  3  
PHAR 780  Introduction-Molecular Modeling  4  
PHAR 781  Drug Metabolism  3

### Suggested Plan of Study

#### First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
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<tr>
<td>BMS 700</td>
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<td>3 BMS 720</td>
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<td>1 PHAR 797</td>
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<td>Laboratory Rotations 1</td>
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<td>BMS Course - Fundamentals of Contempory Biomedical Research</td>
<td>1-8 Advanced Courses/ Elective Modules (selected from the list)</td>
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<tr>
<td>BMS 797</td>
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*Students must sign up for a minimum of 9 hours*

#### Second Year

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<td>PHAR 783</td>
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<td>PHAR 797</td>
<td>4-5 PHAR 797</td>
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<td>Take Qualifying Exams</td>
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#### Third Year

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<td>PHAR 797</td>
<td>3-4 PHAR 797</td>
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**Proposal Defense**

*Students must sign up for a minimum of 9 hours*

*Students must sign up for a minimum of 9 hours*

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<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
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<th>Hours Summer</th>
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<tr>
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<td>PHAR 797</td>
<td>3-6 PHAR 797</td>
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<td><em>Students must sign up for a minimum of 9 hours</em></td>
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Total credit hours: 84-120

**HEALTH OUTCOMES RESEARCH PATHWAY**

Students enrolling in the health outcomes pathway are admitted directly into the School of Pharmacy. To obtain specific application and admission information about the Ph.D. program pathway in health outcomes research, please visit: [http://pharmacy.hsc.wvu.edu/orgp/Pathways/Health-Outcomes-Pathway](http://pharmacy.hsc.wvu.edu/orgp/Pathways/Health-Outcomes-Pathway).

**Curriculum Requirements**

| BIOS 601 | Applied Biostatistics 1 | 3 |
| BIOS 602 | Applied Biostatistics Lab | 1 |
| BIOS 603 | Applied Biostatistics 2 | 3 |
| Select one of the following: | | 3 |
| BIOS 604 | Applied Biostatistics 3 | |
| PSYC 612 | Multivariate Analysis | |
| Select one of the following: | | 2 |
| BMS 700 | Scientific Integrity | |
| PHAR 758 | Ethcl/Rgltry Aspcts-Clin Rsrch | |
| BMS 720 | Scientific Writing | 2 |
| ECON 301 | Intermed Micro-Economic Theory | 3 |
| Select one of the following: | | 6 |
| PHAR 753 | Soc/Bhvr/Thry/Hlth Otcm Rsrch | |
| PHAR 756 | Health Survey Research Methods | |
| Select one of the following: | | 6 |
| PHAR 754 | Decision Analysis-Healthcare | |
| PHAR 786 | Health Svcs Res/Sec Databases | |
| Select one of the following: | | 6 |
| PHAR 755 | Pharmacoconomics | |
| PHAR 758 | Ethcl/Rgltry Aspcts-Clin Rsrch | |
| Select one of the following: | | 3 |
| PHAR 756 | Health Survey Research Methods | |
| PHAR 758 | Ethcl/Rgltry Aspcts-Clin Rsrch | |
| PUBA 670 | Health Systems | |
### PHAR 769
Adv Hlth Service Rsrch Methods 3

### PHAR course "Intro-OR/PR Outcome"
3

### PHAR 797
Research 1-15

### PHAR 798
Dissertation 1-6

### SBHS 701
Public Health Grant Writing 3

### PHAR 788 Graduate Seminar
4

Electives 3-26

Total Hours 56-98

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## Suggested Plan of Study

### First Year

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<td>1 Electives</td>
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<td>1 Electives</td>
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Select one of the following:

| PHAR 753 | 3 |
| PHAR 756 | | |

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<td>14</td>
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### Second Year

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<td>Select one of the following:</td>
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<tr>
<td>PHAR 755</td>
<td>BIOS 604</td>
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<tr>
<td>PHAR 758</td>
<td>PSYC 612</td>
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<td>Select one of the following:</td>
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<td>PHAR course &quot;Intro-OR/PR Outcome&quot;</td>
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<td>PHAR 753</td>
<td>SBHS 701</td>
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<tr>
<td>PHAR 756</td>
<td>Select one of the following:</td>
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Select one of the following:

| PUBA 670 | PHAR 776 |
| PHAR 758 | PHAR 788 |
| PHAR 756 | Electives |

| PHAR 769 | 3 |
| PHAR 788 | 1 |
| Electives | 0-6 |

<p>| | | |</p>
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<td>13-19</td>
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Total credit hours: 57-99
Doctor of Pharmacy (Pharm. D.)

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 at http://pharmacy.hsc.wvu.edu/studentservices/Description-of-the-Professional-Program.

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 Student Services. 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 or the Office of Student Services. 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 Student Services.

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 required work 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 Student Services. 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 and makes recommendations to the dean.

If a student has been found to have a marginal performance in any course as indicated by a grade less than a C or a semester GPA less than 2.5, probation will be recommended. Students on probation are not eligible to hold office in student organizations. Students on probation are expected to be present for all of their classes and laboratories. If a student fails to complete any required remedial actions or meet the specified performance requirements during the probationary period, academic suspension or dismissal may be recommended.

If a student has been found to have an unsatisfactory performance as indicated by a grade of F in any course, two or more grades less than a C in a semester, three or more grades less than C in a year, or an accumulation of narrative evaluations that indicate an academic deficiency or inadequate
integration of curricular content, suspension or dismissal from the school may be recommended. In selected circumstances, the committee may recommend remedial work or repetition of all or a portion of the curriculum. Exceptions may be made only on recommendation of the committee.

After academic dismissal, a student may apply for readmission to the School of Pharmacy. Readmission of a student is the prerogative of the dean 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 (marginal), 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. Narrative evaluations are kept in the student’s file in the Office of Student Services.

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 Committee on Academic and Professional Standards. 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 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. 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 Student Services.

Requirements for Degree

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 Student Services and on the school’s website
2. Satisfactorily complete all of the required coursework in a timely fashion, which normally will not exceed five years from the date of initial enrollment into the professional program
3. Pay all fees
4. Complete the last year’s work in residence in this school
5. Be present at the commencement exercises unless excused by the dean of the School of Pharmacy in writing
6. Satisfactorily complete the required number of experiential rotations and demonstrate the attainment of minimum competencies
7. Complete 100 hours of volunteer community service.

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 certificate must be maintained until completion of the entire internship. The Board of Pharmacy holds final authority over internship rules and regulations. Up to 800 hours of the total of 1,500 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 two-week block of experiential rotations at the conclusion of both the first and second years of the professional curriculum and eight five-week rotations during the Advanced Pharmacy Practice Experience (APPE) year of the program. Two of the eight blocks performed in the fourth year of the curriculum must be performed in designated rural sites. 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 and Reciprocity

To qualify for examination for licensure by the West Virginia Board of Pharmacy, the applicant must be 18 years of age or older and of good moral character. Further, the applicant must be a graduate of an accredited school of pharmacy and must meet the internship requirements set by the West Virginia Board of Pharmacy.
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 Student Services. School of Pharmacy graduates are eligible for examination to practice pharmacy in any state. Graduates who successfully pass the West Virginia Board of Pharmacy examination are privileged to reciprocate with forty-nine other states, the District of Columbia, and Puerto Rico provided they meet the licensure requirements of these states.

Course Changes

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.

Pharm.D. Admissions

Admissions are competitive. It should be noted that applicants with overall or prerequisite GPAs below 3.0 are not admitted. 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, Pharmacy College Admissions Test (PCAT) scores (including a written essay), a personal interview, and letters of recommendation. All prerequisite courses must be taken at a U.S. or Canadian accredited institution of higher education and completed with a grade of C or better. Coursework completed outside the U.S. or Canada will not be considered for admission. Priority is given to qualified West Virginia residents, applicants who have performed the majority of their prerequisite coursework in a West Virginia college or university, and applicants who have already earned a bachelor’s degree. 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. Supplemental applications specific to the WVU School of Pharmacy will then be sent to selected candidates deemed qualified by the Committee on Admissions. A $50 application fee must accompany the supplemental application.

Each applicant who is recommended for acceptance is required to pay a deposit of $400 (if WV resident) or $800 (if non-WV resident) 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 Robert C. Byrd Health Sciences Center, and the School of Pharmacy.

Complete information may be obtained from:

School of Pharmacy Office of Student Services
WVU Robert C. Byrd Health Sciences Center
P.O. Box 9500
Morgantown, WV 26506-9500

or from:
Office of Admissions
WVU Robert C. Byrd Health Sciences Center
P.O. Box 9815 Morgantown, WV 26506-9815

Pharmacy College Admission Test

Completion of the Pharmacy College Admission Test is a requirement for admission to the School. 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 a pre-pharmacy advisor, the School of Pharmacy, or by writing:
Personal Interview

The Committee on Admissions requires a personal interview with selected candidates who qualify for a supplemental application. The Committee on Admissions will determine which applicants are to receive the supplemental application. Interviews are held during the spring semester at the WVU Robert C. Byrd Health Sciences Center in Morgantown.

Recommendations on Academic Performance

Two academic recommendations are required and must be provided by course instructors in any two of the pre-pharmacy science areas: biology, chemistry, math, and physics. The third recommendation may be provided by a variety of individuals. Please refer to the PharmCAS website for more detailed information.

Early Decision

The Early Decision program is a binding option for applicants who have decided that West Virginia University is the degree program of their first choice and that they will enroll if accepted. As an Early Decision applicant, you can apply to only one pharmacy degree program.

The Early Decision application deadline is typically the first of September. In addition to completing the PharmCAS application, you must arrange for PharmCAS to receive all of your official transcripts and fee by the September deadline. If your application, transcripts, or fee arrives after the deadline, PharmCAS will automatically change your file from early decision status to regular status.

You may be offered early admission, denied admission, or deferred to regular applicant status. If you are offered admission as an Early Decision applicant, you are obligated to accept the offer and you will not be permitted to apply to other PharmCAS institutions. If, however, you are denied admission as an Early Decision applicant, you may apply to other PharmCAS institutions for an additional fee. Refer to the PharmCAS application fee schedule to determine the cost to apply to each additional program. PharmCAS institutions will make admission decisions on early decision applicants by mid October.

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.

Pharm.D.

- Optional pathway programs in the Pharm.D. curriculum
- Curriculum requirements for students beginning the program Fall 2014
- Program of study for students beginning the Pharm.D. program Fall 2014

Optional Pathway Programs

AREA OF EMPHASIS IN CLINICAL PHARMACY PRACTICE

Students can complete an Area of Emphasis in Clinical Pharmacy Practice which provides students with the knowledge, clinical skills, and professional development necessary to prepare for post graduate year 1 (PGY-1) residency training. As part of the pathway, students complete a research project under the mentorship of a faculty member. Students apply to the program in the second year of the professional program through a competitive application process. More information can be found on the School’s webpage at http://pharmacy.hsc.wvu.edu/studentservices/Description-of-the-Professional-Program/Areas-of-Emphasis/Emphasis-in-Clinical-Pharmacy-Practice.

AREA OF EMPHASIS IN RESEARCH

The Area of Emphasis in Research is designed to expose students to the research process through research-related coursework and completion of a research project relevant to pharmacy under the guidance of a faculty member. This pathway can increase competitiveness for residencies, provide research experience for students who are considering academic careers, or provide research exposure for students considering additional graduate training. Students complete a honor’s thesis style write up demonstrate critical thinking skills and contribute new knowledge to the profession of

**JOINT PHARM.D./MASTER OF BUSINESS ADMINISTRATION (M.B.A.)**

The joint Pharm.D./Master of Business Administration (M.B.A.) 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 joint 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./M.B.A. degree students will be able to obtain two nationally-accredited graduate degrees - M.B.A. 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 http://pharmacy.hsc.wvu.edu/studentservices/Description-of-the-Professional-Program/PharmD-MBA-Program.

**GRADUATE CERTIFICATE IN GERONTOLOGY**

The Graduate Certificate in Gerontology is offered to students through the School of Social Work. Students explore the biologic, psychological, and sociological processes of aging, the needs and experiences of older people, and the impact of social policies related to aging. An understanding of the unique problems and needs of older adults in Appalachia is emphasized. Coursework in the School of Pharmacy related to the optimal use of medications in the elderly compliments the core curriculum. Additional information can be found at http://socialwork.wvu.edu/certificate-programs/graduate-certificate-in-gerontology.

**CURRICULUM REQUIREMENTS**

**Program Course List:**

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PHAR 735  Pharmaceutical Care Lab 5 1
PHAR 736  Pharmaceutical Care Lab 6 1
PHAR 738  Outcomes Assessment/Quality Improvement 2
PHAR 739  Therapeutic Patient Monitoring 3
PHAR 740  Pharmacotherapeutics 4 4
PHAR 741  Clinical Pharmacokinetics 3
PHAR 742  Pharmacy Practice Experience 5 1
PHAR 746  Pharmacy Practice Experience 6 1
Electives 8-14
Total Hours 106-112

SUGGESTED PLAN OF STUDY

**First Year**

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**Second Year**

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**Third Year**

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**Fourth Year**

**Spring**

Advanced Experiential Components (Students rotate through one-month experiences)
Community Practice (one rotation)
Institutional Practice (one rotation)
Acute Care (one or two rotations)
Ambulatory Care (one or two rotations)
Electives (three rotations)
Total advanced experiential (eight rotations)**

Total credit hours: 106-112

* Prior to beginning the experiential rotations, each student enrolled in the School of Pharmacy professional program must complete a minimum of ten credit hours of school of pharmacy elective courses or 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. Beyond the required ten credit hours, the student may take any other electives. 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.

** Fourth-year students will be required to complete two rotations in the summer session, three in the fall semester, and three in the spring semester.

The University P/F policies will be followed. Only selected professionally-related courses or additional free electives (in excess of the ten hours of required electives) may be taken on a pass/fail basis. No more than three credit hours of PHAR 749 Pharmaceutical Investigations will be permitted to count toward fulfillment of the pharmacy elective requirements.
College of Physical Activity and Sport Sciences

**Degrees Offered**

- Master of Science
- Doctor of Philosophy

The College of Physical Activity and Sport Sciences is organized into two departments: the Department of Coaching and Teaching Studies and the Department of Sport Sciences. The Department of Coaching and Teaching Studies includes the programs in athletic coaching education and physical education teacher education. The Department of Sport Sciences includes the programs in athletic training, sport and exercise psychology, and sport management.

The Ph.D. program in kinesiology administered through the College of Physical Activity and Sport Sciences has two major areas: sport and exercise psychology and coaching and teaching studies (designed for students interested in athletic coaching education or physical education teacher education). The college’s master’s program allows specialization in athletic coaching education, athletic training, physical education teacher education and sport management leading to a master of science in physical education. The master’s degree program in teacher education is run using a hybrid distance education format with courses offered in the summer on campus and courses during the academic year offered online. The master's degree programs in athletic coaching education and sport management have both on-campus and hybrid distance education cohorts (the hybrid distance education cohorts in each of these majors offer courses in the summer on campus and offer courses during the academic year online). The master's program in sport and exercise psychology is only available as part of the doctoral program (i.e., students must be accepted into the Ph.D. program in order to be enrolled in the masters degree program).

The facilities of the College of Physical Activity and Sport Sciences include the gymnasium, dance studio, and swimming pool in E. Moore Hall; a gymnasium and fitness center in Stansbury Hall; bowling lanes and billiard area in the Mountainlair; indoor track and sports area in the Shell Building; outdoor areas including the stadium, tennis courts, soccer and field hockey fields, and outdoor track; and the Natatorium with its pool and diving well. The College of Physical Activity and Sport Sciences will move into a new building bordering the Student Recreation Center and intramural fields in July of 2014. The new building will have 8 technology based classrooms, three large seminar/conference rooms, a 46 seat computer lab, research space, a teacher behavior laboratory, fitness room, multipurpose room, and faculty offices. Additional faculty and staff offices are in E. Moore Hall, Stansbury Hall, the Natatorium, and the Shell Building.

For additional information, contact the Graduate Coordinator, College of Physical Activity and Sport Sciences, 277 Coliseum, P.O. Box 6116, West Virginia University, Morgantown, WV 26506-6116. Telephone (304) 293-0850.

**ADMINISTRATION**

**ED.D**

- Dana D. Brooks - Ed.D. (West Virginia University)
  Dean

**DEPARTMENT CHAIRS**

- Jack Watson - Ph.D. (Florida State University)
  Chair, Sport Sciences
- Valerie Wayda - Ed.D. (West Virginia University)
  Chair, Coaching and Teaching Studies

**PROFESSORS EMERITI**

- William Alsop - Ed.D. (West Virginia University)
- William Bonsall - M.S. (West Virginia University)
- J. William Douglas - Ph.D. (Ohio State University)
- Patricia K. Fehl - Ed.D. (Indiana University)
- Andrew Hawkins - Ph.D. (Ohio State University)
- Lynn Housner - Ph.D. (University of Pittsburgh)
- Andrew Ostrow - Ph.D. (University of California, Berkeley)
- Beatrice Hurst - M.A. (Columbia University)
- Daniel Ziatz - Ph.D. (University of Utah)
Athletic Coaching Education

We offer two different formats for the master’s degree in Athletic Coaching Education (ACE). The first format is a resident (on-campus) master’s degree which focuses on Coaching and Sport Education. This program is designed for individuals who want to coach athletes at highly competitive levels and/or are interested in coaching education and the preparation of coaches. Most of the coursework in this program is delivered in face-to-face format however one class every semester is delivered in the online format.

The second format is a distance learning master’s degree that is delivered using the hybrid model (combination of online and on-campus classes; all courses are taught online but there is a required on campus - face-to-face - session every summer for two weeks). Sport Coaching is designed for K-12 teachers who coach at the scholastic level or at the community/club levels.

When applying to one of these programs, students must select one of the programs and can not switch between the resident (on-campus) and distance-learning formats. The resident program begins in the fall and is five consecutive semesters of coursework (fall, spring, summer, fall, spring). The hybrid program begins in the summer and is seven consecutive semesters (summer, fall, spring, summer, fall, spring, summer).

FACULTY

ASSOCIATE PROFESSORS

- Kristen Dieffenbach - Ph.D. (University of North Carolina, Greensboro)
- Valeria Wayda - Ed.D. (West Virginia University)
  Chair, Coaching and Teaching Studies

ASSISTANT PROFESSORS

- Ryan Flett - Ph.D. (Michigan State University)

TEACHING ASSISTANT PROFESSOR

- Susan Ross - Ph.D. (West Virginia University)

ADJUNCT INSTRUCTORS

- Kathy Ginter - Ph.D. (University of Tennessee)
- Jerry Handley - M.S. (West Virginia University)

Admission Criteria

The following criteria are used to evaluate applications for admission to the ACE master’s programs (both the on-campus and distance-learning formats):

- Undergraduate degree grade point average (2.75 minimum for regular status) from an approved institution
- Minimum of two references (three references preferred)
- Resume emphasizing your coaching/sport experiences
- Professional goal statement (one to two pages on professional background, goals, and reasons for pursuing the master’s degree)

Resident (On-Campus) - Coaching and Sport Education

This master’s degree is 39 credit hours and is completed in five semesters (fall, spring, summer, fall, and spring). Students complete 24 hours of core classes and then select an area of emphasis for the remainder of the courses (15 hours) depending upon their career goals.

Emphasis 1 - Performance Coaching is designed for individuals who will be coaching at the collegiate or elite-levels. The courses in this emphasis focus on evaluating one’s coaching methods.

Emphasis 2 - Science of Coaching is designed for the individual who is interested in coaching education and the preparation of coaches. Students can decide the depth of research to be completed in this emphasis by completing either a research paper or a more in-depth thesis.

Faculty begin reviewing applications March 1st and will offer admission until all seats in the program are filled. Students take classes in a cohort over five semesters (fall - 9 hour in spring, 9 hours in fall, 3 hours in summer, 9 hours in fall, and 9 hours in spring). One course every fall and spring term will be taught in an online format.

CURRICULUM

Core Classes (24 hours)

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Select one of the following Areas of Emphasis: 15

**Performance Coaching (15 hours)**

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<td>NCAA Compliance/Current Issues</td>
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<td>ACE 665</td>
<td>Strngth/Cndtnng Prgrm Dsgn Coch (OR)</td>
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<td>or ACE 663</td>
<td>Adv Strnght/Cndtnng Coach Tech</td>
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**Science of Coaching 2 (15 hours)**

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**Thesis Science of Coaching (15 hrs.)**

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Total Hours: 39

NOTE: Coaching internship is completed the semester when coaching a sport. Only 3 credits of ACE 685 can count toward degree requirements.

**SUGGESTED PLAN OF STUDY FOR TRACK 1**

**First Year**

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Total credit hours: 39

**SUGGESTED PLAN OF STUDY FOR TRACK 2**

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Second Year

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<tr>
<td>SM 627</td>
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<tr>
<td>ACE 697</td>
<td>3 PET 698</td>
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Total credit hours: 39

Distance-learning Hybrid Model - Sport Coaching

This master's degree is 39 credit hours and is completed in seven consecutive semesters (beginning and ending in the summer). Students complete six credit hours for each of the first four semesters (summer, fall, spring, summer). Across the next three terms (fall, spring, summer) students complete four credit hours each semester and complete a three credit hour coaching internship during the term that best aligns with a sport season. This program is unique with all of the courses online however there is a required face-to-face meeting two-weeks every summer (typically the 3rd and 4th weeks of July) while in the program.

Application deadline is March 1 for summer admission.

CURRICULUM

Core Classes

A grade of C or higher must be earned in all core courses

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<thead>
<tr>
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<tr>
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<td>ACE 610</td>
<td>Training Theories for Coaches</td>
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<td>ACE 618</td>
<td>Psychology of Coaching</td>
<td>3</td>
</tr>
<tr>
<td>ACE 630</td>
<td>Coaching Education Administran</td>
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</tr>
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<td>ACE 639</td>
<td>Create HLthy Cmpttve Envirrmnt</td>
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<td>ACE 641</td>
<td>Positive Youth Developmnt-Sport</td>
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<td>ACE 650</td>
<td>Sport Movement Analysis</td>
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<td>Strngth/Cndtng Mthds- Coaches</td>
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<td>ACE 665</td>
<td>Strngth/Cndtng Prgrm Dsgn Coch</td>
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<tr>
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<tr>
<td>ACE 688</td>
<td>Coaching Techniques</td>
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<td>SM 627</td>
<td>Legal Issues-Sport Administrat</td>
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Total Hours: 39
NOTE: Coaching internship is completed the semester when coaching a sport. Only 3 credits of ACE 685 can count toward degree requirements.

**SUGGESTED PLAN OF STUDY FOR DISTANCE LEARNING HYBRID MODEL (ON-LINE) REQUIREMENTS (39 HOURS REQUIRED)**

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<th>First Semester</th>
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<td>ACE 685</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
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</tbody>
</table>

Total credit hours: 36

NOTE: ACE 685 can be taken in the fifth, sixth or seventh semester (the semester that best aligns with your sport coaching season). The semester that you take ACE 685 (3 hours), you will be enrolled for 7 total credits and the other two semesters, you will only be enrolled for 4 credits.

**Athletic Training**

**Master of Science in Athletic Training**

The master of science degree in athletic training is completed over a two-year period, although a one-year option is available. Since this is a post-certification master’s program, all students must be NATA-BOC certified or certified eligible to be considered for admission. Those in the two-year program complete 38 hours of graduate coursework, which includes a research (thesis or research project) or concentration option. Graduate
assistantships are available for the NATA-BOC certified and other qualified individuals in the two-year program. The one-year program requires completion of 35 graduate credit hours.

The review and selection process for admittance to the graduate athletic training program and graduate assistantships run concurrently and begin in late December/early January and continue until all positions are filled. Only those applicants with complete files will be considered for admission to the program and for graduate assistantships. Finalists will be contacted for an on-campus personal interview starting in January.

FACULTY

ASSOCIATE PROFESSORS

- Michelle Sandrey - Ph.D., ATC (University of Kansas)  
  Graduate Program Director
- Vincent G. Stilger - HSD, ATC (Indiana University)  
  Undergraduate Program Director

ASSISTANT PROFESSOR

- Damien Clement - Ph.D. (West Virginia University)

ADJUNCT ASSOCIATE PROFESSOR

- John C. Spiker - M.Ed. (University of Pittsburgh)

CLINICAL INSTRUCTORS

- Brittany Arnold, ATC - M.S. (University of Pittsburgh)
- Allison Hetrick - M.Ed. (University of Cincinnati)
- Amy Hile, ATC - M.A. (University of Connecticut)
- David Kerns - M.S. (Ohio University)
- Randall Meador - M.S. (West Virginia University)
- Christopher Worrell, ATC - MTA (George Washington University)

LECTURER

- Greg Dahmer - M.A. (West Virginia University)

ADMISSION CRITERIA

- Undergraduate degree grade point average (2.75 minimum for regular status) from an accredited institution
- Three letters of recommendation
- Resume
- Graduate Record Examination (300 minimum, qualitative and verbal together)
- Candidate must be NATA-BOC certified or certified eligible

CURRICULUM REQUIREMENTS

Two-Year Athletic Training Program (GA position) - thirty-eight hours

Students pursuing a two-year master of science degree in athletic training have a choice of two options: Research (thesis or research project) and Concentration. Both the thesis and concentration options require 38 hours of coursework, which include four credit hours for the concentration or thesis. The research project option also requires 38 hours of coursework, which includes three credit hours for a group or individual research project and one credit hour of independent study. A plan of study completed during the first year in the program will determine options and semester coursework.

Curriculum Requirements

A grade of C or higher must be earned in all major courses

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<tr>
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<td>ATTR 618</td>
<td>Anatomy Laboratory</td>
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<td>ATTR 620</td>
<td>Athletic Training Practicum 1</td>
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<td>ATTR 640</td>
<td>Critical Thinking-Injury Assessment</td>
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<td>ATTR 621</td>
<td>Athletic Training Practicum 2</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
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<td>ATTR 627</td>
<td>Biomechanics</td>
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<td>ATTR 650</td>
<td>Medcl/Surgical Aspects-Ath Trm</td>
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<td>ATTR 622</td>
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<td>Science/Theory-Rehabilitation</td>
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<td>Psychologcl Aspects-Sprt Injr</td>
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<td>Thesis</td>
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<td>ATTR 626</td>
<td>Low Back &amp; Overuse Pathology</td>
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<td>ATTR 655</td>
<td>Intgrtd Functional Human Perfm</td>
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**One-Year Graduate Athletic Training Program (NO GA position) - 35 Hours**

The one-year program starts Summer II (beginning of July) and ends either the following Summer I (end of June) or end of Summer II (end of July).

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Total credit hours: 35
Physical Education Teacher Education

Master Degree

The Physical Education Teacher Education (PETE) Master of Science degree is designed for certified physical education teachers who work full-time. The focus of the program is to advance individual skills as well as to advance one's knowledge to develop a standards-based physical education program. Students are admitted once a year, so they will complete the program with their cohort. Program highlights include:

• The thirty-seven credit hour program includes a balance of online courses (taken during the spring and fall semesters) and hybrid courses which consist of a combination of online and two full weeks on campus (including the Saturday/Sunday between both weeks).
• Students will be introduced to new forms of physical activities that can be immediately incorporated into one's curriculum through a one-credit hour special topics course on the weekend between the two weeks on campus.
• Practical application of research-based and developmentally appropriate teaching practices are emphasized through a variety of assignments embedded within fall and spring online courses and through a one credit hour practicum experience in the fall or spring semester following the summer courses (e.g., PET 683 Principles of Effective Teaching is completed in the summer (3 cr), and in the fall participants evaluate their teaching effectiveness as part of the 1-cr Advanced Lab class; or in the spring semester participants revise their PE curriculum to include one of the curricular models covered in PET 665 [completed the previous summer]).

Normal completion time is two and a half years (summer - fall - spring - summer - fall - spring - summer). No more than twelve graduate hours may be taken toward the master’s degree as a non-degree seeking graduate student.

Doctorate Degree

WVU is the only institution in the state of West Virginia to offer a Doctorate of Education (Ed.D.) majoring in Physical Education Teacher Education or a Doctorate of Philosophy (Ph.D.) majoring in Coaching and Teaching Studies. Both programs are designed to educate PETE leaders who will work at colleges, universities, educational agencies, and in school systems in order to bring the most current, research-based educational practices to PETE programs and ultimately to children, young adults, and adults via school-based and community-based physical education programming.

Physical Education Teacher Education (Ed.D.)

The objectives of the doctorate of education are to:

• Provide students with an in-depth understanding of the knowledge base surrounding the disciplines of PETE
• Educate, train, and produce highly competent graduates to function within PETE professions as researchers, teachers, grant writers, and applied practitioners
• Produce scholars and professionals who will make significant contributions to the advancement of empirically-based knowledge in PETE
• Train students to produce original, theory-based research projects in PETE

Coaching and Teaching Studies (Ph.D.)

The objectives of the doctorate of philosophy are to:

• Provide students with an in-depth understanding of the knowledge base surrounding the disciplines of coaching and physical education teaching studies
• Educate, train, and produce highly competent graduates to function within both coaching and physical education teaching professions as researchers, teachers, grant writers, and applied practitioners
• Produce scholars and professionals who will make significant contributions to the advancement of empirically-based knowledge in Coaching and Teaching Studies (CATS)
• Train students to produce original, theory-based research projects in CATS

FACULTY

PROFESSOR
• Robert L. Wiegand - Ed.D. (University of Georgia)

ASSOCIATE PROFESSOR
• Sean Bulger - Ed.D. (West Virginia University)
• Stephen Harvey - Ph.D. (Oregon State University)
ASSISTANT PROFESSORS

- Emily Jones - Ph.D. (University of Georgia)
- Andrea Taliaferro - Ph.D. (University of Virginia)

VISITING ASSOCIATE

- Eloise Elliott - Ph.D. (Virginia Polytechnic Institute and State University)
  Ware Distinguished Professor

PROFESSOR EMERITUS

- Lynn Housner - Ph.D. (University of Pittsburgh)

Master’s Admission

In order to be considered for admission to this program, students must have a teaching license and have acquired a minimum undergraduate GPA (on a 4-point scale) of 2.75.

If a student has a GPA of 2.5 or above, provisional admission is possible with approval of the program faculty.

No more than twelve graduate hours may be taken toward the master’s degree as a non-degree seeking graduate student.

Application deadline is March 1 for summer admission.

Doctorate Admissions

Students can be admitted to the Ed.D. or Ph.D. program with either a bachelor’s or master’s degree. Those admitted with a bachelor’s degree will obtain a PETE masters degree at WVU as part of their doctoral program of studies.

ENTRANCE STANDARDS

Applying to the PhD. in Kinesiology - Major in Coaching and Teaching Studies. Priority Deadline - January 15 by completing the online application thru the WVU Office of Admissions website which will be processed after official UG transcript and application fee have been submitted. Applicants with a completed file by the deadline will receive priority review for admission and will be eligible for university fellowship consideration. Applications processed after the priority deadline will be reviewed on a rolling basis and admissions will be made until all seats are filled. Applicants must submit official copies of transcripts and GRE test scores directly to the WVU Office of Admissions, PO Box 6009, Morgantown, WV 26506-6009. The program requirements listed below (if any) are in addition to the WVU Graduate Admission Application.

Applying to the Ed.D. in Kinesiology - Major in Physical Education/Teacher Education: Priority Deadline - January 15 by completing the online application thru the WVU Office of Admissions website which will be processed after official UG transcript and application fee have been submitted. Applicants with a completed file by the deadline will receive priority review for admission and will be eligible for university fellowship consideration. Applications processed after the priority deadline will be reviewed on a rolling basis and admissions will be made until all seats are filled. Applicants must submit official copies of transcripts and GRE test scores directly to the WVU Office of Admissions, PO Box 6009, Morgantown, WV 26506-6009. The program requirements listed below (if any) are in addition to the WVU Graduate Admission Application.

The additional screening materials necessary to complete your doctoral application (submitted online as part of your GEMS admission application) are:

- Resume/CV
- Statement of Professional Goals and Research Interests*
- Letters of Recommendations: 3 required**
- Test Requirements: GRE (taken within 5 years of application). Preferred scores of 149 (Verbal); 152 (Quantitative Reasoning); and 3.5 or higher (Analytical Writing).

* The Statement of Professional Goals and Research Interests should be 2-3 pages in length, double-spaced. Describe your academic and professional background, professional goals, possible areas of research, any completed research projects and how and why you are a good fit for the program. It should be tailored to WVU and your specific program of interests.

** A minimum of two letters of recommendation should speak directly to the candidate’s academic skills and professional potential and abilities.

NOTE: Provisional admission decisions can be made based upon faculty discretion.

NOTE: 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.
Master’s Degree

The Physical Education Teacher Education (PETE) Master of Science degree is designed for certified physical education teachers who work full-time. The program is designed to advance individual skills and to advance one's knowledge to develop a standards-based physical education program. Students are admitted once a year and complete all coursework with a cohort. The master’s program includes a balance of online courses (taken during the spring and fall semesters) and hybrid courses (combination of online and two-weeks in the summer of face-to-face interaction and meetings). Normal time to completion is four regular semesters and three summers (approximately two and-a-half years). Practical application of research-based and developmentally appropriate teaching practices is emphasized through a variety of practicum experiences embedded within the program.

No more than twelve graduate hours may be taken toward the master’s degree as a non-degree seeking graduate student.

Degree Requirements

CURRICULUM

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<td>Professional Issues-Phys Educ</td>
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<td>PET 615</td>
<td>Research Methodology-Phys Educ</td>
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</tr>
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<td>PET 665</td>
<td>Curriculum In Phys Educ</td>
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<td>PET 645</td>
<td>Standards-Based Assessment-PE</td>
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<td>Adv Laboratory - Physical Educ</td>
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<td>PET 681</td>
<td>Motor Developmnt-Spec Populatn</td>
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<td>PET 683</td>
<td>Principles-Effective Teaching</td>
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<td>PET 685</td>
<td>Phys Educ Supervision Tech</td>
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<td>PET 686</td>
<td>Teaching Practicum</td>
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<td>PET 693 - Special Topics (subject matter changes)</td>
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SUGGESTED PLAN OF STUDY

First Semester

**Summer**

<table>
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<tr>
<td>PET 693 - Special Topics (subject matter varies)</td>
<td>1</td>
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<tr>
<td>PET 683</td>
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**Second Semester**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PET 615</td>
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<tr>
<td>PET 672</td>
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<td><strong>Total</strong></td>
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**Third Semester**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PET 645</td>
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<td>PET 672</td>
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**Fourth Semester**

**Summer**

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PET 681</td>
<td>3</td>
</tr>
<tr>
<td>PET 693 - Special Topics (subject matter varies)</td>
<td>1</td>
</tr>
<tr>
<td>PET 673</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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### Fifth Semester

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PET 680</td>
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<td>PET 672</td>
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### Sixth Semester

<table>
<thead>
<tr>
<th>Spring</th>
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### Seventh Semester

<table>
<thead>
<tr>
<th>Summer</th>
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<tbody>
<tr>
<td>PET 605 (Special Topics)</td>
<td>3</td>
</tr>
<tr>
<td>PET 686</td>
<td>3</td>
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<tr>
<td>PET 6963 Special Topics (Subject Matter Changes)</td>
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</table>

Total credit hours: 37

---

## Doctorate Degree

WVU is the only institution in the state of West Virginia to offer a Doctorate of Education (Ed.D.) majoring in Physical Education Teacher Education or a Doctorate of Philosophy (Ph.D.) majoring in Coaching and Teaching Studies. Both programs are designed to educate PETE leaders who will work at colleges, universities, educational agencies, and in school systems in order to bring the most current, research-based educational practices to PETE programs and ultimately to children, young adults, and adults via school-based and community-based physical education programming.

### Physical Education Teacher Education (Ed.D.)

The objectives of the doctorate of education are to:

- Provide students with an in-depth understanding of the knowledge base surrounding the disciplines of PETE
- Educate, train, and produce highly competent graduates to function within PETE professions as researchers, teachers, grant writers, and applied practitioners
- Produce scholars and professionals who will make significant contributions to the advancement of empirically-based knowledge in PETE
- Train students to produce original, theory-based research projects in PETE

In this program, students complete the following coursework:

1. Core classes 12 credits
2. Electives 12 credits
3. Cognate Specialization 12 credits
4. Statistics and Research Methods 15 credits
5. Dissertation Research 12 credits

### Coaching and Teaching Studies (Ph.D.)

The objectives of the doctorate of philosophy are to:

- Provide students with an in-depth understanding of the knowledge base surrounding the disciplines of coaching and physical education teaching studies
- Educate, train, and produce highly competent graduates to function within both coaching and physical education teaching professions as researchers, teachers, grant writers, and applied practitioners
- Produce scholars and professionals who will make significant contributions to the advancement of empirically-based knowledge in Coaching and Teaching Studies (CATS)
- Train students to produce original, theory-based research projects in CATS
In this program, students complete the following coursework:

1. Core classes 12 credits
2. Cognate Specialization 12 credits
3. Statistics and Research Methods 18 credits
4. Dissertation Research 18 credits

**Performance Standards (Ed.D. or Ph.D.)**

Credit for courses in which a grade of lower than C is obtained will not count toward satisfying program requirements for both the Ed.D. or Ph.D. Students who fail to maintain a 3.0 GPA will be placed on probation and must bring their GPA up to 3.0 during the following semester. If a student fails to bring his or her GPA up to 3.0, they will be dismissed from the program. Student research will be graded by the PETE faculty each semester. Research and grades will be satisfactory or unsatisfactory (S/U).

**Degree Requirements (Ed.D. or Ph.D.)**

For the Ph.D. program, the candidate must complete a series of research benchmarks beyond that required for the Ed.D. 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 (ED.D. AND PH.D.)**

<table>
<thead>
<tr>
<th>Core Classes</th>
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<tbody>
<tr>
<td>PET 735</td>
<td>Reading Research 1.</td>
</tr>
<tr>
<td>PET 741</td>
<td>Research in Kinesiology</td>
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<tr>
<td>PET 745</td>
<td>Curriculum Development/Evaluation</td>
</tr>
<tr>
<td>SEP 765</td>
<td>Dissertation/Thesis Seminar</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Statistics and Research Methods</th>
<th>15-18</th>
</tr>
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<tbody>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
</tr>
<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
</tr>
<tr>
<td>EDP 614</td>
<td>Statistical Methods 2</td>
</tr>
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<td>SCFD 615</td>
<td>Qualitative Research Methods</td>
</tr>
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<td>Elective - Advanced Statistic/Research Methods</td>
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<td>Elective - Advanced Statistic/Research Methods</td>
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<table>
<thead>
<tr>
<th>Cognate Specialization</th>
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<tr>
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<table>
<thead>
<tr>
<th>Dissertation Research</th>
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<tbody>
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<td>PET 797</td>
<td>Research</td>
</tr>
<tr>
<td>PET 798</td>
<td>Dissertation</td>
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</table>

**Total Hours** 63-60

**BENCHMARKS**

**Physical Education Teacher Education (Ed.D.)**

1. Research Benchmark #1 - Qualifying Exam
2. Research Benchmark #2 - Pass Comprehensive Exams
3. Research Benchmark #3 - Complete all statistics and research methods courses with grade of B or better
4. Research Benchmark #4 - Complete all cognate courses with a grade of B or better
5. Research Benchmark #5 - Defend dissertation proposal

**Coaching and Teaching Studies (Ph.D.)**

1. Research Benchmark #1 - Qualifying Exam
2. Research Benchmark #2 - Pass Comprehensive Exams
3. Research Benchmark #3 - Complete all statistics and research methods courses with grade of B or better
4. Research Benchmark #4 - Complete all cognate courses with a grade of B or better
5. Research Benchmark #5 - Defend dissertation proposal
6. Research Benchmark #6 - Submit 1st research paper
7. Research Benchmark #7 - Submit 2nd research paper
8. Defend dissertation and submit 3rd research paper (based on dissertation findings)

Sport and Exercise Psychology

Doctoral Program

Graduate studies within the College of Physical Activity and Sport Studies can lead to a Ph.D. in Kinesiology with a major in Sport and Exercise Psychology (SEP). The students admitted into the SEP doctoral program also complete a master's degree in community counseling. Students can be admitted into the doctoral program in SEP with either a baccalaureate degree or a master's degree.

The sport and exercise psychology program has procedures and requirements which are specific to the program. In general, they include the following:

• Selection of an advisor (The program faculty, in consultation with the student, assigns an advisor to assist in planning the student’s program.)
• Selection of a plan of studies committee (The student, in consultation with the advisor, selects a plan of studies committee. This committee assists the students in developing a plan of studies which will include relevant coursework, evaluation of competencies, and an estimated time frame for its completion.)
• Plan of studies approval (The plan of studies committee will meet with the student by March 1st of the first year in the program to ratify the plan. The approved plan of studies functions as the document against which completion of program requirements is assessed.)
• Completion of required coursework (The student completes the coursework required by the plan of studies. The number of credit hours required and the time required to complete the coursework varies, but a minimum of three years [six semesters] of coursework is normally required for students entering with a master’s degree.)
• Comprehensive examination (At the completion of coursework, the student will take a written and oral comprehensive examination specified by the program. The purpose of the examination is to assess competency in research and content areas relevant to the program. The length of the examination varies.)
• Prospectus defense (Following the successful completion of the comprehensive examination, the student will write and defend a prospectus for the dissertation. The prospectus will be evaluated by the student’s dissertation committee. The dissertation committee is often identical to the student’s plan of studies committee, though additions or changes may be made to the plan of studies committee at this time in order to constitute the dissertation committee.)
• Admission to candidacy (Once the comprehensive examination and prospectus defense are successfully completed, the student is admitted to candidacy. Admission to candidacy is permission to proceed with dissertation research as described in the prospectus.)
• Defense of the dissertation (The student will write and orally defend an original research project as described in the prospectus. Successful defense will be determined by the quality of the written document as well as by the quality of the oral defense in a forum open to the academic community. All members of the student’s dissertation committee must be present for the dissertation defense. Successful defense of the dissertation with submission to a professional journal results in the awarding of the degree. The dissertation must be successfully defended within five years of admission to candidacy.)
• During the Ph.D. program, students are required to submit multiple works to peer-reviewed journals and national conferences.

FACULTY
PROFESSORS
• Dana D. Brooks - Ed.D. (West Virginia University)
  Dean
• Edward Etzel, Jr. - Ed.D. (West Virginia University)
• Jack Watson - Ph.D. (Florida State University)
  Chair, Sport Sciences
• Samuel Zizzi - Ed.D. (West Virginia University)

ASSOCIATE PROFESSOR
• Peter Giacobbi - Ph.D. (University of Tennessee-Knoxville)

ASSISTANT PROFESSORS
• Damien Clement - Ph.D. (West Virginia University)
Application Deadline

Application procedures for the Ph.D. in Kinesiology with a major in Sport and Exercise Psychology must submit their online admission application to the Office of Admissions website (www.wvu.edu) to be processed by the December 15 deadline for fall admission. Students must also submit an official undergraduate transcript(s) and application fee (online). Supplemental required materials (GRE scores, resume, goal statement, and three letters of recommendation) must also be uploaded and submitted online. Once all the materials have been received, the admission application will be ready for the screening committee to review after the deadline date. Incomplete applications will not be reviewed. International applicants are strongly encouraged to submit their admission application and supplemental materials by October 1 to allow extra time for processing. Students who seek a graduate assistantship should complete and submit a Graduate Assistantship Application no later than February 1. The GA application can be downloaded by visiting the college web site at cpass.wvu.edu. Click on the “student” link at the top, and the application is in a PDF format at the bottom of the first page.

Admission Criteria

The following criteria is used to evaluate applicants for admission to the doctoral program:

• Undergraduate degree grade point average of 3.0 from an approved institution
• Master’s degree grade point average of 3.5 from an approved institution (if applicable)
• Graduate Record Examination score - Verbal, Quantitative, and Writing percentiles above fifty percent. (Student files will be reviewed with scores lower than fifty percent.)
• Three letters of recommendation (required to be submitted online - NO HARD COPIES)
• Professional goal statement (one-two page paper on professional backgrounds, goals, and reasons for pursuing doctoral degree at WVU) to be submitted online
• Curriculum vitae to be submitted online
• Personal interview

Program Degree Requirements

THE CURRICULUM

SEP PH.D. CURRICULUM AND RESEARCH BENCHMARKS

The curriculum for students in the SEP program represents the science-practice model of psychology. The program features a sixty-five to seventy-five credit hour major that includes coursework in three areas: 1) twenty-one credits in sport and exercise psychology traditional coursework, 2) eighteen credits of professional practice courses (teaching and applied practica), and 3) twelve-eighteen credits in research methods, statistics, and independent research. Most students will also concurrently complete forty-eight to sixty credit hours of coursework in Community Counseling (COUN) in an effort to earn a separate MA degree. Students in the SEP Major will complete coursework across SEP, Counseling, Statistics & Research Methods. They will complete written and practical comprehensive exams at the end of their coursework.

Students may enter in the SEP Ph.D. Major with either a bachelor’s degree or master’s degree. Students entering the program with a bachelor’s degree will first complete a thirty-six credit master’s degree in SEP with a data-based thesis research project. Students will form a Plan of Study committee and have their Plan of Study approved by March 1 of their first year in the program. This Plan of Study will outline all of the courses needed to complete the requirements for the M.S. in SEP (if necessary), Ph.D. in SEP and the M.A. in counseling.

Sport and Exercise Psychology (SEP) Disciplinary Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SEP 620</td>
<td>Indvdl Intractn-Sprt/Phys Act</td>
<td>3</td>
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<tr>
<td>SEP 640</td>
<td>Psychlgy-Sprt/Physicl Activity</td>
<td>3</td>
</tr>
<tr>
<td>SEP 719</td>
<td>Group Influences in Sport *</td>
<td>3</td>
</tr>
<tr>
<td>SEP 720</td>
<td>Psychlgcl Sprt Prfrmnc Enhncm            *</td>
<td>3</td>
</tr>
<tr>
<td>SEP 721</td>
<td>Counseling College Stdnt-Athlete *</td>
<td>3</td>
</tr>
<tr>
<td>SEP 722</td>
<td>Exercise and Health Psychology *</td>
<td>3</td>
</tr>
<tr>
<td>EPID 766</td>
<td>Physical Activity Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>SEP 723</td>
<td>Psychologcl Aspects-Sprt Injy</td>
<td>3</td>
</tr>
<tr>
<td>SEP Course - Ethical/Legal Issues in Sport and Exercise Psychology *</td>
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<tr>
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* Course offered once every two years
SEP Professional Practice Core (fifteen credit hours)

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<tr>
<td>SEP 690</td>
<td>Teaching Practicum</td>
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<td>SEP 690</td>
<td>Teaching Practicum</td>
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<td>SEP 686</td>
<td>Internship-Sport &amp; Ex Psych</td>
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<td>SEP 691</td>
<td>ADTP: Supervision Sport</td>
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Note: Teaching practicum credits are fulfilled by teaching one undergraduate sport psychology course or co-teaching two courses. A typical semester load for internship experiences includes two credits of 686 and one credit of 691G (minimum three semesters).

SEP Statistics / Research Design Disciplinary Core (twelve-eighteen credit hours)

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<td>SEP 726</td>
<td>Adv Measurmnt/Research-Phys Ed</td>
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</tr>
<tr>
<td>SEP 765</td>
<td>Dissertation/Thesis Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Advisor Approved Introductory Graduate-level course in Research methods</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSYC 615</td>
<td>Software Design in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or EDP 711</td>
<td>Multivariate Methods 1</td>
<td>3</td>
</tr>
<tr>
<td>Advisor-approved course in Qualitative or Single-subject Design</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>Total Hours</td>
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Sport Psychology Research Practice Core (fifteen-eighteen credit hours)

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<tr>
<td>SEP 697</td>
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<tr>
<td>or SEP 797</td>
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<tr>
<td>SEP 698</td>
<td>Thesis *</td>
<td>3</td>
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<td>SEP 798</td>
<td>Dissertation</td>
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<tr>
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<td>Total Hours</td>
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</table>

* Only required for students entering with a bachelor’s degree.

Cognate Disciplinary Core (zero-nine credit hours) – may be used to complete requirements for AASP Certification

Total credits for Ph.D. – sixty-eight to seventy-seven (does not include credits to complete concurrent M.A. in counseling)

Research Benchmarks

(timeline indicated for a student with a bachelor’s degree)

1. Submit first data-based article for publication to peer-reviewed journal (fourth semester)
2. Orally defend article / study #1 (fourth semester)
3. Submit second article for publication to peer-reviewed journal (literature review or data-based) OR present a data-based study at a national conference (published abstract) (sixth semester)
4. Complete comprehensive exams (seventh semester)
5. Propose dissertation research plan (eighth semester)
6. Submit third data-based article for publication to a peer-reviewed journal (tenth semester)
7. Orally defend dissertation research (second and third studies) (tenth semester)

- All submissions must be first author with quality evaluated by the student’s plan of studies committee.

RESEARCH PUBLICATIONS / DISSERTATION SUMMARY

For students entering the Ph.D. program with a bachelor’s degree, they will be required to complete a thesis-equivalent data-based research project for submission to a peer-reviewed journal by their fifth semester. This paper will be written in APA manuscript format, with an extended literature review attached as an appendix. The thesis-equivalent manuscript must be deemed worthy of submission to a peer-reviewed journal.

The program will culminate in a dissertation research project on an important kinesiology topic. After submitting their first paper and passing comprehensive exams, students will be asked to orally present their plans for studies two & three. The dissertation will take the form of a series of two-three publishable papers or monographs on a similar, relevant topic in their field. The papers must be cleared for submission by the committee and
submitted before signing off on the final dissertation defense. We emphasize peer-reviewed research publications as desired outcomes because of their positive impact on skills and the professional placement options for our graduates.

The dissertation will be defended in a public forum that has been announced at the college and university level at least two weeks in advance of the meeting date. The dissertation committee will be comprised of five members. All committee members must sign the approval form for the dissertation to be complete.

Counseling Master's Program (sixty credit total). Courses are sequenced in blocks for purposes of prerequisite requirements. Courses in Block II have prerequisites in Block I; Block III requires completion of courses in Block II, and so forth.

<table>
<thead>
<tr>
<th>Block I</th>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>COUN 501</td>
<td>Counseling Theory/Techniques 1</td>
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</tr>
<tr>
<td>COUN 536</td>
<td>Theories of Human Development</td>
<td>3</td>
</tr>
<tr>
<td>COUN 622</td>
<td>Community Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 634</td>
<td>Cultural Issues</td>
<td>3</td>
</tr>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
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<table>
<thead>
<tr>
<th>Block II</th>
<th>Course</th>
<th>Credits</th>
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<td>COUN 606</td>
<td>Counseling Theory/Techniques 2</td>
<td>3</td>
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<tr>
<td>COUN 630</td>
<td>Children/Adolescents/Parents</td>
<td>3</td>
</tr>
<tr>
<td>COUN 640</td>
<td>Addictions Counseling</td>
<td>3</td>
</tr>
<tr>
<td>SEP 721</td>
<td>Counseling College Stdnt-Athlete</td>
<td>3</td>
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<table>
<thead>
<tr>
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<th>Course</th>
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<tbody>
<tr>
<td>COUN 505</td>
<td>Theory &amp; Pract Human Appraisal (Psych Assessment)</td>
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</tr>
<tr>
<td>COUN 665</td>
<td>Abnormal Behavior</td>
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<table>
<thead>
<tr>
<th>Block III</th>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COUN 609</td>
<td>Group Counsel Theory/Technique</td>
<td>3</td>
</tr>
<tr>
<td>COUN 620</td>
<td>Lifespan Career Counseling</td>
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<tr>
<td>COUN 645</td>
<td>Couple/Family Counseling</td>
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<tr>
<td>COUN 685</td>
<td>Practicum</td>
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<table>
<thead>
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<th>Course</th>
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<tbody>
<tr>
<td>COUN 664</td>
<td>Ethical Issues in Counseling</td>
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</tr>
<tr>
<td>COUN 686</td>
<td>Counseling Internship</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Hours 63

* SEP students can substitute another research course for this requirement.

Sport Management

Students have two options for completing a master's degree in sport management: 1) On-Campus and 2) Distance-Learning. These two program options are described below.

On-Campus

The graduate on-campus sport management program requires thirty-six credit hours including a six-hour internship. In addition to the required sport management classes, candidates have the ability to take elective classes in management, marketing, advertising, journalism and public relations. This program can be completed in one or two years. The unique curriculum features courses that provide "real-world" training in Athletic Compliance, Sport Finance, and a one-of-a-kind ESPN Sports Poll class. The Program provides students with marketing research and data mining consultant experiences.

A dual degree track option also exists between on-campus sport management master's degree program and the M.B.A. program in the College of Business and Economics. This track requires two years to complete, as credits are used from each program to support the other. Students interested in the dual degree program must complete the online applications for admission to both the Sport Management Program (fall admission only) and the M.B.A. program (summer admission) and be admitted separately to both programs. For more information, go to: http://www.be.wvu.edu/mba/mba_mssm.htm?expandable=1
Distance-Learning Program

This degree program offers flexibility to complete course competences at times which are convenient for students. The 36 credit hour distance education master’s degree is expected to be completed in two years. Students complete 50% of the courses online with the remaining course load completed onsite at the WVU campus in Morgantown during a two-week period over two consecutive summers.

FACULTY

ASSOCIATE PROFESSORS
• Gonzalo Bravo - Ph.D. (Ohio State University)
• Dallas Branch, Jr. - Ph.D. (Ohio University)
• Dennis Floyd Jones - Ph.D. (University of Pittsburgh)

ASSISTANT PROFESSORS
• Cindy Lee - Ph.D. (Ohio State University)
• Luisa Valez-Colon - Ph.D. (Texas Woman’s College)

ADJUNCT INSTRUCTORS
• William Alsop - Ed.D. (West Virginia University)
• Andro Barnett - Ph.D. (Temple University)
• Matthew Borman - M.S. (West Virginia University)
• Brad Cox - M.S. (West Virginia University)
• Rosa D’Amico-Lopez - Ph.D. (University of Australia)
• Anna Devito - Ph.D. (Syracuse University)
• Christopher Miller - J.D. - (West Virginia University)
• Richard Wilson - J.D. (West Virginia University)

Admission Criteria

ON-CAMPUS PROGRAM
• Undergraduate degree grade point average (2.75 minimum for regular status) from an approved institution
• Three letters of recommendation
• Official transcript (submitted directly to the WVU Office of Admissions)
• Resume
• Two-page career (goal) statement

Submit your online admission application thru the WVU Office of Admissions GEMS website along with your application fee. Official transcripts must be mailed directly to the WVU Office of Admissions. Your goal statement and resume are submitted to the online GEMS web site. The GEMS web site will also need three recommendation names and email addresses for reference letters. The system will send an email to your recommenders to complete a letter to be uploaded to your GEMS web site. Please DO NOT submit any paper copies of the screening materials above, everything must be submitted thru the online GEMS web site (except your official transcript). The deadline to have a completely processed file for the on-campus program is January 15.

DISTANCE EDUCATION

The review process for applicants to this program will begin on March 1. Faculty will continue to review applications after the March 1 deadline until they have reach the maximum number of 30 students. The distance education hybrid sport management major requires thirty-six credit hours including a six-hour practicum. This program is completed online from a distance in the spring and fall semesters. Summer courses are started online but include in-person interactions which require students to come to campus during a two-week period for two consecutive summers. Student must complete the online application application and application fee to the WVU Office of Admissions GEMS web site and mail their official transcripts to the WVU Office of Admissions at PO Box 6009, West Virginia University, Morgantown, WV 26506-6009.. A current resume, goal statement and three letters of recommendation need to be submitted online to your GEMS web site also. Please DO NOT submit paper copies of these screening materials to our office, they are to uploaded to the GEMS web site on your admission application.
Curriculum Requirements

ON-CAMPUS PROGRAM

On-Campus requirements for the Master’s Degree in Sport Management that only begins in the Fall semester. You are required to complete 36 credit hours and must have a 3.0 overall GPA to graduate.

CURRICULUM

A grade of C or higher must be earned in all major courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM 616</td>
<td>Sport Marketing Resrch Methods</td>
<td>3</td>
</tr>
<tr>
<td>SEP 620</td>
<td>Indvdl Intractn-Sprt/Phys Act</td>
<td>3</td>
</tr>
<tr>
<td>SM 627</td>
<td>Legal Issues-Sport Administrat</td>
<td>3</td>
</tr>
<tr>
<td>SM 630</td>
<td>Sport Sponsorship/Sales Mgmt</td>
<td>3</td>
</tr>
<tr>
<td>SM 635</td>
<td>Sport Management Processes</td>
<td>3</td>
</tr>
<tr>
<td>SM 646</td>
<td>Sport Marketing</td>
<td>3</td>
</tr>
<tr>
<td>SM 621</td>
<td>Sport Publicity/Public Relatns</td>
<td>3</td>
</tr>
<tr>
<td>SM 660</td>
<td>NCAA Compliance/Current Issues</td>
<td>3</td>
</tr>
<tr>
<td>SM 670</td>
<td>Sport Finance</td>
<td>3</td>
</tr>
<tr>
<td>SM 680</td>
<td>History/Philosophy of Sport</td>
<td>3</td>
</tr>
<tr>
<td>SM 685</td>
<td>Internship-Sport Management</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>36</strong></td>
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</table>

DISTANCE EDUCATION PROGRAM

Distance Learning/Hybrid requirements for the Master’s Degree in Sport Management that only begins in the summer session. You are required to complete 36 credit hours and must have a 3.0 overall GPA to graduate.

CURRICULUM

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SM 616</td>
<td>Sport Marketing Resrch Methods (Online)</td>
<td>3</td>
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<tr>
<td>SM 627</td>
<td>Legal Issues-Sport Administrat (Online)</td>
<td>3</td>
</tr>
<tr>
<td>SM 635</td>
<td>Sport Management Processes</td>
<td>3</td>
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<tr>
<td>SM 640</td>
<td>International Sport Governance (Online)</td>
<td>3</td>
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<td>SM 646</td>
<td>Sport Marketing (Online)</td>
<td>3</td>
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<td>SM 670</td>
<td>Sport Finance</td>
<td>3</td>
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<tr>
<td>SM 675</td>
<td>Fund-Raising (Online)</td>
<td>3</td>
</tr>
<tr>
<td>SM 680</td>
<td>History/Philosophy of Sport (Online)</td>
<td>3</td>
</tr>
<tr>
<td>SM 686</td>
<td>Facility Planning &amp; Management</td>
<td>3</td>
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<tr>
<td>SM 690</td>
<td>Teaching Practicum (Last three hours are online in the last semester)</td>
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<tr>
<td>SEP 620</td>
<td>Indvdl Intractn-Sprt/Phys Act</td>
<td>3</td>
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<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>36</strong></td>
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SUGGESTED PLAN OF STUDY

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SM 686</td>
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<td>SM 635</td>
<td>3</td>
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<tr>
<td>SM 690</td>
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<tr>
<td>SM 616 (Online)</td>
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<td></td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
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<tr>
<td>SM 675 (Online)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>6</strong></td>
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<tr>
<td>Semester</td>
<td>Hours</td>
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<tr>
<td>Third Semester</td>
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<tr>
<td>Fourth Semester</td>
<td>10</td>
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<tr>
<td>Fifth Semester</td>
<td>3</td>
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</tbody>
</table>

Total credit hours: 36
Public Health

Degrees Offered

ON CAMPUS:

Master of Public Health (MPH):

- Biostatistics
- Epidemiology
- Health Policy
- Occupational and Environmental Health Sciences
- Social and Behavioral Sciences

MPH Dual Degree:

- MD/MPH
- DDS/MPH
- MBA/MPH

Ph.D. in Public Health Science

- Biostatistics
- Epidemiology
- Occupational and Environmental Health Sciences
- Social and Behavioral Sciences

ONLINE:

- MPH in Social and Behavioral Sciences
- MS in School Health Education

West Virginia University’s School of Public Health combines the excitement and challenge of a newly launched school with a 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 Master of Public Health (MPH) program is further accredited by the Council for Education in Public Health (CEPH). The WVU School of Public Health has been approved to conduct an intensive self-study as it transitions from an accredited program to a CEPH-accredited School of Public Health. 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 School Health Education program is nationally unique and attracts future leaders in education. The Ph.D. 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 health of West Virginians through innovation and leadership in education, research and service.

We achieve this by:

- Implementing educational programs that produce highly qualified practitioners, educators, and researchers
- Promoting interdisciplinary research to understand and solve complex health problems with local impact and global significance
- Engaging communities, businesses and government partners in accomplishing our shared mission

The vision of the School of Public Health is to be internationally recognized for demonstrating how academic public health can transform lives.

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.

---

**ADMINISTRATION**

**INTERIM DEAN**

• Jeffrey Coben - MD (University of Pittsburgh)
  Professor, Department of Health Policy, Management and Leadership

**SENIOR ASSOCIATE DEAN FOR ACADEMIC AFFAIRS AND EDUCATIONAL EFFECTIVENESS**

• Gilbert Ramirez - Ph.D., CPH (University of Texas)
  Professor, Department of Health Policy, Management, and Leadership

**ASSOCIATE DEAN FOR FINANCE AND ADMINISTRATION**

• Linda J. Rudy - MBA (West Virginia University)
  Business and Operations

**ASSISTANT DEAN FOR PUBLIC HEALTH PRACTICE AND WORKFORCE DEVELOPMENT**

• Lauri A. Andress - Ph.D. (University of Texas)
  Assistant Professor, Department of Health Policy, Management and Leadership

**ASSISTANT DEAN FOR PROGRAM DEVELOPMENT AND OPERATIONS**

• Janet B. Hunt - MPH (University of Tennessee)
  Teaching Assistant Professor, Department of Social and Behavioral Sciences

**DIRECTOR OF INTERPROFESSIONAL AND CONTINUING EDUCATION**

• Rachel T. Abraham - MD, MPH (Emory University)
  Assistant Professor, Department of Occupational and Environmental Health Sciences

**DIRECTOR OF PRACTICE-BASED LEARNING**

• Bobbi Sykes - MS (West Virginia University)
  Instructor, Department of Social and Behavioral Sciences

**DIRECTOR OF ASSESSMENT**

• R. David Parker - Ph.D. (University of South Carolina)
  Associate Professor, Department of Epidemiology

**DIRECTOR, OFFICE OF STUDENT SERVICES**

• Sherry Kuhl - MS (Walden University)
  Office of Student Services

**INTERIM CHAIR**

• Robert Duval - Ph.D. (Florida State University)
  Associate Professor, Department of Health Policy, Management and Leadership

• Jefferson Frisbee - Ph.D. (University of Guelph, Canada)
  Professor, Department of Epidemiology

• Matthew J. Gurka - Ph.D. (University of North Carolina)
  Associate Professor, Department of Biostatistics

• Michael McCawley - Ph.D. (New York University)
  Research Professor, Department of Occupational and Environmental Health Sciences

• Keith Zullig - Ph.D. (University of South Carolina)
  Associate Professor, Department of Social and Behavioral Sciences
Important Note: For all School of Public Health programs, non-enrollment/completion of program relevant courses in four (4) or more sequential, long semesters (Fall, Spring) may result in suspension from the program.

Affirmation of competency achievement is a requirement for graduation.

MPH Admission Requirements (Fall only)
The WVU School of Public Health participates in the Schools of Public Health Application Service (SOPHAS (http://www.sophas.org)). Our MPH Admissions process is a two-step process. All MPH applications must be submitted through the national SOPHAS service and applicants must also submit a WVU Graduate application. In addition to the application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, 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.

Please see each department and major’s website for additional admission requirements.

MS in School Health Education Admission Requirements (Fall, Spring, Summer)
Students interested in applying for the MS in School Health Education must: Complete the WVU graduate application, complete the MS in School Health Education application, and submit official school transcripts, CV/Resume, three academic letters of recommendation, and a copy of the applicant’s professional teaching certificate and/or licensure. Please see the MS degree website for further admission requirements. http://publichealth.hsc.wvu.edu/sbhs/Academics/MS-in-School-Health-Education

Ph.D. Admission Requirements (Fall Only)
Fully completed applications received by February 15 are considered. Admission to the doctoral program is limited to highly qualified and motivated candidates. Competitive stipend support is offered to these students.

Detailed admissions procedures, including online application materials, as well as application deadline, can be found at the School of Public Health website: http://publichealth.hsc.wvu.edu/

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 bachelor’s 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 in the discipline-specific majors of:

- Biostatistics
- Epidemiology
- Health Policy
- Occupational and Environmental Health Sciences
- Social and Behavioral Science (On campus and Online)

All MPH programs are accredited by the national Council for Education for Public Health (CEPH).

For more information about the MPH program, please contact:
Master of Science (MS) in School Health Education

The mission of the MS in School Health Education Program is to provide teachers with the knowledge and skills necessary to instill in school-age students the information needed to make healthy decisions regarding well-being. The MS degree in School Health Education is only open to applicants holding a professional teaching certificate and/or licensure (in any teaching area). A copy of your teaching certificate is required for admission. This program is a member of the Southern Regional Education Board (SREB) (http://www.electroniccampus.org).

Program Description

Students in this program will complete thirty credit hours of coursework. Students may transfer nine credit hours that are pre-approved, upon admission. All courses are offered on-line. Students can complete this degree in two years or less. The goal of the MS degree program in School Health Education is to provide teachers with the knowledge and skills necessary to instill in school-age students the information necessary to make healthy decisions regarding well-being. Experiential instruction, coupled with critical thinking skills, enables students to be informed health consumers. The program will provide an optimal experience to equip students to be models and mentors for their own students.

For more information about the MS in School Health program, contact:

Ruth Kershner, School Health Coordinator
West Virginia University
School of Public Health
P.O. Box 9190
1 Medical Center Drive
Morgantown, WV 26505-9190
Phone (304) 293-7440
Fax (304) 293-6685

Doctor of Philosophy (Ph.D.) in Public Health Sciences

Welcome to the WVU School of Public Health, Ph.D. program in Public Health Sciences. Our mission is to provide state of the art doctoral education to a select group of highly qualified 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 resulting from communicable disease, chronic disease, and injury. The Ph.D. program offers four discipline-specific majors of:

- Biostatistics (117 credit hours)
- Epidemiology (114 credit hours)
- Occupational and Environmental Health Sciences (118 credit hours)
- Social and Behavioral Sciences (117 credit hours)

Detailed curricula are available at the School of Public Health website: http://publichealth.hsc.wvu.edu/.

Goals of the Ph.D. Program

- Educate and train the next generation of public health leaders, thereby producing a self-renewing cadre of teachers, researchers, and practitioners who will help shape and sustain the best public health practices.
- Identify and address public health disparities.
- Improve health and health care in West Virginia while simultaneously improving the economic competitiveness of the WVU Health Sciences Center, emulating peer training programs in other states.
• Feature trans-disciplinary teaching and research in order for our graduates to be competitive and successful in high-level public health jobs, grants, and research opportunities.
• Create a pool of talent for developing highly technical enterprises in West Virginia.

Program Description

The first two 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. In the first year, students take courses in the core areas of public health, scientific integrity and ethics, research writing, and research and statistical methodology, as well as seminars introducing them to pedagogy and faculty research. In the second year, students engage in required courses and electives in their specialty track and additional research study opportunities.

At the conclusion of the second year, students are matched with a mentor and transition to a funded faculty research project, lab, or group. The last two years will largely be dedicated to the dissertation proposal process and research; however, after qualifying exams, students also engage in teaching practica (to be determined by the student’s departmental advisor).

Qualifying Examination Summary

At the conclusion of the second year of coursework, students are required to pass a comprehensive qualifying examination. This comprehensive exam is based on core public health and discipline-specific material and administered by the student’s dissertation committee. Students are only allowed to take the comprehensive exam twice. If a student fails the exam twice, they will be dismissed from the program.

Doctoral Dissertation Proposal

Upon successful completion of the qualifying exam, the student will set a date for the doctoral dissertation proposal defense. The proposal takes the form of a NIH or equivalent grant proposal including: specific aims, introduction, succinct yet detailed literature review, applicant capability, materials and research methodology, references, human subjects, and supporting documents. The proposal must be defended by the student in a forum that includes the student’s complete Doctoral Dissertation Committee (comprised of five members).

Dissertation Summary

The program will culminate in a dissertation research project on an important public health topic. The dissertation can take the form of a traditional research dissertation or a series of three publishable papers or monographs on a related, important public health topic. The papers must be cleared for submission by the committee and submitted before the dissertation defense. We emphasize peer-reviewed research publications as desired outcomes because of their positive impact on skills and the professional placement options for our graduates. This is consistent with a trend in public health Ph.D. programs around the country.

The dissertation will be defended in a forum that has been announced to the school and university. All members of the Dissertation Committee must sign the dissertation approval form for the dissertation to be complete. The dissertation must be submitted following WVU policy regulating electronic submission of theses and dissertations.

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 will be delivered by web-based technology.

For more information contact:

Keith Zullig
Director, Ph.D. in Public Health Science programs
PO Box 9190
1 Medical Center Drive
Morgantown, WV 26505-9190
(304) 293-1091
(304) 293-6685
kzullig@hsc.wvu.edu
Biostatistics

Biostatistics

Biostatistics is the science of applying statistical theory and principles to research in public health, medicine, biology, pharmaceuticals, environmental science, and other related fields.

DEGREES OFFERED:

• MPH in Biostatistics
• Ph.D. in Biostatistics

CERTIFICATES

• Applied Biostatistics

MPH IN BIOSTATISTICS

The MPH degree in Biostatistics is meant for students with moderate to strong quantitative backgrounds. The purpose of this degree is to provide additional training in statistical data analysis and study design generally not available with other MPH degrees. The target competencies of this concentration include:

• Explain and assess basic concepts of probability and statistical inference.
• Summarize public health data using descriptive biostatistical methods.
• Distinguish appropriate basic inferential statistical analyses and summarize their results.
• Produce tabular and graphical displays of data that effectively convey analytic findings.
• Manage standard statistical software to efficiently manage data structures.
• Summarize central concepts of statistical theory and inference.
• Apply standard statistical methods for the analysis of continuous data in a valid manner.
• Use analytic tools to describe and make inferences on categorical data in a valid manner.
• 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.
• Discriminate situations where standard analytic tools can be applied from those problems where more complex methods are needed.
• Integrate and synthesize biostatistics knowledge, skills and abilities as demonstrated in the context of a culminating experience.

A typical student who graduates with an MPH in Biostatistics from WVU will be qualified to work as a biostatistical or research coordinator in research organizations such as a health department, pharmaceutical company, contract research organization (CRO), or a university.

PH.D. IN BIOSTATISTICS

The Biostatistics major of the Ph.D. in Public Health Sciences will provide students with a general background in not only public health and its related disciplines, but it will also allow students the opportunity to obtain in-depth knowledge and extensive experience in advanced and modern methods for data analysis. In addition, the Ph.D. in Biostatistics will provide students training and experience in collaborating in a health research environment as well as teaching biostatistics to students of varying backgrounds.

As part of the existing Ph.D. in Public Health Sciences, Biostatistics students will gain the following general competencies common to all students in the program, with additional competencies specific to the Biostatistics major:

GENERAL PH.D. IN PUBLIC HEALTH SCIENCES 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

BIOSTATISTICS MAJOR COMPETENCIES

• Assimilate the foundations of public health, including the physical, biological, and social behavioral/factors which affect the health of the community.
• Synthesize and illustrate principles of study design, estimation, statistical inference, and standard data analysis methods to students and researchers across various health disciplines
• Integrate the foundations of statistical theory and inference for estimation and testing of hypotheses in public health
• Discern gaps in current statistical methods that limit further public health research and propose solutions based on rigorous theoretical justification
• Synthesize new developments in the biostatistical literature to address relevant and challenging public health questions
• Evaluate research reports and proposals for research funding on the basis of their scientific integrity, validity, and the strength of the quantitative analysis
• Prepare reports of quantitative analyses for journal publication, presentations at scientific meetings, and grant applications

We expect graduates to obtain not only a deep knowledge of biostatistical theory and principles, but also a broad understanding of public health. Graduates will be trained and receive extensive experience in both consulting/collaboration as well as teaching, making them suitable candidates for careers in industry (for example, pharmaceutical companies, contract research organizations) or academia.

The required amount of credits for this degree is 117, of which 60 are didactic. The courses and the typical schedule may be different to allow for additional biostatistics specialization. This degree typically would take four years to complete.

**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 an [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](http://publichealth.hsc.wvu.edu) for more information on current rates.

**FACULTY**

**INTERIM CHAIR**
• Matthew J. Gurka - Ph.D. (University of North Carolina at Chapel Hill)

**PROFESSOR**
• George A. Kelley - DA (Middle Tennessee State University)

**ASSISTANT PROFESSORS**
• Christa L. Lilly - Ph.D. (Vanderbilt University)
• D. Leann Long - Ph.D. (University of North Carolina at Chapel Hill)
• Dustin M. Long - Ph.D. (University of North Carolina at Chapel Hill)
• Michael D. Regier - Ph.D. (University of British Columbia)
• Sijin Wen - Ph.D. (The University of Texas Health Sciences Center at Houston)
MPH in Biostatistics

ADMISSIONS GUIDELINES

• A baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0 and a GPA of 3.4 for quantitative courses
• Successful completion of multivariable calculus
• GRE scores of 150 (verbal), 155 (quantitative), 4.0 (analytical writing)
• TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based)
• Computer skills are a program requirement. It is the responsibility of the students to become skilled in computer applications and to acquire the minimum software specifications required to be successful

TO APPLY FOR THE MPH IN BIOSTATISTICS

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you. Our MPH Program is CEPH accredited, and our new School of Public Health is transitioning to be a CEPH-accredited school of public health as well.

We are also one of the schools participating in SOPHAS (Schools of Public Health Application Service). Our MPH Admissions process is a two-step process. All MPH applications must be submitted through the national SOPHAS service and applicants must also submit a WVU Graduate application.

In addition to the general application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires original transcripts from ALL U.S. institutions attended! (Even Study Abroad) Please see each Major’s website for additional application requirements.

There is a $120 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.

Applications that are complete will then be reviewed by the department. 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 $60.00 WVU application fee.

Important: when sending GRE scores for consideration for admission at WVU use the GRE WVU School of Public Health College code: 0157. This is the code that MUST be used, otherwise your GRE score will not be reported to SOPHAS and your application will be incomplete and therefore will not be reviewed for an admissions decision. [There are different codes for other programs at West Virginia University]

All other degrees and certificate programs will use the WVU application system.

Ph.D. in Biostatistics

ADMISSIONS GUIDELINES

• Baccalaureate degree from an accredited college or university (preferred GPA: 3.00 overall; 3.4 for quantitative courses) or a Master’s degree from an accredited program or school in biostatistics, statistics, mathematics, or another quantitative field (preferred)
• GRE scores: 160 Quantitative, 150 verbal, and 4.0 for analytical writing.
• A completed Ph.D. application, including a Statement of Purpose
• Three letters of recommendation

TO APPLY FOR THE PH.D. IN BIOSTATISTICS

• Complete the WVU graduate application and submit with the processing fee (https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad)
• Submit official school transcripts and official GRE scores to:

WVU Admissions and Records
PO Box 6009
Morgantown, WV 26506-6009
(304) 293-2121.
• Complete the Ph.D. application online and indicate BIOS as your preference (http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp)
• Three academic letters of recommendation and CV/Resume, mailed to:

WVU School of Public Health
Ph.D. Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

Fall Admissions Only: Fully completed applications received by February 15 are considered.

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 (http://publichealth.hsc.wvu.edu/students/student-policies/student-computer-policy).
• 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 (http://publichealth.hsc.wvu.edu/academics/online-programs/applied-biostatistics-certificate/application-process) to apply for the Applied Biostatistics Certificate. Please contact Dr. Christa Lilly 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=wvugrad
• Submit official school transcripts and official GRE scores to:

WVU HSC Admissions
1 Medical Center Drive
1170 HSC North
Morgantown, WV 26506

• International students must submit to:

WVU Admissions and Records
PO Box 6009
Morgantown, WV 26506-6009

Overview of MPH in Biostatistics Curriculum

Students in the MPH program in Biostatistics will complete a total of forty-three credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of Seminar, nineteen credit hours of departmental required courses, and six credit hours of elective courses). The culminating experience, taken during the final semester, requires completing a consulting practicum (three credit hours) and submitting a paper and poster. This degree will typically take four semesters to complete.

MPH Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 610</td>
<td>Intermediate Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>EPID 601</td>
<td>Public Health Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>or EPID 610</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>HPML 601</td>
<td>Foundations of Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>OEH 601</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 696</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>SBHS 601</td>
<td>Social and Behavioral Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Curriculum Concentration:
The student’s advisor can also approve elective courses from other programs if these courses contribute to the student’s program of study.

**SUGGESTED PLAN OF STUDY**

**First Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 610</td>
<td>4 BIOS 620</td>
<td>3 PUBH 622</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>BIOS 612</td>
<td>3 BIOS 621</td>
<td>3</td>
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</tr>
<tr>
<td>EPID 610</td>
<td>3 BIOS 623</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOS 611</td>
<td>3 BIOS 696</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td>PUBH 696</td>
<td>1</td>
<td></td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
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<td><strong>8</strong></td>
<td><strong>3</strong></td>
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**Second Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEHS 601</td>
<td>3 BIOS 629</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SBHS 601</td>
<td>3 Electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>HPML 601</td>
<td>3</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Total credit hours</strong></td>
<td><strong>43</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The suggested schedule may be altered to allow for additional coursework in biostatistics.

The MPH degree will be awarded based on successful completion of all academic requirements and demonstrated achievement of competencies. The department chair using a faculty panel will review competency performance evidence and based on the evidence reviewed, determine if the student has achieved the expected competencies. If a determination is made that competencies have not been achieved, the department chair will inform the student what must be accomplished to demonstrate achievement and therefore be recommended for awarding of the MPH degree. This may include taking additional courses.

**Overview of Biostatistics Ph.D. Curriculum**

The Biostatistics curriculum of the Ph.D. in Public Health Science Program provides students training and practical experience in advanced and modern quantitative methods. Statistical theory focusing on tools used in practice is presented in the first two years, along with a comprehensive foundation in public health. Students will be provided a balanced education that not only allows them to succeed in biostatistical research, but to excel in environments that emphasize collaboration and education.
## Curriculum Requirements

### Common Core Courses for the SPH Doctoral Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPID 710</td>
<td>Adv Principles-Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>EPID 711</td>
<td>Adv Epidemiologic Theory</td>
<td>3</td>
</tr>
<tr>
<td>PUBH course - Foundations of Public Health</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BIOS 797</td>
<td>Research</td>
<td>15</td>
</tr>
<tr>
<td>BIOS 797</td>
<td>Research</td>
<td>15</td>
</tr>
<tr>
<td>BIOS 797</td>
<td>Research</td>
<td>15</td>
</tr>
<tr>
<td>BIOS 797</td>
<td>Research</td>
<td>15</td>
</tr>
<tr>
<td>C&amp;I 789</td>
<td>Teaching In Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 790</td>
<td>Teaching Practicum</td>
<td>3</td>
</tr>
<tr>
<td>BMS 700</td>
<td>Scientific Integrity</td>
<td>1</td>
</tr>
<tr>
<td>BMS 720</td>
<td>Scientific Writing</td>
<td>2</td>
</tr>
</tbody>
</table>

### BIOS Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 623</td>
<td>Biostatistical Consulting</td>
<td>1</td>
</tr>
<tr>
<td>BIOS 624</td>
<td>Consulting Experience</td>
<td>2</td>
</tr>
<tr>
<td>BIOS 700</td>
<td>Foundtns-Modrn Statstcl Infrc</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 701</td>
<td>Modern Statistical Inference</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 720</td>
<td>Theory/Applicatn-Linear Models</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 645</td>
<td>Linear Models</td>
<td>4</td>
</tr>
<tr>
<td>&amp; BIOS 745</td>
<td>and Adv Application-Linear Models</td>
<td></td>
</tr>
<tr>
<td>BIOS 721</td>
<td>Advanced Categorical Data</td>
<td>4</td>
</tr>
<tr>
<td>BIOS 740</td>
<td>Adv Longitudinal Data Analysis</td>
<td>4</td>
</tr>
<tr>
<td>BIOS 788</td>
<td>Grant Writing-Biostatisticians</td>
<td>2</td>
</tr>
<tr>
<td>BIOS 796</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOS 796</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

### Elective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 622</td>
<td>Analysis of Time-to-Event Data</td>
<td></td>
</tr>
<tr>
<td>BIOS 764</td>
<td>Bayesian Biostatistics</td>
<td></td>
</tr>
<tr>
<td>BIOS 765</td>
<td>Adv Structural Equation Models</td>
<td></td>
</tr>
<tr>
<td>STAT 547</td>
<td>Survival Analysis</td>
<td></td>
</tr>
<tr>
<td>STAT 745</td>
<td>Data Mining</td>
<td></td>
</tr>
<tr>
<td>STAT 761</td>
<td>Theoretical Statistics 1 **</td>
<td></td>
</tr>
<tr>
<td>STAT 762</td>
<td>Theoretical Statistics 2 **</td>
<td></td>
</tr>
<tr>
<td>STAT 763</td>
<td>Stochastic Processes</td>
<td></td>
</tr>
<tr>
<td>STAT 765</td>
<td>Stat Methods-Bioinformatics</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours**: 118

* Students with MS in Statistics or Biostatistics may be exempt from these courses
** Strongly recommended for students interested in an academic career.

## Suggested Plan of Study

### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 700</td>
<td>3 BIOS 701</td>
<td>3 C&amp;I 789</td>
</tr>
<tr>
<td>EPID 710</td>
<td>3 BIOS 721</td>
<td>4 BMS 720</td>
</tr>
<tr>
<td>STAT 645</td>
<td>3 BIOS 623</td>
<td>1 BIOS 797</td>
</tr>
<tr>
<td>BIOS 745</td>
<td>1 BIOS 788</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Summer Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 789</td>
<td>3</td>
</tr>
<tr>
<td>BMS 720</td>
<td>2</td>
</tr>
<tr>
<td>BIOS 797</td>
<td>1</td>
</tr>
</tbody>
</table>

*Total Hours: 118*
Epidemiology

DEGREES OFFERED:

• MPH in Epidemiology
• Ph.D. in Epidemiology

MPH IN EPIDEMIOLOGY

The Master of Public Health (MPH) degree is designed for those who wish to acquire knowledge and skills necessary for epidemiologic practice and research. This degree will be appropriate for persons interested in a career studying the relationship of risk factors to a variety of disease, injury, and other health-related states. This degree requires forty-two credit hours and typically takes four semesters to complete.

Upon completion of the MPH degree in Epidemiology, graduates will have achieved the following competencies:

• Derive and assess basic epidemiologic frequencies and association.
• Compare and contrast epidemiologic study designs.
• Weigh a public health problem in terms of magnitude, person, time, and place.
• Measure occurrences of incidence, morbidity, and mortality.
• Summarize concepts of causation.
• Derive appropriate inferences from epidemiologic data.
• Analyze data using statistical software to fit epidemiologic regressions, generate coefficients, and explain interpretations properly.
• Analyze data for confounding, and generate a proper interpretation.
• Appraise data for effect modification, and generate a proper interpretation.
• Evaluate data for dose-response.
• Evaluate basic multivariable statistical techniques commonly used in clinical and public health settings.
• Manage standard statistical software to efficiently manage data structures.
• Integrate and synthesize epidemiologic knowledge, skills and abilities as demonstrated in the context of a culminating experience.

WVU MPH graduates in Epidemiology are qualified to work and provide leadership in state, federal, and global health agencies (e.g. Centers for Disease Control and Prevention [CDC], The National Institute for Occupational Safety and Health [NIOSH]); hospitals; infection control departments in multiple
industries; academic health centers and other healthcare organizations; research institutions, foundations; insurance and managed care organizations; and pharmaceutical and biotechnology companies.

**PH.D. IN EPIDEMIOLOGY**

The doctor of philosophy (Ph.D.) in epidemiology 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.

Upon completion of the Ph.D. degree in epidemiology, graduates will be able to:

- 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.
- 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, policy makers, and the general public.
- Prepare research proposals for extramural peer-reviewed funding.

Graduates of the Ph.D. in epidemiology program typically 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]).

Students who have not earned a relevant master’s or professional degree may still be admitted to the doctoral program. However, these students are required to complete basic public health/epidemiology courses in the School of Public Health. These students should still apply directly to the Ph.D. program.

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**FACULTY**

**INTERIM CHAIR**

- Jefferson Frisbee - Ph.D. (University of Guelph)

**PROFESSORS**

- Sarah Knox - Ph.D. (University of Stockholm)
- Ian R. H. Rockett - Ph.D. (Brown University)

**ASSOCIATE PROFESSORS**

- Kimberly Innes - Ph.D. (Cornell University)
- Peter Giacobbi, Jr. - Ph.D. (University of Tennessee)
- R. David Parker - Ph.D. (University of South Carolina)

**ASSISTANT PROFESSORS**

- Baqiyah Conway - Ph.D. (University of Pittsburgh)
- Kelly Gurka - Ph.D. (University of North Carolina at Chapel Hill)
- Motao Zhu - Ph.D. (State University of New York at Albany)

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**Admission Guidelines for MPH**

- A baccalaureate degree from an accredited college or university (required)
- Preferred minimum GPA of 3.0
- Preferred minimum GRE scores of 150 (verbal), 155 (quantitative), and 4.0 (analytical writing)
• Personal Statement
• Three academic letters of recommendation
• TOEFL scores (minimum 550 paper-based, 213 computer-based, 80 internet-based) International students only

MPH ADMISSION

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you. Our MPH Program is CEPH accredited, and our new School of Public Health is transitioning to be a CEPH-accredited school of public health as well.

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Applicants must indicate their first choice of MPH major, and may also indicate a second choice. A maximum of two choices is allowed. (SOPHAS fee $120.00 – one choice; SOPHAS fee $165.00 – two choices)

• 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.

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All other degrees and certificate programs will use the WVU application system.

Admission Guidelines for Ph.D.

• A minimum of a baccalaureate degree (Master’s degree preferred) from an accredited college or university (preferred minimum GPA of 3.0)
• GRE preferred scores: 150 (verbal), 155 (quantitative), and 4.0 for (analytical writing)
• A completed Ph.D. application, including a statement of purpose (see below under Ph.D. admission requirements for details regarding the statement of purpose)
• Three academic letters of recommendation
• TOEFL scores (minimum 550 paper-based, 213 computer-based, 80 internet-based) International students only

STATEMENT OF PURPOSE

The essay is a critical piece of the admissions process. We will evaluate both the content of the essay and your writing skills in considering your application. All applicants should write an essay of 1000 words or less. In this essay, please address the following questions:

• What is it about epidemiology that appeals to you?
• What are your long-term career goals?
• What area of research do you wish to emphasize and why?

Applicants should also include any additional information about their interests, prior background, or special circumstances which may be helpful to the Admissions Committee in evaluation of the application.

Students interested in applying for the Ph.D. in epidemiology must:

• Complete the WVU graduate application and submit with the processing fee
  https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad
• Submit official school transcripts and official GRE/TOEFL scores to:

WVU Admissions and Records
PO Box 6009
Morgantown, WV 26506-6009
(304) 293-2121

- Complete the Ph.D. application online and indicate epidemiology as your preference by visiting: http://publichealth.hsc.wvu.edu/epidemiology/Academics/PhD-Degree
- Submit three academic letters of recommendation and CV/Resume

You may mail your recommendation letters and CV/Resume to:

WVU School of Public Health
Ph.D. Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

**Fall Admissions Only:** Fully completed applications received by February 15 are considered.

**Overview of MPH in Epidemiology Curriculum**

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**DEPARTMENT OF EPIDEMIOLOGY MASTER LEVEL COURSES**

**MPH Core Curriculum:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 601</td>
<td>Applied Biostatistics 1</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 602</td>
<td>Applied Biostatistics Lab</td>
<td>1</td>
</tr>
<tr>
<td>EPI 610</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>HPML 601</td>
<td>Foundations of Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>OEHS 601</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 696</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>SBHS 601</td>
<td>Social and Behavioral Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**MPH Concentration Curriculum:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOS 603</td>
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<td>3</td>
</tr>
<tr>
<td>BIOS 611</td>
<td>Data Management and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>EPI 611</td>
<td>Advanced Epidemiologic Theory</td>
<td>3</td>
</tr>
<tr>
<td>EPI 612</td>
<td>Applied Epidemiology for PH</td>
<td>3</td>
</tr>
<tr>
<td>EPI 696</td>
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**Practice based/Culminating Experiences:**

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**Electives (6 hours):**

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SUGGESTED PLAN OF STUDY

First Year

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<td>BIOS 603</td>
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Second Year

<table>
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Total credit hours: 42

The MPH degree will be awarded based on successful completion of all academic requirements and demonstrated achievement of competencies. The department chair using a faculty panel will review competency performance evidence and based on the evidence reviewed, determine if the student has achieved the expected competencies. If a determination is made that competencies have not been achieved, the department chair will inform the student what must be accomplished to demonstrate achievement and therefore be recommended for awarding of the MPH degree. This may include taking additional courses.

Overview of Epidemiology Ph.D. Curriculum

The Doctor of Philosophy (Ph.D.) in epidemiology 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.

Ph.D. in Epidemiology 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

Students who have not earned a relevant master’s or professional degree may still be admitted to the doctoral program; however, these students are required to complete basic public health/epidemiology courses at the master’s level in the Department of Epidemiology before they begin their doctoral coursework. This may add one to two years to the program depending on their preparation. These applicants should still apply directly to the Ph.D. program.
CURRICULUM

Students in the Ph.D. in Public Health Sciences program in epidemiology will complete a total of 114 credit hours, of which fifty-seven are dedicated toward research. The first two years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to epidemiology. The last two years will largely be dedicated to dissertation research.

EPIDEMIOLOGY PH.D. REQUIRED COURSES

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<td>EPID 711</td>
<td>Adv Epidemiologic Theory</td>
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Electives - Select from the following: 9

- EPID 740  Gene X Envrn Intrcts/Chrnc Ds
- EPID 745  Epigenetics/Systems Biology
- EPID 760  Demography/Transitions
- EPID 763  Injury Epidemiology
- EPID 764  Mind-body Medicine
- EPID 765  EPID of Transportation Safety
- EPID 766  Physical Activity Epidemiology

Total Hours 114

ELECTIVES

Students will complete a minimum of nine credit hours of electives during their Ph.D. program. These may be selected from among the department’s, School of Public Health’s, or university’s many course offerings. These courses will be discussed and approved with the faculty advisor.

TEACHING PRACTICUMS

Students will spend two semesters in a mentored relationship with a faculty member, assisting with the implementation of a course.

COMPREHENSIVE EXAMS

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. The Qualifying Examination consists of both a written and oral component. Qualifying exams should not include testing on content of the dissertation. The oral defense of the dissertation proposal will serve that purpose. The Qualifying Examination is planned and administered by the five-member dissertation committee, under the direction of the committee chairperson. If necessary and at the discretion of the Program Director, another faculty member may be appointed to serve on the committee.

The oral portion of the exam may not be attempted until the written component is completed and must be attempted within two academic weeks of the written component. Students are expected to take the qualifying exam during the summer sessions between their fourth and fifth academic semesters. However, the written component must be completed no later than the second week in July. Students are not eligible to begin their dissertation or enroll in dissertation hours until they have successfully completed the Qualifying Examination.
RESEARCH
Students will participate in research rotations during their first year, meeting and working with research faculty with similar interests in order to develop mentorships for dissertation research. A total of fifty-seven credit hours of rotations and dissertation research will be completed during the program.

THE DISSERTATION PROPOSAL, DEFENSE, AND APPROVAL
Although students may choose to pursue a traditional dissertation format, the majority of Ph.D. students format their dissertation using the Three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with chairperson of their dissertation committee. As a reminder, students will not be allowed to defend their dissertations until they have at least one first-authored publication in any form of acceptance, based on their Ph.D. dissertation, in a peer-reviewed journal by the time of the dissertation defense. Note: This required publication does not necessarily need to be one of the three articles generated through the JAF dissertation format.

SUGGESTED PLAN OF STUDY

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Total credit hours: 114

Health Policy, Management and Leadership

Degree Offered:

• MPH in Health Policy

The MPH degree in Health Policy (within the Department of Health Policy, Management and Leadership) is designed for students with a keen interest in using population-based approaches to improve the health status of large groups or populations. The focus of this degree is on understanding how systems in our society influence the health status of populations and how to influence and/or design, implement, and manage broad, system-level instruments to improve population health outcomes. These system-level instruments might include programs in a public health or healthcare setting, or policies at the local, state, or national government levels.
In the MPH in Health Policy there is a dual emphasis on acquiring both theoretical knowledge and practical skills. Students are also offered the opportunity to select electives that will allow for additional focus in areas such as, but not limited to: health services research, health policy, healthcare management, environmental policy, and public health leadership.

Thus, this degree is ideal for recent graduates or early- or mid-career health professionals seeking to develop or advance their careers in a variety of public health or health care settings. Additionally, the internship program has been designed to place students in health settings and apply their newly acquired knowledge and skills to address real-world problems. Upon completion of the MPH in Health Policy, students will be prepared to be successful as they continue their graduate education at the doctoral level or as they continue to develop 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.

FACULTY

INTERIM CHAIR
- Robert Duval - Ph.D. (Florida State University)

PROFESSORS
- Jeff Coben, Interim Dean - MD (University of Pittsburgh)
- Gilbert Ramirez, Senior Associate Dean for Academic Affairs and Educational Effectiveness - Ph.D., CPH (University of Texas)

ASSOCIATE PROFESSOR
- Warren Eller - Ph.D. (Texas A&M University)

ASSISTANT PROFESSORS
- Lauri Andress, Assistant Dean for Public Health Practice and Workforce Development - Ph.D./JD (University of Texas/South Texas College of Law)
- Thomas Bias - Ph.D. (West Virginia University)
- Elyce Biddle - Ph.D. (West Virginia University)
- Stephanie Frisbee - Ph.D. (West Virginia University)

FACULTY ASSOCIATE
- Jean Siebert - MBA (West Virginia University)

ADJUNCT FACULTY
- Wendy King - MHA (George Washington University)
- Sarah Woodrum - Ph.D. (University of Illinois - Chicago)

Admission Guidelines (MPH in Health Policy)
- Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0
- GRE scores of 150 (verbal), 144 (quantitative), 4.0 (analytical writing)
- TOEFL scores (minimum 515 paper-based) (minimum 213 computer-based) (minimum of 80 internet-based)

MPH Applicants (Fall Admissions Only)

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you. Our MPH Program is CEPH-accredited, and our new School of Public Health is transitioning to be a CEPH-accredited school of public health as well.

WVU participates in the Schools of Public Health Application Service (SOPHAS). Our MPH process is a two-step process. All MPH applications must be submitted through the national SOPHAS service and applicants must also submit a WVU Graduate application.

In addition to the general application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires original transcripts from all U.S. institutions attended. (Including Study Abroad) Please see each Major’s website for additional application requirements.

There is a $120 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 $60.00 WVU application fee.

Admission decisions to the West Virginia School of Public Health are conducted in two rounds. Fully completed SOPHAS applications received by April 15 will be considered first. Incomplete applications and new fully completed applications received by June 1 will be considered for those degree programs/concentrations that have openings after the April 15 decisions. Applicants are strongly encouraged to submit their completed applications by the April 15 deadline in order to be considered during the first round.

Important: When sending GRE scores for consideration for admission to WVU, please use the WVU School of Public Health College GRE code: 0157. This code MUST be used, otherwise your GRE score will not be reported to SOPHAS and your application will be incomplete. Incomplete applications cannot be reviewed for an admissions decision. [Each program at West Virginia University has a specific code]

All other degrees and certificate programs will use the WVU application system.

Overview of MPH in Health Policy Curriculum

Students in the MPH program in Health Policy will complete a total of forty-five credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of seminar, eighteen credit hours of departmental required courses, and nine credit hours of elective courses). The culminating experience, taken the last semester, requires completing an internship (six credit hours) and submitting a paper and poster. This degree will typically take four semesters to complete.

DEPARTMENT OF HEALTH POLICY, MANAGEMENT AND LEADERSHIP CURRICULUM

MPH Core Courses:

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Concentration Curriculum:

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Practice-based/Culminating Experiences:

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<th>Course</th>
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<tr>
<td>PUBH 622</td>
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<td>Capstone</td>
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Electives:

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<td>HPML 695</td>
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Total Hours 45

SUGGESTED PLAN OF STUDY

First Year

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<td>HPML Course - Health Insurance Policy:Medicaid, Medicare, and the Affordable Care Act</td>
<td>3</td>
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<tr>
<td>HPML Course - Performance and Economic Evaluation for Public Health</td>
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<tr>
<td>HPML 695</td>
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Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPML 610</td>
<td>3</td>
<td>3 HPML 629</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 622</td>
<td>3</td>
<td>Elective</td>
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<tr>
<td>Electives</td>
<td>6</td>
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<td>6</td>
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</tbody>
</table>

Total credit hours: 45

ELECTIVES

Students must select at least nine credit hours for electives. The Department of Health Policy, Management and Leadership offers four elective courses; additionally, any course offered by any department within the School of Public Health is an acceptable elective. Students may select a course not listed specifically, but only with approval, in advance, from their faculty advisor and the Department Chair.

PRACTICE-BASED EXPERIENCE

Students will be required to complete a practice-based experience as part of the MPH program in the department of Health Policy, Management & Leadership. The practice-based field experience will include identification of site preceptor, learning objectives, field reports, and final evaluation. All students must complete a minimum of 180 hours of field experience.

CULMINATING EXPERIENCE/CAPSTONE

This course is to be taken in the last semester of study. Students are required to demonstrate the ability to synthesize and integrate knowledge and competencies across the full breadth of the MPH-HP curriculum.

The MPH degree will be awarded based on successful completion of all academic requirements and demonstrated achievement of competencies. The department chair, using a faculty panel, will review competency performance evidence and based on the evidence reviewed, determine if the student has achieved the expected competencies. If a determination is made that competencies have not been achieved, the department chair will inform the student what must be accomplished to demonstrate achievement and therefore be recommended for awarding of the MPH degree. This may include taking additional courses.

Occupational and Environmental Health Sciences

Degrees Offered:

- MPH in Occupational and Environmental Health Sciences
- Ph.D. in Occupational and Environmental Health Sciences

MPH DEGREE IN OCCUPATIONAL AND ENVIRONMENTAL HEALTH SCIENCES

The MPH degree in occupational and environmental health sciences provides students with the practical skills needed to solve occupational and environmental health problems. Students will focus on understanding occupational and environmental processes and their effects on humankind and developing the skills needed to assess and address their health consequences. Both the internship and practicum have been designed to place students in settings in which they can apply their newly acquired knowledge and skills and continue to learn from professionals in their field while working on current, relevant public health problems.

The MPH degree in occupational and environmental health sciences is designed to meet the following occupational and environmental health sciences' competencies:

- Judge the precision and accuracy of methods for quantifying environmental agents
- Understand the routes of entry of environmental agents into the body and how those routes affect toxicity
- Provide management expertise for planning and carrying out disaster preparation
- Determine the relevance of toxicological and epidemiologic data for regulatory use and integrate scientific, regulatory, and social information for risk communication
- Design approaches for achieving environmental sustainability in communities and industry
• Integrate multiple data sources to determine the underlying causes of injury
• Understand the role of genetics in mediating host susceptibility to disease

Upon completion of the MPH in occupational and environmental health sciences, students will be prepared to either continue their graduate education at the doctoral level or begin a career as consultants, managers, and leaders in public health practice, research settings, government, or industry, addressing such issues as environmental pollution related to air, water, and waste, occupational health hazards, and work-related injury. The MPH degree is ideal for recent college graduates or early to mid-career public health professionals seeking to develop or advance their current careers.

Ph.D. in Occupational and Environmental Health Sciences

http://publichealth.hsc.wvu.edu/oehs/

The Ph.D. in Public Health Sciences in occupational and environmental health 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 and 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.

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.

Upon graduation, students in the Ph.D. in Public Health Sciences program from the Department of Occupational and Environmental Health Sciences will have the following core 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 and identify populations at high risk of exposure and communicate that risk effectively
• Create programs that protect the environment using proven technologies and novel approaches
• Evaluate the management of occupational and environmental problems and develop long and short term goals for reducing or eliminating their impact

FACULTY

INTERIM CHAIR
• Michael McCawley - Ph.D. (New York University)

PROFESSOR
• Alan Ducatman - MSc (City University of New York)

ASSOCIATE PROFESSOR
• Lan Guo - Ph.D. (West Virginia University)
• Charles L. Werntz III - DO (Kirksville College of Osteopathic Medicine)

ASSISTANT PROFESSORS
• Rachel T. Abraham - MD, MPH (Emory University)
• Anna Allen - DO, MPH (West Virginia University)
• Travis Knuckles - Ph.D. (North Carolina State)
• Douglas Myers - ScD (University of Massachusetts)
• Kimberly Rauscher - ScD (University of Massachusetts at Lowell)

RESEARCH PROFESSOR
• Mike Luster - Ph.D. (Loyola University of Chicago)

LECTURER
• Doug Boyer - Ph.D. (West Virginia University)
Admission Guidelines (MPH In Occupational and Environmental Health Sciences)

- Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0
- GRE scores of 150 (verbal), 147 (quantitative), 3.0 (analytical writing)
- TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based) International Students Only

MPH Applicants (Fall Admissions Only)

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you. Our MPH Program is CEPH-accredited, and our new School of Public Health is transitioning to be a CEPH-accredited school of public health as well.

WVU participates in the Schools of Public Health Application Service (SOPHAS). Our MPH Admissions is a two-step process. All MPH applications must be submitted through the national SOPHAS service and applicants must also submit a WVU Graduate application.

In addition to the general application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires original transcripts from all U.S. institutions attended. (Including Study Abroad) Please see each Major’s website for additional application requirements.

There is a $120 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.

Completed applications will be reviewed by the department. 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 $60.00 WVU application fee.

Admission decisions to the West Virginia School of Public Health are conducted in two rounds. Fully completed SOPHAS applications received by April 15 will be considered first. Incomplete applications and new fully completed applications received by June 1 will be considered for those degree programs/concentrations that have openings after the April 15 decisions. Applicants are strongly encouraged to submit their completed applications by the April 15 deadline in order to be considered during the first round.

Important: When sending GRE scores for consideration for admission to WVU, please use the WVU School of Public Health College GRE code: 0157. This code MUST be used, otherwise your GRE score will not be reported to SOPHAS and your application will be incomplete. Incomplete applications cannot be reviewed for an admissions decision. [Each program at West Virginia University has a specific code]

All other degrees and certificate programs will use the WVU application system.

Admission Guidelines for the Ph.D.

- Baccalaureate degree from an accredited college or university with some background in science (preferred GPA: 3.0 overall)
- GRE scores of: Verbal: sixtieth percentile or greater; Quantitative: fiftieth percentile or greater; or, a combined score of twenty-four or higher on the MCAT, with nine or higher in verbal; or, a terminal degree
- A completed Ph.D. application, including a Statement of Purpose (see below for details)
- Three letters of recommendation

Statement of Purpose

The essay is a critical piece of the admissions process. We will evaluate both the content of the essay and your writing skills in considering your application. All applicants should write an essay of 600 words or less. In this essay, please address the following questions:

- What is it about Occupational and Environmental Health Sciences (OEHS) that appeals to you?
- What have you done to prepare yourself for training in OEHS?
- How will you use your training in OEHS?
- What area(s) within OEHS do you wish to emphasize and why?
- Applicants should also include any additional information about their interests, prior background, or special circumstances which may be helpful to the Admissions Committee in evaluation of the application.
Students interested in applying for the Ph.D. in occupational and environmental health must:

- Complete the WVU graduate application and submit with the processing fee
- Submit official school transcripts and official GRE scores to:

  WVU Office of Admissions  
  PO Box 6009  
  Morgantown, WV 26506-6009  
  (304) 293-2121

- Complete the Ph.D. application online and indicate occupational and environmental health as your preference: http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp
- Submit three academic letters of recommendation and CV/Resume

You must mail your completed recommendation letters and CV/Resume to:

  WVU School of Public Health  
  Ph.D. Admissions  
  PO Box 9190  
  One Medical Center Drive  
  Morgantown, WV 26506

Fall Admissions Only: Fully completed applications received by February 15 are considered.

Overview of MPH in Occupational and Environmental Health Sciences Curriculum

Students in the MPH program in occupational and environmental health sciences will complete a total of forty-three credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of seminar, fifteen credit hours of departmental required courses, and nine credit hours of elective courses). Students have two options for the culminating experience, usually completed during the last year of the program. These options are: a) the internship (six credit hours) or b) the proposal and practicum (six credit hours). Both options require a paper and poster. This degree will typically take four semesters to complete.

DEPARTMENT OF OEHS MASTER LEVEL COURSES

**MPH Core Curriculum:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 601</td>
<td>Applied Biostatistics 1</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 602</td>
<td>Applied Biostatistics Lab</td>
<td>1</td>
</tr>
<tr>
<td>EPID 601</td>
<td>Public Health Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>HPML 601</td>
<td>Foundations of Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>OEHS 601</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 696</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>SBHS 601</td>
<td>Social and Behavioral Theory</td>
<td>3</td>
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</table>

**Concentration Curriculum:**

<table>
<thead>
<tr>
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<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>OEHS 610</td>
<td>Environmental Practice</td>
<td>3</td>
</tr>
<tr>
<td>OEHS 622</td>
<td>Public Health Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>OEHS 696</td>
<td>Graduate Seminar</td>
<td>1</td>
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</table>

**Practice Based/Culminating Experiences:**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
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<td>MPH Practice-Based Experience</td>
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<td>Capstone</td>
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**Electives (6 hours):**

<table>
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<tr>
<th>Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>OEHS 630</td>
<td>Public Health Biology</td>
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</tr>
<tr>
<td>OEHS 665</td>
<td>Worksite Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>OEHS 691 - Advanced Topics (subject matter changes)</td>
<td>varies</td>
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</tr>
<tr>
<td>OEHS 626</td>
<td>Internship</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Total Hours 40-45
The MPH curriculum is designed so that students have a broad exposure to the core disciplines in public health and an introduction to occupational and environmental sciences in the first year of the program. An internship or proposal/practicum is required in the second year of study. The degree would typically take two years to complete. A minimum of forty-three credit hours are required for the MPH in occupational and environmental health sciences. Students complete eighteen credit hours of School of Public Health core courses, sixteen credit hours of departmental required courses, and nine credit hours of electives.

**SUGGESTED PLAN OF STUDY**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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</thead>
<tbody>
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<td></td>
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<td>EPID 601</td>
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<td>PUBH 696</td>
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<td></td>
<td>OEHS 601</td>
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<td>PUBH 696</td>
<td>1</td>
<td>Elective (Optional)</td>
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<tr>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>IENG 561</td>
<td>3</td>
<td>OEHS 626</td>
<td>1-6</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>6</td>
<td>9</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Total credit hours: 40-45

**PRACTICE-BASED/CULMINATING EXPERIENCE OPTIONS**

**Practice-based Experience:** It is six credits, which translates to 360 hours of work, and has been designed to place students in occupational or environmental settings to further develop and apply their newly acquired knowledge and skills in a way that addresses real-world problems. The nature of the practice-based experience is dependent on the student and opportunities. An appropriate practice-based experience could include a local health department, a rural healthcare facility, an industrial plant, or an agency of the state or federal government.

The purpose of the practice-based experience is to provide experience in most, if not all, of the listed competencies for this degree. A primary focus of all these experiences is to provide skill building and practical experience in an environmental or occupational health setting. Development and application of analytical skills is emphasized; these skills may include a collection or data analysis of an exposure database, formulation of control measures, or oversight of public environmental activities.

With the guidance of a faculty mentor from the Department of Occupational and Environmental Health Sciences, as well as a preceptor at the location of the internship and the SPH Internship Coordinator, students will be expected to participate in a meaningful way. They will work with their academic team to identify a relevant problem and then develop and conduct an analysis and evaluation of that problem or acquire a new skill such as exposure assessment, on which they will be evaluated. Students will be required to present their findings to an appropriate audience of practice-based related professionals in a poster presentation.

The MPH degree will be awarded based on successful completion of all academic requirements and demonstrated achievement of competencies. The department chair using a faculty panel will review competency performance evidence and based on the evidence reviewed, determine if the student has achieved the expected competencies. If a determination is made that competencies have not been achieved, the department chair will inform the student what must be accomplished to demonstrate achievement and therefore be recommended for awarding of the MPH degree. This may include taking additional courses.

**Overview of Occupational and Environmental Health Sciences Ph.D.**

The Ph.D. in Public Health Sciences in occupational and environmental health 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.

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.
PH.D. IN OEHS 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
• Evaluate the management of occupational and environmental problems and develop long and short term goals for reducing or eliminating their impact

CURRICULUM

Students in the Ph.D. in Public Health Sciences program in occupational and environmental health sciences will complete a total of 118 credits hours, of which fifty-eight are dedicated toward research. The last two years will largely be dedicated to dissertation research; however, after qualifying exams, during the dissertation period, students will also engage in teaching practicum (to be determined by the student’s departmental advisor). The dissertation requires a minimum of three published articles with an integrative summary.

The OEHS Department does not require students to pick a track or concentration. Rather, students are encouraged to design their own program of electives. Students interested in a variety of topics may choose with the permission of their advisor to take a mix of electives. The choice to focus or mix electives is up to the student and his/her advisor. In addition to their coursework, Ph.D. students will be required to complete HIPAA and Lab Environment training provided by the university.

OCCUPATIONAL AND ENVIRONMENTAL HEALTH SCIENCES REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>OEHS 601</td>
<td>Environmental Health</td>
<td>3</td>
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<td>OEHS course - Occupational and Environmental Hazard Assessment</td>
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<tr>
<td>OEHS 732</td>
<td>Occupational Injury Prevention</td>
<td>3</td>
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<tr>
<td>EPID 745</td>
<td>Epigenetics/Systems Biology</td>
<td>3</td>
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<tr>
<td>OEHS 796</td>
<td>Graduate Seminar</td>
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</tr>
<tr>
<td>OEHS 790</td>
<td>Teaching Practicum</td>
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</tr>
<tr>
<td>EPID 601</td>
<td>Public Health Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>EPID 769</td>
<td>Occupational Epidemiology</td>
<td>3</td>
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<tr>
<td>HPML 601</td>
<td>Foundations of Health Policy</td>
<td>3</td>
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<td>BIOS 601</td>
<td>Applied Biostatistics 1</td>
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</tr>
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<td>BIOS 602</td>
<td>Applied Biostatistics Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIOS 603</td>
<td>Applied Biostatistics 2</td>
<td>3</td>
</tr>
<tr>
<td>SBHS 601</td>
<td>Social and Behavioral Theory</td>
<td>3</td>
</tr>
<tr>
<td>SBHS 701</td>
<td>Public Health Grant Writing</td>
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<td>PUBH course - Special Topics Seminar</td>
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<td>BMS 700</td>
<td>Scientific Integrity</td>
<td>1</td>
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<tr>
<td>BMS 720</td>
<td>Scientific Writing</td>
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<td>Research</td>
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<td>OEHS 797</td>
<td>Research</td>
<td></td>
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Total Hours: 118

ELECTIVES

Students will complete a minimum of fifteen credit hours of electives during their Ph.D. program. These may be selected from among the department’s, School of Public Health’s, or university’s many course offerings. These courses will be discussed and approved with the faculty advisor.

TEACHING PRACTICUMS

Students will spend two semesters in a mentored relationship with a faculty member, assisting with the implementation of a course.

COMPREHENSIVE EXAMS

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. The Qualifying Examination consists of both a written and oral component. Qualifying exams should not include testing on content of the dissertation. The oral defense of the dissertation proposal will serve
that purpose. The Qualifying Examination is planned and administered by the five-member dissertation committee, under the direction of the committee chairperson. If necessary and at the discretion of the Program Director, another faculty member may be appointed to serve on the committee.

The oral portion of the exam may not be attempted until the written component is completed and must be attempted within two academic weeks of the written component. Students are expected to take the qualifying exam during the summer sessions between their fourth and fifth academic semesters. However, the written component must be completed no later than the second week in July. Students are not eligible to begin their dissertation, or enroll in dissertation hours, until they have successfully completed the Qualifying Examination.

RESEARCH

Students will participate in research rotations during their first year, meeting and working with research faculty with similar interests in order to develop mentorships for dissertation research. A total of fifty-eight credit hours of rotations and dissertation research will be completed during the program.

THE DISSERTATION PROPOSAL, DEFENSE, AND APPROVAL

Although students may choose to pursue a traditional dissertation format, the majority of Ph.D. students format their dissertation using the Three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with chairperson of their dissertation committee. As a reminder, students will not be allowed to defend their dissertations until they have at least one first-authored publication in any form of acceptance, based on their Ph.D. dissertation, in a peer-reviewed journal by the time of the dissertation defense. Note: This required publication does not necessarily need to be one of the three articles generated through the JAF dissertation format.

SUGGESTED PLAN OF STUDY

First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EPID 601</td>
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<td>HPML 601</td>
<td>3</td>
<td>BMS 720</td>
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<td>BIOS 601</td>
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<td>BIOS 602</td>
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<td>OEH 601</td>
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<td>OEHS 797</td>
<td>1</td>
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<td>SBHS 701</td>
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<td>EMS 700</td>
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Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
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Third Year

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Fourth Year

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<tr>
<td>OEH 797</td>
<td>9</td>
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</table>

Total credit hours: 118
School Health Education

MS in School Health Education

http://publichealth.hsc.wvu.edu/academics/online-programs/ms-in-school-health-education/

The mission of the MS in school health education is to provide teachers with the knowledge and skills necessary to instill in school-age students the information needed to make healthy decisions regarding well-being. We believe that experiential instruction, coupled with critical thinking skills, enables students to be informed health consumers. We seek to provide an optimal experience for our students to be models and mentors for their own students.

This program is a member of the Southern Regional Education Board (SREB) (http://www.electroniccampus.org).

Admission Guidelines for the MS in School Health Education

• Baccalaureate degree from an accredited college or university with a preferred GPA of 3.0
• Copy of teaching certificate

For admission to this program, one must be in possession of a teaching certificate for their state of residence. The program is designed for those who do not have health teaching certification or those who do and wish to obtain a graduate degree in this area.

Students interested in applying for the MS in School Health Education must:

• Complete the WVU graduate application and submit with the processing fee: https://app.applyyourself.com/AYApplicantLogin/
• Submit official school transcripts to:
  WVU Admissions and Records
  PO Box 6009
  Morgantown, WV 26506-6009
  (304) 293-2121
• Complete the MS in School Health Education application: http://publichealth.hsc.wvu.edu/media/45368/School-Health-Admissions.pdf
• Submit CV/Resume
• Three academic letters of recommendation

You may mail your MS application, CV/Resume, and recommendation letters to:

WVU School of Public Health
MS Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

Fall, Spring and Summer applications accepted for the MS in School Health degree ONLY. Completed applications and materials may be submitted any time.

Overview of Online MS in School Health Education Curriculum

Students in the online MS program in School Health Education will complete a total of 30 credit hours of coursework. Students may transfer nine credit hours if pre-approved at admission.

This program can be completed in two calendar years or less. All courses are web-based.

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<td>CHPR 655</td>
<td>Fndtns-Pub Hlth:Schl Hlth Educ</td>
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</tr>
<tr>
<td>CHPR 680</td>
<td>School Health Concepts</td>
<td>3</td>
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<tr>
<td>C&amp;I 687</td>
<td>Advanced Teaching Strategies</td>
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Social and Behavioral Sciences

DEGREES OFFERED

• MPH in Social and Behavioral Sciences
• MPH ONLINE in Social and Behavioral Sciences
• MS in School Health Education
• Ph.D. in Social and Behavioral Sciences

MPH IN SOCIAL AND BEHAVIORAL SCIENCES
The MPH degree 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. The SBHS MPH is offered on campus and online. The target competencies of this track include the ability to:

1. Summarize sound public health research methodology used in the social and behavioral sciences.
2. Evaluate inferential statistical techniques used in public health research.
3. Distinguish key factors to be considered when determining appropriate sampling techniques to access community needs and health issues.
4. Illustrate an understanding of key factors related to question constructive and interview techniques.
5. Summarize key factors and strategies to develop successful health interventions in communities.
6. Summarize social and behavioral models or theories that are used to guide successful community health interventions.
7. Discern the key components of the PRECEDE/PROCEED model in the planning and delivery of public health program evaluations.
8. Summarize the three principal types of experimental designs in program evaluation.

A student who graduates with an MPH 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 implementations and evaluation efforts. (see below for admissions guidelines)

PH.D. IN SOCIAL AND BEHAVIORAL SCIENCES
The mission for the Ph.D. in social and behavioral sciences 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.

SBHS PH.D.-SPECIFIC COMPETENCIES:

1. Display broad knowledge and application of relevant public health social and behavioral theories to health promotion and disease prevention strategies.
2. Demonstrate rigorous understanding of methodological and statistical principles that enhance research in the public health sciences.
3. Review and synthesize pertinent behavioral literature and formulate focused specific aims and research questions that address identified knowledge gaps.
4. Design and conduct original research that uniquely contributes to social & behavioral science knowledge base.
5. Disseminate research findings through appropriate peer-reviewed publications and presentations, and to other appropriate public health community audiences.

There are 117 required credits for this degree. The curriculum is designed so that students receive methodologically-intense training and one-on-one research experience with faculty in the social and behavioral sciences. The first two years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to the social and behavioral sciences. During the final two years of the program,
students are engaged in their dissertation research while given the freedom to further diversify their training by completing teaching practice and choosing three additional electives.

FACULTY

INTERIM CHAIR
• Keith Zullig, Associate Professor, Director - Ph.D. in Public Health Sciences - Ph.D. (University of South Carolina)

PROFESSORS
• Geri Dino - Ph.D. (Kansas State University)
• Ruth Kershner, Coordinator - MS in School Health Education - EdD (West Virginia University)
• Ranjita Misra - Ph.D. (Old Dominion University)
• Peter Shaffron - EdD (West Virginia University)

ASSISTANT PROFESSORS
• Christiaan Abildso - Ph.D. (West Virginia University)
• Haslyn Hunte - Ph.D. (University of Michigan)
• Afgeir Kristajansson - Ph.D. (Karolinska Institute)
• Michael Mann - PhD (University of Florida)
• Toni Morris - MS (West Virginia University)
• Cecil Pollard - MA (West Virginia University)
• Nancy O’Hara Tompkins - Ph.D. (University of Maryland)

TEACHING ASSISTANT PROFESSOR
• Janet B. Hunt - MPH (University of Tennessee)

INSTRUCTOR
• Bobbi Sykes - MS (West Virginia University)

ADJUNCT PROFESSORS
• Ahmed Aboraya - MD (Cairo University)
• Dwight Harshbarger - Ph.D. (University of North Dakota)
• Mark Wicclair - Ph.D. (Columbia University)
• Samuel Zizzi - EdD (West Virginia University)

ADJUNCT ASSOCIATE PROFESSORS
• Joy Buck - Ph.D. (University of Virginia)
• Ilana Chertok - Ph.D. (Ben-Gurion University)
• Cindy Fitch - Ph.D. (Case Western Reserve University)

ADJUNCT ASSISTANT PROFESSORS
• Muazzam Nasrullah - MD (Allama Iqbal Medical College, Lahore Pakistan)
• Judith Sedgeman - EdD (West Virginia University)
• Melissa Olfert - Ph.D. (Loma Linda University)
• Thomas Sims - MA (Georgia State University)

ADJUNCT INSTRUCTOR
• Danielle Davidov - Ph.D. (West Virginia University)
• Janie Leary - Ph.D. (West Virginia University)
• Janet Reger-Nash - MS (University of California)
• Gary Sams - MS (University of Pittsburgh)
• Gina Sharps - MPH (West Virginia University)
• Matthew West - MBA (Duke University)
FACULTY EMERITI

- William Reger-Nash - EdD (West Virginia University)
- Kenneth Simon - EdD (Columbia University)

Admission Guidelines for the MPH in Social and Behavioral (On Campus or Online)

- Baccalaureate degree from an accredited college or university with a preferred GPA of 3.0
- GRE scores of 146 (verbal), 144 (quantitative), 3.0 (analytical writing)
- TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based) International Students Only

MPH (Fall Admissions Only):

If you are ready to apply to West Virginia University School of Public Health, the admissions team is here to assist you. Our MPH Program is CEPH accredited, and our new School of Public Health is transitioning to be a CEPH-accredited school of public health as well. We are also one of the schools participating in SOPHAS (Schools of Public Health Application Service). Our MPH Admissions process is a two-step process. All MPH applications must be submitted through the national SOPHAS service and applicants must also submit a WVU Graduate application.

In addition to the general application, applicants must submit to SOPHAS a statement of purpose and objectives, official GRE test scores, three letters of reference, a current resume/curriculum vitae, and all university transcripts. SOPHAS requires original transcripts from ALL U.S. institutions attended! (Even Study Abroad) Please see each Major’s website for additional application requirements.

There is a $120 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.

Applications that are complete will then be reviewed by the department. 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 $60.00 WVU application fee.

Important: When sending GRE scores for consideration for admission at WVU use the GRE WVU School of Public Health College code: 0157. This is the code that MUST be used, otherwise your GRE score will not be reported to SOPHAS and your application will be incomplete and therefore will not be reviewed for an admissions decision. [There are different codes for other programs at West Virginia University]

FALL ADMISSIONS ONLY:

Fully completed applications received by April 15 will be considered first. Incomplete applications and new fully completed applications received by June 1 will be considered second, for those degree programs/concentrations that have openings after the April 15 decisions

Admission Guidelines for Ph.D. in Social and Behavioral Sciences

- Baccalaureate degree from an accredited college or university (preferred GPA: 3.0 overall) or a Master of Public Health degree from an accredited program or school (preferred)
- GRE scores: 146 quantitative, 156 verbal, and 3.5 for analytical writing
- A completed Ph.D. application, including a Statement of Purpose (see below for details)
- Three letters of recommendation

Statement of Purpose

The essay is a critical piece of the admissions process. We will evaluate both the content of the essay and your writing skills in considering your application. All applicants should write an essay of 1000 words or less. In this essay, please address the following questions:

- What is it about Social and Behavioral Sciences (SBHS) that appeals to you?
- What are your long term career goals?
- What area(s) of research do you wish to emphasize and why?
- Applicants should also include any additional information about their interests, prior background or special circumstances that may be helpful to the Admissions Committee in evaluation of the application.
Students interested in applying for the Ph.D. in social and behavioral science (SBHS) must:

- Complete the WVU graduate application and submit with the processing fee: [https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad](https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad)
- Submit official school transcripts and official GRE scores to:

  WVU Admissions and Records
  PO Box 6009
  Morgantown, WV 26506-6009
  (304) 293-2121

- Complete the Ph.D. application online and indicate SBHS as your preference: [http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp](http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp)
- Submit three academic letters of recommendation and CV/Resume

You must mail your completed recommendation letters and CV/Resume to:

WVU School of Public Health
Ph.D. Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

**Fall Admissions Only**: Fully completed applications received by February 15 are considered.

### Overview of MPH in Social and Behavioral Sciences Curriculum

Students in the MPH program in Social and Behavioral Sciences will complete a total of forty-four credit hours (eighteen credit hours of School of Public Health core courses, including two credit hours of seminar, seventeen credit hours of departmental required courses, and nine credit hours of elective courses). Students have two options for the culminating experience, usually completed during the last year of the program. Options are either 1) a Capstone Course or 2) Thesis that focuses on SBHS. The student will be expected to engage in meaningful synthesis and integration of the core and SBHS departmental competencies (Capstone Course) or behavioral sciences research project (Thesis). This degree will typically take four semesters to complete.

### DEPARTMENT OF SOCIAL AND BEHAVIORAL MPH CURRICULUM REQUIREMENTS

<table>
<thead>
<tr>
<th>MPH Core Curriculum:</th>
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<tr>
<td>BIOS 601 Applied Biostatistics 1</td>
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<td>BIOS 602 Applied Biostatistics Lab</td>
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</tr>
<tr>
<td>EPID 601 Public Health Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>HPML 601 Foundations of Health Policy</td>
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<td>OEH 601 Environmental Health</td>
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<td>SBHS 601 Social and Behavioral Theory</td>
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<td>SBHS 611 Community Assessment</td>
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<td>or SBHS 660 Survey Research Methods</td>
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<td>SBHS 614 Cmmnty-Bsd Participatory Rsrch</td>
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<tr>
<td>or SBHS 615 Intervention Design</td>
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</tr>
<tr>
<td>SBHS 613 Public Health Program Evaluatn</td>
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<th>Practice Based/Culminating Experiences:</th>
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<tr>
<td>SBHS 629 Capstone Course</td>
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</table>
The curriculum is designed so that students have a broad exposure to the core disciplines in public health and introduction to the social and behavioral sciences during their first academic year with a greater focus on SBHS in their second academic year. The standard schedule allows for students to select three electives (nine credit hours). It is highly recommended that these electives be selected from the approved list of electives for students in SBHS. Students may also opt to complete an area of emphasis (currently public health practice or worksite wellness). Note that the completion of the worksite wellness area of emphasis will increase total program hours to 47. A certificate in women’s health may also be completed with an additional six credit hours of courses (fifty credit hours).

SUGGESTED PLAN OF STUDY

First Year

<table>
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<td>SBHS 610</td>
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<td>14</td>
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Second Year

<table>
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Total credit hours: 44

PRACTICE-BASED EXPERIENCE

- All students will be required to complete a practice-based experience as part of the SBHS MPH program. The practice-based field experience can be completed following one full year of MPH coursework; when possible, students should have completed the MPH school-level core courses and a minimum of one course required by their departmental discipline. Under certain circumstances, exceptions may be made but only with advance arrangement with and consent of the Instructor, Department Chair, and the student’s Faculty Advisor. The practice-based experience will be a 180-hour placement in an agency or organization that provides an SBHS-focused experience (no less than 4.5 weeks of placement at 40 hours per week, or 9 weeks of placement at 20 hours per week) and will include identification of site preceptor, learning objectives, field reports, and final evaluation.

CULMINATING EXPERIENCE: CAPSTONE COURSE OR THESIS

A primary focus of all culminating experiences is to provide skill building and practical experience in the social and behavioral sciences in most, if not all, of the listed competencies for this degree.

There are two options for the culminating experience, the nature of which would be dependent on the student and available opportunities. These include either a Capstone Course or Thesis (as described below) that focuses on SBHS. The student will be expected to engage in meaningful synthesis and integration of the core and SBHS departmental competencies (Capstone Course) or behavioral sciences research project (Thesis).

Option 1:

Capstone Course (two credit hours)

- The SBHS capstone is the culminating experience for social and behavioral sciences majors in the MPH program and requires students to demonstrate their capacity to synthesize and integrate the core and SBHS departmental competencies via a paper and poster presentation.

Option 2:

Thesis (five credit hours)
The thesis requirement is designed to provide the student with an opportunity to integrate and synthesize the major components of the MPH/SBHS learning experience and to apply the principles of public health by engaging in an applied research project of a specific topic area. The student is expected to demonstrate verbal and technical proficiency in expository writing. The topic must be one of public health significance. Students are required to make an oral proposal and defense, and produce a manuscript of publishable quality that can be submitted to an appropriate peer-reviewed journal mutually agreed upon between the committee Chair(s) and the student.

**Thesis Entry Requirements:**

- Student acceptance into the thesis option depends on the student being able to acquire a committee chair from the SBHS Graduate Faculty and a full committee. Individual thesis committee chairs/members may use a variety of methods for evaluating potential thesis candidates that include, but are not limited to, past academic performance, current academic performance, writing samples, and match between student-faculty research interests.

**OVERVIEW OF ONLINE SBHS MPH CURRICULUM**

Students in the online SBHS MPH program will complete a total of forty-four credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of seminar, seventeen credit hours of departmental required courses, and nine credit hours of elective courses). The culminating experience taken over the last two semesters requires either 1) a Capstone Course or 2) Thesis that focuses on SBHS. The student will be expected to engage in meaningful synthesis and integration of the core and SBHS departmental competencies (Capstone Course) or behavioral sciences research project (Thesis). This degree will typically take four semesters to complete.

**SUGGESTED PLAN OF STUDY**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td>Fall</td>
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</table>

**Total credit hours: 44**

**PRACTICE-BASED EXPERIENCE**

- All students will be required to complete a practice-based experience as part of the SBHS MPH program. The practice-based field experience can be completed following one full year of MPH coursework; when possible, students should have completed the MPH school-level core courses and a minimum of one course required by their departmental discipline. Under certain circumstances, exceptions may be made but only with advance arrangement with and consent of the Instructor, Department Chair, and the student’s Faculty Advisor. The practice-based experience will be a 180-hour placement in an agency or organization that provides an SBHS-focused experience (no less than 4.5 weeks of placement at 40 hours per week, or 9 weeks of placement at 20 hours per week) and will include identification of site preceptor, learning objectives, field reports, and final evaluation.

**CULMINATING EXPERIENCE: CAPSTONE COURSE OR THESIS**

A primary focus of all culminating experiences is to provide skill building and practical experience in the social and behavioral sciences in most, if not all, of the listed competencies for this degree.

There are two options for the culminating experience, the nature of which would be dependent on the student and available opportunities. These include either a Capstone Course or Thesis (as described below) that focuses on SBHS. The student will be expected to engage in meaningful synthesis and integration of the core and SBHS departmental competencies (Capstone Course) or behavioral sciences research project (Thesis).

**Option 1:**

Capstone Course (two credit hours)

- The SBHS capstone is the culminating experience for social and behavioral sciences majors in the MPH program and requires students to demonstrate their capacity to synthesize and integrate the core and SBHS departmental competencies via a paper and poster presentation.
Option 2:

Thesis (five credit hours)

• The thesis requirement is designed to provide the student with an opportunity to integrate and synthesize the major components of the MPH/SBHS learning experience and to apply the principles of public health by engaging in an applied research project of a specific topic area. The student is expected to demonstrate verbal and technical proficiency in expository writing. The topic must be one of public health significance. Students are required to make an oral proposal and defense, and produce a manuscript of publishable quality that can be submitted to an appropriate peer-reviewed journal mutually agreed upon between the committee Chair(s) and the student.

Thesis Entry Requirements:

• Student acceptance into the thesis option depends on the student being able to acquire a committee chair from the SBHS Graduate Faculty and a full committee. Individual thesis committee chairs/members may use a variety of methods for evaluating potential thesis candidates that include, but are not limited to, past academic performance, current academic performance, writing samples, and match between student-faculty research interests.

The MPH degree will be awarded based on successful completion of all academic requirements and demonstrated achievement of competencies. The department chair using a faculty panel will review competency performance evidence and based on the evidence reviewed, determine if the student has achieved the expected competencies. If a determination is made that competencies have not been achieved, the department chair will inform the student what must be accomplished to demonstrate achievement and therefore be recommended for awarding of the MPH degree. This may include taking additional courses.

WORK-SITE WELLNESS - AREA OF EMPHASIS

Students will complete a 12-credit hour course sequence designed to impart the work-site wellness skills, knowledge, and competencies.

Competencies include:

1. Design needs and resource assessments relative to the implementation of a work-site wellness program
2. Create and evaluate work-site wellness interventions
3. Discern the individual, organizational, structural, and societal factors that contribute to health and safety in the workplace
4. Derive the value of public health and wellness programs and policies to justify investment by business organizations

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Total credit hours: 12
Overview of Social and Behavioral Sciences Ph.D. Curriculum

Our mission 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 who desire to transform public health. This program trains students using a research intensive curriculum led by a distinguished faculty at the cutting edge of public health science. The Social and Behavioral Sciences Ph.D. 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 and the competence to embark on high-impact research careers.

PH.D. IN SBHS COMPETENCIES

1. Display broad knowledge and application of relevant public health social and behavioral theories to health promotion and disease prevention strategies
2. Demonstrate rigorous understanding of methodological and statistical principles that enhance research in the public health sciences
3. Review and synthesize pertinent behavioral literature and formulate focused specific aims and research questions that address identified knowledge gaps
4. Design and conduct original research that uniquely contributes to social and behavioral science knowledge base
5. Disseminate research findings through appropriate peer-reviewed publications and presentations and to other appropriate public health community audiences

CURRICULUM

Students in the Ph.D. in public health sciences, Social and Behavioral Sciences program will complete a total of 117 credits hours, of which fifty-three are dedicated toward research. 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 four-year period.

The first two years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to Social and Behavioral Sciences. During the final two years of the program, students are engaged in their dissertation research while given the freedom to further diversify their training by choosing electives. After qualifying examinations, students will also engage in teaching practicum (to be determined by the student's departmental advisor).

SOCIAL AND BEHAVIORAL SCIENCES PH.D. REQUIRED COURSES

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<td>Community Assessment</td>
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<td>SBHS 613</td>
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<td>SBHS 711</td>
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<td>SBHS 715</td>
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<td>SBHS 760</td>
<td>Survey Research Methods</td>
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ELECTIVES

Students will complete a minimum of twelve credit hours of electives during their Ph.D. program. These may be selected from among the department’s, School of Public Health’s, or university’s many course offerings. These courses will be discussed and approved with the faculty advisor.
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. The Qualifying Examination consists of both a written and oral component. Qualifying exams should not include testing on content of the dissertation. The oral defense of the dissertation proposal will serve that purpose. The Qualifying Examination is planned and administered by the five-member dissertation committee, under the direction of the committee chairperson. If necessary and at the discretion of the Program Director, another faculty member may be appointed to serve on the committee.

The oral portion of the exam may not be attempted until the written component is completed and must be attempted within two academic weeks of the written component. Students are expected to take the qualifying exam during the summer sessions between their fourth and fifth academic semesters. However, the written component must be completed no later than the second week in July. Students are not eligible to begin their dissertation or enroll in dissertation hours until they have successfully completed the Qualifying Examination.

RESEARCH

Students will participate in research rotations during their first year, meeting and working with research faculty with similar interests in order to develop mentorships for dissertation research. A total of fifty-three credit hours of rotations and dissertation research will be completed during the program.

THE DISSERTATION PROPOSAL, DEFENSE, AND APPROVAL

Although students may choose to pursue a traditional dissertation format, the majority of Ph.D. students format their dissertation using the Three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with chairperson of their dissertation committee. As a reminder, students will not be allowed to defend their dissertations until they have at least one first-authored publication in any form of acceptance, based on their Ph.D. dissertation, in a peer-reviewed journal by the time of the dissertation defense. Note: This required publication does not necessarily need to be one of the three articles generated through the JAF dissertation format.

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