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# Health Sciences Information

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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/institid,1677](http://www.ncahlc.org/component/com_directory/Action,ShowBasic/institid,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.

## General Information - Health Science Center

The West Virginia University Robert C. Byrd Health Sciences Center has five schools - Dentistry, Medicine, Nursing, Pharmacy, and Public Health. Undergraduate and graduate students learn on our three campuses in Morgantown, Charleston, and Martinsburg.

Academic home to more than 1,000 faculty members, the WVU Health Sciences Center is committed to education, research, service, and patient care. The five health schools share a common goal: to educate the next generation of healthcare providers, biomedical researchers, and health policy leaders for West Virginia.

## Health Sciences Center Mission

The mission of the Health Sciences Center is to improve the health of West Virginians through the education of health professionals, through basic/clinical scientific research and research in rural healthcare delivery, through the provision of continuing professional education, and through participation in the provision of direct and supportive healthcare.

Visit the Robert C. Byrd Health Sciences Center website (<http://home.hsc.wvu.edu>) for up-to-date information.

## 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

- *Benjamin M. Statler College of Engineering and Mineral Resources*, Eugene V. Cilento
- *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
- *School of Medicine*, Arthur J. Ross III
- *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

## DISTINGUISHED PROFESSORS

- 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
- Vincent P. Cardi, Bowles, Rice, McDavid, Graff and Love Professor of Law
- Tim Carr, Marshall S. Miller Energy Professor of Geology
- William H. Carter, Warren Point Chair of Internal Medicine
- Judie F. Charlton, Jane McDermott Shott Chair of Ophthalmology
- 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 Keckojevic, Massey Foundation Professor of Mining Engineering
- Kennon A. Lattal, Eberly College Centennial Professor of Psychology
- Richard D. Layne, Grace Kinney Mead Chair of Geriatrics
- David Lederman, Robert L. Carroll Chair in Physics
- Huey Hannah Lin, J. Vance and Florence Highland Johnson Teaching Professor of Chinese Studies
- Paul Lockman, Douglas D. Glover Endowed Chair of the Department of Basic Pharmaceutical Sciences
- Diana Martinelli, Widmeyer Professorship in Public Relations
- Matthew Marvel, James Clark Coffman Distinguished Chair of Entrepreneurial Studies
- Michael Mays, Eberly Distinguished Professor of Outstanding Teaching
- Joyce E. McConnell, William J. Maier, Jr. Dean and Thomas R. Goodwin Professor
- Marjorie A. McDiarmid, Steptoe and Johnson Professor of Law and Technology
- Patrick C. McGinely, Charles H. Haden, Jr. Professor of Law
- James McGraw, Eberly Family Professor of Biology
- James A. McLaughlin, Robert L. Shuman Professor of Law
- Daniel McNeil, Eberly Family Professor for Outstanding Public Service
- Keith Morris, Ming Hsieh Distinguished Professor of Forensic and Investigative Science
- Tracy Morris, Eberly Family Professorship of Teaching
- William Neal, James H. Walker Chair of Pediatric Cardiology
- 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
- 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
- Arthur I. Jackowitz, The Arthur I. Jackowitz Distinguished Chair of Clinical Pharmacy, 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

## PROBATION & SUSPENSION:

- Undergraduate Probation and Suspension Policy, Procedures, and Appeal
- Graduate Probation, Suspension, and Dismissal Policy and Appeal

## RESEARCH INTEGRITY:

- Statement on Research Integrity

## INTELLECTUAL PROPERTY:

- 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 severe 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](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.

### In this section:

- Undergraduate Academic Probation and Suspension Policy
- Graduate Academic Probation and Suspension Policy

## UNDERGRADUATE ACADEMIC PROBATION AND SUSPENSION POLICY AND APPEAL

### In this section:

- Undergraduate Academic Probation and Suspension Policy
  - Suspension Guide
  - Probation Procedures
  - Suspension Procedures
  - Duration of Suspension
  - Appeal of Suspension
  - Summer Enrollment for Students Suspended for Fall
  - Immediate Reinstatement after Suspension
  - Readmission after Serving Suspension

## Undergraduate Academic Probation and Suspension Policy

This policy concerns academic probation and suspension (referred to below as probation and suspension) from the University. Individual schools, colleges, and programs may place students on probation or dismiss them from their programs as well, using criteria that are the same as or different from those below. Students who are dismissed from a program may transfer to another program if they meet the program's admission requirements or they may be advised in the University College until they are able to be accepted to a program.

Any student with an overall grade point average (GPA) below 2.0 is considered to be on probation and may be eligible for suspension. The standards that are used to determine a student's eligibility for suspension are based on overall GPA in relation to credit hours attempted. Credit hours attempted include all credits included on the student's WVU transcript (regardless of where or how completed and including credits with grades of F). Students whose GPAs are below the following requirements are eligible for suspension from the University:

### Suspension Guide

Total Hours Attempted*	Minimum cumulative GPA*
1-28 hours	1.40
29-58 hours	1.70
59-88 hours	1.90
89 or more hours	2.00

## Probation Procedures

At the conclusion of every term, students on probation (i.e., with a GPA below 2.0) are sent a probation letter (via e-mail to their MIX account and by post to their permanent address) from the Office of the University Registrar (OUR). This letter informs students about their academic status, explains what is meant by probation, provides information on resources available to help them improve their academic performance, and describes the consequences of continued poor performance, including the standards and procedures concerning suspension.

## Suspension Procedures

At the conclusion of each spring term only, students eligible for suspension are sent a suspension letter rather than a probation letter from the OUR (via e-mail to their MIX account and by post to their permanent address) and are suspended from the University effective at the end of the summer term. This letter informs students that they have been suspended from the University, explains what that means, and provides information about appealing the suspension. The letter also describes procedures for reinstatement to the University after their suspension period and the impact of taking classes at other institutions during the suspension period.

Students may also be suspended at the end of fall or summer term, as recommended to the OUR by the designated academic officer in each school or college, based on a failure to meet the provisions of a prior contract put in place for a reinstated student.

## Duration of Suspension

Students who are suspended for the first time may not enroll in classes at WVU (including sections offered through Extended Learning) for the following major term (fall semester). Students suspended for a second time will not be allowed to enroll in classes at WVU (including sections offered through Extended Learning) for one calendar year. Students suspended for a third and final time will not be allowed to return to WVU for a minimum of five years.

## Appeal

Suspended students have until early June (exact date specified in written notice of suspension) to appeal the suspension by sending a request to their school or college by e-mail or post. A designated academic officer in each school or college will then have until July 1 to review the requests and to reinstate students whose appeals are approved. Students who appeal and are denied or who do not appeal their suspension will be removed from their fall classes.

## Summer Enrollment

Students who are suspended for fall may enroll in summer courses at WVU (main campus, Extended Learning, Potomac State College and WVU Institute of Technology). Students who are enrolled in summer courses as of July 1 will not be removed from their fall classes until summer grades are available. Students who rehabilitate their GPA above minimums required for their class will be automatically removed from suspension. Colleges and schools may elect to defer a reinstatement decision as well until summer grades are available. Each college or school will communicate to the OUR the final decision on reinstatement immediately after summer grades are released. Only summer courses taken at WVU will be considered in determining eligibility for reinstatement for the fall following suspension.

## Immediate Reinstatement after Suspension

Students who are suspended and subsequently reinstated following a successful appeal or a successful summer term may be retained in their major for advising.

## Readmission after Serving Suspension

Suspended students who wish to be readmitted into the University after their required suspension period must contact Undergraduate Admission. Students, at the discretion of their College/School, may remain in their major at the time they leave WVU or change majors upon return. All reinstated students whose GPAs are below the suspension cutoff are given a contract that describes the conditions that must be met to avoid suspension in future terms.

# 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](http://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](http://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](http://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](http://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](http://techtransfer.research.wvu.edu).

## Admissions

### Undergraduate Admissions

#### In this section:

#### **POLICIES:**

- Introduction
- Robert C. Byrd Health Sciences Center
- Visiting Students Coming to WVU
- Veterans
- Readmission
- Second Degree Students
- Undergraduate Non-Degree
- Academic Forgiveness Policy
- WVU Transient Students
- Immunization Requirement

#### **FRESHMAN/EARLY:**

- Freshman Admission Requirements
- General Equivalency Degree (GED)/Test of Accessing Secondary Completion (TASC)
- Advanced Placement Program (AP)
- College Level Examination Program (CLEP)
- Active Military Service Credit
- International Baccalaureate (IB)
- Early Admission
- ACCESS (Attaining College Credits and Experiences while in Secondary School)

#### **TRANSFER:**

- Transfer Students from Regional Campuses
- Transfers from Other Accredited Institutions
- Application Materials
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#### **INTERNATIONAL:**

- International Student Admission
- Required Academic Credentials

- English Language Proficiency
- Financial Documents and Student Visa

## POLICIES

### In this section:

- Introduction
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- WVU Transient Students
- Immunization Requirement

## Introduction

WVU provides excellent educational programs for well-prepared students. The goal of the University's admission policy is to select applicants who will succeed academically and socially. If space is limited, the better-prepared students are admitted.

WVU enrolls a diverse student population. While preference is given to West Virginia residents, qualified students from other states and countries are encouraged to apply. The University is committed to the goal of equal educational opportunity for all students: no candidate is denied admission because of race, religion, color, sex, sexual orientation, marital status, age, handicap or disability, veteran status, or national origin.

The primary focus of the admissions review is on academic potential. All of the required materials submitted by the applicant - application, transcripts, and standardized test scores - are reviewed carefully.

Applications for admission can be found online at: <http://apply.wvu.edu/> or write to:

Office of Admissions  
West Virginia University  
P.O. Box 6009  
Morgantown, WV 26506-6009  
Telephone: (304) 293-2121  
e-mail: [WVUAdmissions@mail.wvu.edu](mailto:WVUAdmissions@mail.wvu.edu)

Some colleges and programs have admission standards that exceed the minimal requirements for admission to the University. For example, admission to the forensics major in the Eberly College of Arts and Sciences and to the professional programs in the Division of Physical Therapy and the School of Pharmacy, among others, is competitive, and preference is given to West Virginia residents. Admission to the University does not ensure admission into a specific major, school, or college.

## Robert C. Byrd Health Sciences Center

The undergraduate programs at the Robert C. Byrd Health Sciences Center have specific application periods and requirements. Please refer to the program's website for admission requirements for Dental Hygiene, Exercise Physiology, Immunology & Medical Microbiology, Medical Laboratory Science, Nursing or Occupational Therapy. The undergraduate application is available at: <http://admissions.wvu.edu/apply-now>.

## Visiting Students Coming to WVU

Students wanting to take a course at WVU and have the credit transferred to another college or university must complete a Visiting Student Form. The application can be found at: <http://admissions.wvu.edu/admissions/forms>.

## Veterans

Veterans not meeting minimal admission requirements may be reviewed for admission by the Admissions Review Committee.

## Readmission

If a student leaves the University for at least one complete semester, an application for readmission must be submitted to the Office of Admissions. Decisions on readmission are based on the student's academic standing.

If another institution(s) was attended, readmission will be based on the WVU academic standing along with academic credit earned at any other institution attended after leaving WVU. In order to be readmitted, student must obtain an overall grade point average of 2.0 at all institutions attended since leaving WVU or attain a combined overall grade point average of 2.0 from all institutions attended including WVU.

If suspended from the University, a student must apply for readmission. Additional information may be found at: [http://registrar.wvu.edu/current\\_students/probation-suspension](http://registrar.wvu.edu/current_students/probation-suspension).

## Second Degree Students

College graduates wanting to earn a second bachelor's degree are required to submit an undergraduate application and official transcripts from all institutions previously attended. The Office of Admissions can only accept transcripts sent from the Registrars' Offices of these institutions. Transcripts issued directly to the student or facsimile (fax) transcripts are not considered official. In general, admission is granted on the basis of a cumulative grade point average of at least 2.0 in the first baccalaureate. Selected majors have higher requirements. After admission, the individual department evaluates the transcript and applies any appropriate credit from the first baccalaureate toward completion of the second. Students who have earned a bachelor's degree from an accredited college or university generally meet all of WVU's General Education Curriculum (GEC) requirements. All residence requirements must be met to receive a second bachelor's degree. (See Residence Requirements).

## Undergraduate Non-Degree

Students with one or more bachelor's degrees from an accredited college or university (including WVU) who want to enroll for undergraduate credit may be admitted as non-degree students. Post-baccalaureate students who are not working toward a graduate degree may earn undergraduate credit and will be assessed undergraduate fees. Candidates for admission to this classification who are not graduates of WVU must submit an undergraduate application and an official transcript from the institution granting the latest degree. The Office of Admissions can only accept transcripts sent from the Registrar's Office of the institution(s) previously attended. Transcripts issued directly to the student or facsimile (fax) transcripts are not considered official. WVU students need only to apply with an undergraduate application.

WVU will admit students who are not degree candidates but who wish to take additional courses. If students meet University requirements, they should submit a complete application and official transcripts from all institutions previously attended. If students have completed fewer than twenty-four college-level credits, they should submit an official high school transcript.

## Academic Forgiveness Policy

WVU allows academic forgiveness to some undergraduate students who are not successful in their first attempt at higher education within the West Virginia system.

In order to determine eligibility, an Academic Forgiveness form must be completed, which is available at the Office of Admissions. Students should consult with their academic department for advising.

The conditions and rules of the academic forgiveness policy are as follows:

- A student cannot have been enrolled at any higher education institution for at least five calendar years.
- Admission or readmission to WVU under the academic forgiveness policy is contingent upon satisfying the above stated non-enrollment period. In addition, a recommendation that the student be admitted under the academic forgiveness policy must be submitted by the dean of the college or school that the student plans to enter, and the recommendation must be approved by the Associate Provost for Undergraduate Academic Affairs.
- Upon admission to WVU under this policy, the student will be credited with the hours earned for courses completed with a grade of D or higher.
- Grades earned during any prior enrollment period will not be counted for purposes of calculating the student's grade point average, but the grades earned will remain on the student's permanent record.
- The student must meet and complete all coursework required to meet the college's or school's requirements for graduation, but under no circumstances after the student has been admitted under the academic forgiveness policy shall the student complete fewer than sixty-four credit hours prior to earning a degree.
- A student admitted to WVU under this policy will follow all regulations regarding probation, suspension, and expulsion.

## WVU Transient Students

In order to take a course or courses at another college or university, a student must complete a Transient Credit Form, which can be found at: <http://admissions.wvu.edu/r/download/134700>. To receive such approval, a student must have an overall 2.0 grade-point average. All approved college-level work is accepted for transfer from accredited institutions, provided the above requirements have been met. To view a list of schools and courses already reviewed, visit <http://admissions.wvu.edu/admissions/university> ([http://admissions.wvu.edu/admissions/university-requirements/transfer\\_equivalency](http://admissions.wvu.edu/admissions/university-requirements/transfer_equivalency))-

requirements/transfer\_equivalency ([http://admissions.wvu.edu/admissions/university-requirements/transfer\\_equivalency](http://admissions.wvu.edu/admissions/university-requirements/transfer_equivalency)). In addition, an official transcript must be received by the Office of Admissions before any coursework can be counted toward degree requirements.

If the school is outside of the United States, all students must complete the Study Abroad Transient Form and have the approval of the Office of International Programs.

## Immunization Requirements

Requirements for immunizations are posted at: <http://well.wvu.edu/medical/immunizations>.

## FRESHMAN/EARLY

### In this section:

- Freshman Admission Requirements
- General Equivalency Degree (GED)/Test of Accessing Secondary Completion (TASC)
- Advanced Placement Program (AP)
- College Level Examination Program (CLEP)
- Active Military Service Credit
- International Baccalaureate (IB)
- Early Admission
- ACCESS (Attaining College Credits and Experiences while in Secondary School)

## Freshman Admission Requirements

To be considered for freshman admission, a student must:

- Submit an application for admission
- Pay required application fees and provide all required documents to be reviewed for admission which includes: an official high school transcript and ACT/SAT test scores. Upon graduation, please ask the high school counselor to send an official final high school transcript verifying graduation to the Office of Admissions.

And successfully complete the following high school credits:

- Four units of English
- Three units of social studies (including U.S. History)
- Four units of college preparatory mathematics (three units must be Algebra I and II and Plane Geometry). Select majors may require a fourth math considered to be higher than Algebra II.
- Three units of science (ALL units must be laboratory science)
- Two units of the same foreign language
- One unit of fine arts

The following is a list of the GPA and test score criteria.

High school grade point average and comprehensive tests are the major criterion used to determine admission to WVU. WVU accepts either ACT (American College Testing) or SAT scores.

High school graduates from West Virginia are eligible to be considered for admission with a 2.0 grade point average and either a composite ACT score of 19 or a combined math and critical reading SAT score of 910. Non-residents are eligible to be considered for admission with a 2.5 overall grade point average and either an ACT composite score of 21 or a combined math and critical reading SAT score of 990. If space is available and the required high school units, GPA, and test scores are met, the student will be admitted. Therefore, we encourage eligible students to apply as soon as possible after September 15 of their senior year. If one of the requirements is not met, students may still apply, and the Admissions Review Committee will review the application. If appropriate, students should submit a written statement explaining any extenuating circumstances that may have affected their academic performance. Each application is reviewed individually and given full consideration.

Students who graduate fewer than five years before their admission request must present ACT or SAT scores with the admission application. If it is more than five years since the student's class graduated from high school or a GED diploma was earned and no other college has been attended, WVU may waive some of the admission requirements

## General Equivalency Degree (GED)/Test of Accessing Secondary Completion (TASC)

Students who have completed a General Equivalency Degree (GED) with an average standard score of 2250 (450) or above must request that the State Department of Education mails copies of scores to the Office of Admissions. In addition, a high school transcript must also be mailed to the WVU Office of Admissions.

Beginning January, 2014, the West Virginia Department of Education will begin to use the Test Assessing Secondary Completion (TASC) exam in place of the GED. The GED will continue to be accepted for students who took the GED prior to January, 2014 or from a state that does not administer the TASC exam. Those students passing the TASC will need to submit their "State of West Virginia High School Equivalency Diploma." A high school transcript must also be mailed to the WVU Office of Admissions. More information about the TASC exam can be found at: <http://www.tasctest.com>.

## Advanced Placement Program (AP)

WVU encourages students to work to their full capacity and to earn their degree at their own learning speed. As a high school junior or senior, students can take college-level courses at their school through Advanced Placement courses. Administered by the College Board, Advanced Placement examinations verify if a student has earned competency equal to that of a college course. The WVU Office of (<http://admissions.wvu.edu/admissions/equivalency>) Admissions (<http://admissions.wvu.edu/admissions/equivalency>)' Advanced Placement chart (<http://admissions.wvu.edu/admissions/equivalency>) shows the subject areas and necessary test scores needed to earn WVU equivalent courses. In order to receive Advanced Placement credit, official scores must be sent to the Office of Admissions.

## College Level Examination Program (CLEP)

If an incoming student has gained a significant level of maturity through life experiences, he or she may receive college credit for those educationally-related experiences through the College Level Examination Program (CLEP) of the College Board. With the exception of English composition, up to thirty-five hours of general education or elective credit may be earned for successful performance on the CLEP general examinations. Although this program was designed primarily for adults, exceptionally well-qualified high school seniors may use the CLEP program. The chart at the WVU Office of Admissions' website: <http://admissions.wvu.edu/admissions/equivalency> indicates the areas for which WVU grants credit based on the minimum scores required. It should be noted that no student is eligible for CLEP credits after he or she has enrolled at WVU.

## Active Military Service Credit

A student with at least one year of active military service may receive college-level credit by submitting a copy of his or her DD214 or a Sailor/Marine/ACE Registry Transcript (SMART) or Army/ACE Registry Transcript System (AARTS) transcript. The chart can be found at <http://admissions.wvu.edu/admissions/equivalency>.

## International Baccalaureate (IB)

West Virginia University welcomes applications from students who have attended high schools that offer the international baccalaureate program. Credit given varies with level (standard or higher) and with score. The chart can be found at: <http://admissions.wvu.edu/admissions/equivalency>.

## Early Admission

WVU will admit a limited number of rising high school seniors who have demonstrated high academic achievement and maturity to enter college before high school graduation. Students who have completed their junior year in high school with 3.5 GPA or higher and a 26 enhanced ACT composite or 1170 on the SAT and have completed all requirements for graduation from high school except senior English may apply for early admission. In addition to submitting the freshman admission application and required documents (see Freshman Admissions), the principal or guidance counselors must submit a letter supporting the application. The student's parent(s) or guardian(s) must also submit a letter of support for the application. Once the above requirements are met, an interview with the student will be conducted for the Early Admissions Program. Accepted students are admitted as full-time students with all of the rights and privileges offered to other students.

## ACCESS (Attaining College Credits and Experiences while in Secondary School)

High school students who have completed their junior year with a 3.0 cumulative GPA may be admitted to enroll in college courses before high school graduation. An ACCESS application for admission must be submitted along with an official high school transcript and a letter of permission from parent(s) or guardian(s) and high school counselor or principal. Coursework completed at the University must be at a level beyond that available in the high school setting.

## TRANSFER

### In this section:

- Transfer Students from Regional Campuses
- Transfers from Other Accredited Institutions

- Application Materials
- Evaluation of Transfer Credit

## Transfer Students from Regional Campuses

Students enrolled at Potomac State College of WVU or WVU Institute of Technology must complete the Change of Campus form to transfer to the Morgantown campus. The form can be found at: <http://admissions.wvu.edu/r/download/134772>. WVU admission requirements must be met as well as requirements to specific programs.

Students wanting to transfer to WVU in Morgantown before completing two semesters at any of our regional or branch campuses need to meet freshman admission standards.

## Transfers from Other Accredited Institutions

We welcome transfer students who have completed post-secondary coursework at a regionally accredited college or university. To be admitted as a transfer student at WVU, students must have at least a cumulative 2.0 grade point average in all college work attempted. Transfer students who have fewer than twenty-four transferable credit hours must also meet freshman admission standards. Some individual programs and majors have different course requirements and higher grade point average requirements.

## Application Materials

To be considered for transfer admissions, the following materials are needed:

1. A completed application for undergraduate admission.
2. Official transcripts of all college work attempted must be sent to the Office of Admissions. Admissions can only accept transcripts sent directly from Registrars' offices. Transcripts issued to the student, or a facsimile (fax) transcript, are not considered official. Before final admission is granted, an official transcript must be submitted covering all courses taken after application to WVU.
3. If you have fewer than 24 transferable credit hours, ACT or SAT scores and a high school transcript must be submitted as part of your application.

**All application materials must be received in the Office of Admissions by August 1 for fall admission and December 1 for spring admission.**

## Evaluation of Transfer Credit

Evaluation of transferable credit will be made after receipt of all final official transcripts and admission to WVU. All credits and grades accepted as transfer credit will be used in the calculation of the cumulative grade point average and total attempted and earned credits. Transfer credits from community colleges and junior colleges outside the West Virginia Regional Campus System are limited to seventy-two hours of lower-division courses.

In all cases, the application of transfer credit toward completion of a bachelor's degree is determined by the school or college upon enrollment. The student's academic department will determine which credits will be used to meet degree requirements. If more than fifty-eight semester hours are being transferred, entrance requirements for the specific program must be met. Individual consideration is given to a limited number of students with more than fifty-eight transferable hours who do not meet specific program requirements.

## INTERNATIONAL STUDENT ADMISSION POLICIES

### In this section:

- International Student Admission
- Required Academic Credentials
- English Language Proficiency
- Financial Documents and Student Visa

## International Student Admission

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

Application deadlines are as follows:

- Fall Semester – April 1
- Spring Semester – October 1
- Summer – February 15

International students applying for admission to WVU must submit the following:

- Completed International Student Admission Application
- Application fee
- Results of the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS). TOEFL results must be sent to WVU directly from the Educational Testing Service (ETS) and the IELTS results must be sent directly from the University of Cambridge Local Examinations Syndicate.
- Original or certified copies of an official academic record in original language of issue
- Original or certified copy of all certificates or diplomas in original language of issue
- Official English translations of academic record and certificates/diplomas
- For visa documents: certification of financial support and a copy of current passport or visa

International applicants who have completed high school in the United States will also be required to submit ACT or SAT results.

The above items should be sent to the following address by the application deadline: Office of Admissions, West Virginia University, P.O. Box 6009, 2<sup>nd</sup> Floor, One Waterfront Place, Morgantown, WV 26505-6009.

If possible, all application material should be submitted at one time (TOEFL/IELTS scores and official transcripts from United States institutions should be requested so that all material arrives at WVU close to the same date). Incomplete applications cannot be guaranteed consideration for the desired semester.

To expedite the application process, it is strongly recommended that all undergraduate students (both freshmen and transfer) who have attended high school, post-secondary educational institutions, colleges or universities, outside the United States, use World Education Service (WES) to complete the required professional credential evaluation of all academic work completed. A “detailed” or “course-by-course” evaluation, including a calculated grade point average (GPA), and WES certified copies of official documents are required for all work completed in a country other than the United States.

Transcripts, mark sheets, grade report examination results and degree certificates from all previously attended institutions should be sent to: World Education Services (WES), Bowling Green Station, PO Box 5087, New York, NY 10274-5087/ Online: [www.wes.org](http://www.wes.org) (<http://www.wes.org>).

Sending credentials to WES will result in a faster evaluation; however, there is a fee associated with the evaluation. Credentials submitted directly to West Virginia University will take longer to evaluate, and there is no guarantee as to the length of time it may require.

Once credentials have been submitted to WES for evaluation, any inquiries regarding the evaluation can be sent to the address above or to: [www.wes.org](http://www.wes.org) (<http://www.wes.org>).

## Required Academic Credentials

Applicants must submit academic records from all secondary and post-secondary institutions attended regardless of whether grades were issued or credit was received. WVU requires that original or certified copies of the original academic documents from non-United States institutions be submitted. The required documents include the official academic record (showing course titles, dates taken, and grades received) and diploma(s) or certificate(s) showing degree awarded. These documents must be in the original language of issue; official English translations must be included. Translations must be literal, word-for-word translations and must indicate actual grades received, not an interpretation of the grades. Applicants who have studied in the United States are required to have the institution(s) in the U.S. send the official transcript directly to WVU.

Documents received by WVU become the property of WVU and cannot be returned to the applicant or copied for the applicant. It is therefore recommended that students who receive only one original copy of credentials submit certified copies with the application.

## English Language Proficiency

All applicants whose first language is not English must provide proof of English language proficiency. WVU uses the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) as the measure of English language proficiency. A score of 500 on the paper-based TOEFL, or 61 on the internet-based TOEFL, or 6.0 on the IELTS is the minimum required of all such applicants. Applicants must make arrangements to take the TOEFL/IELTS well in advance of the desired date of enrollment at WVU. Information about registration for the TOEFL can be obtained by writing to: Educational Testing Service, P.O. Box 6151, Princeton, NJ 08541-6151, USA, or by contacting the local office of the United States Information Service (USIS). Information about registration for IELTS can be obtained by accessing the IELTS website at <http://www.ielts.org>.

TOEFL results are not required for applicants who have received a high school diploma or a bachelor's degree from schools in the United States.

In some cases, it may be possible to consider applications from students who lack adequate TOEFL or IELTS scores and who will enroll in WVU's Intensive English Program. Such applicants must contact the Intensive English Program directly and notify the Office of Admissions of their intentions. Admission to the Intensive English Program does not guarantee admission to the University or to a specific program of study. Inquiries should be directed to: Intensive English Program, WVU Department of Foreign Languages, P.O. Box 6298, Morgantown, WV 26506-6298, Telephone: (304) 293-3604. Online: <http://iep.wvu.edu>.

## Financial Documents and Student Visa

International students requiring a form I-20 or DS 2019 for student or exchange visa must provide certification of adequate financial resources in US dollars. Generally, the student is required to provide an official bank statement showing the availability of the appropriate funds. If a private sponsor will be the student's source of support, the sponsor must submit a letter showing intent to sponsor and an official bank statement showing the availability of the appropriate funds. Other forms of support could include sponsorship certifications from the student's government or sponsoring agency. In all cases, original or certified copies of financial/sponsorship documents must be submitted before the I-20 or DS 2019 can be issued.

## Graduate 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](http://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=wwugrad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=wwugrad).

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](http://majors.wvu.edu). Information relevant to the application process can be found at [grad.wvu.edu/admissions](http://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/](http://catalog.wvu.edu/graduate/)) and at [majors.wvu.edu](http://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/](http://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](http://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

### Undergraduate Advising, Enrollment & Evaluation

#### In this section:

##### ADVISING:

- Academic Advising
- Goals of Undergraduate Education
- Degree Works

##### ENROLLMENT:

- Academic Leave of Absence
- Attendance Policy
- Auditors
- Military Leave
- Withdrawal Policy

##### GRADES:

- Grading System
- Pass/Fail Grading

- Incomplete Grades
- Grade Point Average
- Repeat Policy
- Grade Reports
- Dean's and President's List

## ADVISING

### In this section:

- Academic Advising
- Goals of Undergraduate Education
- Degree Works

### Academic Advising

Every student at West Virginia University has access to academic advising and will be assigned an advisor. WVU students are required to meet with their academic advisors prior to registering for classes each semester. Advisors assist students in understanding major and University requirements including the General Education Curriculum (GEC); course registration planning and processes; program and course prerequisites; and academic standing (e.g. probation and suspension). In addition, advisors may assist students with planning for post-baccalaureate education and careers.

It is the student's responsibility to understand their degree requirements. Students are expected to become familiar with the Undergraduate Catalog and Degree Works and prepare for their own course planning and registration processes.

### Goals of Undergraduate Education

WVU's undergraduate education is designed to help students acquire a basic foundation in a variety of academic areas in addition to their major field. Students are expected to integrate the perspectives of the humanities, social sciences, natural sciences, and an appreciation of the arts with coursework in their major to facilitate an understanding of the world at large. This foundation for lifelong learning should provide the knowledge and skills necessary to embrace social, cultural, and technological change.

In addition to these various perspectives, students are expected to develop critical thinking and problem-solving skills sufficient for life in contemporary society. These skills include the ability to read critically, listen critically, ask appropriate questions, gather relevant information, and apply critical analysis to reach logical conclusions. Central to these skills are mathematical literacy and proficiency in oral and written communications.

In preparation for life after the university, students are expected to attain proficiency in their major fields. This proficiency should enable them to be competitive in the job market or in admission to graduate or professional schools.

Finally, students are expected to acquire knowledge, understanding, and an appreciation of diversity in languages, cultures, ideas, and peoples, along with a desire to work so that all individuals are treated in a manner consistent with social justice. We hope that students will maintain a lifelong commitment to ethical behavior, responsible citizenship, and public service.

One of the primary ways in which students accomplish WVU's goals of undergraduate education is through completion of the nine General Education Curriculum (GEC) objectives. Each of the objectives is satisfied by completion of courses designated as GEC courses. For a description of the General Education Curriculum and a listing of approved courses, visit the Office of Registrar's website: <http://registrar.wvu.edu/>.

### Degree Works

Degree Works is the online advising and degree auditing tool at WVU. All undergraduate students should have a completed audit for graduation. Some graduate programs also have an audit available in Degree Works. Please refer to this system regularly. Students can access Degree Works through their MIX account. More information is available at <http://registrar.wvu.edu/dw>.

Degree Works is NOT an official evaluation. All degree requirements must be verified by student's college or school prior to graduation. Students are responsible for complying with all academic policies published in the University catalog. If students have any questions about the information presented in this audit, they are encouraged to contact their advisor or the Office of the University Registrar at [registrar@mail.wvu.edu](mailto:registrar@mail.wvu.edu).

## ENROLLMENT

### In this section:

- Academic Leave of Absence
- Attendance Policy

- Auditors
- Military Leave
- Withdrawal Policy

## Academic Leave of Absence

WVU offers undergraduate students in good standing, as defined by WVU's uniform suspension policy, and not subject to disciplinary action the opportunity to request an academic leave of absence. The academic leave of absence is designed for the student who wishes to be away from his or her academic endeavors at WVU for one or more semesters but intends to return at a later date. Leave of absence status must be requested before the beginning of the semester for which the leave is desired. The academic records of students on an academic leave of absence remain in an active status. While on an academic leave of absence, the student retains the right to use certain campus facilities and will continue to receive communications from WVU. To request a leave of absence, a student must complete the Leave of Absence form found on the Office of the University Registrar's website.

When a student decides to return to WVU after his or her academic leave of absence, application fees are waived. An overall grade point average of 2.0 on all work attempted while on leave combined with the WVU grade point average is acceptable. Students who have non-academic holds (delinquent loans, outstanding fees, etc.) will not be permitted to return from a leave of absence until all outstanding debts have been resolved. If a student fails to return to WVU by the stated leave of absence return date, the student is removed from active status and the student's record is deactivated.

## 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.

### 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.

### Military Leave

#### STUDENTS CALLED TO SERVE IN THE MILITARY

1. Students who withdraw from the University for military service up to and including the 12th week of the semester will receive a full refund of their fees and be administratively withdrawn from their classes. No course grades or credit will be awarded.

2. Students who leave the University for military service after the 12th week of the semester should work with the designated contact person in their home college (usually the academic associate/assistant dean). The student may also contact the Office of the University Registrar (304-293-5355). The contact person will assist the student in reviewing the student's eligibility for credit for their courses on a course-by course basis with the instructors.
3. The contact person will work with the student's instructors to gather grade information for the student. If the course is not in the student's home college, the contact person can work with his/her counterpart in the appropriate college. Several outcomes are possible:
  - A. If the course is substantially complete and the student has done passing work, the student should receive the grade earned at that time. It is anticipated that this would be the outcome in the majority of the courses. **NOTE: Students who receive orders with sufficient advance notice are expected to notify their professors of their upcoming deployment date and meet with their professors to come to an agreement on what regular course assignments they can reasonably complete prior to the deployment date (the details of this arrangement should be included in a contract initialed by both the instructor and the student; contracts must be placed in the student's file). Students should not be penalized for not completing assignments, quizzes, tests, or exams due after their deployment date.**
  - B. If a critical competency has yet to be covered in a competency-based course, the instructor should award a grade of "I" and work with the student to develop a plan to complete that critical part of the course. To alleviate confusion at a later date, the plan should be in writing and signed by both the instructor and the student. Students called to active duty for a relatively short duration that includes exam week may arrange for an "I" with provision to make up the final exam after completing the period of duty.
  - C. If the student chooses to withdraw from the course, the contact person will work with the appropriate University office to provide an administrative withdrawal.

## LEAVE FOR MILITARY DRILL

In accordance with the "Veteran Friendly" designation, WVU faculty may allow students who are members of the US Armed Forces (including the National Guard and Active Reserve) to make up tests and assignments that are missed during a semester if the student is officially called up for military service requirements for a limited period and if the delayed coursework completion will not irreversibly impact the student's ability to appropriately master the required subject matter. Absence due to required military obligation should not exceed a cumulative amount of three weeks. Students should notify faculty members of the circumstances of their absence as far in advance as possible and work with faculty members to agree upon a plan of action for completing course requirements.

## 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](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](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:

- Grading System
- Pass / Fail Grading
- Incomplete Grades
- Grade Point Average
- Repeat Policy
- Grade Reports
- Dean's and President's List

### Grading System

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

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.

### Pass/Fail Grading

Pass/fail grading encourages students to take elective courses not related to their degree concentrations. Pass/fail grading also facilitates grading in competency-based courses that may be an integral part of an academic program.

Any full-time student who has completed fifteen hours or more and who has maintained a 2.0 grade point average may take a maximum of four hours each semester or summer term on a pass/fail basis. Any course taken on a pass/fail basis must be a free elective. Students are limited to a total of eighteen hours of pass/fail credit in the collegiate career. Unless otherwise indicated, courses in the major, courses in other subjects that are required by the major, and courses taken to satisfy University, college, school, or departmental requirements are excluded from pass/fail. For example, courses elected to satisfy the General Education Curriculum (GEC) or foreign language requirements may not be taken for pass/fail grading.

A course taken on a pass/fail basis is graded as a graded course. The instructor turns in the appropriate letter grade to the Office of the University Registrar. This letter grade is then converted to a P on the basis of A, B, C, or D for a pass and F for a fail. The grade of P does not affect your grade point average. However, any F grade affects a student's grade point average whether it is a regular grade or a pass/fail grade.

A student chooses the option of pass/fail grading for a course during the registration period. Once the registration period has ended, he or she may not change the grade status in the course.

A department or unit may designate any performance- or competency-based course as exclusively pass/fail. To institute this, the college or school must have the approval of the Faculty Senate. Courses offered only as pass/fail are not included in the maximum of eighteen hours that may be freely elected as pass/fail under the student option.

## Incomplete Grades

A grade of "I" (Incomplete) is a temporary grade assignment used when unforeseen, non-academic circumstances arise that prohibit students from completing the last assignment at the end of the semester. The grade of Incomplete is typically assigned because of an excused absence from the final examination, or because the work is unavoidably incomplete, as determined by the faculty member in consultation with the Dean. Students who are failing a course (exclusive of the incomplete work) may not request an Incomplete.

Students who want to be considered for an Incomplete must apply to their instructor prior to the end of the term; if the instructor agrees, the instructor and the student must negotiate the conditions under which the grade of "I" will be changed to a letter grade and sign a contract. The date to submit the incomplete work should not be set beyond the last day of class of the following semester.

To remove the grade of I, a student does not register for the course again.

If a student does not complete the course requirements as stipulated in the contract or by the expiration date, the I grade will be replaced with an IF.

## 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.

- A- 4
- B- 3
- C- 2
- D- 1
- F- 0
- I- 0
- U- 0

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,  $3 \times 3 = 9$

B. Geology 101, 3, C, 2,  $3 \times 2 = 6$

C. Spanish 101, 3, D, 1,  $3 \times 1 = 3$

D. Mathematics 126, 3, A, 4,  $3 \times 4 = 12$

E. Political Sci. 101, 3, B, 3,  $3 \times 3 = 9$

F. Psychology 201, 1, P, 0,  $1 \times 0 = 0$

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:  $39 \div 15 =$  grade point average of 2.6.

## Repeat Policy

### D/F REPEAT

WVU has a D/F repeat policy for undergraduate students who have not received their initial baccalaureate degree. If a student earns a D or F in a course at WVU or at any school in the WV State System and the course is taken no later than the semester or summer term in which the student completes the sixtieth hour (including any class in which the student earns a grade and transfer classes), the student may "D/F repeat" that course. Hours from the Intensive English Program do count towards the sixty hours. The course can be repeated only at WVU Morgantown or at one of WVU's divisional campuses. Students have only one opportunity to improve their original grades under the D/F repeat policy. The new grade becomes the grade that counts toward the student's cumulative GPA and credit hours for graduation, even if the repeated course grade is lower than the original grade in the course. The D/F repeat policy will be enacted any time an eligible course is repeated.

When a course is D/F repeated, the following procedure occurs:

1. The original grade is disregarded for the purpose of determining the overall GPA; it is marked as excluded (E) in the semester that the student originally took the course.
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. Grades of Unforgivable F (UF) are not eligible for D/F repeat. Such a failure is indicated on the student's permanent record by an UF and is calculated in the GPA.

### OTHER REPEATED COURSES

Courses repeated, but not eligible for the provisions of the D/F repeat policy, 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.

## Grade Reports

During the seventh week of classes in the fall and spring semesters, instructors submit a grade for all undergraduate students earning grades of D or F in undergraduate courses. These grades are used for counseling, are not recorded on the student's official transcript, and disappear from the computer system after the semester is completed. These grades are sent first to the Office of the University Registrar and then to the student via MIX.

Final grades are due to the Office of the University Registrar within 48 hours after the end of the University's final examination and are viewable to students within one week of submission to the Office of the University Registrar. The final grades of all seniors provisionally approved for graduation at the close of each semester or summer term are reported to the deans of the students' colleges or schools. Special report forms for this purpose are supplied by the student's dean.

At the end of each semester, grades are available through MIX.

## Dean's and President's List

Outstanding undergraduate academic achievement is recognized by awarding President's List and Dean's List status to students who obtain a 4.0 GPA or 3.5 GPA, respectively. Only the highest honor is awarded, and it will be noted on the transcript. Students must be enrolled in 12 credit hours or more of graded courses to be eligible for such recognition with no grades of I (incomplete), NR (not reported), or W (withdrawal).

## Graduate 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

### In this section:

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

### Advisors

Academic and scholarly advising varies by graduate program across the University. Each graduate academic unit has one or more graduate advisors, and every graduate student 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.

## 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 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](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](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

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

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.

- A- 4
- B- 3
- C- 2
- D- 1
- F- 0
- I- 0
- U- 0

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,  $3 \times 3 = 9$
  - B. Geology 101, 3, C, 2,  $3 \times 2 = 6$
  - C. Spanish 101, 3, D, 1,  $3 \times 1 = 3$
  - D. Mathematics 126, 3, A, 4,  $3 \times 4 = 12$
  - E. Political Sci. 101, 3, B, 3,  $3 \times 3 = 9$
  - F. Psychology 201, 1, P, 0,  $1 \times 0 = 0$
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:  $39 \div 15 =$  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.

## 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

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

Thursday, December 18	Winter Recess Begins
Friday, December 19	December Convocation
Friday, December 26	Degree Conferring Date

## SPRING 2015

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

## 12-Week Summer Session 2015

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

## Degree Regulations

### Undergraduate Degree Regulations

#### In this section:

#### REQUIREMENTS:

- Undergraduate Degree Requirements
- Credit Residence Requirements
- Work Done Out of Residence
- Credit Validation

#### AWARDING DEGREES:

- Awarding Degrees

- Official Program Designations
- Double Majors
- Dual Degrees
- Second Degrees

## GRADUATION:

- Graduation
- Graduation with Honors

## REQUIREMENTS

### In this section:

- Undergraduate Degree Requirements
- Credit Residence Requirements
- Work Done Out of Residence
- Credit Validation

### Undergraduate Degree Requirements

All undergraduate degree programs include the General Education Curriculum (GEC), require a minimum grade point average of 2.0 or higher, and require a minimum of 120 credit hours. In addition, the various colleges and schools may determine their own specific graduation requirements which may include additional course or credit requirements, minimum course grades, and grade point averages higher than a 2.0.

Every undergraduate degree program at WVU requires that students satisfactorily complete the General Education Curriculum which includes an approved Writing course and a Capstone experience. For General Education Curriculum definitions, please see the list of approved GEC/Writing/Capstone courses ([http://registrar.wvu.edu/current\\_students/gec\\_description](http://registrar.wvu.edu/current_students/gec_description)). Please note that transfer courses do not fulfill the Writing or Capstone requirements. In exceptional cases, students can petition their college to have a transfer course approved as fulfilling the writing requirement. Students will need to provide evidence of process writing. Because of their unique concept, Capstone courses can never be transferred from another institution, including courses taken while studying abroad.

Students entering WVU as an undergraduate student with fewer than twenty-nine hours must also earn a passing grade in First Year Seminar in their first semester at WVU. Those who do not pass the course must re-enroll for subsequent semesters until they earn a passing grade.

### Credit Residence Requirements

Candidates for an undergraduate degree from West Virginia University should plan to complete their final 30 credit hours in residence. Students who do not complete the final 30 credit hours in residence must complete a minimum of 90 total credit hours in residence in order to earn a WVU degree. Individual colleges, schools, or departments might have additional residence requirements as part of their degree or major requirements. Students should consult their respective academic unit with questions regarding specific degree or major residence requirements. Transfer coursework (including Potomac State College and WVU Institute of Technology transfer courses); WVU administered credit by examination, placement credit, and experiential learning credit; Advanced Placement (AP) credit; International Baccalaureate (IB) credit; College Level Examination Program (CLEP) credit; high school dual enrollment credit; and military training credit are examples of the types of coursework excluded from WVU residence credit. While WVU administered credit by examination, placement credit, and experiential learning credit will be excluded from WVU residence credit, it does not interrupt the final 30 credit hours in residence if earned during this period.

**Note: Resident credit hours are not synonymous with West Virginia State residency definitions for tuition purposes.**

### Work Done Out of Residence

Coursework completed at another institution (including Potomac State College and WVU Institute of Technology) is considered non-WVU resident credit hours. Students transferring to WVU from another institution will receive a preliminary evaluation of transfer credits upon admission to the University. Transfer credits from two-year community colleges and junior colleges are limited to a maximum of seventy-two hours of lower-division credit. Coursework accepted from two-year colleges is limited to lower-division credit; in some cases, upper-division courses may not apply toward a student's degree at WVU. WVU students who wish to take courses at another accredited institution and receive transfer credit should review the transient approval process and consult the Office of Admissions's website ([http://admissions.wvu.edu/admissions/university-requirements/transfer\\_equivalency](http://admissions.wvu.edu/admissions/university-requirements/transfer_equivalency)) for the Transient Application Form.

### Credit Validation

Students returning to WVU to complete a degree after a significant break in enrollment may be asked to retake certain courses to validate their subject knowledge (or otherwise demonstrate mastery). This significant break is normally defined by the department offering the course. Typically, a course

must be revalidated if taken seven or more years previously. However, certain programs may have shorter time limitations that require re-enrollment or validation sooner. This requirement to re-enroll or demonstrate subject mastery in a course is at the discretion of the department chair and dean.

Coursework deemed to be insufficient to meet current course standards will still be factored into a student's GPA and may be treated as elective credit (as allowed by the student's academic major).

## AWARDING DEGREES

### In this section:

- Awarding Degrees
- Official Program Designations
- Double Majors
- Dual Degrees
- Second Degrees

### Awarding Degrees

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

A student becomes eligible to graduate when he or she completes the requirements of the University, college or school, and major degree program according to the Undergraduate Catalog in effect at the time the student first entered WVU. With the consent of the student's advisor and dean, a student may choose to meet the conditions published in a later catalog. If a student entered WVU more than seven years previously, the student must complete the requirements in a catalog that is no more than seven years old.

Students must observe any program changes that are enacted by the West Virginia University Faculty Senate, West Virginia University Board of Governors, the West Virginia Higher Education Policy Commission, or by local, state, or federal law.

WVU policy dictates that, in view of their professional responsibilities to the general public, the faculty of a professional school may recommend to the president of the University, in writing, that a student be removed from its rolls. The recommendation of the faculty must indicate that the student is not fit to meet the qualifications and responsibilities of the profession.

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

### 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.

### Double Majors

The double major is the awarding of one degree with two majors (e.g. a student who completes majors in English and history earns one B.A. degree). The completion of double or multiple majors must lead to the same degree and can only be achieved simultaneously. Students must be accepted into each major and fulfill all requirements of each major in addition to satisfying all University requirements. Students who complete multiple majors within one degree will be awarded one degree, and the transcript will list the degree and each major.

## Dual Degrees

The dual degree is the concurrent awarding of two distinct baccalaureate degrees (i.e. B.A., B.S., B.S.E., B.S.J., B.S.B.A.). Dual degrees will not be awarded when a student has completed a double major with the same degree designation. Students pursuing two majors in different degree programs are expected to have the full range of skills, competencies, and experiences as students graduating from each of the programs independently. Therefore, students must be admitted into each degree program and fulfill all requirements for each degree. Students should pay particular attention to GEC requirements for each degree. Simultaneous completion of dual baccalaureate degrees requires students to complete a minimum of thirty unique credit hours that are not used to satisfy their primary degree requirements. For example, if the student's primary degree program requires a minimum of 120 credit hours, the student must complete a minimum of 150 credit hours to earn both degrees.

## Second Degrees

Some students decide to continue their undergraduate studies after receiving their first bachelor's degree. Students who attempt to earn dual baccalaureate degrees from WVU but do not fully complete requirements for both degrees simultaneously will become second degree candidates. Students who have previously earned a bachelor's degree, whether from WVU or another institution, must complete a minimum of thirty hours beyond the first degree. Second degree candidates must meet all requirements for their degree program, major, college, or school and the University, including residence requirements. General Education Curriculum (GEC) requirements, however, are generally considered satisfied by completion of the first undergraduate degree. In the event that courses taken for the first bachelor's degree are required courses for the second degree program, the college or school granting the second degree may approve course substitutions. In no circumstance may the coursework in the second degree program be fewer than thirty credit hours after the conferral of the first degree.

## GRADUATION

### In this section:

- Graduation
- Graduation with Honors

### Graduation

In order to graduate, a student is required to complete an application for graduation the semester or summer term in which he or she expects to graduate. If a student is uncertain about graduation requirements, the student should meet with his or her academic advisor for guidance.

### Graduation with Honors

WVU recognizes distinguished academic achievement by awarding degrees cum laude, magna cum laude, and summa cum laude. This distinction can be awarded on initial or second baccalaureates and specified entry-level professional degrees. All candidates for a baccalaureate with a GPA of 3.8 or higher graduate summa cum laude. Those with a grade point average of less than 3.8, but equal to or above 3.6, graduate magna cum laude. Those with a GPA of less than 3.6, but equal to or above 3.4, graduate cum laude.

The grade point average for honors consideration for a baccalaureate is based on baccalaureate-level college work attempted through the final semester. This calculation includes baccalaureate-level college work attempted at institutions accredited by regional accreditors in the United States. Credit hours earned with a grade of P or S are not considered in the determination. Grades of F, however, are computed as hours attempted. The grade point average through the penultimate semester will be used for notations in the commencement programs. Students who received academic forgiveness are not eligible to graduate with honors.

Students must meet residency requirements at WVU to be considered for graduation with honors.

The GPA for honors consideration for entry-level professional degrees is based on baccalaureate-level and professional-level work attempted through the last semester. This calculation includes baccalaureate-level and professional-level college work attempted at all regionally accredited higher education institutions attended. Credit hours earned with a grade of P or S are not considered in the determination.

Students entering and completing a second baccalaureate program following completion of the initial degree are eligible to receive the honors designation. Grade point averages for graduation with honors on second baccalaureates shall be computed on all baccalaureate-level work, excluding credit earned with a P or S. This includes work completed for the first degree as well.

## Graduate 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

#### GRADUATE/PROFESSIONAL:

- 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) (<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) (<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 follow 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](http://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 priority:

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](http://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 the Office of Graduate Education and Life website at [grad.wvu.edu](http://grad.wvu.edu).

## Programs, Courses & Credits

### Undergraduate Programs, Courses & Credits

#### In this section:

##### PROGRAMS:

- Official Program Designations
- Programs Offered at WVU
- Academic Certificate Matriculation and Award Policy
- Undergraduate Certificate Programs
- Graduate Certificate Programs
- Minors
- Academic Innovation

##### COURSES:

- Abbreviations Used in Course Listings
- Plan for Numbering Courses
- Common Course Numbers and Descriptions
- Undergraduate Course Descriptions
- Eligibility to Enroll in 500-Level Courses
- Graduate Credit via Senior Petition
- Final Exams
- Last Week of Classes

##### CREDITS:

- Classification of Students
- Course Overload
- Credit Hour Definition
- Credit by Exam
- Experiential Learning

## PROGRAMS

#### In this section:

- Official Program Designations
- Programs Offered at WVU
- Academic Certificate Matriculation and Award Policy
- Undergraduate Certificate Programs
- Graduate Certificate Programs

- Minors
- 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

Program	Bachelor's	Master's	Doctoral/Professional
Accounting	B.S.B.Ad.		
Business Administration		M.B.A.	
Business Administration - AOE: Accounting			Ph.D.
Business Administration - AOE: Finance		M.B.A.	Ph.D.
Business Administration - AOE: Marketing			Ph.D.
Business Administration - AOE: Management			Ph.D.
Business Management - AOE: Hospitality and Tourism Management	B.S.B.Ad.		
Business Management - AOE: Human Resource Management	B.S.B.Ad.		

Business Management - AOE: International Business	B.S.B.Ad.		
Business Management - AOE: Small Business/Entrepreneurship	B.S.B.Ad.		
Business Management - AOE: Supply Chain Management	B.S.B.Ad.		
Economics	B.S.	M.A.	
Economics - AOE: International Economics			Ph.D.
Economics - AOE: Financial Economics			Ph.D.
Economics - AOE: Monetary Economics			Ph.D.
Economics - AOE: Public Economics			Ph.D.
Economics - AOE: Regional & Urban Economics			Ph.D.
Economics - AOE: Resource Economics			Ph.D.
Finance	B.S.B.Ad.	M.S.	
Finance - AOE: Energy		M.S.	
General Business	B.S.B.Ad.		
Hospitality & Tourism Management	B.S.B.Ad.		
Industrial Relations		M.S.	
Management Information Systems	B.S.B.Ad.		
Marketing	B.S.B.Ad.		
Professional Accountancy		M.P.A.	

## COLLEGE OF CREATIVE ARTS

Program	Bachelor's	Master's	Doctoral/Professional
Art - AOE: Art Education		M.A.	
Art - AOE: Art History		M.A.	
Art - AOE: Studio Art		M.A.	
Art History	B.A.		
Art and Design - AOE: Certification K-12	B.F.A.		
Art and Design - AOE: Ceramics	B.F.A.	M.F.A.	
Art and Design - AOE: Graphic Design	B.F.A.	M.F.A.	
Art and Design - AOE: Intermedia/ Photography	B.F.A.	M.F.A.	
Art and Design - AOE: Painting	B.F.A.	M.F.A.	
Art and Design - AOE: Printmaking	B.F.A.	M.F.A.	
Art and Design - AOE: Sculpture	B.F.A.	M.F.A.	
Music	B.A.		
Music - AOE: Collaborative Piano		M.M.	Ph.D./D.M.A.
Music - AOE: Music Composition	B.M.	M.M.	Ph.D./D.M.A.
Music - AOE: Music Education		M.M.	Ph.D./D.M.A.
Music - AOE: Music Education: Vocal, General, Instrumental	B.M.		
Music - AOE: Music History		M.M.	
Music - AOE: Music Theory		M.M.	
Music - AOE: Performance: Conducting		M.M.	Ph.D./D.M.A.

Music - AOE: Performance: Guitar, Band or Orchestra Instrument	B.M.		
Music - AOE: Performance: Jazz(Pedagogy)		M.M.	
Music - AOE: Performance: Jazz Studies	B.M.		
Music - AOE: Performance: Piano(Coaching/Accompanying)	B.M.		
Music - AOE: Performance: Piano(Jazz)	B.M.		
Music - AOE: Performance: Piano(Pedagogy)	B.M.	M.M.	
Music - AOE: Performance: Piano(Traditional)	B.M.		
Music - AOE: Performance: Piano, Voice, Band, or Orchestra Instruments		M.M.	Ph.D./D.M.A.
Music - AOE: Performance: Woodwinds	B.M.		
Music - AOE: Performance: Voice	B.M.		
Multidisciplinary Studies	B.M.D.S.		
Theatre - Theatre	B.A.		
Theatre - Dance	B.A.		
Theatre - AOE: Acting	B.F.A.	M.F.A.	
Theatre - AOE: Costume Design and Technology		M.F.A.	
Theatre - AOE: Creative Dramatics and Puppetry	B.F.A.		
Theatre - AOE: Design/Technology	B.F.A.		
Theatre - AOE: Lighting Design and Technology		M.F.A.	
Theatre - AOE: Scene Design and Technology		M.F.A.	
Music - AOE: Vocal Pedagogy and Performance			Ph.D./D.M.A.

## BENJAMIN M. STATLER COLLEGE OF ENGINEERING AND MINERAL RESOURCES

Program	Bachelor's	Master's	Doctoral/Professional
Aerospace Engineering	B.S.A.E.	M.S.A.E.	
Biomedical Engineering	B.S.Bm.E.		
Biometric Systems - AOE: DNA/Molecular Biology	B.S.B.S.		
Biometric Systems - AOE: Microsensors & Circuits	B.S.B.S.		
Biometric Systems - AOE: Signal Processing	B.S.B.S.		
Biometric Systems - AOE: Statistics	B.S.B.S.		
Biometric Systems - AOE: Software Systems	B.S.B.S.		
Chemical Engineering	B.S.Ch.E.	M.S.Ch.E.	
Civil Engineering	B.S.C.E.	M.S.C.E.	
Computer Engineering	B.S.Cp.E.		
Computer Science	B.S.C.S.		Ph.D.
Computer Science - AOE: Biometrics & Information Assurance		M.S.C.S.	

Electrical Engineering	B.S.E.E.	M.S.E.E.	
Energy Systems Engineering		M.S.E.S.E.	
Engineering		M.S.E.	
Engineering - Aerospace			Ph.D.
Industrial Engineering	B.S.I.E.	M.S.I.E.	
Engineering - Chemical			Ph.D.
Engineering - Civil			Ph.D.
Engineering - Computer			Ph.D.
Engineering - Electrical			Ph.D.
Engineering - Industrial			Ph.D.
Engineering - Mechanical			Ph.D.
Engineering - Mining			Ph.D.
Engineering - Petroleum & Natural Gas			Ph.D.
Engineering - Occupational Safety & Health			Ph.D.
Industrial Hygiene		M.S.	
Mechanical Engineering	B.S.M.E.	M.S.M.E.	
Mining Engineering	B.S.Min.E.	M.S.Min.E.	
Petroleum & Natural Gas Engineering	B.S.PNGE.	M.S.PNGE.	
Safety Management - AOE: Environmental Management		M.S.	
Software Engineering - AOE: Biometrics & information Assurance		M.S.S.E.	

## COLLEGE OF EDUCATION AND HUMAN SERVICES

Program	Bachelor's	Master's	Doctoral/Professional
Audiology			Au.D.
Child Development and Family Studies - AOE: Child Development	B.S.		
Child Development and Family Studies - AOE: Family and Youth Studies	B.S.		
Child Development and Family Studies - AOE: Pre-school Education - Birth-Age 4	B.S.		
Child Development and Family Studies - AOE: Preschool Special Needs-PreK-K	B.S.		
Communication Sciences and Disorders			Ph.D.
Counseling - AOE: Community Agency Counseling		M.A.	
Counseling - AOE: School Counseling		M.A.	
Counseling Psychology			Ph.D.
Education - Curriculum & Instruction			Ed.D.
Education - Education - AOE: Curriculum, Literacy, Cultural Studies			Ph.D.
Education - Education - AOE: Educational Leadership & Policy Studies			Ph.D.
Education - Education - AOE: Human Development and Family Studies			Ph.D.

Education - Education - AOE: Learning, Instructional Design, & Technology		Ph.D.
Education - Educational Leadership/ Public School Administration		Ed.D.
Education - Educational Psychology		Ed.D.
Education - Higher Education Administration		Ed.D.
Education - Special Education - AOE: Personnel Preparation in Special Education		Ed.D.
Education - Special Education - AOE: School Leadership in Special Education		Ed.D.
Educational Leadership - Higher Education Administration	M.A.	
Educational Leadership - Public School Administration	M.A.	
Educational Psychology - AOE: Child Development & Family Studies	M.A.	
Educational Psychology - AOE: Educational Psychology	M.A.	
Elementary Education	B.A.	
Elementary Education - Elementary - AOE: Early Childhood Education	M.A.	
Elementary Education - Elementary - AOE: Early Childhood, PreK-K	M.A.	
Elementary Education - Elementary - AOE: Elementary Education/ Advanced	M.A.	
Elementary Education - Elementary/ MDS - AOE: Early Childhood Education , PreK-K	M.A.	
Elementary Education - Elementary/ MDS - AOE: English Education	M.A.	
Elementary Education - Elementary/ MDS - AOE: Foreign Language Education	M.A.	
Elementary Education - Elementary/ MDS - AOE: Interdepartmental Studies (Social Studies)	M.A.	
Elementary Education - Elementary/ MDS - AOE: Integrated Science	M.A.	
Elementary Education - Elementary/ MDS - AOE: Mathematics Education	M.A.	
Elementary Education - Elementary/ MDS - AOE: Multicategorical Special Education K-6 + 5-Adult	M.A.	
Instructional Design & Technology	M.A.	Ed.D.
Literacy Education	M.A.	
Multidisciplinary Studies- Elementary Education - AOE: Early Childhood Education, PreK-K	B.M.D.S.	
Multidisciplinary Studies- Elementary Education - AOE: English Education	B.M.D.S.	

Multidisciplinary Studies- Elementary B.M.D.S.  
Education - AOE: Foreign Language  
Education

Multidisciplinary Studies- Elementary B.M.D.S.  
Education - AOE: Integrated Science

Multidisciplinary Studies- Elementary B.M.D.S.  
Education - AOE: Interdepartmental  
Studies(Social Studies)

Multidisciplinary Studies- Elementary B.M.D.S.  
Education - AOE: Mathematics  
Education

Multidisciplinary Studies- Elementary B.M.D.S.  
Education - AOE: Multicategorical  
Special Education K-6 + 5-Adult

Multidisciplinary Studies- Secondary B.M.D.S.  
Education - AOE: Biology &  
Integrated Science

Multidisciplinary Studies- Secondary B.M.D.S.  
Education - AOE: Chemistry &  
Integrated Science

Multidisciplinary Studies- Secondary B.M.D.S.  
Education - AOE: Physics &  
Integrated Science

Multidisciplinary Studies – Education/ B.M.D.S.  
Human Services

Rehabilitation Counseling M.S.

Secondary Education - AOE:  
Advanced Science M.A.

Secondary Education - AOE:  
Advanced Social Studies M.A.

Secondary Education - AOE: Biology  
Education M.A.

Secondary Education - AOE:  
Chemistry Education M.A.

Secondary Education - AOE: English  
Education M.A.

Secondary Education - AOE: Foreign  
Language Education M.A.

Secondary Education - AOE: General  
Science Education M.A.

Secondary Education - AOE: Higher  
Education Curriculum & Teaching M.A.

Secondary Education - AOE: Math  
Education M.A.

Secondary Education - AOE: Physics  
Education M.A.

Secondary Education - AOE:  
Secondary Education/Advanced M.A.

Secondary Education - AOE:  
Secondary Education M.A.

Secondary Education - AOE: Social  
Studies Education M.A.

Secondary Education - Secondary/  
English M.A.

Secondary Education - Secondary/  
Foreign Languages M.A.

Secondary Education - Secondary/ Interdepartmental Studies	M.A.
Secondary Education - Secondary/ Mathematics	M.A.
Secondary Education - Secondary/ MDS - AOE: Biology and Integrated Science	M.A.
Secondary Education - Secondary/ MDS - AOE: Chemistry and Integrated Science	M.A.
Secondary Education - Secondary/ MDS - AOE: Physics and Integrated Science	M.A.
Special Education - Special Education	M.A.
Special Education - Autism Spectrum Disorders - AOE: Autism K-6	M.A.
Special Education - Autism Spectrum Disorders - AOE: Autism 5-Adult	M.A.
Special Education - Early Intervention/Early Childhood - Pre- school Special Needs PreK-K	M.A.
Special Education - Gifted Education - AOE: Gifted 1-12	M.A.
Special Education - Low Vision/ Blindness - AOE: Visual Impairments PreK-Adult	M.A.
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

Program	Bachelor's	Master's	Doctoral/Professional
Law - Law - AOE: Energy & Sustainable Development Law			J.D.
Law - Law - AOE: Public Interest Law			J.D.
Law - Energy Law & Sustainable Development			LL.M.
Law - Forensic Justice			LL.M.

## COLLEGE OF PHYSICAL ACTIVITY AND SPORTS SCIENCE

Program	Bachelor's	Master's	Doctoral/Professional
Kinesiology - Coaching & Teaching Studies			Ph.D.
Kinesiology - Sport & Exercise Psychology			Ph.D.

Physical Education - Athletic Coaching		M.S.	
Physical Education - Athletic Coaching Education - AOE: Aquatic Facility Management	B.S.		
Physical Education - Athletic Coaching Education - AOE: Group Fitness	B.S.		
Physical Education - Athletic Coaching Education - AOE: Personal Training	B.S.		
Physical Education - Athletic Coaching Education - AOE: Strength Conditioning	B.S.		
Physical Education - Athletic Training		M.S.	
Physical Education - Physical Ed-Teacher Ed		M.S.	
Physical Education - Physical Ed-Teacher Ed - AOE: Administration of Physical Education			Ed.D.
Physical Education - Physical Ed-Teacher Ed - AOE: Motor Development			Ed.D.
Physical Education - Physical Ed-Teacher Ed - AOE: Special Physical Education			Ed.D.
Physical Education - Physical Ed-Teacher Ed - AOE: Curriculum & Instruction			Ed.D.
Physical Education - Physical Ed-Teacher Ed - AOE: Teaching Certification	B.S.		
Physical Education - Sport & Exercise Psychology		M.S.	
Physical Education - Sport Management		M.S.	
Sport Studies - Athletic Training	B.S.		
Sport Studies - Sports & Exercise Psychology	B.S.		
Sport Studies - Sport Management	B.S.		

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

Program	Bachelor's	Master's	Doctoral/Professional
Agricultural and Resource Economics		M.S.	
Agricultural and Extension Education - AOE: Ag Extension Education		M.S.	
Agricultural and Extension Education - AOE: Agricultural & Environmental Tech	B.S. Agr.		
Agricultural and Extension Education - AOE: Agricultural Teacher Education	B.S. Agr.		
Agricultural and Extension Education - AOE: Extension Education	B.S. Agr.		
Agricultural and Extension Education - AOE: Teaching Vo-Ag		M.S.	

Agriculture, Natural Resources, & Design	M.Agr.	
Agricultural Sciences - Animal & Food Science - AOE: Agricultural Biochemistry		Ph.D.
Agricultural Sciences - Animal & Food Science - AOE: Animal Nutrition		Ph.D.
Agricultural Sciences - Animal & Food Science - AOE: Animal Physiology		Ph.D.
Agricultural Sciences - Animal & Food Science - AOE: Production Management		Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Applied & Environmental Microbiology		Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Crops Agronomy		Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Entomology		Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Horticulture		Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Plant Pathology		Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Soil Sciences		Ph.D.
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Animal Sciences	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Animal & Vet Science	B.S. / B.S. Agr.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Breeding	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Human Nutrition	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Food Sciences	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Nutrition	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Physiology	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Pre-Health Sciences	B.S. / B.S. Agr.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Pre-Vet Medicine	B.S. / B.S. Agr.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Production	M.S.	

Animal and Nutritional Sciences - Animal Physiology		M.S.	
Animal and Nutritional Sciences - Biochemistry	B.S.		
Animal and Nutritional Sciences - Human Nutrition & Food - AOE: Dietetics	B.S.		
Animal and Nutritional Sciences - Nutritional & Food Science		M.S.	
Design & Merchandising		M.S.	
Design and Merchandising - Design Studies	B.S.		
Design and Merchandising - Fashion Design & Merchandising - AOE: Fashion Design	B.S.		
Design and Merchandising - Fashion Design & Merchandising - AOE: Fashion Merchandising	B.S.		
Design and Merchandising - Interior Design - AOE: Contract Design	B.S.		
Design and Merchandising - Interior Design - AOE: Residential Design	B.S.		
Forest Resources Management	B.S.F.		
Forest Resource Science - AOE: Forest Resources Management			Ph.D.
Forest Resources Science - AOE: Recreation, Parks, and Tourism Resources			Ph.D.
Forest Resources Science - AOE: Wildlife & Fisheries Resources			Ph.D.
Forest Resources Science - AOE: Wood Science Technology			Ph.D.
Forestry - AOE: Forest Resource Management		M.S.F.	
Forestry - AOE: Wood Science & Technology		M.S.F.	
Genetics and Developmental Biology - AOE: Animal Breeding		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Biochemical Molecular Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Cytogenetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Descriptive Embryology		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Developmental Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Experimental Morphogenesis		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Human Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Immunogenetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Life Cycles of Animals & Plants		M.S.	Ph.D.

Genetics and Developmental Biology - AOE: Molecular Aspects of Development		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Mutagenetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Oncology		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Plant Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Population & Quantitative Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Regeneration		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Teratology		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Toxicology		M.S.	Ph.D.
Landscape Architecture	B.S.L.A.	M.L.A.	
Multidisciplinary Studies	B.M.D.S.		
Plant and Soil Sciences - Agroecology	B.S. Agr.		
Plant and Soil Sciences - Agronomy - AOE: Crop Science		M.S.	
Plant and Soil Sciences - Agronomy - AOE: Soil Science		M.S.	
Plant and Soil Sciences - Agronomy - AOE: Turf	B.S.Agr.		
Plant and Soil Sciences - Applied & Environmental Microbiology	B.S.	M.S.	
Plant and Soil Sciences - Entomology		M.S.	
Plant and Soil Sciences - Environmental Protection - AOE: Pest Management	B.S. Agr.		
Plant and Soil Sciences - Environmental Protection - AOE: Soil and Water Conservation	B.S. Agr.		
Plant and Soil Sciences - Horticulture		M.S.	
Plant and Soil Sciences - Horticulture - AOE: Landscape Management	B.S. Agr.		
Plant and Soil Sciences - Horticulture - AOE: Production	B.S. Agr.		
Plant and Soil Sciences - Plant Pathology		M.S.	
Plant and Soil Sciences - Soil Science - AOE: Land Use	B.S.		
Plant and Soil Sciences - Soil Science - AOE: Watershed Management	B.S.		
Recreation, Parks, and Tourism Resources		M.S.	
Recreation, Parks, and Tourism Resources - AOE: Administration & Planning	B.S.R.		

Recreation, Parks, and Tourism Resources - AOE: Adventure Recreation	B.S.R.		
Recreation, Parks, and Tourism Resources - AOE: Park & Outdoor Recreation	B.S.R.		
Recreation, Parks, and Tourism Resources - AOE: Sustainable Tourism	B.S.R.		
Recreation, Parks, and Tourism Resources - AOE: Wildlands Recreation Management	B.S.R.		
Reproductive Physiology		M.S.	Ph.D.
Resource Management - Environmental & Natural Resource Economics	B.S.		
Resource Management - Agribusiness Management & Rural Development	B.S.		
Resource Management - Environmental & Energy Resources Management	B.S.		
Resource Management and Sustainable Development - Agricultural & Extension Ed			Ph.D.
Resource Management and Sustainable Development - Human and Community Development			Ph.D.
Resource Management and Sustainable Development - Natural Resource Economics			Ph.D.
Resource Management and Sustainable Development - Resource Management			Ph.D.
Wildlife and Fisheries Resources		M.S.	
Wildlife and Fisheries Resources - AOE: Fisheries Sciences	B.S.		
Wildlife and Fisheries Resources - AOE: Planning	B.S.		
Wildlife and Fisheries Resources - AOE: Toxicology	B.S.		
Wildlife and Fisheries Resources - AOE: Wildlife Management	B.S.		
Wildlife and Fisheries Resources - AOE: Wildlife Science	B.S.		
Wood Science and Technology - AOE: Processing	B.S.		
Wood Science and Technology - AOE: Renewable Materials Marketing	B.S.		
Wood Science and Technology - AOE: Sustainable Low-Rise Residential Construction	B.S.		
Wood Science and Technology - AOE: Utilization	B.S.		

## EBERLY COLLEGE OF ARTS AND SCIENCES

Program	Bachelor's	Master's	Doctoral/Professional
Biology	B.A., B.S.		
Biology - AOE: Cellular & Molecular Biology			Ph.D.
Biology - AOE: Environmental Plant Biology			Ph.D.
Biology - AOE: Population Genetics		M.S.	
Chemistry	B.A., B.S.		
Chemistry - AOE: Analytical Chemistry		M.S.	Ph.D.
Chemistry - AOE: Inorganic Chemistry		M.S.	Ph.D.
Chemistry - AOE: Organic Chemistry		M.S.	Ph.D.
Chemistry - AOE: Physical Chemistry		M.S.	Ph.D.
Chemistry - AOE: Theoretical Chemistry		M.S.	Ph.D.
Communication Studies - AOE: Communication in Instruction		M.A.	
Communication Studies - AOE: Communication Theory & Research		M.A.	
Communication Studies - AOE: Corporate & Organizational Communication		M.A.	
Communication Studies - AOE: Health Communication	B.A.		
Communication Studies - AOE: Integrated Communication	B.A.		
Communication Studies - AOE: Interpersonal Communication	B.A.		
Communication Studies - AOE: Social Media & Communication	B.A.		
Communication Studies - AOE: Strategic/Organizational Communication	B.A.		
Computational Statistics			Ph.D.
Creative Writing		M.F.A.	
Data Science		M.D.S.	
Economics	B.A.		
English - AOE: Creative Writing	B.A.		
English - AOE: Literary/Cultural Studies	B.A.	M.A.	Ph.D.
English - AOE: Professional Writing and Editing	B.A.		
English - AOE: Writing		M.A.	
English - English/Secondary Education	B.A.		
Forensic and Investigative Science		M.S.	
Forensic and Investigative Science - AOE: Forensic Biology	B.S.		
Forensic and Investigative Science - AOE: Forensic Chemistry	B.S.		
Forensic and Investigative Science - AOE: Forensic Examiner	B.S.		

Forensic and Investigative Science - B.S. AOE: Forensic Toxicology		
Geography - AOE: Energy & Environmental Resources	M.A.	
Geography - AOE: Geographic Information Systems		Ph.D.
Geography - AOE: GIS/Cartographic Analysis	M.A.	
Geography - AOE: International Area Studies	B.A.	
Geography - AOE: Natural Resources, Environment & Development	B.A.	
Geography - AOE: Planning & Regional	B.A.	
Geography - AOE: Geography-Regional		Ph.D.
Geography - AOE: Regional Development & Urban Planning	M.A.	
Geography - AOE: Spatial Analysis/ GIS	B.A.	
Geology B.S.		
Geology - Environmental Geoscience	B.A.	
Geology - AOE: Geomorphology		Ph.D.
Geology - AOE: Geophysics		Ph.D.
Geology - AOE: Hydrology		Ph.D.
Geology - AOE: Paleontology		Ph.D.
Geology - AOE: Petrology		Ph.D.
Geology - AOE: Professional Studies	M.S.	
Geology - AOE: Research	M.S.	
Geology - AOE: Stratigraphy		PH.D.
Geology - AOE: Structure		Ph.D.
History B.A.		
History - AOE: African History	M.A.	Ph.D.
History - AOE: American History	M.A.	Ph.D.
History - AOE: Appalachian/Regional History	M.A.	Ph.D.
History - AOE: East Asian History	M.A.	Ph.D.
History - AOE: European History	M.A.	Ph.D.
History - AOE: Latin American History	M.A.	
History - AOE: Public History	M.A.	
Interdepartmental Studies - AOE: Individualized Studies	B.A.	
Interdepartmental Studies - Industrial Mathematics & Statistics	B.S.	
Interdepartmental Studies - International Studies - AOE: Africa & Middle East	B.A.	
Interdepartmental Studies - International Studies - AOE: Asia	B.A.	
Interdepartmental Studies - International Studies - AOE: Developmental Studies	B.A.	

Interdepartmental Studies - International Studies - AOE: Diplomacy & International Security	B.A.		
Interdepartmental Studies - International Studies - AOE: Europe	B.A.		
Interdepartmental Studies - International Studies - AOE: Intelligence & National Security	B.A.		
Interdepartmental Studies - International Studies - AOE: International Business	B.A.		
Interdepartmental Studies - International Studies - AOE: International Environment	B.A.		
Interdepartmental Studies - International Studies - AOE: The Americas	B.A.		
Interdepartmental Studies - Latin American Studies	B.A.		
Interdepartmental Studies - Religious Studies	B.A.		
Interdepartmental Studies - Slavic & East European Studies	B.A.		
Interdepartmental Studies - Social Studies/Secondary Education	B.A.		
Interdepartmental Studies - Women's and Gender Studies	B.A.		
Legal Studies		M.L.S.	
Mathematics	B.A., B.S.		
Mathematics - AOE: Applied Mathematics		M.S.	Ph.D.
Mathematics - AOE: Discrete Mathematics			Ph.D.
Mathematics - AOE: Interdisciplinary Mathematics		M.S.	
Mathematics - AOE: Mathematics for Secondary Education		M.S.	
Mathematics - AOE: Pure Mathematics		M.S.	
Mathematics - Mathematics/Secondary Education	B.A.		
Multidisciplinary Studies	B.M.D.S., B.A.		
Philosophy - AOE: Pre-Law	B.A.		
Physics - AOE: Applied Physics	B.A., B.S.	M.S.	Ph.D.
Physics - AOE: Astrophysics		M.S.	Ph.D.
Physics - AOE: Astro/Space Physics	B.A., B.S.		
Physics - AOE: Biophysics	B.A., B.S.		
Physics - AOE: Chemical Physics		M.S.	Ph.D.
Physics - AOE: Computational Physics	B.A., B.S.		
Physics - AOE: Condensed Matter Physics		M.S.	Ph.D.
Physics - AOE: Elementary Particle Physics		M.S.	Ph.D.
Physics - AOE: Materials Physics		M.S.	Ph.D.
Physics - AOE: Materials Science	B.A., B.S.		

Physics - AOE: Medical Physics	B.A., B.S.		
Physics - AOE: Plasma Physics		M.S.	Ph.D.
Physics - AOE: Solid State Physics		M.S.	Ph.D.
Physics - AOE: Statistical Physics		M.S.	Ph.D.
Physics - AOE: Theoretical Physics		M.S.	Ph.D.
Political Science - AOE: American Politics and Policy	B.A.		
Political Science - AOE: American Public Policy & Politics		M.A.	
Political Science - AOE: General	B.A.		
Political Science - AOE: Government & Business	B.A.		
Political Science - AOE: International & Comparative Public Policy & U.S. Politics		M.A.	
Political Science - AOE: International Relations, Comp Politics & National Security	B.A.		
Political Science - AOE: Political Science			Ph.D.
Political Science - AOE: Pre-Law and Legal Studies	B.A.		
Political Science - AOE: Public Policy Analysis			Ph.D.
Professional Writing and Editing		M.A.	
Psychology - AOE: Behavior Analysis			Ph.D.
Psychology - AOE: Behavioral Neuroscience			Ph.D.
Psychology - AOE: Clinical Child Psychology	B.A., B.S.		Ph.D.
Psychology - AOE: Clinical Psychology		M.A., M.S.	Ph.D.
Psychology - AOE: Life Span Development	B.A., B.S.		Ph.D.
Public Administration - AOE: Health Care Administration		M.P.A.	
Public Administration - AOE: Local Governance and Community Development		M.P.A.	
Social Work	B.S.W.		
Social Work - AOE: Community Organizing and Social Administration		M.S.W.	
Social Work - AOE: Direct Practice		M.S.W.	
Sociology		M.A.	
Sociology and Anthropology - AOE: Anthropology	B.A.		
Sociology and Anthropology - AOE: Sociology	B.A.		
Sociology and Anthropology - Criminology	B.A.		
Statistics		M.S.	
Statistical and Data Sciences - Applied Statistics		M.P.S.	
World Languages, Literature, and Linguistics - AOE: Chinese Studies	B.A.		

World Languages, Literature, and Linguistics - AOE: Foreign Literature in Translation	B.A.	
World Languages, Literature, and Linguistics - AOE: French	B.A.	M.A.
World Languages, Literature, and Linguistics - AOE: French/Linguistics		M.A.
World Languages, Literature, and Linguistics - AOE: French/Spanish		M.A.
World Languages, Literature, and Linguistics - AOE: French/TESOL		M.A.
World Languages, Literature, and Linguistics - AOE: German	B.A.	
World Languages, Literature, and Linguistics - AOE: Italian Studies	B.A.	
World Languages, Literature, and Linguistics - AOE: Linguistics		M.A.
World Languages, Literature, and Linguistics - AOE: Linguistics/French		M.A.
World Languages, Literature, and Linguistics - AOE: Linguistics/Spanish		M.A.
World Languages, Literature, and Linguistics - AOE: Linguistics/TESOL		M.A.
World Languages, Literature, and Linguistics - AOE: Russian Studies	B.A.	
World Languages, Literature, and Linguistics - AOE: Spanish	B.A.	M.A.
World Languages, Literature, and Linguistics - AOE: Spanish/French		M.A.
World Languages, Literature, and Linguistics - AOE: Spanish/Linguistics		M.A.
World Languages, Literature, and Linguistics - AOE: Spanish/TESOL		M.A.
World Languages, Literature, and Linguistics - AOE: TESOL		M.A.
World Languages, Literature, and Linguistics - AOE: TESOL/French		M.A.
World Languages, Literature, and Linguistics - AOE: TESOL/Linguistics		M.A.
World Languages, Literature, and Linguistics - AOE: TESOL/Spanish		M.A.
World Languages, Literature, and Linguistics - World Languages/Secondary Education	B.A.	

## REED COLLEGE OF MEDIA

Program	Bachelor's	Master's	Doctoral/Professional
Integrated Marketing Communications		M.S.	
Journalism - AOE: News	B.S.J.		
Journalism - AOE: Print Journalism	B.S.J.		
Journalism - AOE Teaching/Research Professional		M.S.J	

Journalism - AOE: Television Journalism	B.S.J.
Journalism - AOE: Visual Journalism	B.S.J.
Journalism - Strategic Communications - AOE: Advertising	B.S.J.
Journalism - Strategic Communications - AOE: Public Relations	B.S.J.

## SCHOOL OF DENTISTRY

Program	Bachelor's	Master's	Doctoral/Professional
Dental Hygiene	B.S.		
Dental Hygiene - AOE: Basic Science		M.S.	
Dental Hygiene - AOE: Education/ Administration		M.S.	
Dental Hygiene - AOE: Office Management		M.S.	
Dental Hygiene - AOE: Special Patients		M.S.	
Dental Specialties - Endodontics		M.S.	
Dental Specialties - Orthodontics		M.S.	
Dental Specialties - Periodontics		M.S.	
Dental Specialties - Prosthodontics		M.S.	
Dentistry - AOE: Basic Biological Science			D.D.S.
Dentistry - AOE: General Practice			D.D.S.
Dentistry - AOE: Specific Clinical Interest			D.D.S.

## SCHOOL OF MEDICINE

Program	Bachelor's	Master's	Doctoral/Professional
Biochemistry and Molecular Biology			Ph.D.
Biomedical Sciences		M.S.	
Cancer Cell Biology			Ph.D.
Cellular and Integrative Physiology			Ph.D.
Clinical and Translational Science		M.S.	
Exercise Physiology		M.S.	Ph.D.
Exercise Physiology - AOE: Aquatic Therapy	B.S.		
Exercise Physiology - AOE: Health Professions	B.S.		
Health Sciences		M.S.	
Immunology and Medical Microbiology	B.S.		
Immunology and Microbial Pathogenesis			Ph.D.
Pathologist's Assistant		M.H.S.	
Medical Laboratory Science - AOE: Clinical Laboratory Science	B.S.		
Medical Laboratory Science - AOE: Histotechnology	B.S.		
Medicine			M.D.
Neuroscience			Ph.D.

Occupational Therapy	M.O.T.	
Physical Therapy		D.P.T.

## SCHOOL OF NURSING

Program	Bachelor's	Master's	Doctoral/Professional
Nursing	B.S.N.		D.N.P., Ph.D.
Nursing - Nursing RN	B.S.N.		
Nursing - AOE: Family Nurse Practitioner		M.S.N.	
Nursing - AOE: Geriatric Nurse Practitioner		M.S.N.	
Nursing - AOE: Neonatal Nurse Practitioner		M.S.N.	
Nursing - AOE: Nursing Leadership		M.S.N.	
Nursing - AOE: Pediatric Nurse Practitioner		M.S.N.	
Nursing - AOE: Women's Health Nurse Practitioner		M.S.N.	

## SCHOOL OF PHARMACY

Program	Bachelor's	Master's	Doctoral/Professional
Pharmaceutical and Pharmacological Sciences			Ph.D.
Pharmacy - AOE: Clinical Pharmacy Practice			Pharm.D.
Pharmacy - AOE: Pharmacy Research			Pharm.D.

## SCHOOL OF PUBLIC HEALTH

Program	Bachelor's	Master's	Doctoral/Professional
Community Health Promotion - School Health Education		M.S.	
Public Health – Biostatistics		M.P.H.	
Public Health – Epidemiology		M.P.H.	
Public Health – Health Policy – AOE: Worksite Wellness		M.P.H.	
Public Health – Occupational and Environmental Health Sciences – AOE: Worksite Wellness		M.P.H.	
Public Health - AOE: Public Health Practice		M.P.H.	
Public Health – Social and Behavioral Sciences – AOE: Worksite Wellness		M.P.H.	
Public Health – Social and Behavioral Sciences – AOE: Public Health Practice		M.P.H.	
Public Health Sciences – Social & Behavioral Science – AOE: Worksite Wellness			Ph.D.
Public Health Sciences – Occupational & Environmental Health Sciences – AOE: Worksite Wellness			Ph.D.

Public Health Sciences - Epidemiology	Ph.D.
Public Health Sciences - Biostatistics	Ph.D.

## UNIVERSITY COLLEGE

Program	Bachelor's	Master's	Doctoral/Professional
Biochemistry	B.S.		
Multidisciplinary Studies – Multidisciplinary Studies	B.M.D.S.		
Multidisciplinary Studies – Human Performance & Health	B.A.		
Regents BA - AOE: Advertising/ Public Relations	R.B.A.		
Regents BA - AOE: American History	R.B.A.		
Regents BA - AOE: Anthropology	R.B.A.		
Regents BA - AOE: Art History	R.B.A.		
Regents BA - AOE: Business Administration	R.B.A.		
Regents BA - AOE: Child Development	R.B.A.		
Regents BA - AOE: Communication Studies	R.B.A.		
Regents BA - AOE: Creative Writing	R.B.A.		
Regents BA - AOE: Crime & Social Control	R.B.A.		
Regents BA - AOE: Economics	R.B.A.		
Regents BA - AOE: Foreign Literature in Translation	R.B.A.		
Regents BA - AOE: French	R.B.A.		
Regents BA - AOE: Geography	R.B.A.		
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-African & Mid East	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.

## Undergraduate Certificate Programs

### Arts & Sciences - Eberly College of

- Gerontology
- Global Engagement

### Education and Human Sciences - College of

- Early Childhood Development
- Infant/Toddler Education
- Interdisciplinary Certificate in Disability Studies

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

- Biomedical Engineering
- Global Competency

### Journalism - School of

- Digital Proficiency

## 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

## **Minors**

For a complete list of minors and information on WVU's minors, please see our Minors page (<http://catalog.wvu.edu/undergraduate/minors>).

## **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:

- Abbreviations Used in Course Listings
- Plan for Numbering Courses
- Common Course Numbers and Descriptions
- Undergraduate Course Descriptions ([http://catalog.wvu.edu/healthsciences/programscoursescredits/undergraduate/Undergraduate\\_Course\\_Descriptions.pdf](http://catalog.wvu.edu/healthsciences/programscoursescredits/undergraduate/Undergraduate_Course_Descriptions.pdf))
- Eligibility to Enroll in 500-Level Courses
- Graduate Credit via Senior Petition
- Final Exams
- Last Week of Classes

### Abbreviations Used in Course Listings

Abbreviation	Description
I	a course given in the first (fall) semester
II	a course given in the second (spring) semester
I, II	a course given each semester
I and II	a course given throughout the year
Yr	a course continued through two semesters
S	a course given in the summer
HR	credit hours per course
Lec	lecture period
Rec	recitation period
Lab	laboratory period
GLAB	graded lab
WEB	web-based course
CONC	concurrent - usually listed with PR meaning course must either be completed prior to or at the same time as enrollment in the course it is listed for
PR	prerequisite - course must be completed in a term prior to enrollment in the course it is listed for
Coreq	co-requisite - courses must be taken in the same term
Consent	consent of instructor required
CR	credit but no grade

### 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.

## Undergraduate Common Course Numbers & Descriptions

199. Orientation to [subject/field]. 1-2 Hr. Orientation to degree programs and requirements, departmental resources, curriculum options, student responsibilities, and opportunities.

293. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.

298. Honors, 1-3 Hr. PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

393. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.

490. Teaching Practicum. 1-3 Hr. PR: Consent. Teaching practice such as a tutor or assistant.

491. Professional Field Experience. 1-18 Hr. PR: Consent (may be repeated up to a maximum of 18 hours). Prearranged experiential learning program to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

492. Directed Study. 1-3 Hr. Directed study, reading, and/or research.

493. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.

494. Seminar. 1-3 Hr. PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

495. Independent Study. 1-6 Hr. Faculty-supervised study of topics not available through regular course offerings.

496. Senior Thesis. 1-3 Hr. PR: Consent.

497. Research. 1-6 Hr. Independent research projects.

498. Honors, 1-3 Hr. PR: Students in Honors Program with consent by the honors director. Independent reading, study, or research.

499. Global Service Learning. 1-3 Hr. PR: Consent. Theory and practice of global service-learning. The main objective will be to pair the experiential aspects of meaningful and sustained service in the host community with work from the student's anchor course by offering a methodological framework for cultural immersion and community service as well as adding to the content of the anchor course.

## Undergraduate Course Descriptions ([http://catalog.wvu.edu/healthsciences/programscoursescredits/undergraduate/Undergraduate\\_Course\\_Descriptions.pdf](http://catalog.wvu.edu/healthsciences/programscoursescredits/undergraduate/Undergraduate_Course_Descriptions.pdf))

### Eligibility to Enroll in 500-Level Courses

Advanced undergraduate students may request permission to enroll in a graduate course numbered 500-599. Undergraduate students may not enroll in 600 or above level courses. To qualify, students must be classified as either a Junior or Senior and have a minimum of a 3.0 cumulative grade point average on a 4.0 scale. To enroll in 500-599 courses, students must complete an Undergraduate Application to Enroll in 500-Level Courses, found on the Office of the University Registrar's website, and have it approved. Non-WVU students will also be required to submit an undergraduate application for admission and have his or her official transcripts sent to the Office of Admissions from all of the colleges and universities previously attended; the transcript cannot be one sent to the student or by facsimile (fax).

### Graduate Credit via Senior Petition

Students classified as seniors may begin graduate study early through the University's senior petition policy. Senior petition applies only to courses numbered 400–599, and students can receive only 15 graduate hours through the senior petition process. If a student is permitted to receive graduate credit, that credit cannot count toward the undergraduate degree. To qualify, students must be classified as seniors and have a minimum of a 3.0 cumulative grade point average on a 4.0 scale. To be granted permission to earn graduate credit as an undergraduate senior, students must complete the Senior Petition to Earn Graduate Credit, found on the Office of the University Registrar's website, and have this approved.

## Finals

The last week of each semester of the academic year is designated as finals week. Final examinations for the summer term are given on the last day of classes. The website <http://registrar.wvu.edu/> gives the dates and times for final examinations. (See specific term Course Registration Information link for further information.)

Students who take a section of a multi-section course may be required to take the departmental final examination, given during the regular final examination period.

## Last Week of Classes

Practical laboratory tests, make-up examinations, and regularly scheduled short quizzes are the only tests permitted for day classes during the week of classes preceding finals week unless the faculty member petitions the associate provost for Undergraduate Academic Affairs and the petition is approved by the beginning of the second week of the semester in which the final exam is to be given. Evening classes have their final exams on the last meeting of the class preceding finals week.

## CREDITS

### In this section:

- Classification of Students
- Course Overload
- Credit Hour Definition
- Credit by Exam
- Experiential Learning

## Classification of Students

WVU undergraduates are classified as freshmen, sophomores, juniors, or seniors. These classifications are based upon the number of hours completed. The classifications are as follows:

Classification	Hours
Freshman	1-28 Earned Credit Hours, Inclusive
Sophomore	29-58 Earned Credit Hours, Inclusive
Junior	59-88 Earned Credit Hours, Inclusive
Senior	89 or More Earned Hours

## Course Overload

Undergraduate students are not permitted to enroll in more than 20 credits in a fall or spring semester or 14 credits in a summer semester without approval. The student's dean or dean's designee may approve requests of 21 credits in the fall or spring semester or 15 credits in the summer semester. Requests to enroll in credits higher than this limit must be approved by the student's dean or dean's designee and the Associate Provost for Undergraduate Academic Affairs.

## 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.

## **Credit by Exam**

A student who is currently enrolled may receive credit for a course or courses upon demonstration of competency in the course content at the discretion of the department. The department offering the course determines evaluation standards for the student's competency. If skill and cognitive abilities are components of the course, then both are evaluated. A college, school, or department may ask a student to prepare a self-evaluation statement. The purpose of the statement is to determine competency and the methods by which the student achieved it. Students interested in pursuing credit by exam should begin by consulting with the department offering the course. A fee is required to pursue credit by exam.

Credit is given only when a satisfactory degree of competency is shown. While WVU administered credit by examination and placement credit will be excluded from WVU residence credit, it does not interrupt the final thirty credit hours in residence if earned during this period.

## **Experiential Learning**

Each academic unit has a policy of general applicability controlling the allocation of credit for ad hoc experiential learning. No credit shall be granted for ad hoc experiential learning that is not sanctioned by an approved policy. At a minimum, each discipline shall adhere to accreditation standards of that discipline with respect to credits given toward student advancement based on experiential learning. There should be an equivalence in quantity and quality of ad hoc experiential learning effort and conventional academic effort for a set amount of credit within a discipline. Credit awarded for experiential learning will be posted as transfer work to West Virginia University with the course number of three zeros (000). The course prefix will vary by department granting credit. Credits applied to a student's record through experiential learning will count in degree (or earned) hours. No formal grade will be entered. While WVU administered experiential learning credit will be excluded from WVU residence credit, it does not interrupt the final thirty credit hours in residence if earned during this period.

# **Graduate 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

## COURSES:

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

## CREDIT HOURS:

- Course Credit Limitations
- Credit Hour Definition

## 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

Program	Bachelor's	Master's	Doctoral/Professional
Accounting	B.S.B.Ad.		
Business Administration		M.B.A.	
Business Administration - AOE: Accounting			Ph.D.
Business Administration - AOE: Finance		M.B.A.	Ph.D.
Business Administration - AOE: Marketing			Ph.D.
Business Administration - AOE: Management			Ph.D.
Business Management - AOE: Hospitality and Tourism Management	B.S.B.Ad.		
Business Management - AOE: Human Resource Management	B.S.B.Ad.		
Business Management - AOE: International Business	B.S.B.Ad.		
Business Management - AOE: Small Business/Entrepreneurship	B.S.B.Ad.		
Business Management - AOE: Supply Chain Management	B.S.B.Ad.		
Economics	B.S.	M.A.	
Economics - AOE: International Economics			Ph.D.
Economics - AOE: Financial Economics			Ph.D.
Economics - AOE: Monetary Economics			Ph.D.
Economics - AOE: Public Economics			Ph.D.
Economics - AOE: Regional & Urban Economics			Ph.D.
Economics - AOE: Resource Economics			Ph.D.
Finance	B.S.B.Ad.	M.S.	
Finance - AOE: Energy		M.S.	
General Business	B.S.B.Ad.		
Hospitality & Tourism Management	B.S.B.Ad.		
Industrial Relations		M.S.	
Management Information Systems	B.S.B.Ad.		
Marketing	B.S.B.Ad.		
Professional Accountancy		M.P.A.	

## COLLEGE OF CREATIVE ARTS

Program	Bachelor's	Master's	Doctoral/Professional
Art - AOE: Art Education		M.A.	
Art - AOE: Art History		M.A.	
Art - AOE: Studio Art		M.A.	

Art History	B.A.		
Art and Design - AOE: Certification K-12	B.F.A.		
Art and Design - AOE: Ceramics	B.F.A.	M.F.A.	
Art and Design - AOE: Graphic Design	B.F.A.	M.F.A.	
Art and Design - AOE: Intermedia/Photography	B.F.A.	M.F.A.	
Art and Design - AOE: Painting	B.F.A.	M.F.A.	
Art and Design - AOE: Printmaking	B.F.A.	M.F.A.	
Art and Design - AOE: Sculpture	B.F.A.	M.F.A.	
Music	B.A.		
Music - AOE: Collaborative Piano		M.M.	Ph.D./D.M.A.
Music - AOE: Music Composition	B.M.	M.M.	Ph.D./D.M.A.
Music - AOE: Music Education		M.M.	Ph.D./D.M.A.
Music - AOE: Music Education: Vocal, General, Instrumental	B.M.		
Music - AOE: Music History		M.M.	
Music - AOE: Music Theory		M.M.	
Music - AOE: Performance: Conducting		M.M.	Ph.D./D.M.A.
Music - AOE: Performance: Guitar, Band or Orchestra Instrument	B.M.		
Music - AOE: Performance: Jazz(Pedagogy)		M.M.	
Music - AOE: Performance: Jazz Studies	B.M.		
Music - AOE: Performance: Piano(Coaching/Accompanying)	B.M.		
Music - AOE: Performance: Piano(Jazz)	B.M.		
Music - AOE: Performance: Piano(Pedagogy)	B.M.	M.M.	
Music - AOE: Performance: Piano(Traditional)	B.M.		
Music - AOE: Performance: Piano, Voice, Band, or Orchestra Instruments		M.M.	Ph.D./D.M.A.
Music - AOE: Performance: Woodwinds	B.M.		
Music - AOE: Performance: Voice	B.M.		
Multidisciplinary Studies	B.M.D.S.		
Theatre - Theatre	B.A.		
Theatre - Dance	B.A.		
Theatre - AOE: Acting	B.F.A.	M.F.A.	
Theatre - AOE: Costume Design and Technology		M.F.A.	
Theatre - AOE: Creative Dramatics and Puppetry	B.F.A.		
Theatre - AOE: Design/Technology	B.F.A.		
Theatre - AOE: Lighting Design and Technology		M.F.A.	
Theatre - AOE: Scene Design and Technology		M.F.A.	

Music - AOE: Vocal Pedagogy and  
Performance

Ph.D./D.M.A

## BENJAMIN M. STATLER COLLEGE OF ENGINEERING AND MINERAL RESOURCES

Program	Bachelor's	Master's	Doctoral/Professional
Aerospace Engineering	B.S.A.E.	M.S.A.E.	
Biomedical Engineering	B.S.Bm.E.		
Biometric Systems - AOE: DNA/ Molecular Biology	B.S.B.S.		
Biometric Systems - AOE: Microsensors & Circuits	B.S.B.S.		
Biometric Systems - AOE: Signal Processing	B.S.B.S.		
Biometric Systems - AOE: Statistics	B.S.B.S.		
Biometric Systems - AOE: Software Systems	B.S.B.S.		
Chemical Engineering	B.S.Ch.E.	M.S.Ch.E.	
Civil Engineering	B.S.C.E.	M.S.C.E.	
Computer Engineering	B.S.Cp.E.		
Computer Science	B.S.C.S.		Ph.D.
Computer Science - AOE: Biometrics & Information Assurance		M.S.C.S.	
Electrical Engineering	B.S.E.E.	M.S.E.E.	
Energy Systems Engineering Engineering		M.S.E.S.E. M.S.E.	
Engineering - Aerospace			Ph.D.
Industrial Engineering	B.S.I.E.	M.S.I.E.	
Engineering - Chemical			Ph.D.
Engineering - Civil			Ph.D.
Engineering - Computer			Ph.D.
Engineering - Electrical			Ph.D.
Engineering - Industrial			Ph.D.
Engineering - Mechanical			Ph.D.
Engineering - Mining			Ph.D.
Engineering - Petroleum & Natural Gas			Ph.D.
Engineering - Occupational Safety & Health			Ph.D.
Industrial Hygiene		M.S.	
Mechanical Engineering	B.S.M.E.	M.S.M.E.	
Mining Engineering	B.S.Min.E.	M.S.Min.E.	
Petroleum & Natural Gas Engineering	B.S.PNGE.	M.S.PNGE.	
Safety Management - AOE: Environmental Management		M.S.	
Software Engineering - AOE: Biometrics & information Assurance		M.S.S.E.	

## COLLEGE OF EDUCATION AND HUMAN SERVICES

Program	Bachelor's	Master's	Doctoral/Professional
Audiology			Au.D.
Child Development and Family Studies - AOE: Child Development	B.S.		

Child Development and Family Studies - AOE: Family and Youth Studies	B.S.	
Child Development and Family Studies - AOE: Pre-school Education - Birth-Age 4	B.S.	
Child Development and Family Studies - AOE: Preschool Special Needs-PreK-K	B.S.	
Communication Sciences and Disorders		Ph.D.
Counseling - AOE: Community Agency Counseling		M.A.
Counseling - AOE: School Counseling		M.A.
Counseling Psychology		Ph.D.
Education - Curriculum & Instruction		Ed.D.
Education - Education - AOE: Curriculum, Literacy, Cultural Studies		Ph.D.
Education - Education - AOE: Educational Leadership & Policy Studies		Ph.D.
Education - Education - AOE: Human Development and Family Studies		Ph.D.
Education - Education - AOE: Learning, Instructional Design, & Technology		Ph.D.
Education - Educational Leadership/ Public School Administration		Ed.D.
Education - Educational Psychology		Ed.D.
Education - Higher Education Administration		Ed.D.
Education - Special Education - AOE: Personnel Preparation in Special Education		Ed.D.
Education - Special Education - AOE: School Leadership in Special Education		Ed.D.
Educational Leadership - Higher Education Administration		M.A.
Educational Leadership - Public School Administration		M.A.
Educational Psychology - AOE: Child Development & Family Studies		M.A.
Educational Psychology - AOE: Educational Psychology		M.A.
Elementary Education	B.A.	
Elementary Education - Elementary - AOE: Early Childhood Education		M.A.
Elementary Education - Elementary - AOE: Early Childhood, PreK-K		M.A.
Elementary Education - Elementary - AOE: Elementary Education/ Advanced		M.A.
Elementary Education - Elementary/ MDS - AOE: Early Childhood Education , PreK-K		M.A.

Elementary Education - Elementary/ MDS - AOE: English Education	M.A.	
Elementary Education - Elementary/ MDS - AOE: Foreign Language Education	M.A.	
Elementary Education - Elementary/ MDS - AOE: Interdepartmental Studies (Social Studies)	M.A.	
Elementary Education - Elementary/ MDS - AOE: Integrated Science	M.A.	
Elementary Education - Elementary/ MDS - AOE: Mathematics Education	M.A.	
Elementary Education - Elementary/ MDS - AOE: Multicategorical Special Education K-6 + 5-Adult	M.A.	
Instructional Design & Technology	M.A.	Ed.D.
Literacy Education	M.A.	
Multidisciplinary Studies- Elementary Education - AOE: Early Childhood Education, PreK-K	B.M.D.S.	
Multidisciplinary Studies- Elementary Education - AOE: English Education	B.M.D.S.	
Multidisciplinary Studies- Elementary Education - AOE: Foreign Language Education	B.M.D.S.	
Multidisciplinary Studies- Elementary Education - AOE: Integrated Science	B.M.D.S.	
Multidisciplinary Studies- Elementary Education - AOE: Interdepartmental Studies(Social Studies)	B.M.D.S.	
Multidisciplinary Studies- Elementary Education - AOE: Mathematics Education	B.M.D.S.	
Multidisciplinary Studies- Elementary Education - AOE: Multicategorical Special Education K-6 + 5-Adult	B.M.D.S.	
Multidisciplinary Studies- Secondary Education - AOE: Biology & Integrated Science	B.M.D.S.	
Multidisciplinary Studies- Secondary Education - AOE: Chemistry & Integrated Science	B.M.D.S.	
Multidisciplinary Studies- Secondary Education - AOE: Physics & Integrated Science	B.M.D.S.	
Multidisciplinary Studies – Education/ Human Services	B.M.D.S.	
Rehabilitation Counseling	M.S.	
Secondary Education - AOE: Advanced Science	M.A.	
Secondary Education - AOE: Advanced Social Studies	M.A.	
Secondary Education - AOE: Biology Education	M.A.	
Secondary Education - AOE: Chemistry Education	M.A.	

Secondary Education - AOE: English Education	M.A.
Secondary Education - AOE: Foreign Language Education	M.A.
Secondary Education - AOE: General Science Education	M.A.
Secondary Education - AOE: Higher Education Curriculum & Teaching	M.A.
Secondary Education - AOE: Math Education	M.A.
Secondary Education - AOE: Physics Education	M.A.
Secondary Education - AOE: Secondary Education/Advanced	M.A.
Secondary Education - AOE: Secondary Education	M.A.
Secondary Education - AOE: Social Studies Education	M.A.
Secondary Education - Secondary/English	M.A.
Secondary Education - Secondary/Foreign Languages	M.A.
Secondary Education - Secondary/Interdepartmental Studies	M.A.
Secondary Education - Secondary/Mathematics	M.A.
Secondary Education - Secondary/MDS - AOE: Biology and Integrated Science	M.A.
Secondary Education - Secondary/MDS - AOE: Chemistry and Integrated Science	M.A.
Secondary Education - Secondary/MDS - AOE: Physics and Integrated Science	M.A.
Special Education - Special Education	M.A.
Special Education - Autism Spectrum Disorders - AOE: Autism K-6	M.A.
Special Education - Autism Spectrum Disorders - AOE: Autism 5-Adult	M.A.
Special Education - Early Intervention/Early Childhood - Pre-school Special Needs PreK-K	M.A.
Special Education - Gifted Education - AOE: Gifted 1-12	M.A.
Special Education - Low Vision/Blindness - AOE: Visual Impairments PreK-Adult	M.A.
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

Program	Bachelor's	Master's	Doctoral/Professional
Law - Law - AOE: Energy & Sustainable Development Law			J.D.
Law - Law - AOE: Public Interest Law			J.D.
Law - Energy Law & Sustainable Development			LL.M.
Law - Forensic Justice			LL.M.

## COLLEGE OF PHYSICAL ACTIVITY AND SPORTS SCIENCE

Program	Bachelor's	Master's	Doctoral/Professional
Kinesiology - Coaching & Teaching Studies			Ph.D.
Kinesiology - Sport & Exercise Psychology			Ph.D.
Physical Education - Athletic Coaching		M.S.	
Physical Education - Athletic Coaching Education - AOE: Aquatic Facility Management	B.S.		
Physical Education - Athletic Coaching Education - AOE: Group Fitness	B.S.		
Physical Education - Athletic Coaching Education - AOE: Personal Training	B.S.		
Physical Education - Athletic Coaching Education - AOE: Strength Conditioning	B.S.		
Physical Education - Athletic Training		M.S.	
Physical Education - Physical Ed-Teacher Ed		M.S.	
Physical Education - Physical Ed-Teacher Ed - AOE: Administration of Physical Education			Ed.D.
Physical Education - Physical Ed-Teacher Ed - AOE: Motor Development			Ed.D.
Physical Education - Physical Ed-Teacher Ed - AOE: Special Physical Education			Ed.D.
Physical Education - Physical Ed-Teacher Ed - AOE: Curriculum & Instruction			Ed.D.
Physical Education - Physical Ed-Teacher Ed - AOE: Teaching Certification	B.S.		
Physical Education - Sport & Exercise Psychology		M.S.	

Physical Education - Sport Management M.S.

Sport Studies - Athletic Training B.S.

Sport Studies - Sports & Exercise Psychology B.S.

Sport Studies - Sport Management B.S.

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

Program	Bachelor's	Master's	Doctoral/Professional
Agricultural and Resource Economics		M.S.	
Agricultural and Extension Education - AOE: Ag Extension Education		M.S.	
Agricultural and Extension Education - AOE: Agricultural & Environmental Tech	B.S. Agr.		
Agricultural and Extension Education - AOE: Agricultural Teacher Education	B.S. Agr.		
Agricultural and Extension Education - AOE: Extension Education	B.S. Agr.		
Agricultural and Extension Education - AOE: Teaching Vo-Ag		M.S.	
Agriculture, Natural Resources, & Design		M.Agr.	
Agricultural Sciences - Animal & Food Science - AOE: Agricultural Biochemistry			Ph.D.
Agricultural Sciences - Animal & Food Science - AOE: Animal Nutrition			Ph.D.
Agricultural Sciences - Animal & Food Science - AOE: Animal Physiology			Ph.D.
Agricultural Sciences - Animal & Food Science - AOE: Production Management			Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Applied & Environmental Microbiology			Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Crops Agronomy			Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Entomology			Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Horticulture			Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Plant Pathology			Ph.D.
Agricultural Sciences - Plant & Soil Science- AOE: Soil Sciences			Ph.D.
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Animal Sciences		M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Animal & Vet Science	B.S. / B.S. Agr.		

Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Breeding	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Human Nutrition	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Food Sciences	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Nutrition	M.S.	
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Physiology	M.S.	
Animal and Nutritional Sciences - B.S. / B.S. Agr. Animal & Nutritional Sciences - AOE: Pre-Health Sciences		
Animal and Nutritional Sciences - B.S. / B.S. Agr. Animal & Nutritional Sciences - AOE: Pre-Vet Medicine		
Animal and Nutritional Sciences - Animal & Nutritional Sciences - AOE: Production	M.S.	
Animal and Nutritional Sciences - Animal Physiology	M.S.	
Animal and Nutritional Sciences - B.S. Biochemistry		
Animal and Nutritional Sciences B.S. - Human Nutrition & Food - AOE: Dietetics		
Animal and Nutritional Sciences - Nutritional & Food Science	M.S.	
Design & Merchandising	M.S.	
Design and Merchandising - Design B.S. Studies		
Design and Merchandising - Fashion B.S. Design & Merchandising - AOE: Fashion Design		
Design and Merchandising - Fashion B.S. Design & Merchandising - AOE: Fashion Merchandising		
Design and Merchandising - Interior B.S. Design - AOE: Contract Design		
Design and Merchandising - Interior B.S. Design - AOE: Residential Design		
Forest Resources Management B.S.F.		
Forest Resource Science - AOE: Forest Resources Management		Ph.D.
Forest Resources Science - AOE: Recreation, Parks, and Tourism Resources		Ph.D.
Forest Resources Science - AOE: Wildlife & Fisheries Resources		Ph.D.
Forest Resources Science - AOE: Wood Science Technology		Ph.D.

Forestry - AOE: Forest Resource Management		M.S.F.	
Forestry - AOE: Wood Science & Technology		M.S.F.	
Genetics and Developmental Biology - AOE: Animal Breeding		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Biochemical Molecular Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Cytogenetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Descriptive Embryology		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Developmental Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Experimental Morphogenesis		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Human Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Immunogenetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Life Cycles of Animals & Plants		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Molecular Aspects of Development		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Mutagenetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Oncology		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Plant Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Population & Quantitative Genetics		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Regeneration		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Teratology		M.S.	Ph.D.
Genetics and Developmental Biology - AOE: Toxicology		M.S.	Ph.D.
Landscape Architecture	B.S.L.A.	M.L.A.	
Multidisciplinary Studies	B.M.D.S.		
Plant and Soil Sciences - Agroecology	B.S. Agr.		
Plant and Soil Sciences - Agronomy - AOE: Crop Science		M.S.	
Plant and Soil Sciences - Agronomy - AOE: Soil Science		M.S.	
Plant and Soil Sciences - Agronomy - AOE: Turf	B.S.Agr.		
Plant and Soil Sciences - Applied & Environmental Microbiology	B.S.	M.S.	
Plant and Soil Sciences - Entomology		M.S.	

Plant and Soil Sciences - Environmental Protection - AOE: Pest Management	B.S. Agr.		
Plant and Soil Sciences - Environmental Protection - AOE: Soil and Water Conservation	B.S. Agr.		
Plant and Soil Sciences - Horticulture		M.S.	
Plant and Soil Sciences - Horticulture - AOE: Landscape Management	B.S. Agr.		
Plant and Soil Sciences - Horticulture - AOE: Production	B.S. Agr.		
Plant and Soil Sciences - Plant Pathology		M.S.	
Plant and Soil Sciences - Soil Science - AOE: Land Use	B.S.		
Plant and Soil Sciences - Soil Science - AOE: Watershed Management	B.S.		
Recreation, Parks, and Tourism Resources		M.S.	
Recreation, Parks, and Tourism Resources - AOE: Administration & Planning	B.S.R.		
Recreation, Parks, and Tourism Resources - AOE: Adventure Recreation	B.S.R.		
Recreation, Parks, and Tourism Resources - AOE: Park & Outdoor Recreation	B.S.R.		
Recreation, Parks, and Tourism Resources - AOE: Sustainable Tourism	B.S.R.		
Recreation, Parks, and Tourism Resources - AOE: Wildlands Recreation Management	B.S.R.		
Reproductive Physiology		M.S.	Ph.D.
Resource Management - Environmental & Natural Resource Economics	B.S.		
Resource Management - Agribusiness Management & Rural Development	B.S.		
Resource Management - Environmental & Energy Resources Management	B.S.		
Resource Management and Sustainable Development - Agricultural & Extension Ed			Ph.D.
Resource Management and Sustainable Development - Human and Community Development			Ph.D.
Resource Management and Sustainable Development - Natural Resource Economics			Ph.D.
Resource Management and Sustainable Development - Resource Management			Ph.D.
Wildlife and Fisheries Resources		M.S.	

Wildlife and Fisheries Resources - AOE: Fisheries Sciences	B.S.
Wildlife and Fisheries Resources - AOE: Planning	B.S.
Wildlife and Fisheries Resources - AOE: Toxicology	B.S.
Wildlife and Fisheries Resources - AOE: Wildlife Management	B.S.
Wildlife and Fisheries Resources - AOE: Wildlife Science	B.S.
Wood Science and Technology - AOE: Processing	B.S.
Wood Science and Technology - AOE: Renewable Materials Marketing	B.S.
Wood Science and Technology - AOE: Sustainable Low-Rise Residential Construction	B.S.
Wood Science and Technology - AOE: Utilization	B.S.

## EBERLY COLLEGE OF ARTS AND SCIENCES

Program	Bachelor's	Master's	Doctoral/Professional
Biology	B.A., B.S.		
Biology - AOE: Cellular & Molecular Biology			Ph.D.
Biology - AOE: Environmental Plant Biology			Ph.D.
Biology - AOE: Population Genetics		M.S.	
Chemistry	B.A., B.S.		
Chemistry - AOE: Analytical Chemistry		M.S.	Ph.D.
Chemistry - AOE: Inorganic Chemistry		M.S.	Ph.D.
Chemistry - AOE: Organic Chemistry		M.S.	Ph.D.
Chemistry - AOE: Physical Chemistry		M.S.	Ph.D.
Chemistry - AOE: Theoretical Chemistry		M.S.	Ph.D.
Communication Studies - AOE: Communication in Instruction		M.A.	
Communication Studies - AOE: Communication Theory & Research		M.A.	
Communication Studies - AOE: Corporate & Organizational Communication		M.A.	
Communication Studies - AOE: Health Communication	B.A.		
Communication Studies - AOE: Integrated Communication	B.A.		
Communication Studies - AOE: Interpersonal Communication	B.A.		
Communication Studies - AOE: Social Media & Communication	B.A.		
Communication Studies - AOE: Strategic/Organizational Communication	B.A.		

Computational Statistics			Ph.D.
Creative Writing		M.F.A.	
Data Science		M.D.S.	
Economics	B.A.		
English - AOE: Creative Writing	B.A.		
English - AOE: Literary/Cultural Studies	B.A.	M.A.	Ph.D.
English - AOE: Professional Writing and Editing	B.A.		
English - AOE: Writing		M.A.	
English - English/Secondary Education	B.A.		
Forensic and Investigative Science		M.S.	
Forensic and Investigative Science - AOE: Forensic Biology	B.S.		
Forensic and Investigative Science - AOE: Forensic Chemistry	B.S.		
Forensic and Investigative Science - AOE: Forensic Examiner	B.S.		
Forensic and Investigative Science - AOE: Forensic Toxicology	B.S.		
Geography - AOE: Energy & Environmental Resources		M.A.	
Geography - AOE: Geographic Information Systems			Ph.D.
Geography - AOE: GIS/Cartographic Analysis		M.A.	
Geography - AOE: International Area Studies	B.A.		
Geography - AOE: Natural Resources, Environment & Development	B.A.		
Geography - AOE: Planning & Regional	B.A.		
Geography - AOE: Geography-Regional			Ph.D.
Geography - AOE: Regional Development & Urban Planning		M.A.	
Geography - AOE: Spatial Analysis/ GIS	B.A.		
Geology	B.S.		
Geology - Environmental Geoscience	B.A.		
Geology - AOE: Geomorphology			Ph.D.
Geology - AOE: Geophysics			Ph.D.
Geology - AOE: Hydrology			Ph.D.
Geology - AOE: Paleontology			Ph.D.
Geology - AOE: Petrology			Ph.D.
Geology - AOE: Professional Studies		M.S.	
Geology - AOE: Research		M.S.	
Geology - AOE: Stratigraphy			PH.D.
Geology - AOE: Structure			Ph.D.
History	B.A.		
History - AOE: African History		M.A.	Ph.D.
History - AOE: American History		M.A.	Ph.D.

History - AOE: Appalachian/Regional History		M.A.	Ph.D.
History - AOE: East Asian History		M.A.	Ph.D.
History - AOE: European History		M.A.	Ph.D.
History - AOE: Latin American History		M.A.	
History - AOE: Public History		M.A.	
Interdepartmental Studies - AOE: Individualized Studies	B.A.		
Interdepartmental Studies - Industrial Mathematics & Statistics	B.S.		
Interdepartmental Studies - International Studies - AOE: Africa & Middle East	B.A.		
Interdepartmental Studies - International Studies - AOE: Asia	B.A.		
Interdepartmental Studies - International Studies - AOE: Developmental Studies	B.A.		
Interdepartmental Studies - International Studies - AOE: Diplomacy & International Security	B.A.		
Interdepartmental Studies - International Studies - AOE: Europe	B.A.		
Interdepartmental Studies - International Studies - AOE: Intelligence & National Security	B.A.		
Interdepartmental Studies - International Studies - AOE: International Business	B.A.		
Interdepartmental Studies - International Studies - AOE: International Environment	B.A.		
Interdepartmental Studies - International Studies - AOE: The Americas	B.A.		
Interdepartmental Studies - Latin American Studies	B.A.		
Interdepartmental Studies - Religious Studies	B.A.		
Interdepartmental Studies - Slavic & East European Studies	B.A.		
Interdepartmental Studies - Social Studies/Secondary Education	B.A.		
Interdepartmental Studies - Women's and Gender Studies	B.A.		
Legal Studies		M.L.S.	
Mathematics	B.A., B.S.		
Mathematics - AOE: Applied Mathematics		M.S.	Ph.D.
Mathematics - AOE: Discrete Mathematics			Ph.D.
Mathematics - AOE: Interdisciplinary Mathematics		M.S.	
Mathematics - AOE: Mathematics for Secondary Education		M.S.	

Mathematics - AOE: Pure Mathematics		M.S.	
Mathematics - Mathematics/Secondary Education	B.A.		
Multidisciplinary Studies	B.M.D.S., B.A.		
Philosophy - AOE: Pre-Law	B.A.		
Physics - AOE: Applied Physics	B.A., B.S.	M.S.	Ph.D.
Physics - AOE: Astrophysics		M.S.	Ph.D.
Physics - AOE: Astro/Space Physics	B.A., B.S.		
Physics - AOE: Biophysics	B.A., B.S.		
Physics - AOE: Chemical Physics		M.S.	Ph.D.
Physics - AOE: Computational Physics	B.A., B.S.		
Physics - AOE: Condensed Matter Physics		M.S.	Ph.D.
Physics - AOE: Elementary Particle Physics		M.S.	Ph.D.
Physics - AOE: Materials Physics		M.S.	Ph.D.
Physics - AOE: Materials Science	B.A., B.S.		
Physics - AOE: Medical Physics	B.A., B.S.		
Physics - AOE: Plasma Physics		M.S.	Ph.D.
Physics - AOE: Solid State Physics		M.S.	Ph.D.
Physics - AOE: Statistical Physics		M.S.	Ph.D.
Physics - AOE: Theoretical Physics		M.S.	Ph.D.
Political Science - AOE: American Politics and Policy	B.A.		
Political Science - AOE: American Public Policy & Politics		M.A.	
Political Science - AOE: General	B.A.		
Political Science - AOE: Government & Business	B.A.		
Political Science - AOE: International & Comparative Public Policy & U.S. Politics		M.A.	
Political Science - AOE: International Relations, Comp Politics & National Security	B.A.		
Political Science - AOE: Political Science			Ph.D.
Political Science - AOE: Pre-Law and Legal Studies	B.A.		
Political Science - AOE: Public Policy Analysis			Ph.D.
Professional Writing and Editing		M.A.	
Psychology - AOE: Behavior Analysis			Ph.D.
Psychology - AOE: Behavioral Neuroscience			Ph.D.
Psychology - AOE: Clinical Child Psychology	B.A., B.S.		Ph.D.
Psychology - AOE: Clinical Psychology		M.A., M.S.	Ph.D.
Psychology - AOE: Life Span Development	B.A., B.S.		Ph.D.
Public Administration - AOE: Health Care Administration		M.P.A.	

Public Administration - AOE: Local Governance and Community Development		M.P.A.
Social Work	B.S.W.	
Social Work - AOE: Community Organizing and Social Administration		M.S.W.
Social Work - AOE: Direct Practice		M.S.W.
Sociology		M.A.
Sociology and Anthropology - AOE: Anthropology	B.A.	
Sociology and Anthropology - AOE: Sociology	B.A.	
Sociology and Anthropology - Criminology	B.A.	
Statistics		M.S.
Statistical and Data Sciences - Applied Statistics		M.P.S.
World Languages, Literature, and Linguistics - AOE: Chinese Studies	B.A.	
World Languages, Literature, and Linguistics - AOE: Foreign Literature in Translation	B.A.	
World Languages, Literature, and Linguistics - AOE: French	B.A.	M.A.
World Languages, Literature, and Linguistics - AOE: French/Linguistics		M.A.
World Languages, Literature, and Linguistics - AOE: French/Spanish		M.A.
World Languages, Literature, and Linguistics - AOE: French/TESOL		M.A.
World Languages, Literature, and Linguistics - AOE: German	B.A.	
World Languages, Literature, and Linguistics - AOE: Italian Studies	B.A.	
World Languages, Literature, and Linguistics - AOE: Linguistics		M.A.
World Languages, Literature, and Linguistics - AOE: Linguistics/French		M.A.
World Languages, Literature, and Linguistics - AOE: Linguistics/Spanish		M.A.
World Languages, Literature, and Linguistics - AOE: Linguistics/TESOL		M.A.
World Languages, Literature, and Linguistics - AOE: Russian Studies	B.A.	
World Languages, Literature, and Linguistics - AOE: Spanish	B.A.	M.A.
World Languages, Literature, and Linguistics - AOE: Spanish/French		M.A.
World Languages, Literature, and Linguistics - AOE: Spanish/Linguistics		M.A.
World Languages, Literature, and Linguistics - AOE: Spanish/TESOL		M.A.
World Languages, Literature, and Linguistics - AOE: TESOL		M.A.

World Languages, Literature, and Linguistics - AOE: TESOL/French		M.A.	
World Languages, Literature, and Linguistics - AOE: TESOL/Linguistics		M.A.	
World Languages, Literature, and Linguistics - AOE: TESOL/Spanish		M.A.	
World Languages, Literature, and Linguistics - World Languages/Secondary Education	B.A.		

## REED COLLEGE OF MEDIA

Program	Bachelor's	Master's	Doctoral/Professional
Integrated Marketing Communications		M.S.	
Journalism - AOE: News	B.S.J.		
Journalism - AOE: Print Journalism	B.S.J.		
Journalism - AOE Teaching/Research Professional		M.S.J	
Journalism - AOE: Television Journalism	B.S.J.		
Journalism - AOE: Visual Journalism	B.S.J.		
Journalism - Strategic Communications - AOE: Advertising	B.S.J.		
Journalism - Strategic Communications - AOE: Public Relations	B.S.J.		

## SCHOOL OF DENTISTRY

Program	Bachelor's	Master's	Doctoral/Professional
Dental Hygiene	B.S.		
Dental Hygiene - AOE: Basic Science		M.S.	
Dental Hygiene - AOE: Education/Administration		M.S.	
Dental Hygiene - AOE: Office Management		M.S.	
Dental Hygiene - AOE: Special Patients		M.S.	
Dental Specialties - Endodontics		M.S.	
Dental Specialties - Orthodontics		M.S.	
Dental Specialties - Periodontics		M.S.	
Dental Specialties - Prosthodontics		M.S.	
Dentistry - AOE: Basic Biological Science			D.D.S.
Dentistry - AOE: General Practice			D.D.S.
Dentistry - AOE: Specific Clinical Interest			D.D.S.

## SCHOOL OF MEDICINE

Program	Bachelor's	Master's	Doctoral/Professional
Biochemistry and Molecular Biology			Ph.D.
Biomedical Sciences		M.S.	
Cancer Cell Biology			Ph.D.
Cellular and Integrative Physiology			Ph.D.
Clinical and Translational Science		M.S.	

Exercise Physiology		M.S.	Ph.D.
Exercise Physiology - AOE: Aquatic Therapy	B.S.		
Exercise Physiology - AOE: Health Professions	B.S.		
Health Sciences		M.S.	
Immunology and Medical Microbiology	B.S.		
Immunology and Microbial Pathogenesis			Ph.D.
Pathologist's Assistant		M.H.S.	
Medical Laboratory Science - AOE: Clinical Laboratory Science	B.S.		
Medical Laboratory Science - AOE: Histotechnology	B.S.		
Medicine			M.D.
Neuroscience			Ph.D.
Occupational Therapy		M.O.T.	
Physical Therapy			D.P.T.

## SCHOOL OF NURSING

Program	Bachelor's	Master's	Doctoral/Professional
Nursing	B.S.N.		D.N.P., Ph.D.
Nursing - Nursing RN	B.S.N.		
Nursing - AOE: Family Nurse Practitioner		M.S.N.	
Nursing - AOE: Geriatric Nurse Practitioner		M.S.N.	
Nursing - AOE: Neonatal Nurse Practitioner		M.S.N.	
Nursing - AOE: Nursing Leadership		M.S.N.	
Nursing - AOE: Pediatric Nurse Practitioner		M.S.N.	
Nursing - AOE: Women's Health Nurse Practitioner		M.S.N.	

## SCHOOL OF PHARMACY

Program	Bachelor's	Master's	Doctoral/Professional
Pharmaceutical and Pharmacological Sciences			Ph.D.
Pharmacy - AOE: Clinical Pharmacy Practice			Pharm.D.
Pharmacy - AOE: Pharmacy Research			Pharm.D.

## SCHOOL OF PUBLIC HEALTH

Program	Bachelor's	Master's	Doctoral/Professional
Community Health Promotion - School Health Education		M.S.	
Public Health – Biostatistics		M.P.H.	
Public Health – Epidemiology		M.P.H.	
Public Health – Health Policy – AOE: Worksite Wellness		M.P.H.	

Public Health – Occupational and Environmental Health Sciences – AOE: Worksite Wellness	M.P.H.	
Public Health - AOE: Public Health Practice	M.P.H.	
Public Health – Social and Behavioral Sciences – AOE: Worksite Wellness	M.P.H.	
Public Health – Social and Behavioral Sciences – AOE: Public Health Practice	M.P.H.	
Public Health Sciences – Social & Behavioral Science – AOE: Worksite Wellness		Ph.D.
Public Health Sciences – Occupational & Environmental Health Sciences – AOE: Worksite Wellness		Ph.D.
Public Health Sciences - Epidemiology		Ph.D.
Public Health Sciences - Biostatistics		Ph.D.

## UNIVERSITY COLLEGE

Program	Bachelor's	Master's	Doctoral/Professional
Biochemistry	B.S.		
Multidisciplinary Studies – Multidisciplinary Studies	B.M.D.S.		
Multidisciplinary Studies – Human Performance & Health	B.A.		
Regents BA - AOE: Advertising/ Public Relations	R.B.A.		
Regents BA - AOE: American History	R.B.A.		
Regents BA - AOE: Anthropology	R.B.A.		
Regents BA - AOE: Art History	R.B.A.		
Regents BA - AOE: Business Administration	R.B.A.		
Regents BA - AOE: Child Development	R.B.A.		
Regents BA - AOE: Communication Studies	R.B.A.		
Regents BA - AOE: Creative Writing	R.B.A.		
Regents BA - AOE: Crime & Social Control	R.B.A.		
Regents BA - AOE: Economics	R.B.A.		
Regents BA - AOE: Foreign Literature in Translation	R.B.A.		
Regents BA - AOE: French	R.B.A.		
Regents BA - AOE: Geography	R.B.A.		
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-African & Mid East	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 ([http://catalog.wvu.edu/healthsciences/programscoursescredits/graduate/Graduate\\_Course\\_Descriptions.pdf](http://catalog.wvu.edu/healthsciences/programscoursescredits/graduate/Graduate_Course_Descriptions.pdf))

### 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

Abbreviation	Description
I	a course given in the first (fall) semester
II	a course given in the second (spring) semester
I, II	a course given each semester
I and II	a course given throughout the year
Yr	a course continued through two semesters
S	a course given in the summer
HR	credit hours per course
Lec	lecture period
Rec	recitation period

Lab	laboratory period
GLAB	graded lab
WEB	web-based course
CONC	concurrent - usually listed with PR meaning course must either be completed prior to or at the same time as enrollment in the course it is listed for
PR	prerequisite - course must be completed in a term prior to enrollment in the course it is listed for
Coreq	co-requisite - courses must be taken in the same term
Consent	consent of instructor required
CR	credit but no grade

## 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.

795. Independent Study. I, II, S. 1-9 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.

697/797. Research. I, II, S. 1-15 hr. PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. (Grading is S/U.)

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. 1-6 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/healthsciences/programscoursescredits/graduate/Graduate\\_Course\\_Descriptions.pdf](http://catalog.wvu.edu/healthsciences/programscoursescredits/graduate/Graduate_Course_Descriptions.pdf))

## CREDITS

### 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 and 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](http://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](http://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](http://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/](http://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](http://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](http://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](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](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](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](http://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](http://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](http://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](http://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](http://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.

# Health Sciences School of Dentistry

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## 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. (UNC)

### ASSOCIATE DEANS

- Christina B. DeBiase - Ed.D. (West Virginia University)  
Academic & Postdoctoral Affairs
- Shelia S. Price - D.D.S. (West Virginia University)  
Admissions, Recruitment, and Access

### ASSISTANT DEAN

- Robert L. Wanker - D.D.S. (West Virginia University)  
Student and Alumni Affairs

## FACULTY

### PROFESSORS EMERITI

- Camillo A. Alberico - D.D.S. (Marquette U.)
- Henry J. Bianco, Jr. - D.D.S., M.S. (U. MD.)
- Emmett F. Brown - D.M.D. (U. Pitt.)
- William L. Graham - D.D.S. U. MD. )  
Diagnostic Sciences
- Catherine E. Graves - M.A. (WVU)  
Dental Hygiene
- Robert W. Graves - D.D.S. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- James A. Griffin - D.D.S. (Baylor)  
Endodontics
- Richard I. Hart - D.D.S. (U. Mich.)  
Operative Dentistry
- David M. Hickman - D.D.S. (WVU)  
Dental Practice and Rural Health
- Barbara K. Komives-Norris - M.S. (Ohio St. U.)  
Dental Hygiene
- William R. McCutcheon - D.D.S., M.P.H. (WVU)

Dental Practice and Rural

- Donald J. Morrison - D.D.S., M.S. (U. Iowa)  
Periodontics
- Gerald Nieuwma - D.D.S. (U of Mich)  
Oral and Maxillofacial Surgery
- James E. Overberger - D.M.D.(U. Pitt.)  
Restorative Dentistry
- Robert E. Sausen - D.D.S. (U. Minn)  
Operative Dentistry
- Carol A. Spear - M.S. (U. Mich)  
Dental Hygiene
- John T. Stevens - D.D.S. (U. Penn)  
Operative Dentistry
- Harold E. Tucker - D.D.S. (MCV)  
Prosthodontics

## **CLINICAL ASSISTANT PROFESSORS**

- Kristofer L. Adkins - M.S. (WVU)  
Dental Hygiene
- Anissa Anderson - D.D.S., M.S. (WVU)
- Angela Beth Armstead - D.D.S. (WVU)
- William Artrip, III - D.D.S. (WVU)
- Kenneth Banks - D.D.S. (WVU)
- Perry A. Barr - D.D.S. (WVU)
- Lynnel Beauchesne - D.D.S. (WVU)
- Aaron Bloom - D.D.S. (WVU)
- Stewart Bloom - D.D.S. (WVU)
- Jerry Bondurant - D.D.S. (WVU)
- Jody Boyles - D.D.S. (WVU)
- Leilani S. Brown - D.D.S. (WVU)
- James G. Bryant - D.M.D. (U. KYU.)
- Carol Buffington - D.D.S. (WVU)
- Mark A. Byron - D.D.S., M.S. (WVU)
- Robert Campbell - D.D.S. (WVU)
- John A. Capriolo - D.D.S. (U of MD.)
- Bruce Cassis - D.D.S. (WVU)
- Michelle Chapman-Paterno - D.D.S. (WVU)
- Karen Collins - D.D.S. (WVU)
- Kevin Conde - D.D.S. (WVU)
- Catherine Connor - D.D.S., M.S. (WVU)
- Thomas Conklin - D.D.S. (WVU)
- Gary W. Cunningham - D.D.S. (WVU)
- Cheryl Delp - D.D.S. (WVU)  
Dental Practice and Rural Health
- Gerald E. Dice - D.D.S. (Ohio St. U)  
Dental Practice and Rural Health
- Mary K. Doersch - D.D.S. (WVU)  
Dental Practice and Rural Health
- Brian Dorsey - D.D.S. (WVU)  
Dental Practice and Rural Health
- Robert C. Evans - D.D.S. (WVU)  
Restorative
- Leo Fleckenstein - D.D.S. (St. Louis U)  
Dental Practice and Rural Health
- Mitri Ghareeb - D.D.S. (WVU)

## Dental Practice and Rural Health

- Sami Ghareeb - D.D.S., M.S. (Meharry Med College)  
Dental Practice and Rural Health
- Steven Ghareeb - D.D.S. (WVU)  
Dental Practice and Rural Health
- Llynn Gilbert - D.D.S. (WVU)  
Dental Practice and Rural Health
- Jeffrey Gilmore - D.D.S., M.S. (Ohio St. U. )  
Orthodontics
- James T. Hall - D.D.S. (WVU)  
Dental Practice and Rural Health
- David Harman - D.D.S. (WVU)  
Dental Practice and Rural Health
- Robert Harris - D.D.S. (WVU)  
Dental Practice and Rural Health
- Patricia Harman - D.D.S. (WVU)  
Dental Practice and Rural Health
- Carrie E. Hazey - D.D.S. (WVU)  
Pediatric Dentistry
- Michael Hazey, III - D.D.S., M.S. (WVU)  
Orthodontics
- Keith Hildebrand - D.D.S., M.S. (WVU)  
Endodontics
- Tara Hilleary - D.D.S. (WVU)  
Dental Practice and Rural Health
- Jimmie Hissem - D.D.S. (WVU)  
Dental Practice and Rural Health
- Jennifer Howell - D.D.S. (WVU)  
Dental Practice and Rural Health
- John Hubbard - D.D.S. (WVU)  
Dental Practice and Rural Health
- Thomas Jarrett - D.D.S. (WVU), MS (St. Louis U)  
Orthodontics
- Stephen S. Johns - D.D.S. (WVU)  
Dental Practice and Rural Health
- Ali Kanawati - D.D.S., M.B.A., M.S. (WVU)  
Restorative Dentistry
- Jon Paul Kardos - D.D.S. (WVU)  
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- Andrea N. Kelley - D.D.S. (WVU)  
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- Charles A. Kennedy - D.D.S. (WVU)  
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- Mark Kilcollin - D.D.S. (WVU)  
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- Jeffreery Kimble - D.D.S. (WVU)  
Dental Practice and Rural Health
- J. Stephen Kimble - D.D.S. (WVU)  
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- Don W. Kines - D.D.S. (WVU)  
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- Kerry Kirsch - D.D.S., M.S. (WVU)  
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- William A. Klenk - D.D.S. (WVU)  
Dental Practice and Rural Health
- Chad Lancaster - D.D.S. (WVU)

- Dental Practice and Rural Health
- R. Brooks Legg - D.D.S. (WVU)  
Dental Practice and Rural Health
- Thomas Leslie - D.D.S. (WVU)  
Dental Practice and Rural Health
- Kevin Lewis - D.D.S. (WVU)  
Dental Practice and Rural Health
- Lisa Lisauckis - M.S. (WVU)  
Dental Hygiene
- Scott Little - D.D.S. (Ohio St. U. )  
Orthodontics
- Cody Lockhart - D.D.S. (WVU)  
Dental Practice and Rural Health
- J. Stephen Lovell - D.D.S. (WVU)  
Restorative Dentistry
- David L. Mandel - D.D.S. (NY U)  
Oral and Maxillofacial Surgery and Hospital Dentistry
- Laura Marple - D.D.S. (WVU)  
Dental Practice and Rural Health
- Richard Marshall - D.D.S. (WVU)  
Dental Practice and Rural Health
- Peter McCutcheon - D.D.S. (WVU)  
Dental Practice and Rural Health
- Douglas J. McIntyre - D.D.S. (Ohio ST. U.)  
Restorative Dentistry
- Donald McLaurin - D.D.S., M.D. (Baylor ,LSU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- A.B. Merbedone - D.D.S. (WVU)  
Restorative Dentistry
- H. Darrell Milem - D.D.S. (WVU)  
Dental Practice and Rural Health
- David E. Miranda - D.D.S. (WVU)  
Dental Practice and Rural Health
- Azati Misaghi - D.D.S. (WVU)  
Dental Practice and Rural Health
- Janice Reed Morris - D.D.S. (WVU)  
Dental Practice and Rural Health
- Bobbi Jo Muto - RDH, M.S. (WVU)  
Dental Practice and Rural Health
- William A. Myers, II - D.M.D. (U. Pitt)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- Gary Naylor - D.D.S. (WVU)  
Restorative Dentistry
- Timothy Nichols - D.D.S. (WVU)  
Dental Practice and Rural Health
- Christopher Pagano - D.D.S. (WVU)  
Dental Practice and Rural Health
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Dental Practice and Rural Health
- Jason Rousch - D.D.S. (WVU)

Dental Practice and Rural Health

- Michael Romeo - D.D.S. (WVU)  
Dental Practice and Rural Health
- Thaddeus Rusiecki - D.D.S. (Ohio St. U)  
Oral Maxillofacial Surgery, Hospital Dentistry
- Helen Dee Rymer - D.D.S. (WVU)  
Dental Practice and Rural Health
- Matthew Scarberry - D.D.S. (WVU)  
Dental Practice and Rural Health
- Gina Sharps - B.S. (WVU)  
Dental Practice and Rural Health
- Bruce V. Shipe - D.D.S. (WVU)  
Restorative Dentistry
- John Shreve - D.D.S. (WVU)  
Restorative Dentistry
- Jeremy Simms - D.D.S. (WVU)  
Dental Practice and Rural Health
- Donald E. Skaff - D.D.S. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- Michael Sokolosky - D.D.S. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- Mark A. Spiker - D.D.S. (WVU)  
Dental Practice and Rural Health
- Timothy Stewart - D.D.S. (U MD)  
Dental Practice and Rural Health
- Daniel J. Tatich - D.D.S. (WVU)  
Oral Maxillofacial Surgery, Hospital Dentistry
- Dan Taylor - D.D.S. (WVU)  
Dental Practice and Rural Health
- Timothy Thorne - D.D.S. (WVU)  
Dental Practice and Rural Health
- Gerald Veltri - D.D.S. (WVU)  
Dental Practice and Rural Health
- Allison M. Wilson - D.D.S., (WVU)  
Pediatric Dentistry
- Kristafer L. Adkins - B.S.H.A., M.S. (WVU)  
Dental Hygiene

## PROFESSORS

- Michael D. Bagby - D.D.S. (Loyola U.) M.S., (Northwestern U), Ph.D. (Northwestern U)  
Restorative Dentistry
- Lester H. Bakos - D.D.S. (WVU)
- Mohssen Ghalichebaf - D.D.S. (Ind. U) , M.S. (U of Rochester)  
Restorative Dentistry
- George W. Harper - D.D.S. (WVU)  
Restorative Dentistry
- Robert H. Hornbrook - D.D.S. (WVU), M.S.D. (Indiana)  
Periodontics
- Elizabeth C. Kao - D.M.D. (U. Penn.)  
Restorative Dentistry
- Gordon G. Keyes - D.D.S., J.D. (U. MD. , WVU), M.S. (U of Minn)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- William Marshall - D.D.S. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- Gerald Nieuwma - D.D.S. (U. Mich.)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- Harold H. Reed - D.D.S., M.S. (WVU)

Periodontics

- Mark W. Richards - D.D.S. (U. Wash.), M.Ed. (George Washington U)  
Restorative Dentistry
- Robert N. Stuchell - D.M.D. (U Pitt)  
Periodontics
- David H. Walker - D.D.S. (WVU)  
Dental Practice and Rural Health
- Stephen J. Wetmore - M.D. (U Mich)  
Oral and Maxillofacial Surgery, Hospital Dentistry

## **CLINICAL PROFESSORS**

- Frank S. Balaban - D.D.S., M.S. (WVU)  
Endodontics
- John B. Haley Jr. - D.D.S. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- David A. Lattanzi - D.D.S. (Case West. Res. U)  
Oral and Maxillofacial Surgery and Hospital Dentistry
- William M. Oscanyan - D.D.S. (WVU)  
Restorative Dentistry
- David T. Puderbaugh - D.D.S. (WVU)  
Restorative Dentistry
- Donald T. Sauter - D.D.S. (Ohio St. U)  
Restorative Dentistry
- John G. Thomas - Ph.D. (Syracuse U)  
Periodontics
- A.E. Skidmore - D.D.S., M.S. (WVU)  
Endodontics

## **CLINICAL ASSOCIATE PROFESSORS**

- Byron H. Black - D.D.S. (WVU)
- Eric R. Brannon - D.D.S. (WVU)
- Regina R. Brannon - D.D.S. (WVU)
- John H. Dempsey - D.D.S. (U.M.D.)  
Orthodontics
- Amy Everett - D.D.S. (WVU)  
Dental Practice and Rural Health
- Lewis Gilbert - D.D.S. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- William G. Golden - D.D.S. (WVU)  
Restorative Dentistry
- Joseph D. Hancock - D.D.S. (WVU)  
Oral and Maxillofacial Surgery and Hospital Dentistry
- John K. Kuyk - D.D.S. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- Edward McFarland - D.M.D., M.S.D. (U Pitt)  
Orthodontics
- Daniel W. McNeil - Ph.D. (U. Ala.)  
Dental Practice and Rural Health
- Susan K. Morgan - D.D.S. (WVU)  
Periodontics
- John W. Perrine - D.D.S. (WVU)  
Dental Practice and Rural Health
- William F. Queen - D.D.S. (WVU)  
Restorative Dentistry
- W. Dean Russell - D.D.S. (Emory U)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- Lawrence E. Syner - D.D.S. (WVU)

Oral and Maxillofacial Surgery, Hospital Dentistry

- W. Christopher Taylor - D.D.S. (WVU)  
Oral Maxillofacial Surgery, Hospital Dentistry
- William M. Wine - D.D.S. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry
- William G. Golden - D.D.S. (WVU)  
Restorative Dentistry

## ADJUNCT PROFESSOR

- Jerry Bouquot - D.D.S., M.S. (U. of Minn.)

## ASSOCIATE PROFESSORS

- Cathryn Frere - M.S. (U.S.C.)  
Dental Hygiene
- Chris Martin - D.D.S., M.S. (WVU)  
Orthodontics

## ASSISTANT PROFESSORS

- Thomas N. Brindock - D.M.D., MPH (U of Pitt)  
Restorative Dentistry
- Ashlee Charnoplosky - M.S. (WVU)  
Dental Hygiene
- M. Suann Gaydos - B.S., M.S. (WVU)  
Dental Hygiene
- Lora D. Graves - D.D.S. (WVU)  
Restorative Dentistry
- Frank Mastalerz, Jr. - D.D.S. (WVU)  
Restorative Dentistry
- Michael Meador - D.D.S. (WVU)  
Restorative Dentistry
- Shelia Ann Scumaci - B.S., M.B.A. (WVU)  
Dental Hygiene
- Alcinda Trickett Shockey - M.A. (WVU)  
Dental Hygiene
- Ashlee Sowards - BSDH, M.S. (WVU)  
Dental Hygiene

## ASSOCIATE PROFESSORS EMERITI

- C. Russell Jackson - D.D.S., M.S. (WVU)  
Endodontics

## CLINICAL INSTRUCTORS

- Katie Kilcollin - D.D.S. (WVU)  
Dental Practice and Rural Health
- Zachary Law - D.D.S. (WVU)  
Dental Practice and Rural Health

## CO-CHAIRS

- Richard. L. Meckstroth - D.D.S. (Loma Linda U.)  
Dental Practice and Rural Health
- Peter W. Ngan - D.M.D. (Harvard)  
Orthodontics
- Bryan D. Weaver - D.D.S., M.D. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry

## INSTRUCTOR

- Michael Wilson - D.D.S. (WVU)  
Dental Practice and Rural Health

# 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 (1<sup>st</sup> 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 (2<sup>nd</sup>) 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. (WVU)

### ASSOCIATE PROFESSOR

- Cathryn L. Frere - M.S.Ed. (University of Southern California)

### ASSISTANT PROFESSORS

- Kristafer L. Adkins - M.S.D.H. (WVU)
- M. Suann Gaydos - M.S.D.H. (WVU)
- Lisa E. Lisauckis - M.S.D.H. (WVU)
- Sheila A. Scumaci - MBA (WVU)
- Alcinda K. T. Shockey - M.A. (WVU)
- Ashlee B. Sowards - M.S.D.H. (WVU)

## UNDERGRADUATE

### Admission

To apply to the program, go to <http://home.hsc.wvu.edu/> and follow the "On-line Application" link at the bottom of the page. You may also get an application by contacting:

#### The Division of Dental Hygiene

West Virginia University

PO Box 9425

Morgantown, WV 26506

Or

#### The Office of Admissions

Health Sciences Center

PO Box 9815

Morgantown, WV 26506

Applications for the fall semester should be received by March 1<sup>st</sup> of the preceding spring semester. To be considered for the program, you need to complete the entire dental hygiene application, including the one-page essay, shadowing form, and shadowing essay.

The Dental Hygiene Admissions committee pays particular attention to scholastic achievement in science courses as well as overall grade point average and involvement in community service activities. Physical strength with the ability to sit and stand as required, fine precision bilateral manipulative hand/motor skills, adequate visual acuity, eye/hand/foot coordination, and emotional stability are essential characteristics for individuals who wish to enter and

continue in the dental hygiene program. They must meet other medical qualifications as required. Reasonable accommodation will be considered for students with special needs.

The Dental Hygiene Admissions Committee reviews all applications. If you are among the most qualified, you may be invited to come to the campus for a personal interview. Competition for admission is intense. Preference is given to residents of West Virginia.

## Direct Admission (Freshman Entry)

Applicants are eligible to enter the program as freshmen. Admission is based on the above mentioned criteria plus a minimum high school grade point average of 3.5 and a composite score of ACT 22 or total SAT (reading and math) of 1140. Additionally, applicants must meet all the University admission requirements which include successful completion of the following high school requirements:

- four units of English (Units must include grammar, composition, and literature.)
- four units of college preparatory mathematics (Three units must be Algebra I and II and Plane Geometry.)
- three units of social studies (including U.S. History)
- three units of science (ALL units must be laboratory science. Recommended units include: biology, chemistry, physics, anatomy, and environmental science.)
- two units of a foreign language, must be the same language (American Sign Language is acceptable for this requirement.)
- one unit of fine arts (Recommended units include: Music, band, art, theater, dance, drama, and performance.)

Additional science courses on the high school level are recommended. To be eligible for enrollment, the applicant must be a graduate of an accredited high school or preparatory school that is acceptable for college entrance. Please visit the West Virginia University website for more information: <http://admissions.wvu.edu/admissions/university-requirements>.

## Degree Completion Program

If you are a registered dental hygienist, you can be admitted directly to the Division of Dental Hygiene as a full-time or a part-time student. To be eligible for the degree completion program, you must have a certificate or associate's degree from an accredited dental hygiene program. You can transfer lower-division credits (see "Suggested Dental Hygiene Curriculum"). Your acceptance and placement in the program depend upon your academic record and upon the number of spaces available.

When you apply, we ask you to include complete records of previous study. An official transcript needs to be mailed to us by the registrar of your previous school. Include catalog descriptions of the courses taken. If you are currently enrolled in a certificate or associate's degree program, include your program of study. You are responsible for the submission of a complete record package. You can enter the degree completion program twice a year. Applications can be obtained after September 1<sup>st</sup> of the year preceding application to the program. The *WVU Health Sciences Center Catalog* contains complete information about this program in dental hygiene.

## GRADUATE

### 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.

### Degree Offered

- Bachelor of Science

Advanced Standing Admission (Sophomore Entry)

Students may apply to the program with a minimum college overall grade point average of 3.0 and completion of the following pre-requisite college courses with a grade of C or better:

Required Math and Science Courses:

BIOL 102	General Biology	3
BIOL 104	General Biology Laboratory	1
CHEM 111	Survey of Chemistry	4
CHEM 112	Survey of Chemistry	4
Select one of the following:		3
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
MATH 126C	College Algebra 3-Day	
HN&F 171	Introduction to Nutrition	3
NBAN 107	Intro Human Anat/Physiol	4
Select a minimum of 15 credit hours from the following courses:		15
DTHY 100	Health Care Terminology	
DTHY 101	Introduction to Dental Hygiene	
ENGL 101	Composition And Rhetoric	
ENGL 102	Composition And Rhetoric	
SOCA 101	Introduction to Sociology	
PSYC 101	Introduction to Psychology	
PSYC 241	Intro to Human Development	
Select one of the following:		3
COMM 100 & COMM 102	Principles-Human Communication and Human Comm-Interprsnl Context	
COMM 104	Public Communication	
GEC Objectives (Select from objectives 3, 5, 8, or 9)		12
Total Hours		52

**Major in Dental Hygiene Requirements**

A minimum GPA of 2.25 is required in all DTHY/Science courses

DTHY 100	Health Care Terminology	1
DTHY 101	Introduction to Dental Hygiene	2
DTHY 185	Oral Anatomy	2
DTHY 186	Dental Anatomy	2
DTHY 205	Theory/Practice of Prevention	2
DTHY 210	Dental Radiology	2
DTHY 211	Dental Radiology	1
DTHY 220	Dental Nursing Techniques	2
DTHY 225	Dental Hygiene Techniques	4
DTHY 226	Clinical Dental Hygiene	1
DTHY 300	Anesthesia for Dental Hygiene	1
DTHY 350	Public Health	2
DTHY 351	Dental Health Education	3
DTHY 360	Dental Materials	3
DTHY 361	Expanded Functions	2
DTHY 363	Periodontics 1	1
DTHY 364	Periodontics 2	2
DTHY 366	Technical Expression/Dentl Lit	1
DTHY 370	Dental Hygiene Clinical Methds	2
DTHY 372	Clinical Dental Hygiene 1	2
DTHY 374	Clinical Dental Hygiene 2	3
DTHY 378	Dental Hyg Teachng Method	2

DTHY 402	Dental Hygiene Ethics/Practice	1
DTHY 405	Adv Clinical Dental Hygiene 1	4
DTHY 406	Adv Clin Dentl Hygiene 2	3,4
DTHY 407	Adv Dental Hygiene Methds 2	2
DTHY 440	Senior Integration Seminar	1
DTHY 445	Applied Pharmacology	1
DTHY 450	Dental Health Education 2	2
DTHY 451	Dental Health Education 3	2
DTHY 478	Clinical Evaluation	1
DTHY 491	Prof Fld Expr:Rural Health	4
<b>Dental/Biomedical Science Courses</b>		
HN&F 171	Introduction to Nutrition	3
NBAN 205	Introduction to Human Anatomy	3
NBAN 206	Human Anatomy Laboratory	1
NBAN 309	Oral Histology	2
MICB 200	Medical Microbiology	3
PATH 300	Introduction to Pathology	3
PATH 302	Oral Pathology	3
PCOL 260	Pharmacology	3
PSIO 241	Elementary Physiology	4
<b>Dental Hygiene Electives</b>		
DTHY 490	Teaching Practicum	1-3
DTHY 493@		
Total Hours		90-93

## Suggested Plan of Study

### First Year

Fall	Hours Spring	Hours Summer	Hours
CHEM 111	4 BIOL 102	3 GEC Objectives (Select from objectives 3, 5, 8, or 9)*	6
Select one of the following:	3 BIOL 104	1	
COMM 100 & COMM 102*	CHEM 112	4	
COMM 104*	DTHY 100*	1	
DTHY 101*	2 NBAN 107	4	
ENGL 101*	3 PSYC 101*	3	
WVUE 191	1 HN&F 171	3	
Choose one of the following:	3		
MATH 126A			
MATH 126B			
MATH 126C			
	<b>16</b>	<b>19</b>	<b>6</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
DTHY 185	2 DTHY 186	2 DTHY 226	1
DTHY 205	2 DTHY 211	1 PCOL 260 (Web)	3
DTHY 210	2 DTHY 225	4	
NBAN 207	4 ENGL 102*	3	
MICB 200	3 SOCA 101	3	

PSYC 241*	3 NBAN 309	2	
	<b>16</b>	<b>15</b>	<b>4</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
DTHY 350	2 DTHY 300	1 DTHY 491	1-18
DTHY 360	3 DTHY 351	3	
DTHY 363	1 DTHY 361	2	
DTHY 366	1 DTHY 364	2	
DTHY 370	2 DTHY 374	3	
DTHY 372	2 DTHY 378	2	
PATH 300	3 PATH 302	3	
GEC Objective (Select from objectives 3, 5, 8, or 9)*	3		
	<b>17</b>	<b>16</b>	<b>1-18</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
DTHY 402	1 DTHY 406	3,4	
DTHY 405	4 DTHY 407	2	
DTHY 445	1 DTHY 440	1	
DTHY 450	2 DTHY 451	2	
DTHY 478	1 Select one of the following electives:	2	
Select one of the following electives:	1 DTHY 490		
DTHY 490	DTHY 492		
DTHY 492	DTHY 495		
DTHY 495	GEC Objective (Select from objectives 3, 5, 8, or 9)*	3	
GEC Objective (Select from objectives 3, 5, 8, or 9)*	3		
	<b>13</b>	<b>13-14</b>	

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Total credit hours: 136-154

\* Courses subject to varied sequencing.

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.

C&I 689	Cultural Diversity -Classroom	3
DTHY 678	Dental Hygiene Teaching Method	2
DENT 687	Research Methods	1
PUBH 601	Intro Community/Public Health	3
DTHY 679	Clinical Evaluation	2
DTHY 680	Dental Hygiene Sem/Practice 1	3
DTHY 690	Teaching Practicum	1
DTHY 697	Research	6
<b>Elective area(s) of dental hygiene specialization - choose from the following:</b>		<b>17</b>
DTHY 691 Advanced Topics Course		
Business & Economics courses		
Educational Psychology courses		
Medicine (Community Health Promorion)		
Multidisciplinary Students Program		
Human Resources and Education		
<b>Total Hours</b>		<b>38</b>

- \* 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:

English composition and rhetoric, or equivalent	6
Zoology or Biology (with laboratory)	8
Inorganic Chemistry (with laboratory)	8
Organic Chemistry (with laboratory)	8
Physics (with laboratory)	8
Biochemistry	3
Anatomy (Comparative or Human)	3
<b>Total Hours</b>	<b>44</b>

Completion of courses in microbiology, embryology/developmental biology, physiology, cellular and molecular biology, genetics and psychology are strongly recommended. In addition, courses in the humanities and the social sciences are suggested 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.aadea.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](http://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

BIOC 705	General Biochemistry	5
DENT 700	Anesthesiology	1
DENT 701	Art/Science:Preventv Dentistry	2
DENT 703	Introduction to Patient Care	3
DENT 704	Operative Dentistry	4
DENT 707	Intro to Clinical Dentistry	2

DENT 710	Dental Anatomy & Occlusion	4
DENT 711	Periodontics	2
DENT 712	Dental Materials	3
DENT 715	Intro-Community Dentistry	2
DENT 719	Pedodontics	1
DENT 721	Endodontics	2
DENT 722	Tooth-Colored Restorations	4
DENT 725	Practice Management	1
DENT 726	Removable Partial Dentures	7
DENT 727	Dental/Maxillofacial Radiology	2
DENT 729	Gold Direct/Indirect Restorations	3
DENT 730	Community Dentistry	2
DENT 731	Occlusion	2
DENT 733	Adv Endo Theory and Practice	1
DENT 734	Complete Dentures	6
DENT 735	Pediatric Dentistry	1
DENT 737	Treatment Planning	2
DENT 739	Oral Surgery	1
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 Implantology	2
DENT 756	Fixed Prosthodontics: Part 1	4
DENT 757	Fixed Prosthodontics: Part 2	4
Taken twice for 2 hours each:		4
DENT 758	Senior Seminar	
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-Pathologic Correlation Conf	1
PCOL 760	Pharmacology & Therapeutics	5
PSIO 743	Fundamentals of Physiology	5
Total Hours		196

## Suggested Plan of Study

### First Year

Fall	Hours Spring	Hours Summer	Hours
DENT 701	2 BIOC 705	5 DENT 703	3
DENT 710	4 DENT 700	1 DENT 745	1
DENT 712	3 DENT 704	4	
NBAN 724	7 DENT 711	2	
PSIO 743	5 DENT 715	2	
	DENT 719	1	
	DENT 731	2	
	NBAN 718	6	
	<b>21</b>	<b>23</b>	<b>4</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
DENT 722	4 DENT 707	2 DENT 725	1
DENT 729	3 DENT 721	2 DENT 726	7
DENT 734	6 DENT 727	2 DENT 740	1
DENT 735	1 DENT 737	2 DENT 746	1
DENT 756	4 DENT 739	1	
MICB 702	5 DENT 744	1	
PCOL 760	5 DENT 757	4	
	DENT 766	2	
	DENT 778	2	
	PATH 728	5	
	PATH 738	3	
	<b>28</b>	<b>26</b>	<b>10</b>

### Third Year

Fall	Hours Spring	Hours Summer	Hours
DENT 754	2 DENT 730	2 DENT 733	1
DENT 761	1 DENT 747	1 DENT 771	2
DENT 763	2 DENT 751	1 DENT 781	4
DENT 773	1 DENT 752	2	
DENT 778	2 DENT 759	2	
PATH 753	2 DENT 765	1	
	<b>10</b>	<b>9</b>	<b>7</b>

### Fourth Year

Fall	Hours Spring	Hours
DENT 758	2 DENT 758	2
DENT 770	4 DENT 767	1
DENT 782	2 DENT 775	6

PATH 755	1 DENT 776	5
	DENT 777	5
	DENT 780	4
	DENT 782	2
	DENT 783	6
	DENT 784	6
	DENT 785	2
	DENT 786	4
	DENT 787	1
	DENT 789	5
	<b>9</b>	<b>49</b>

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Total credit hours: 196

## 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

- C. Russell Jackson - D.D.S.,M.S.

## 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

DENT 600	Advanced Oral Surgery	1-12
BIOS 601	Applied Biostatistics 1	3
PATH 601	Special Studies:Oral Pathology	1-3
BIOS 602	Applied Biostatistics Lab	1
ORTH 625	Sem:Clinical Photography	1-8

DENT 687	Research Methods	1
ENDO 688	Clinical Endodontics	28
ENDO 689	Endodontic Theory	10
DENT course - Biomedical Sciences-PCOL		1
ENDO 690	Teaching Practice	7
DENT course - Post Graduate Dental Microbiology		3
DENT Course Biomedical Sciences-ANAT		1
ENDO 697	Research	7
Total Hours		65-85

## SUGGESTED PLAN OF STUDY

### First Semester

Summer	Hours
DENT 600	1
ORTH 625	1
ENDO 688	3
ENDO 689	2
ENDO 690	1
	<b>8</b>

### Second Semester

Fall	Hours
DENT 600	1-12
BIOS 601	3
PATH 601	1-3
BIOS 602	1
ENDO 688	4
ENDO 689	2
ENDO 690	1
DENT course - Biomedical Sciences- PCOL	1
	<b>14-27</b>

### Third Semester

Spring	Hours
DENT 687	1
ENDO 688	4
ENDO 689	2
ENDO 690	2
DENT course - Post Graduate Dental Microbiology	3
	<b>12</b>

### Fourth Semester

Summer	Hours
ENDO 688	4
ENDO 690	1
DENT course - Biomedical Sciences- ANAT	1
ENDO 697	2
	<b>8</b>

**Fifth Semester**

<b>Fall</b>	<b>Hours</b>
ENDO 688	4
ENDO 689	2
ENDO 690	1
ENDO 697	1
<b>8</b>	

**Sixth Semester**

<b>Spring</b>	<b>Hours</b>
ENDO 688	4
ENDO 689	2
ENDO 690	1
ENDO 697	3
<b>10</b>	

**Seventh Semester**

<b>Summer</b>	<b>Hours</b>
ENDO 688	5
ENDO 697	1
<b>6</b>	

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Total credit hours: 66-79

## 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.

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## FACULTY

### CHAIR

- Peter Ngan - D.M.D. (Harvard University)

## 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 compel 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

BIOS 601	Applied Biostatistics 1	3
PATH 601	Special Studies:Oral Pathology	1-3

BIOS 602	Applied Biostatistics Lab	1
ORTH 616	Biomechanics	2
ORTH 617 - Orthodontic Technique		4
ORTH 618	Orthodontic Materials	1
ORTH 619 - Orthodontic Diagnosis		11
ORTH 620	Cephalometrics	1
ORTH 621 - Orthodontic Mechanics		7
ORTH 623	Growth And Development	2
ORTH 625	Sem:Clinical Photography	1
ORTH 626 - Orthodontic Clinic		18
ORTH 627 - Surgical Orthodontics		2
ORTH 628 - Early Orthodontic Treatment		2
ORTH 629 - Orthodontic Patient Management		2
ORTH 630	Craniofacial Anomalies	1
ORTH 631 - Journal Club		2
ORTH 632	Dentofacial Orthopedics	1
ORTH 633 - Ortho-Perio Seminar		2
DENT 687	Research Methods	1
ORTH 690 - Teaching Practicum		6
DENT course - Biomedical Sciences-PCOL		1
DENT course - Biomedical Sciences-ANAT		1
ORTH 697	Research	12
DENT course - Post Graduate Dental Microbiology		1
Total Hours		86-88

## SUGGESTED PLAN OF STUDY

### First Semester

Summer	Hours
ORTH 617	2
ORTH 618	1
ORTH 619	1-3
ORTH 621	1-4
ORTH 625	1-8
	<b>6-18</b>

### Second Semester

Fall	Hours
BIOS 601	3
PATH 601	1-3
BIOS 602	1
ORTH 616	2
ORTH 617	2
ORTH 619	1-3
ORTH 621	1-4
ORTH 626	1-12
ORTH 632	1

**13-31**

### Third Semester

Spring	Hours
ORTH 619	1-3
ORTH 620	1-3
ORTH 621	1-4
ORTH 623	1-5

ORTH 625	1-8
ORTH 626	1-12
DENT 687	1
DENT Course- Post Graduate Dental Microbiology	1

**8-37****Fourth Semester****Summer****Hours**

ORTH 619	1-3
ORTH 626	1-12
ORTH 631	1
DENT Course- Biomedical Sciences- ANAT	1
ORTH 697	1-15

**5-32****Fifth Semester****Fall****Hours**

ORTH 619	1-3
ORTH 621	1-4
ORTH 626	1-12
ORTH 627	1
ORTH 628	1
ORTH 633**	1
DENT Course- Biomedical Sciences- PCOL	
ORTH 697	1-15

**7-37****Sixth Semester****Spring****Hours**

ORTH 619	1-3
ORTH 621	1-4
ORTH 626	1-12
ORTH 697	1-15

**4-34****Seventh Semester****Summer****Hours**

ORTH 626	1-12
ORTH 631	1
ORTH 690	1-3
ORTH 697	1-15

**4-31****Eighth Semester****Fall****Hours**

ORTH 619	1-3
ORTH 621	1-4
ORTH 626	1-12
ORTH 628	1
ORTH 629	1
ORTH 633**	1
ORTH 690	1-3

ORTH 697  
8-40

1-15

#### Ninth Semester

<b>Spring</b>	<b>Hours</b>
ORTH 619	1-3
ORTH 621	1-4
ORTH 626	1-12
ORTH 627	1
ORTH 629	1
ORTH 630	1
ORTH 690	1-3
ORTH 697	1-15

8-40

Total credit hours: 63-300

## 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)

## 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

DENT 600 - Advanced Oral Surgery		2
BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
ORTH 618	Orthodontic Materials	1
ORTH 625	Sem:Clinical Photography	1
DENT 687	Research Methods	1
PROS 688 - Advanced Clinical Prosthodontics		32
PROS 689 - Advanced Prosthodontics Theory		28
DENT Course - Biomedical Sciences-PCOL		1
DENT Course - Post Graduate Dental Microbiology		1
DENT Course - Biomedical Sciences-ANAT		1
DENT 697 - Research		7
DENT 690 - Teaching Practicum		6
Total Hours		85

## SUGGESTED PLAN OF STUDY

### First Semester

Summer	Hours
DENT 600	1
ORTH 618	1
ORTH 625	1
PROS 688	1
PROS 689	4
	<b>8</b>

### Second Semester

Fall	Hours
DENT 600	1
BIOS 601	3
BIOS 602	1
PROS 688	2
PROS 689	3
DENT course - Biomedical Sciences- PCOL	1
	<b>11</b>

### Third Semester

Spring	Hours
DENT 687	1
PROS 688	4
PROS 689	5
DENT Course - Post Graduate Dental Microbiology	1
	<b>11</b>

### Fourth Semester

Summer	Hours
PROS 688	3
PROS 689	3

DENT Course - 1  
 Biomedical Sciences-  
 ANAT  
 DENT 697 1  
**8**

**Fifth Semester**

<b>Fall</b>	<b>Hours</b>
PATH 601	2
PROS 688	4
PROS 689	2
DENT 697	1
<b>9</b>	

**Sixth Semester**

<b>Spring</b>	<b>Hours</b>
PROS 688	6
PROS 688	4
DENT 697	1

**11**

**Seventh Semester**

<b>Summer</b>	<b>Hours</b>
PROS 688	3
PROS 689	3
DENT 690	2
DENT 697	1
<b>9</b>	

**Eighth Semester**

<b>Fall</b>	<b>Hours</b>
PROS 688	4
PROS 689	2
DENT 690	2
DENT 697	1
<b>9</b>	

**Ninth Semester**

<b>Spring</b>	<b>Hours</b>
PROS 688	5
PROS 689	2
DENT 690	2
DENT 697	2

**11**

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Total credit hours: 87

# Health Sciences School of Medicine

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## 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
- B.S. in Immunology and Medical Microbiology
- Ph.D. in Neuroscience
- M.H.S. in Pathologists' Assistant
- B.S., M.S., Ph.D., Exercise Physiology
- 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 includes 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.

Students in the M.D. program complete two years of their professional education on the Morgantown campus. In the third and fourth year of their medical education, they may complete clinical clerkships on the Morgantown, Charleston or WVU-East (Martinsburg) campuses.

The Department of Human Performance and Applied Exercise Sciences incorporates exercise physiology, physical therapy, and occupational therapy. These programs offer graduate degrees at the master's and doctoral (M.S., PhD) level as well as professional degrees (MOT, DPT).

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.

These School of Medicine graduate and professional programs complement programs in the other health professions schools (dentistry, nursing, public health, and pharmacy).

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## 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. (WVU School of Medicine)

### VICE DEAN FOR CLINICAL SERVICES & CMO WVU HEALTHCARE

- Judie Charlton - M.D. (WVU School of Medicine)

## ASSOCIATE DEANS

- Scott A. Cottrell - Ed.D. (WVU)  
Student Services & Curriculum
- Barbara Ducatman - M.D. (Albany Medical College)  
Faculty Services
- James P. Griffith - M.D. (WVU School of Medicine)  
Charleston Campus Student Services
- Maria Kolar - M.D. (WVU School of Medicine)  
Veterans Affairs
- Rosemarie Cannarella Lorenzetti - M.D. (WVU School of Medicine)  
Eastern Campus Student Services
- Timothy Palencik - M.B.A.  
Finance
- James M. Stevenson - M.D. (WVU School of Medicine)  
Development

## ASSISTANT DEANS

- Kathleen Bors - M.D. (WVU School of Medicine)  
Charleston Campus
- James Brown - M.D. (Meharry Medical School)  
Eastern Campus
- Hannah Hazard - M.D. (WVU 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. (WVU)  
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. (WVU School of Medicine)  
Dean, Eastern Campus

## SENIOR ASSOCIATE DEAN/CHIEF ADMINISTRATIVE OFFICER

- John Worth - M.B.A. (State University of New York at 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

Isalati@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/Respirat 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

BIOC 785	Biochem Mol Bio Journal Club
BIOC 797	Research

## 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 Graduate Programs

fminnear@hsc.wvu.edu

pphillips@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.

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## FACULTY

### ASSISTANT DEAN FOR GRADUATE STUDIES

- Fred L. Minnear - Ph.D. (Oregon Health Sciences University)  
M.D./Ph.D. Scholars Program

## CHAIR

- Jason Huber - Ph.D. (Florida A&M University)

## ASSISTANT DIRECTOR FOR GRADUATE STUDIES

- Renee Seitz

## 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 physicians, 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.

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## FACULTY

### GRADUATE PROGRAM DIRECTOR

- 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..

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/Respirat 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

## 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.

CCB 700	Sel Tp - Cancer Cell Biology	3
CCB 701	Biochemical/Oncogenic Signalng	3
CCB 702	Cancer Pharmacol/Therapeutics	3
BMS 730	Cancer Cell Biology	2-3
Required every semester beginning in Year 2:		
CCB 705	Journal Club	1
CCB 796	Graduate Seminar	1
CCB 797	Research	1-15

## 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.

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## FACULTY

### GRADUATE PROGRAM DIRECTOR

- Robert W. Brock - Ph.D. (University of Western Ontario)

## MAJOR REQUIREMENTS

### Major Requirements

BMS 700	Scientific Integrity	1
BMS 705	Cell Structure/Metabolism	4
BMS 710	Fund Integrated Systems	4
BMS 715	Molecular Genetics	3
BMS 720	Scientific Writing	2
PSIO 750	Graduate Physiology	7
Research Hours		7
BMS 797	Research	
Graduate Seminar		4
PSIO 744	Graduate Seminar	
Research Hours		48
PSIO 797	Research	
PSIO 799	Graduate Colloquium	6
Choose 5 Credits from the Following:		5
BMS 730	Cancer Cell Biology	
BMS 732	Cardiovasc/Respirat Biol	
BMS 734	Cell Signaling Metabolism	
BMS 736	Immunology & Microbial Patho	
BMS 738	Muscle Structure/Function	
BMS 740	Neuroscience 2	
PHAR 794	Seminar	
Advanced Topics or Electives		9
PSIO 746	Neurophysiology	
PSIO 790	Teaching Practicum	
PSIO 791	ADTP:Physiology Issues	
PSIO 792	Directed Study	
PSIO 793	Special Topics	
PSIO 795	Independent Study	
PSIO 798	Dissertation	
Total Hours		100

## 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

Fall	Hours Spring	Hours Summer	Hours
BMS 700	1 BMS 715	3 BMS 720	2
BMS 705	4 BMS 797	2 BMS 797	4
BMS 710	4 Biomedical Sciences Module	5	
BMS 797	1		
CMED 750	1		
	<b>11</b>	<b>10</b>	<b>6</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
PSIO 750	7 Advanced Topics (As Needed)	6 PSIO 797	6
PSIO 797	1 PSIO 797	2	
PSIO 799	1 PSIO 799	1	
	<b>9</b>	<b>9</b>	<b>6</b>

### Third Year

Fall	Hours Spring	Hours Summer	Hours
Advanced Topics (As Needed)	3 PSIO 744	1 PSIO 797	6
PSIO 797	5 PSIO 797	7	
PSIO 799	1 PSIO 799	1	
	<b>9</b>	<b>9</b>	<b>6</b>

### Fourth Year

Fall	Hours Spring	Hours Summer	Hours
PSIO 797	8 PSIO 744	3 PSIO 797	6
PSIO 799	1 PSIO 797	7	
	PSIO 799	1	
	<b>9</b>	<b>11</b>	<b>6</b>

Total credit hours: 101

## Clinical and Transitional Sciences

### 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 WVU 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/>.

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](mailto: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](mailto: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](mailto: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

## Bachelor of Science

The Bachelor of Science program in Exercise Physiology 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. The bachelor of science is also an excellent preparatory program for graduate or professional school. Graduates continue their education in areas such as exercise physiology, physical therapy, dentistry, pharmacy, occupational therapy, or medicine. The program is designed to provide students with a background in basic science and exercise physiology as well as courses in nutrition, athletic training, personal fitness, first aid and emergency care, and business.

## Curriculum Requirements

Students must complete the University requirements for the General Education Curriculum. Students must complete the following courses or course equivalents in theory and foundation to meet the exercise physiology program requirements.

A grade of C or higher must be earned in all required courses

CHPR 172	First Aid and Emergency Care	2
PSYC 241	Intro to Human Development	3
ATTR 121	Sport Injury Control/Managment	3
ATTR 219	Gross Anatomy	3
EXPH 240	Medical Terminology	1
EXPH 100	Orientation:Exercise Physlgy 1	1
EXPH 101	Intro-Exercise Physiology	1
EXPH 364	Kinesiology	3
EXPH 369	Strength/Conditioning Methods	4
EXPH 370	Writing for Exercise Science	3
EXPH Course	Physiology of Ex Phys 1	3
EXPH Course	Physiology of Ex Phys Lab 1	1
EXPH Course	Physiology of Ex Phys 2	3
EXPH Course	Physiology of Ex Phys Lab 2	1
EXPH 491	Professional Field Experience	4
EXPH 475	Indstry Orgnzn-Excise Physio	3
EXPH 496	Senior Thesis:Capstone	1-3
PHYS 101	Introductory Physics	4
PHYS 102	Introductory Physics	4
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 231	Organic Chemistry:Brief Course	4
CHEM 233	Organic Chemistry	3
CHEM 235	Organic Chemistry Laboratory (Only Health Professionals Track)	1
CHEM 234	Organic Chemistry	3
CHEM 236	Organic Chemistry Laboratory (Only Health Professionals Track)	1
BIOL 101 & BIOL 103	General Biology and General Biology Laboratory *	4
BIOL 102	General Biology	3
BIOL 104	General Biology Laboratory	1
Select one of the following:		4
PSIO 241	Elementary Physiology	

PSIO 441	Mechanisms Body Function	
HN&F 171	Introduction to Nutrition	3
Select one of the following:		3
STAT 211	Elemntry Statistical Inference	
ECON 225	Elemntry Busness/Economcs Stat	
MATH 128	Plane Trigonometry **	3
MATH 126B	College Algebra 4-Day	3
Suggested Electives:		
BIOL 219	The Living Cell	4
BIOC 339	Intro To Biochemistry	0-5
GEC Electives		38-45
Total Hours		134-148

\* BIOL 115 and BIOL 117 may be substituted for of BIOL 101–104. BIOL 115 can also be taken with any other four credit biology class that is for science majors and also contains a laboratory.

\*\* MATH 129, MATH 155, or MATH 150 may be substituted for MATH126A or MATH 126B and MATH 128.

**Students must have a grade of C or better in all required courses. Students must have a minimum of 128 hours to graduate. Students must maintain a cumulative GPA of 2.5 or better to remain in the program.**

Students may choose the general curriculum tract or health professional tract. Students who intend on applying to medicine, dentistry, pharmacy, or graduate school should take the health professionals tract. Students applying to physical therapy can choose either the general or health professional track.

## Exercise Physiology Suggested Plan of Study

### First Year

Fall	Hours Spring	Hours
ENGL 101	3 EXPH 101	1
BIOL 101 & BIOL 103	4 MATH 128	3
EXPH 100	1 BIOL 102 & BIOL 104	4
PSYC 101	3 ATTR 121	3
MATH 126C	3 ATTR 219	3
GEC Objective	3 GEC Objectives	3
	<b>17</b>	<b>17</b>

### Second Year

Fall	Hours Spring	Hours
PHYS 101	4 PHYS 102	4
ENGL 102	3 CHEM 116	4
CHEM 115	4 PSIO 241	4
EXPH 364	3 EXPH 240	1
GEC Objective	3 GEC Objectives	3
	<b>17</b>	<b>16</b>

### Third Year

Fall	Hours Spring	Hours
CHPR 172	2 HN&F 171	3
PSYC 241	3 CHEM 231	4
EXPH 370	3 EXPH 369	4
EXPH 393	3 EXPH 393B	3
EXPH 393A	1 EXPH 393C	1
GEC Objective	3	
	<b>15</b>	<b>15</b>

**Fourth Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
EXPH 460	3 EXPH 491	4
EXPH 496	3 EXPH 475	3
STAT 211	3 GEC Objectives	3
Electives	6 Electives	6
	<b>15</b>	<b>16</b>

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 Total credit hours: 128
**Health Professions Emphasis Suggested Plan of Study****First Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
EXPH 100	1 EXPH 101	1
ENGL 101	3 MATH 128	3
CHEM 115	4 BIOL 117	4
BIOL 115	4 CHEM 116	4
MATH 126C	3 ATTR 219	3
	GEC Objectives	1-2
	<b>15</b>	<b>16-17</b>

**Second Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ENGL 102	3 PHYS 102	4
ATTR 121	3 CHEM 234 & CHEM 236	4
EXPH 364	3 EXPH 240	1
CHEM 233 & CHEM 235	4 PSIO 241	4
PHYS 101	4 GEC Objectives	3
	<b>17</b>	<b>16</b>

**Third Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CHPR 172	2 HN&F 171	3
PSYC 241	3 STAT 211	3
BIOC 339	4 EXPH 369	4
EXPH 393	3 EXPH 370	3
EXPH 393A	1 EXPH 393B	3
Elective Science (e.g. BIOL 219)	4 EXPH 393C	1
	<b>17</b>	<b>17</b>

**Fourth Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
EXPH 460	3 EXPH 475	3
EXPH 496	3 Elective	3
Elective Science	4 EXPH 491	4
GEC Objective	3 Elective Science (e.g. BIOL 410)	4
Elective	3 GEC Objective	3
	<b>16</b>	<b>17</b>

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 Total credit hours: 131-132
**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

EXPH 670	Lab Techniques & Methods 2	3
EXPH 671	Stress Testing	3
EXPH 672	Professional Field Placement	1-18
EXPH 673	Exercise Prescription	3
EXPH 680	Adv Clinicl Exercise Physiolyg	3
EXPH 682	Research Design and Methods	4
EXPH 691	Advanced Topics	1-6
EXPH 691A	Advanced Topics	1-6
EXPH 691B	Advanced Topics	1-6
EXPH 691C	Advanced Topics	1-6
EXPH 691D	Advanced topics	1-6
EXPH 691E	Advanced Topics	1-6
EXPH 691F	Advanced Topics	1-6
EXPH 696	Graduate Seminar	1
EXPH 693C	Special Topics	1-6
PSIO 743	Fundamentals of Physiology	5
STAT 511	Statistical Methods 1	3

## 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

STAT 511	Statistical Methods 1	3
AGBI 514	Animal Biotechnology	4
EXPH 567	Exercise Physiology 2	4
EXPH 682	Research Design and Methods	4
EXPH 697	Research	1-15
EXPH 698	Thesis	1-6
EXPH 786	Musculoskeletal Biology	3
EXPH 799	Graduate Colloquium	1-6
EXPH 787	Cardiopulmonary Physiology	3
PSIO 743	Fundamentals of Physiology	5

## 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.

EXPH 786	Musculoskeletal Biology	3
EXPH 787	Cardiopulmonary Physiology	3
EXPH 797	Research	1-15
EXPH 798	Dissertation	1-3
Electives		3-6
EXPH 799	Graduate Colloquium	1-6

## Immunology and Medical Microbiology

### Introduction

Every day of our lives, we are exposed to microbes such as bacteria, viruses, and parasites. For the most part we suffer no disease or symptoms from these organisms, and they often go un-noticed. The single system in the body that allows life to continue in the face of these assaults is the immune

system. The immune system is the network of cells and their biological processes that enable the body to recognize diseased cells or the invasion by microorganisms (bacteria, viruses, parasites, and prions) and eliminate them. The scientific discipline called Immunology is the study of this system, and Medical Microbiology is the study of the disease states induced by the invasion of microorganisms. Collectively, these two disciplines address how humans and other mammals respond to infectious disease. These scientific disciplines have become the cornerstone for many industries - including the biotechnology, pharmaceutical and medical and public health industries. These are all areas of particular emphasis and are being targeted for further development in West Virginia.

## Educational Objectives

The Bachelor of Science degree in Immunology and Medical Microbiology will prepare students from diverse backgrounds to serve as professionals that are knowledgeable about the immune system of humans and other mammals, how the immune system functions, and the consequences of its malfunction on the health of the host. Knowledge of the immune system will be fully integrated with an excellent understanding of the diversity of microorganisms that cause disease in humans and other mammals and mechanisms of disease pathogenesis. Graduates will possess the laboratory skills and knowledge needed to assess the functional status of the immune system and to safely cultivate and identify microorganisms that cause disease in mammals. Graduates will be qualified to pursue several professional career paths in private industry, state and federal government, and academic institutions. The degree can also provide a strong foundation to progress to advanced studies leading to a Masters or professional degree.

## Relationship of the Objectives to the Mission of WVU

The Bachelor of Science degree in Immunology and Medical Microbiology directly fulfills many of the stated objectives in the Strategic Plan for WVU, the WVU Health Sciences Center and the WVU School of Medicine. It will be a financially viable, new, innovative and dynamic educational program that provides a unique opportunity to earn a degree in Immunology and Medical Microbiology for both in-state and out-of-state undergraduate students. Its learner centered curriculum will integrate both classroom and hands-on laboratory experiences. Graduates of the program will provide the state of West Virginia with a well-trained healthcare and research workforce who have the education and experience to work in a variety of occupations that require knowledge in immunology, medical microbiology and related disciplines.

## FACULTY

### CHAIR

- John. B. Barnett - Ph.D.  
Immunotoxicology

### PROFESSORS

- Christopher F. Cuff - Ph.D.  
Mucosal Immunology, Microbiome
- Thomas Elliott - Ph.D.  
Bacterial Genetics
- Kenneth S. Landreth - Ph.D.  
Developmental Immunology

### ASSOCIATE PROFESSORS

- Slawomir Lukomski - Ph.D.  
Bacterial Pathogenesis and Nanodiagnosics
- Joan Olson - Ph.D.  
Bacterial-host interaction
- Rosana Schafer - Ph.D.  
Immune-Endocrine Interactions
- James M. Sheil - Ph.D.

### ASSISTANT PROFESSORS

- Kathy Brundage - Ph.D.  
Technical Director of Flow Cytometry Core Facility
- Ivan Martinez - Ph.D.  
Non-coding RNAs and oncogenic viruses
- Valerie Watson - M.S.

## Admission Requirements:

Applicants must fulfill all requirements for admission to WVU and the IMMB program:

- ACT Math score of 26, or SAT Math score of 600, or place into Chemistry 115
- High school GPA of # 3.75
- Complete admissions information at <http://admissions.wvu.edu/admissions/university-requirements>

## GENERAL EDUCATION CURRICULUM

Please use this link to view a list of courses that meet each GEC requirement. ([http://registrar.wvu.edu/current\\_students/general\\_education\\_curriculum](http://registrar.wvu.edu/current_students/general_education_curriculum))

NOTE: Some major requirements will fulfill specific GEC requirements. Please see the curriculum requirements listed below for details on which GECs you will need to select.

### General Education Curriculum

ENGL 101 & ENGL 102 or ENGL 103	Composition And Rhetoric and Composition And Rhetoric Accelerated Academic Writing	3-6
GEC 2A - Mathematics		3-4
GEC 2B - Natural and Physical Science		7-8
GEC 2C - Additional GEC 2A, B or C		3
GEC 3 - The Past and Its Traditions		3
GEC 4 - Issues of Contemporary Society		3
GEC 5 - Artistic Expression		3
GEC 6 - The Individual in Society		3
GEC 6F - First Year Seminar		1-3
GEC 7 - American Culture		3
GEC 8 - Western Culture		3
GEC 9 - Non-Western Culture		3
Total Hours		38-45

## Curriculum Requirements

GEC electives 3-9		18
ENGL 101	Composition And Rhetoric	3
ENGL 102	Composition And Rhetoric	3
WVUE 191	First Year Seminar	1
AEM 341	General Microbiology	4
BIOC 339	Intro To Biochemistry	4
BIOL 115	Principles of Biology	4
BIOL 117	Introductory Physiology	4
BIOL 219	The Living Cell	4
BIOL 324	Molecular Genetics	3
CHEM 115 or CHEM 117	Fundamentals of Chemistry Principles of Chemistry	4
CHEM 116 or CHEM 118	Fundamentals of Chemistry Principles of Chemistry	4
CHEM 233	Organic Chemistry	3
CHEM 234	Organic Chemistry	3
CHEM 235	Organic Chemistry Laboratory	1
CHEM 236	Organic Chemistry Laboratory	1
Select one of the following:		3-4
MATH 126A	College Algebra 5-Day	
MATH 129	Pre-Calculus Mathematics	
MATH 155 or MATH 153	Calculus 1 * has pre-requisites, consult Math dept Calculus 1a with Precalculus	

Select one of the following:		3-4
MATH 150	Applied Calculus	
MATH 155	Calculus 1	
MATH 156	Calculus 2 *has pre-requisites, consult Math dept	
or MATH 154	Calculus 1b with Precalculus	
PHYS 101	Introductory Physics	4
or PHYS 111	General Physics	
PHYS 102	Introductory Physics	4
or PHYS 112	General Physics	
STAT 215	Intro Probability & Statistics	3
or STAT 205	Intro Probability/Stat Infernc	
IMMB 150	Microbiology Colloquium 1	2
IMMB 200	Immunology Colloquium 1	2
IMMB 250	Microbiology Colloquium 2	2
IMMB 300	Immunology Colloquium 2	2
IMMB 301	Basic Medical Microbiology	4
IMMB 302	Principles of Immunobiology	3
IMMB 310	Bacterial Pathogenesis	4
IMMB 320	Cellular Immunobiology	3
IMMB 350	Microbiology Colloquium 3	2
IMMB 400	Senior Colloquium 1	1
IMMB 405	Scientific Integrity	1
IMMB 410	Mlcrobial Genetics	3
IMMB 420	Molecular Immunobiology	5
IMMB 494	Seminar	1
IMMB 450	Senior Collquium 2	1
IMMB 460	Contemporary Issues for Majors	3
IMMB 496	Senior Thesis	1-3
IMMB 470	Medical Virology	3
Select at least ONE from the following IMMB approved Electives		2-4
AEM 401	Environmental Microbiology	
AEM 408	Applied Water Microbiology	
AEM 445 & AEM 449	Food Microbiology and Food Microbiology Lab	
BIOL 310	Adv Cellular/Molecular Biology	
PATH 310	Clinical Laboratory Mycology	
IMMB 327	Parasitology	
IMMB 491	Professional Field Experience	

Total Hours

126-132

## Suggested Plan of Study

### First Year

Fall	Hours Spring	Hours
ENGL 101	3 ENGL 102	3
Select one of the following	3-4 Select one of the following	3-4
MATH 126A	MATH 150	
MATH 129	MATH 155	
MATH 155 or 153	MATH 156 or 154	
Select one of the following:	4 Select one of the following:	4
CHEM 115	CHEM 116	
CHEM 117	CHEM 118	
WVUE 191	1 IMMB 150	2

BIOL 115	4 BIOL 117	4
	<b>15-16</b>	<b>16-17</b>
<b>Second Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CHEM 233	3 CHEM 234	3
CHEM 235	1 CHEM 236	1
BIOL 219	4 IMMB 250	2
IMMB 200	2 AEM 341	4
GEC 2B Requirement	4 GEC 2B Requirement	4
Select one of the following:	Select one of the following:	
PHYS 101	PHYS 102	
PHYS 111	PHYS 112	
GEC Objective from 3, 4, 5, 6, 7, 8, 9	3 GEC Objective from 3, 4, 5, 6, 7, 8, 9	3
	<b>17</b>	<b>17</b>
<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
BIOC 339	4 BIOL 324	3
IMMB 300	2 IMMB 310	4
IMMB 301	4 IMMB 320	3
IMMB 302	3 IMMB 350	2
GEC Objective from 3, 4, 5, 6, 7, 8, 9	3 GEC Objectives from 3, 4, 5, 6, 7, 8, 9	6
	<b>16</b>	<b>18</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
Select one of the following:	3 IMMB 450	1
STAT 215	IMMB 460	3
STAT 205	IMMB 470	3
IMMB 400	1 IMMB 496	1-3
IMMB 405	1 Elective (IMMB approved)	2-4
IMMB 410	3	
IMMB 420	5	
IMMB 494	1	
GEC Objective 3, 4, 5, 6, 7, 8, 9,	3	
	<b>17</b>	<b>10-14</b>

Total credit hours: 126-132

## 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).

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## 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 S. Landreth - Ph.D. (University of Washington)
- Rajesh Naz - Ph.D. (All India Institute of Medical Sciences, New Dehli)
- Vazhaikurichi 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](mailto:wvuadmissions@mail.wvu.edu)

The admissions application is available here:

[https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantConnectLogin.asp?id=wwugrad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=wwugrad)

## 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/Respirat 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

## 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.

MICB 790	Teaching Practicum	1-3
At least two additional Advanced courses		
Required each semester beginning in Year 2:		
MICB 785	Immunol Micro Journal Club	1-2
MICB 796	Graduate Seminar	1
MICB 797	Research	1-15

## 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.

# Medical Laboratory Science

## DEGREE OFFERED

- Bachelor of Science in Medical Laboratory Science

## The Degree Program

The B.S. in medical laboratory science has two areas of emphasis: Clinical laboratory science (<http://www.hsc.wvu.edu/medsci>) and Histotechnology (<http://www.hsc.wvu.edu/histotech>). Clinical laboratory scientists are healthcare professionals educated in all aspects of clinical laboratory analysis, including test development, performance, and evaluation. Clinical laboratory scientists may work in many areas, including clinical chemistry, hematology, immunohematology, immunology, clinical microbiology, and molecular diagnostics.

Histotechnologists are healthcare professionals who are qualified through academic and applied science education and training to provide service, research, and management in histotechnology and areas related to anatomic pathology. Histotechnologists are integral to the success of the anatomic pathology department by performing routine and complex procedures to preserve and process tissue specimens for examination and diagnosis by a pathologist.

Practice settings for clinical laboratory scientists and histotechnologists include hospital, clinic, public health, or private clinical laboratories; research, cytogenetic, pharmaceutical, or in-vitro fertilization laboratories; technical or sales representatives for medical manufacturers and suppliers; biotechnology, food, and cosmetic industries; and state or federal crime laboratories.

## Nature of Program

Students are admitted into either the clinical laboratory science or the histotechnology area of emphasis within the medical laboratory science division after completing the pre-requisite courses at an accredited college or university. As students complete the pre-requisite courses, they may apply to the medical laboratory science area(s) of emphasis typically during the sophomore year.

Within both areas of emphasis, the junior year (the first year of the professional curriculum) includes core and area-specific courses to introduce the student to the medical sciences and to prepare for the senior year curriculum. During the senior year (the second year of the professional curriculum),

the student receives both didactic instruction and practical experience. Students receive practical experience at one or more of the affiliated hospital laboratories including:

- Ruby Memorial Hospital, Morgantown, WV
- Monongalia County General Hospital, Morgantown, WV
- West Penn Allegheny Health System, Pittsburgh, PA
- WVU Eastern Division which includes City Hospital, Martinsburg, WV and Jefferson Memorial Hospital, Ranson, WV
- Veterans Affairs Medical Center, Martinsburg, WV
- Excela Health which includes Westmoreland Hospital in Greensburg, PA and Latrobe Hospital in Latrobe, PA
- Charleston Area Medical Center, Charleston, WV
- United Hospital Center, Clarksburg, WV
- St. Clair Hospital, Pittsburgh, PA

Students must provide their own transportation and housing during the clinical rotations. Students assigned to the Eastern Division will participate in the rural rotation activities at this site.

The WVU medical laboratory science areas of emphasis in clinical laboratory science and histotechnology are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, and (773) 714-8880. Graduates of the clinical laboratory science program and the histotechnology program are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

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## **FACULTY**

### **PROFESSOR AND MLS DIVISION DIRECTOR**

- Beverly Kirby - Ed.D. (West Virginia University)  
Professor and Medical Laboratory Science Division Director

### **HTL PROGRAM DIRECTOR**

- Kimberly Feaster - B.S. (University of Findlay)

### **ASSOCIATE PROFESSOR AND CLS MEDICAL DIRECTOR**

- Peter L. Perrotta - M.D. (Pennsylvania State University)

### **ASSISTANT PROFESSOR AND HTL MEDICAL DIRECTOR**

- Olukemi Esan - M.D. (West Virginia University)

### **ASSOCIATE PROFESSORS**

- Abra Elkins - M.S.
- Kerry Harbert - M.A.,M.T.

### **ASSISTANT PROFESSOR**

- Linda Corum - MS

### **CLINICAL INSTRUCTOR**

- Jane Wade

## **Admission to the Pre-Medical Laboratory Science Major**

Students in the pre-medical laboratory science major and direct admit students must meet the admission criteria of WVU. Pre-medical laboratory science students are advised by the University College. Medical laboratory science faculty advise direct admit students. Prospective students are advised to take mathematics, chemistry, and biology in high school.

Qualified applicants may enter the pre-medical laboratory science major at the beginning of any semester, however the professional curriculum begins the fall semester after the student is admitted to either the clinical laboratory science or histotechnology area of emphasis. Admission to the pre-medical laboratory science major does not ensure admission to the medical laboratory science areas of emphasis in clinical laboratory science or histotechnology.

Pre-medical laboratory science students apply for admission into the junior year (first year in the MLS area of emphasis professional curriculum) before the second semester of the sophomore year in college. Fulfillment of the pre-medical laboratory science curriculum does not ensure admittance into either the clinical laboratory science or the histotechnology area of emphasis.

## PRE-REQUISITES

<b>English</b>		3-6
ENGL 101 & ENGL 102 or ENGL 103	Composition And Rhetoric and Composition And Rhetoric Accelerated Academic Writing	
<b>Biology</b>		8
BIOL 101 & BIOL 103 or BIOL 115	General Biology and General Biology Laboratory Principles of Biology	4
BIOL 102 & BIOL 104 or BIOL 117	General Biology and General Biology Laboratory Introductory Physiology	4
<b>Chemistry</b>		
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory	4
<b>Mathematics (One of the following):</b>		3
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
MATH 126C	College Algebra 3-Day	
<b>Statistics</b>		3
STAT 211 or ECON 225	Elemntry Statistical Inference Elemntry Busness/Economcs Stat	3
<b>GEC</b>		22-24
Credits to satisfy objectives 3,5-9.		
<b>Total Hours</b>		<b>66-71</b>

\* CHEM 231 Organic Chemistry: Brief Course may be substituted for CHEM 233/235 and CHEM 234/236, however two semesters of organic chemistry are strongly recommended to better prepare for the professional curriculum.

Although not required for admission to the medical laboratory science areas of emphasis in clinical laboratory science and histotechnology, eight credits of organic chemistry, eight credits of physics, cell biology, and six credits of social sciences are suggested electives for those students interested in applying to medical, dental, or other graduate programs. In addition, a foreign language is recommended for students who plan to do graduate work.

Admission decisions are based upon the applicant's grade point average, recommendations, interview, and documented ability to successfully complete full-time academic work. Applicants should have a minimum grade point average of 2.5 (cumulative and science). Applicants may be admitted on probation if their GPA (cumulative or science) is less than 2.5. Applicants with less than a 2.0 GPA, either cumulative or science, will not be admitted. A GPA of 2.5 or above does not necessarily ensure admission. Two letters of recommendation are required; at least one must be from a college science professor. A personal interview with the Medical Laboratory Science Admissions Committee is required. Admission of international students is in compliance with WVU regulations.

## APPLICATION PROCEDURE

Each year the medical laboratory science division selects a limited number of applicants from the applications received for admission to the area of emphasis in clinical laboratory science and histotechnology. Application for admission to the medical laboratory science's areas of emphasis is available online after December 1 at: [http://admissions.wvu.edu/admissions/hsc\\_applicants](http://admissions.wvu.edu/admissions/hsc_applicants)

There is an application fee for residents and non-residents. The priority date for completing applications is February 15. The deadline is March 1 if the applicant expects to enter the program the following fall semester. If the class is not filled by those applications, the deadline may be extended until August.

## GENERAL EDUCATION CURRICULUM

Please use this link to view a list of courses that meet each GEC requirement. ([http://registrar.wvu.edu/current\\_students/general\\_education\\_curriculum](http://registrar.wvu.edu/current_students/general_education_curriculum))

NOTE: Some major requirements will fulfill specific GEC requirements. Please see the curriculum requirements listed below for details on which GECs you will need to select.

### General Education Curriculum

ENGL 101 & ENGL 102 or ENGL 103	Composition And Rhetoric and Composition And Rhetoric Accelerated Academic Writing	3-6
GEC 2A - Mathematics		3-4
GEC 2B - Natural and Physical Science		7-8
GEC 2C - Additional GEC 2A, B or C		3
GEC 3 - The Past and Its Traditions		3
GEC 4 - Issues of Contemporary Society		3
GEC 5 - Artistic Expression		3
GEC 6 - The Individual in Society		3
GEC 6F - First Year Seminar		1-3
GEC 7 - American Culture		3
GEC 8 - Western Culture		3
GEC 9 - Non-Western Culture		3
Total Hours		38-45

## Pre-Medical Laboratory Sciences Suggested Plan of Study

### First Year

Fall	Hours Spring	Hours
CHEM 115	4 CHEM 116	4
Select one of the following:	3 ENGL 101	3
MATH 126A	Select one of the following:	4
MATH 126B	BIOL 102 & BIOL 104	
MATH 126C	BIOL 117	
Select one of the following:	4 GEC	3
BIOL 101 & BIOL 103	PATH 101 ( (Graded Pass/Fail))**	1
BIOL 115		
GEC	4	
PATH 100 (Graded Pass/Fail)**	1	
	<b>16</b>	<b>15</b>

### Second Year

Fall	Hours Spring	Hours
ENGL 102	3 CHEM 234 & CHEM 236	4
STAT 211 or ECON 225	3 PATH 200**	3
CHEM 233 & CHEM 235*	4 GEC	9
GEC	6	
PATH 201 (Graded Pass/Fail)**	1	
	<b>17</b>	<b>16</b>

Total credit hours: 64

- \* CHEM 231 Organic Chemistry: Brief Course may be substituted for CHEM 233/235 and CHEM 234/236, however two semesters of organic chemistry are strongly recommended to prepare for the professional curriculum.
- \*\* PATH 100, PATH 101, PATH 200, and PATH 201 are required for Direct Admit students and highly recommended for Pre-Medical Laboratory Science students.

**Required Core Curriculum for Medical Laboratory Science Major**

MICB 323	Medical Microbiology/Lab	5
PATH 300	Introduction to Pathology	3
PATH 303	Clinical Lab Applications	2
PATH 320	Basic Clinical Biochemistry	3
PATH 380	Introduction to Immunology	1
PATH 381	Rsrch/Educational Methodology	2
PATH 403	Community Service Practicum	1
PATH 465	Medical Laboratory Management	2
PATH 475	Medical Relevance - Capstone	3
PSIO 441	Mechanisms Body Function	4
Total Hours		26

**Required Courses for Clinical Laboratory Science Area of Emphasis**

PATH 310	Clinical Laboratory Mycology	1
PATH 329	Clinical Chemistry 1	2
PATH 340	Introduction to Hematology	3
PATH 401	Phlebotomy	1
PATH 420	Immunology and Blood Banking	3
PATH 421	Immunoematlgy/Blood Bank Lab	3
PATH 430	Clinical Chemistry 2	3
PATH 431	Clinical Chemistry Laboratory	3
PATH 440	Clinical Hematology	3
PATH 441	Clinical Hematology Laboratory	3
PATH 450	Clinical Microbiology	3
PATH 451	Clinical Microbiology Lab	3
PATH 470	Clinical Microscopy	1
PATH 472	Urinalysis and Body Fluids Lab	1
PATH 480	Clinical Immunology	2
PATH 481	Clinical Immunology Laboratory	1
Total Hours		36

**Required Courses for Histotechnology Area of Emphasis**

NBAN 205	Introduction to Human Anatomy	3
NBAN 206	Human Anatomy Laboratory	1
PATH 200	Medical Terminology	3
PATH 304	Histotechnology Microanatomy	3
PATH 305	Staining Techniques 1	4
PATH 306	Histotechnique 1	3
PATH 405	Staining Techniques 2	4
PATH 406	Histotechnique 2	3
PATH 407	Histology Laboratory	8
PATH 408	Histotechnologist Practicum	10
Total Hours		42

## Graduation Requirements

### JUNIOR YEAR

Students must maintain a minimum grade point average of 2.0 throughout the program. Failure to maintain at least a 2.0 GPA may result in disciplinary sanctions. The Academic and Professional Standards Committee must recommend any student for advancement to the senior year. A satisfactory GPA does not ensure advancement.

### SENIOR YEAR

Students receive didactic and clinical instruction during the senior year which includes summer, fall, and spring semesters. Students must maintain a minimum grade point average of 2.0 for each semester of the senior year. Graduation requires satisfactory completion of all academic work and the recommendation of the faculty of the School of Medicine. All first degree students are required to complete a total of 125 semester hours for the BS in MLS degree. Any competencies not completed must be made up by the end of the school year (mid-May) or graduation may be delayed. Graduation is not dependent upon passing a national certification examination.

## 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.

Interruption 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

BMP 741	Clinical Clerkship:Psychiatry	6
CCMD 712	Public Health	3
CCMD 721	Physcl Diagnos/Clincl Intgrt 2	4
CCMD 722	Physcl Diagnos/Clincl Intgrt 2	5
CCMD 725	Health Care Ethics	2
CCMD 730	Human Function	16
CCMD 740	Behavioral Sci/Psychopathlgy	4
CCMD 745	Physcl Diagnos/Clincl Intgrt 1	3
CCMD 746	Physcl Diagnos/Clincl Intgrt	4
CCMD 775	Neurobiology	7
CCMD 776	Step-One Board Preparation	3
CCMD 777	Step-2 Board Prep	2
CCMD 778	Basis Medical Science Exam	2
CCMD 779	Clinical Performance Exam	1
CCMD 780	Hospital Care	4
CCMD 781	Rural Health	4
CCMD 782	Critical Care	4
CCMD 788 Elective Requirement		20
CCMD 788	Selective Experiences-Medicine	3
FMED 731	Clerkship	8
MED 731	Clerkship Med Yr Course	8
MICB 801	Immunity/Infection and Disease	9
NBAN 801	Human Structure	19
NEUR 741	Clinical Clerkship Neurology	2
OBST 741	Clin Clerk-Obstetrcs/Gynecolgy	8
PATH 801	Mechanisms of Human Disease	11
PCOL 801	Medical Pharmacology	9
PEDI 731	Clinical Clerkship-Pediatrics	8
SURG 741	Clin Clerk Surg Yr Cours	8
Total Hours		187

## 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

### First Year

Fall	Hours Spring	Hours Summer	Hours
CCMD 712	3 CCMD 746	4 CCMD 788	3
CCMD 730	16 CCMD 775	7	
CCMD 745	3 NBAN 801	19	
	<b>22</b>	<b>30</b>	<b>3</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
CCMD 721	4 CCMD 722	5 CCMD 776	3
CCMD 740	4 CCMD 725	2	
MICB 801	9 CCMD 778	2	
PATH 801	11 MICB 801 is a year long course		
PCOL 801	9 PATH 801 is a year long course		

PCOL 801 is a  
year long course

37 9 3

### Third Year

Fall	Hours Spring	Hours Summer	Hours
FMED 731	8 BMP 741	6 SURG 741	8
MED 731	8 NEUR 741	2	
OBST 741	8 PEDI 731	8	
	24	16	8

### Fourth Year

#### Hours

CCMD 777	2
CCMD 779	1
CCMD 780	4
CCMD 781	4
CCMD 782	4
Elective	20
Requirement	

35

Total credit hours: 187

## 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/>

*Sensory Neuroscience:* mechanisms of auditory and visual system development, inhibitory neural circuits in the brain stem and cortex, synaptic development of thalamocortical circuits, molecular genetic control of retinal development and neural patterning, cell biology of G-protein-mediated signal transduction in vertebrate photoreceptors, olfactory signal processing in the brain, post-translational modification of proteins and protein assembly.

*Cognitive Neuroscience:* sound recognition, spatial hearing and sensory integration using fMRI, use-dependent plasticity in motor cortex after stroke, neurogenic communication disorders.

*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.

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## 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..

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/Respirat 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

## 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.

Required each semester beginning Year 2

NBAN 793	Special Topics
NBAN 795	Independent Study
NBAN 796	Graduate Seminar
NBAN 797	Research

## 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.

# Division of 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) (<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.

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## FACULTY

### CHAIR

- Randy P. McCombie - Ph.D., OTR/L (Loyola University of Chicago)  
Associate Professor - Chair, Program Director

### ASSOCIATE PROFESSORS

- Anne Cronin - Ph.D., OTR/L, FAOTA (University of Florida)  
Associate Professor
- Steve Wheeler - Ph.D., OTR/L (Virginia Commonwealth University)  
Associate Professor

### ASSISTANT PROFESSORS

- Amanda Acord-Vira - MOT, OTR/L (West Virginia University)  
Assistant Professor
- Amanda Kessler - M.S., OTR/L (West Virginia University)  
Assistant Professor - Fieldwork Coordinator
- Amy Burt - MOT, OTR/L (University of Pittsburgh)  
Assistant Professor
- Brandy Brown - OTD, OTR/L (Chatham University)
- Diana Davis - M.A., OTR/L (West Virginia University)  
Assistant Professor
- Donna Colaianni - Ph.D., OTR/L, CHT (Duquesne University)  
Assistant Professor
- Garth Graebe - MOT, OTR/L (West Virginia University)  
Assistant Professor

## 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](http://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>.

Note: The following list of prerequisite courses requirements is subject to change without notice.

ENGL 101	Composition And Rhetoric	3
ENGL 102	Composition And Rhetoric	3
PSYC 101	Introduction to Psychology	3
PSYC 241	Intro to Human Development	3
PSYC 281	Intro to Abnormal Psychology	3
SOCA 101	Introduction to Sociology (OR)	3
OR		
SOCA 105	Introduction to Anthropology	3
BIOL 101	General Biology	3
BIOL 103	General Biology Laboratory	1
BIOL 102	General Biology	3
BIOL 104	General Biology Laboratory	1
PHYS 101	Introductory Physics	4
STAT 211	Elemntry Statistical Inference	3
COMM 100	Principles-Human Communication	1
COMM 102	Human Comm-Interprsnl Context	2
PSIO 241	Elementary Physiology	4
OR		
PSIO 441	Mechanisms Body Function	4
OTH 201	Medical Terminology for OT	1

\*Check for prerequisites for PHYS 101, PSIO 241, and STAT 211 by checking the department course offerings in the catalog.

Fulfillment of WVU's General Education Curriculum (GEC) are not covered by the above. It is the student's responsibility to complete all WVU GEC requirements prior to starting the OT Program. Applicants must complete all of the WVU General Education and all OT Prerequisite requirements (by June 1) prior to starting the OT Program.

(See the WVU Undergraduate Catalog)

These include one three-credit course in each of the following (GEC) objectives: 3, 5, 8, and 9, - plus the one-credit university orientation.

Note: Applicants holding a bachelor's degree from an accredited institution are exempt from the GEC requirement.

WVU students must consult the university college prior to enrolling in prerequisite courses. These courses may also be taken at any institution which offers equivalent courses. Any questions regarding pre-requisite courses may be directed to the university college, (304) 293-5805, and/or the Division of Occupational Therapy (304) 293-8828. Equivalence may be determined by contacting the Transfer Desk, Admissions Office, West Virginia University, P.O. Box 6009, Morgantown, WV 26506-6009.

Students are awarded a Bachelor of Arts degree in Human Performance and Health at the end of the senior year (year two in the OT program). In order to receive this degree, students must have successfully completed a minimum total of 128 hours of college credits, including completion of WVU's GEC requirements. To achieve this, the student typically completes 40 hours of OT prerequisite coursework, 12 hours of GEC coursework (not covered by OT prerequisites) one hour of University Orientation and 77 hours of undergraduate OT coursework, a total of 130 hours. It is the student's responsibility to insure sufficient approved hours of coursework are completed in order to fulfill the requirements for awarding the Bachelor's degree. It is the student's responsibility to insure all prerequisite coursework and GEC courses are completed prior to starting the OT program. The master of Occupational Therapy (MOT) degree is awarded upon completion of all required graduate work (typically the end of the third year in the OT program). The total number of credit hours of graduate OT work (including both academic and clinical fieldwork) is 38-41 hours, allowing for elective courses.

## OCCUPATIONAL 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

OTH 301	Professional Foundations	3
OTH 493I	SPTP:Anatomy/Kinesiology-OT	1-6
OTH 303	Functnl Movmnt Across Lifespan	2
OTH 304	Phys Impairment & Function 1	4
OTH 307	Neurobiologic Foundations	4
OTH 308	Evaluation Procedures	3
OTH 321	Developmental Life Tasks	3
OTH 360	Research Methods in OT	3
OTH 384	Level 1 Fieldwork 1	1,2
OTH 386	Level 1 Fieldwork 3	1,2
OTH 401	Physical Impairment/Fxn 2	4
OTH 405	Upper Extremity Rehabilitation	4
OTH 408	Tests/Measures-Occupatnl Thrpy	3
OTH 416	Professional Decision-Making	2
OTH 417	Occupationl Therapy-Geriatrics	3
OTH 419	Professional Values	3
OTH 430	Occupatnl Therapy-Mental Hlth	3
OTH 432	OT Interventions-Mental Health	3
OTH 435	Therapeutic Activity	3
OTH 440	Cognition and Perception in OT	2
OTH 480	Current Topics-Occupatnl Thrpy (2 Separate Classes)	1-3
OTH 497	Research:Capstone (2 classes (YrII Fall, Yr II Spr))	2
OTH 310	Critical Reasoning in OT	3
OTH 387	Level 1 Fieldwork 4	1,2
OTH 493G	Special Topics	1-6
OTH 493H	Special Topics	1-6
OTH 493J	SPTP:Principles-Occ Science	1-6
Total Hours		65-90

### Graduate Courses

OTH 500	Health Care Issues in OT	3
OTH 501	Management for OT Practice	4
OTH 503	Occupationl Therapy-Pediatrics	3
OTH 520	OT in the Work Environment	3
OTH 540	Level 2 Fieldwork 1	1-6

OTH 550	Education in OT Practice	3
OTH 551	OT in Prevention & Wellness	3
OTH 570	Advanced Theory in OT	3
OTH 594	Sem: Professional Development	1
OTH 640	Level 2 Fieldwork 2	1-6
OTH 697	Research ((Yr III Fall 2 credits, Spr 2 credits))	2-4

Total Hours 27-39

## 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	Hours
OTH 301	3
OTH 493I	1-6
	<b>4-9</b>

### Third Year

Fall	Hours Spring	Hours
OTH 303	2 OTH 307	4
OTH 304	4 OTH 308	3
OTH 360	3 OTH 310	3
OTH 435	3 OTH 321	3
OTH 493G	1 OTH 480	1
OTH 493J	3 OTH 493A (Foundations Cog & Perc)	1
	OTH 384	2
<b>16</b>	<b>17</b>	

### Fourth Year

Summer	Hours Fall	Hours Spring	Hours
undefined	OTH 401	4 OTH 386	2
	OTH 417	3 OTH 405	4
	OTH 430	3 OTH 408	3
	OTH 440	2 OTH 416	2
	OTH 497	1 OTH 419	3
	OTH 493H	2 OTH 432	3
	OTH 387	2 OTH 480	1
		OTH 497	1
	<b>0</b>	<b>17</b>	<b>19</b>

### Fifth Year

Summer	Hours Fall	Hours Spring	Hours
OTH 540	1-6 OTH 500	3 Weeks 1-4	
	OTH 503	3 OTH 501	4
	OTH 520	3 OTH 550	3
	OTH 551	3 OTH 594	1
	OTH 570	3 OTH 697	2
	OTH 697	2 Weeks 5-16	
		OTH 640	6
	<b>1-6</b>	<b>17</b>	<b>16</b>

Total credit hours: 107-117

## 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

- Vernard Adams - M.D.

### 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

Requirement	Description
College Prep	Baccalaureate Degree*
Pre-requisite Courses	8 Hr. Biology with laboratory
Pre-requisite Courses	8 Hr. College Chemistry with lab
Pre-requisite Courses	4 Hr. CHEM 231, Organic Chemistry: Brief course or 4 Hr.
Pre-requisite Courses	Biochemistry with laboratory or equivalent
Pre-requisite Courses	4 Hr. Microbiology with laboratory
Grade Point Average preferred	3.0 cumulative
Grade Point Average preferred	3.0 in the pre-requisite courses
Recommendations**	Two letters of recommendation
Interview**	A personal interview with the Pathologists' Assistant Program Admission Committee

## 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

Fall	Hours Spring	Hours Summer	Hours
PATH 610	1 PATH 603	6 PATH 801	11
MICB 702	5 PATH 625	4	
PSIO 743	5 PATH 728	5	
PATH 620	2 FIS 493B	3	
PATH 465	2		
PATH 605	2		
	<b>17</b>	<b>18</b>	<b>11</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
PATH 629	7 PATH 627	9 PATH 628	9
PATH 631	2 PATH 630	2	
	<b>9</b>	<b>11</b>	<b>9</b>

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.

## Division of 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 and Pediatric PT

### PROFESSORS

- John J. Petronis - M.S. (West Virginia University)  
Orthopedic Physical Therapy
- Bill Stauber - Ph.D. (Rutgers University)  
Electrotherapy, Muscle Physiology
- Anne Swisher - Ph.D. (West Virginia University)  
Cardiopulmonary PT, Oncology

### ASSOCIATE PROFESSORS

- Duane Scott Davis - Ph.D. (West Virginia University)  
Orthopedic Physical Therapy
- Mia Erickson - Ed.D. (West Virginia University)  
Education, Professional Roles, Hand Therapy
- Dina Jones - Ph.D. (University of Pittsburgh)  
Public Health, Arthritic disease
- Corrie Mancinelli - Ph.D. (West Virginia University)  
Anatomy and Orthopedic Physical Therapy
- Ralph Utzman - M.P.H. (West Virginia University)  
Health Policy, Professional Roles

### ASSISTANT PROFESSORS

- Kimeran Evans - D.P.T. (Virginia Commonwealth University)  
Clinical Education; General Physical Therapy Practice
- Valeriya Gritsenko - PhD. (University of Alberta, Edmonton, AB, Canada)  
Neurosciences, Motor Control
- Teresa Rice - P.R. N.C.S. (West Virginia University)  
Neurorehabilitation
- Krystal Thomas-Whetsel - D.P.T. (West Virginia University)  
Women's Health Physical Therapy
- Carol Waggy - Ph.D. (West Virginia University)  
Anatomy and Hand Physical Therapy

## 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:

Pre-requisite Courses	WVU Course Number
Biology with lab (8 hours)	BIOL101/103, 102/104
Chemistry with lab (8 hours)	CHEM 115, 116
Physics with lab (8 hours)	PHYS 101, 102
General psychology (3 hours)	PSYC 101
Developmental psychology (3 hours), should include development across the human lifespan	PSYC 241
Introductory statistics (3 hours), must include descriptive and inferential statistics	STAT 211 or ECON 225
Human anatomy (3 hours)*	ATTR 219 (recommended) or NBAN 205
Human physiology (3 hours)**	PSIO 241 or PSIO 441

\* 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](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](mailto: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.

PT 705	Intro to Evidence Based PT	2
PT 706	Advanced Clinical Anatomy	5
PT 711	Professional Roles 1	3
PT 713	Lifespan Functional Movement	2
PT 714	Clinical Sciences 1	4
PT 715	Evidence Based PT 1	2
PT 716	Kinesiologic Foundations	4
PT 718	Evaluation Procedures	3
PT 720	Clinical Education 1	1
PT 723	Developmental Life Tasks	3
PT 724	Exercise Foundations	3
PT 725	Evidence-Based Physicl Thrpy 2	3
PT 727	Neurobiologic Foundations	4
PT 728	Physical Therapy Procedures 1	4
PT 730	Clinical Education Symposium 1	1
PT 732	Physical Therapeutic Agents 1	2
PT 733	Cardiopulmonary PT	3
PT 734	Clinical Sciences 2	2
PT 738	Physical Therapy Procedures	3
PT 740	Clinical Education 2	1
PT 741	Professional Roles 2	4
PT 742	Physical Therapy Agents 2	2
PT 743	Geriatric Physical Therapy 1	2
PT 744	Clinical Sciences 3	2
PT 745	Evidence Based PT 3	2
PT 746	Orthopedic Physical Therapy 1	5
PT 754	Clinical Sciences 4	3
PT 755	Evidence Based PT 4	2
PT 756	Orthopedic Physical Therapy 2	3
PT 757	Neurologic Physical Therapy	3
PT 760	Clinical Education 3	8
PT 761	Professional Roles 3	3
PT 762	Health Care Issues in PT	2
PT 763	Pediatric Physical Therapy	3
PT 765	Evidence-Based PT 5	1
PT 767	Neurologic Physical Therapy 2	2
PT 768	Prosthetics and Orthotics 1	3

PT 770	Clinical Education Symposium 3	2
PT 771	Survey of Niche PT Practice	2
PT 780	Clinical Education 4	8
PT 795	Independent Study	1-6
PT 797	Research	1-15
Total Hours		119-138

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours Spring	Hours Summer	Hours
PT 705 (Pre-Fall)*	2 PT 724	3 PT 725	3
PT 706 (Pre-Fall)*	5 PT 720	1 PT 730	1
PT 711	3 PT 723	3 PT 732	2
PT 713	2 PT 727	4 PT 733	3
PT 714	4 PT 728	4 PT 734	2
PT 715	2 PT 738	3 PT 742	2
PT 716	4		
PT 718	3		
	<b>25</b>	<b>18</b>	<b>13</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
PT 740	1 PT 754	3 PT 760	8
PT 741	4 PT 755	2	
PT 743	2 PT 756	3	
PT 744	2 PT 757	3	
PT 745	2 PT 797	2	
PT 746	5		
	<b>16</b>	<b>13</b>	<b>8</b>

### Third Year

Fall	Hours Spring	Hours
PT 797	2 PT 770	2
PT 761	3 PT 780	8
PT 762	2	
PT 763	3	
PT 765	1	
PT 767	2	
PT 768	3	
PT 771	2	
	<b>18</b>	<b>10</b>

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.

# Health Sciences School of Nursing

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## 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](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

### DEAN

- Tara F. Hulse - Ph.D., RN, CNE, FAAN (University of South Carolina)  
Professor

### INTERIM ASSOCIATE DEAN FOR GRADUATE PRACTICE PROGRAMS

- 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 WVUH Evidence-Based Practice Research Professor

### ASSOCIATE DEAN FOR UNDERGRADUATE ACADEMIC AFFAIRS

- Elisabeth Shelton - Ph.D. (Widener University)  
Associate Professor

### ASSISTANT DEAN FOR STUDENT AND ALUMNI AFFAIRS

- Misti Woldemikael - MBA (Wheeling Jesuit University)

### CHAIR-MORGANTOWN DEPARTMENT

- Roger Carpenter - Ph.D. (West Virginia University)  
Clinical Assistant Professor

### VICE CHAIR - MORGANTOWN DEPARTMENT

- Susan Newfield - Ph.D. (University of Texas)  
Associate Professor
- Kari Sand-Jecklin - Ed.D. (West Virginia University)  
Associate Professor
- Martha Summers - DNP (West Virginia University)  
Clinical Assistant Professor

## FACULTY

### PROFESSORS

- Laurie Badzek - M.S. (West Virginia University)
- Joanne Duffy - Ph.D. (Catholic University of America)  
Interim Associate Dean for Research and PhD Programs, Endowed WVUH Evidence-Based Practice Research Professor
- Susan H. McCrone - Ph.D. (University of Utah)
- Georgia Narsavage - Ph.D. (University of Pennsylvania)
- Mary Jane Smith - Ph.D. (University of New York)

### ASSOCIATE PROFESSOR

- K. Joy Buck - Ph.D. (University of Virginia)

- Ilana Chertok - Ph.D. (Ben-Gurion University of the Negev)
- Pamela Deiriggi - Ph.D. (University of Texas)  
Coordinator PNP Track
- Barbara Kupchak - Ph.D. (University of Texas)
- Susan New#eld - Ph.D. (University of Texas)  
Vice Chair, Tenure Track
- Kari Sand-Jecklin - Ed.D. (West Virginia University)  
Vice Chair, Teaching Track
- Elisabeth Shelton - Ph.D. (Widener University)  
Associate Dean for Undergraduate Programs
- Laurie Theeke - Ph.D. (West Virginia University)

## **ASSISTANT PROFESSOR**

- Dottie Oakes - M.S.N. (Duke University)  
Director - Clinical Services
- Jennifer Mallow - PhD (West Virginia University)
- Taura Barr - Ph.D. (University of Pittsburgh)
- Susan Coyle - Ph.D. (West Virginia University)
- Stacey Culp - Ph.D. (University of Michigan)  
Research
- Patty Hermosilla - DNP (West Virginia University)
- 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

## **CLINICAL ASSISTANT PROFESSOR**

- Suzy Walter - Ph.D. (West Virginia University)
- Emily Brinker Barnes - D.N.P. (West Virginia University)
- Roger Carpenter - Ph.D. (West Virginia University)  
Chair, Morgantown Department
- Sandra Cotton - DNP, APRN, ANP-BC, FNAP (West Virginia University)  
Director - Faculty Practice
- Daniel J. DeFeo - M.S.N. (West Virginia University)
- Gina Maiocco - Ph.D. (University of Utah)
- Elizabeth A. Minchau - M.S.N. (University of Pittsburgh)
- Billie Murray - MSN (West Virginia University)
- Judith Polak - DNP (West Virginia University)  
Coordinator NNP Track
- Amy Sparks - PhD (West Virginia University)
- Martha Summers - DNP (West Virginia University)

## **SENIOR LECTURER**

- Lori Constantine - DNP (West Virginia University)
- Dana Friend - M.P.H. (West Virginia University)
- Kathy Linkous - M.S.N. (Bellarmine College)
- Patricia Joyce Maramba - D.N.P. (West Virginia University)
- Joanne E. Watson - M.S.N. (University of Virginia)
- Tina Antell-Keener - PhD (West Virginia University)
- Doris Burkey - MSN (University of Maryland)
- Stacy Huber - MSN (Waynesburg College)
- Diana L. McCarty - M.S.N. (West Virginia University)

## **LECTURERS**

- Stacy Peirce - MSN (Mashall University)

- Christy Barnhart - MSN (West Virginia University)
- Debbie Bellisario - B.S.N. (West Virginia University)
- Pear Bingham - MSN (Norwich University)
- Monique Bandy - MSN (West Virginia University)
- Abby Fisher - BSN (West Virginia University)
- Chelsea Hess - BSN (West Virginia University)
- Kelly Jenkins - D.N.P. (Duquesne University)
- Rebecca Kromar - N.D. (Case Western)
- Terri L. Marcischak - M.S.N. (West Virginia University)
- Amy Miner - M.S.N. (Waynesburg University)
- Christine Mott - M.S.N. (West Virginia University)
- Tonya Payerchin - M.S.N. (Waynesburg University)
- Trisha Petite - MSN (West Virginia University)
- April Shay - MSN (West Virginia University)
- Kevin Smith - MSN (Waynesburg College)
- Natalie Sypolt - BSN (West Virginia University)
- Kara Terhune - M.S.N. (Wilkes University)
- Melissa Teets - MSN (Wheeling Jesuit)
- Sharon Thralls - M.S.N. (Waynesburg University)
- Kimberly Wallace - B.S.N. (West Virginia University)
- Chain-Wen Wang - MSN (West Virginia University)
- Ashley Wilson - M.S.N. (West Virginia University)

### **CLINICAL INSTRUCTOR**

- Kendra Barker - MSN (West Virginia University)
- Dennelle Parker - M.S.N. (West Virginia University)
- Angel Smothers - M.S.N. (West Virginia University)
- Barbara Summers - M.S.N. (Marshall University)

### **VISITING CLINICAL ASSISTANT PROFESSOR**

- Carolyn Donovan - M.S.N. (West Virginia University)
- Lisa Hardman - D.N.P. (Rush University)

### **CHARLESTON DIVISION - ASSOCIATE PROFESSOR**

- Barbara Nunley - Ph.D. (University of Kentucky)
- Alvita Nathaniel - Ph.D. (West Virginia University)  
Interim Chair and Interim Associate Dean for Graduate Practice Programs, Coordinator FNP Track

### **CHARLESTON DIVISION - CLINICAL PROFESSOR**

- Marilyn Smith - Ph.D. (University of Tennessee)

### **CHARLESTON DIVISION - CLINICAL ASSISTANT PROFESSOR**

- Sheila Stephens - D.N.P. (University of Kentucky)
- Jerena Kelly - DNP (West Virginia University)

### **CHARLESTON DIVISION - SENIOR LECTURER**

- Chrystal Sheaves - MSN (West Virginia University)
- Kritsina Childers - MSN (Marshall University)

### **CHARLESTON DIVISION - LECTURER**

- Nancy Atkins - M.S.N. (Bellarmine Coll.)
- Barbara Koster - M.S.N. (WVU)
- Evelyn Martin - MSN (Marshall University)
- Teresa D. 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)
- Evelyn Klocke - Ed.D. (Marshall University)  
Chair-Department of Nursing
- Melanie Whelan - M.S.N. (West Virginia University)

## **WVU TECH DIVISION - SENIOR LECTURER**

- Barbara Douglas - M.S.N. (Wright St. University)
- Mindy Harris - M.S.N. (Marshall University)
- Robin Spencer - M.S.N. (Marshall University)

## **WVU TECH DIVISION - LECTURER**

- Kelli Kirk - M.S.N. (Mountain St. University)
- James Messer - M.S.N. (University of Phoenix)
- Amy Shaw - M.S.N. (Marshall University)
- Melinda Stoecklin - M.S.N. (Marshall University)

## **DEAN EMERITUS**

- Lorita Jenab - Ed.D. (Columbia University)
- E. Jane Martin - Ph.D. (University of Pittsburgh)

## **PROFESSOR EMERITUS**

- June Larrabee - Ph.D. (University of Tennessee)
- Gaynelle McKinney - M.S.N. ED (Ind. University)
- Nan Leslie - Ph.D. (University of Pittsburgh)

## **ASSOCIATE PROFESSOR EMERITUS**

- Peggy Burkhardt - Ph.D. (University of Texas)  
Charleston Division
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- Debra Harr - Ed.D. (West Virginia University)
- Jean Hoff - M.P.H. (University of Pittsburgh)
- Nancy A. Koontz - MSN (University of Maryland)
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- C. Lynn Ostrow - Ed.D. (West Virginia University)
- Jacqueline Riley - M.N. (University of Florida)
- Jane A. Shrewsbury - M.N. Ed. (University of Pittsburgh)
- Patricia Simoni - Ed.D. (West Virginia University)
- Jacqueline Stemple - Ed.D. (West Virginia University)
- Fredona Stenger - M.S.N. (Boston University)

## **ASSISTANT PROFESSOR EMERITUS**

- Ann Cleveland - Ed.D. (West Virginia University)
- Suzanne Gross - Ph.D. (University of Texas)
- Kathleen Marsland - M.S. (University of Colorado)
- Dorothy M. Johnson - Ed.D. (West Virginia University)

# Bachelor of Nursing

## Nature of Program

The School of Nursing undergraduate program in nursing is recognized by health care agencies as providing excellent preparation for the nursing profession. Our graduates are in great demand and enjoy a large number of career opportunities. The BSN curriculum includes courses in the humanities, social sciences, basic sciences, and nursing science. The clinical component of nursing courses enables students to apply their learning to actual client, family, and community situations that warrant nursing intervention. The curriculum has been carefully designed to equip graduates to begin professional nursing practice with patients of all ages in any health care setting where there is a position for the professional nurse at the start of his or her career. The program also provides an excellent foundation for graduate study in nursing and in other fields.

The baccalaureate program (BSN) is available for high school graduates who aspire to a career in nursing (basic students). It is also available to registered nurses (RNs) who are licensed graduates of associate degree or diploma nursing programs seeking to continue their career development and to individuals with college degrees in other fields who wish to attain the bachelor of science in nursing. The basic BSN program can be completed in four years at WVU's Morgantown campus or at WVU Institute of Technology. Programs at Potomac State College and Glenville State College allow students to complete pre-nursing requirements at those institutions.

Registered nurses can complete the BSN requirements online through a completely web-based program. Advising for the program can occur at WVU in Morgantown, at the Charleston division, or at WVU Institute of Technology. Nursing courses for RN students are scheduled to provide opportunity for completion of degree requirements in three semesters if non-nursing courses are already completed. Credit may be earned by enrollment and by challenge through advanced placement and portfolio exams.

A BS/BA to BSN accelerated program is available for the college graduate with a degree in a field other than nursing. Following eighteen months of continuous enrollment, students attain the BSN degree and are eligible to take the RN licensing examination. The BS/BA to BSN program is offered at WVU in Morgantown.

Further information about the BSN program or the MSN, DNP, and Ph.D. graduate programs in nursing may be obtained from the School of Nursing website at <http://www.hsc.wvu.edu/son> or by contacting the WVU School of Nursing Office of Student Services, 6400 Health Sciences South, P.O. Box 9600, Morgantown, WV 26506-9600; telephone (304) 293-1386 or (toll free) 1-866-WVUNURS.

## 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](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 the 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 <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 or (toll free) 1-866-WVUNURS.

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 are required for all health sciences students.

## Criminal Background Checks

Students are required by clinical agencies to undergo a criminal background check prior to clinical experiences. Felony convictions and some serious misdemeanors may preclude participation in clinical rotations. This could, in turn, prevent the completion of clinical course requirements and completion of the nursing program.

Curriculum details are also available on the School of Nursing webpage: <http://www.hsc.wvu.edu/son>.

## In this section:

- Direct Admission to Basic Program
- Admission to Basic Program as Pre-Nursing or Other College Major
- Transfer

- BS/BA to BSN Admission
- Admission for RN to BSN Program

## **DIRECT ADMISSION TO BASIC PROGRAM**

Applicants are eligible to enter the BSN program as freshmen. Admission is based on a combination of high school grade point average and composite ACT or total SAT scores in a single testing session. Students admitted to the nursing major as freshmen have a total of four semesters to complete the required freshman coursework.

High school students eligible for admission to the University are admitted directly into nursing if they meet the following criteria:

- GPA of 3.8 or higher with composite ACT 25 or SAT combined Critical Reading and Math 1150
- GPA of 3.6-3.79 with composite ACT 26 or SAT combined Critical Reading and Math 1190
- GPA of 3.5-3.59 with composite ACT 28 or SAT combined Critical Reading and Math 1260

In addition, students must have completed the following high school credits required by the University:

### **UNITS (YEARS)**

- Four in English (including courses in grammar, composition, and literature)
- Three in Social studies (including US History)
- Three in College preparatory mathematics (algebra I, algebra II, and plane geometry)
- Two in Laboratory science (biology, chemistry, physics, or other courses with a strong laboratory science orientation)

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (<http://www.hsc.wvu.edu/son>).

## **ADMISSION TO BASIC PROGRAM AS PRE-NURSING OR OTHER COLLEGE MAJOR**

If a student does not meet the nursing admission criteria to be directly admitted to the BSN program as a freshman, the student can apply for admission to the BSN program as a sophomore after completion of at least one semester of college coursework with a minimum cumulative GPA of 3.0.

To be admitted to the University as a pre-nursing major, high school students must meet the following criteria:

- GPA of 3.2 or higher with composite ACT 21 or SAT combined Critical Reading and Math 990
- GPA of 3.0-3.19 with composite ACT 23 or SAT combined Critical Reading and Math 1070

Pre-nursing applicants are admitted to the School of Nursing as sophomores for either the Fall or Spring semesters. A completed application, including transcripts, for the basic BSN program must be made by January 15 of the year the candidate wishes to be admitted for the Fall semester and by May 15 to be admitted for the following Spring semester. Acceptance and placement in the program are dependent upon space available in the program. There are limited spaces available and the best-qualified applicants are accepted. Application forms are distributed after December 1 by the Health Sciences Center Office of Admissions or are available online from the admissions website. Qualified applicants will be invited for an interview as part of the admissions process.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (<http://www.hsc.wvu.edu/son>).

## **TRANSFER STUDENTS**

Students with nursing credit from a nationally accredited nursing program in an accredited college or university are eligible for consideration for transfer admission by presenting a record of courses comparable to those required in this curriculum and meeting other School of Nursing admission requirements. These students must provide a statement of good standing from the nursing program in which they are currently enrolled. Acceptance and placement in the program are dependent on the individual's academic record and the number of spaces available. Transfer students must have a cumulative GPA of 3.0 for previous college coursework and must have earned at least a C in all nursing and pre- and co-requisite non-nursing courses, with no grade below a C in nursing courses. Only courses that are comparable to required courses in the BSN curriculum will be transferable. Nursing credits from a program that is not nationally accredited are not transferable. Transfer students are required to complete a transfer student orientation.

Acceptance and placement in the program is dependent on the individual's academic record and the number of spaces available in the program. Application should be initiated three months prior to the beginning of the semester in which the applicant wishes to begin nursing courses. Transcripts and other required materials must be received no later than two months before the start of entering semester.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (<http://www.hsc.wvu.edu/son>).

## **BS/BA TO BSN ADMISSION**

Applicants for the BS/BA to BSN program must have a baccalaureate degree from an accredited college or university with an overall grade point average of at least 3.0 on a 4.0 scale and a cumulative GPA of 3.0 or better in prerequisite courses.

The following prerequisite courses must be completed with a grade of C or better prior to enrollment:

English Composition	6
Chemistry	3-4
Biology	3-4
Human Anatomy	3-4
Human Physiology	3-4
Microbiology	3-4
Statistics	3
Introductory Psychology	3
Introductory Sociology	3
Developmental Psychology Across the Lifespan	3
Human Nutrition	3
College Algebra	3

Application to the BS/BA to BSN program must be made by September 1 for admission to the program the following January. Acceptance and placement in the program are dependent upon space available in the program. There are limited spaces available and the best-qualified applicants are accepted. Application forms are distributed after June 1 by the Health Sciences Center Office of Admissions or are available online from the admissions website. Qualified applicants will be invited for an interview as part of the admissions process. Students in the BS/BA to BSN program must meet the same academic standards as basic BSN students and must complete the graduation requirements as specified for second degree students.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (<http://www.hsc.wvu.edu/son>).

## ADMISSION FOR RN TO BSN PROGRAM

Registered nurses are admitted directly to the School of Nursing. Acceptance and placement in the program are dependent upon the individual's academic record and upon the number of spaces available. An unrestricted license to practice nursing, an Associate Degree in Nursing from a nationally accredited program, and a grade point average of 2.5 or better on all college work attempted are required to be eligible for consideration.

All Registered Nurses will transfer 50 hours of undifferentiated nursing credit. All RN to BSN students will be required to meet WVU's General Education Curriculum (GEC). Students who already hold a bachelors degree in another discipline will be required to complete ENGL 102, STAT 211, PSYC 101, PSYC 241, and SOCA 101 (if not already taken) to fulfill the GEC requirements. Advisors will work with students to identify courses already appearing on the transcript that meet GEC requirements, and then develop a plan to fulfill any remaining requirements. For example:

128 credits (minimum required to graduate)

~~-50~~ undifferentiated nursing credits for RN license

78 credits remaining

~~-28~~ credits RN-BSN nursing courses (See program of study)

50 general education credits remaining\*

\*General education credits may be fulfilled by course work from associate degrees or other college work. For more information about General education Curricular Objectives; see link below. For more information about course equivalence please see the following website: Transfer Course Equivalency System ([http://admissions.wvu.edu/admissions/university-requirements/transfer\\_equivalency](http://admissions.wvu.edu/admissions/university-requirements/transfer_equivalency)).

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (<http://www.hsc.wvu.edu/son>).

## Curriculum Requirements

### ACADEMIC STANDARDS AND GRADUATION REQUIREMENTS

To be in good academic standing, students must:

- Maintain a cumulative grade point average of 3.0 or better in all college work attempted for pre-licenced programs and a 2.5 for RN-BSN students.
- Pass all nursing courses and pre- or co-requisite non-nursing courses with a grade of C or better

A student who receives a grade of D, F, or W in a required nursing course or pre- or co-requisite non-nursing course may repeat that course once and must earn a grade of C or better when the course is repeated. Students who repeat a nursing course or a pre- or co-requisite non-nursing course and earn a grade of D, F, or W will be dismissed from the school. A student may repeat only one nursing course. Students who do not maintain a cumulative GPA of 3.0 or better for pre-licenced programs and a 2.5 for RN-BSN will be placed on probation for one semester. Students on probation who do not raise their cumulative GPA to 3.0 or better for pre-licenced programs and a 2.5 for RN-BSN after one semester will be dismissed from the School of Nursing. Nursing courses and pre- and co-requisite courses in which students earn a grade of D, F, or W must be repeated prior to the student's

progression to the next course(s) in the nursing sequence. Nursing courses must be repeated in the next fall or spring semester that the course is offered. Any general education course that is not a pre- or co-requisite of nursing courses and in which a grade of D or F has been earned must be repeated prior to graduation if it is to be counted toward graduation requirements. The baccalaureate of science in nursing degree for the traditional BSN and RN-BSN programs is conferred upon completion of 128 hours and all required courses. The baccalaureate of science in nursing degree for the BS/BA-BSN second degree students is conferred upon completion of 64 hours and all required courses.

## Bachelor of Science in Nursing

All basic students admitted to the school complete a common curriculum in the freshman year designed to provide the foundation for success in subsequent nursing courses.

Students admitted to the School of Nursing as sophomores must have completed the freshman-year (pre-requisite) courses prior to beginning the sophomore year. All freshman-year courses must be completed with a grade of C or better, and the student must have a cumulative GPA of 3.0 or higher in required pre-requisite courses and an overall GPA of 3.0 or higher in all college level work.

Pre-requisite courses required with a grade of C or better before enrollment in Sophomore nursing courses.

BIOL 102 & BIOL 104 or BIOL 115	General Biology and General Biology Laboratory Principles of Biology	4
CHEM 111 or CHEM 115	Survey of Chemistry Fundamentals of Chemistry	4
CHEM 112 or CHEM 116	Survey of Chemistry Fundamentals of Chemistry	4
ENGL 101	Composition And Rhetoric	3
NBAN 107	Intro Human Anat/Physiol	4
NSG 100	Introduction to Nursing	2
PSYC 101	Introduction to Psychology	3
SOCA 101 or SOCA 105	Introduction to Sociology Introduction to Anthropology	3
WVUE 191	First Year Seminar	1
Select one of the following:		
MATH 126A	College Algebra 5-Day	3
MATH 126B	College Algebra 4-Day	3
MATH 126C	College Algebra 3-Day	3
Pre- or Co-requisites with enrollment of Sophomore courses. Must be completed with a C or better.		
ENGL 102 or ENGL 103	Composition And Rhetoric Accelerated Academic Writing	3
MICB 200	Medical Microbiology	3
NBAN 207	Human Anatomy/Physiology 2	4
PSYC 241	Intro to Human Development	3
STAT 211	Elementary Statistical Inference	3
Nursing courses. Must be completed with a C or better.		
NSG 211	Health Assessment/Communication	6
NSG 212	Foundations-Nursing Practice	6
NSG 276	Intro-Evidence Based Prac/Research	3
NSG 310	Women's Health Across Lifespan	4
NSG 311	Alterations in Adult Health 1	6
NSG 312	Alterations in Adult Health 2	6
NSG 320	Child and Adolescent Health	4
NSG 360	Ethics and Health Policy	3
NSG 376	Clinical Nursing Pharmacology	3
NSG 411	Complex Community Systems-CAP	7
NSG 412	Leadership in Complex Systems	7
NSG 450	Alterations in Mental Health	4
NSG 460	Care of the Critically Ill Pt.	4

NSG 486	NCLEX Review	1
Select one of the following:		
NSG 400	Spirituality and Health	3
NSG 481	Introduction-Cardiac Nursing	2
NSG 482	Palliative Care Nursing	2
NSG 483	Holistic & Integrative Nursing	2
NSG 484	Care of the Diabetic Patient	2
NSG 485	Children/Complex Health Needs	2
NSG 487	Movies and Mental Health	2
NSG 488	Genetics/Genomics in Health	2
Total Credit Hours		128

## Suggested Plan of Study for Basic Nursing and Pre-Nursing Majors

### First Year

Fall	Hours Spring	Hours
CHEM 111 or 115	4 CHEM 112 or 116	4
BIOL 102 or 115	3 NBAN 107	4
BIOL 104 or 115	1 ENGL 101	3
NSG 100	2 STAT 211	3
PSYC 101	3 Select one of the following:	3
Select one of the following:	3 SOCA 101	
MATH 126A	SOCA 105	
MATH 126B		
MATH 126C		
WVUE 191	1	
	<b>17</b>	<b>17</b>

### Second Year

Fall	Hours Spring	Hours
PSYC 241	3 ENGL 102	3
NBAN 207	4 HN&F 171	3
MICB 200	3 NSG 212	6
NSG 211	6 NSG 276	3
	<b>16</b>	<b>15</b>

### Third Year

Fall	Hours Spring	Hours
NSG 310	4 NSG 312	6
NSG 311	6 NSG 320	4
NSG 376	3 NSG 360	3
GEC Objective	3 GEC Objective	3
	<b>16</b>	<b>16</b>

### Fourth Year

Fall	Hours Spring	Hours
NSG 450	4 NSG 412	7
NSG 411	7 NSG 460	4
Nursing Elective	2 NSG 486	1
GEC Objective	3 GEC Objective	3
	<b>16</b>	<b>15</b>

Total credit hours: 128

## The BS/BA to BSN Curriculum

Student must have a cumulative GPA of 3.0 or higher in required pre-requisite courses and an overall GPA of 3.0 or higher in all college level work.

Students must maintain a cumulative GPA of 3.0 or higher through completion of degree.

All courses must be completed with a grade of a C or better

NSG 211	Health Assessment/Communicatn	6
NSG 212	Foundations-Nursing Practice	6
NSG 276	Intro-Evidence Basd Prac/Rsrch	3
NSG 310	Women's Health Across Lifespan	4
NSG 311	Alterations in Adult Health 1	6
NSG 312	Alterations in Adult Health 2	6
NSG 320	Child and Adolescent Health	4
NSG 360	Ethics and Health Policy	3
NSG 376	Clinical Nursing Pharmacology	3
NSG 411	Complex Community Systems-CAP	7
NSG 412	Leadership in Complex Systems	7
NSG 450	Alterations in Mental Health	4
NSG 460	Care of the Critically Ill Pt.	4
NSG 486	NCLEX Review	1
Total Hours		64

## Suggested Plan of Study for BS/BA to BSN

### First Semester

Spring	Hours
NSG 211	6
NSG 212	6
NSG 276	3
	<b>15</b>

### Second Semester

Summer	Hours
NSG 310	4
NSG 311	6
NSG 376	3
	<b>13</b>

### Third Semester

Fall	Hours
NSG 312	6
NSG 320	4
NSG 360	3
	<b>13</b>

### Fourth Semester

Spring	Hours
NSG 411	7
NSG 450	4
	<b>11</b>

### Fifth Semester

Summer	Hours
NSG 412	7
NSG 460	4
NSG 486	1
	<b>12</b>

Total credit hours: 64

## RN to BSN Curriculum

All Registered Nurses will transfer 50 hours of undifferentiated nursing credit. All RN to BSN students will be required to meet WVU's General Education Curriculum (GEC). If a student already holds a bachelors degree in another discipline, you will be required to complete ENGL 102, STAT 211, PSYC 101, PSYC 241, and SOCA 101 (if not already taken) to fulfill the GEC requirements. Advisors will work with students to identify courses already appearing on the transcript that meet GEC requirements, and then develop a plan to fulfill any remaining

Student must have a cumulative GPA of 2.5 or higher on college work attempted and carry an overall GPA of 2.5 or higher throughout through completion of degree.

All courses must be completed with a grade of C or better

ENGL 102	Composition And Rhetoric	3
PSYC 101	Introduction to Psychology	3
PSYC 241	Intro to Human Development	3
SOCA 101	Introduction to Sociology	3
STAT 211	Elemntry Statistical Inference	3
NSG 333	Ethics in Nursing	3
NSG 361	Health Assessment	3
NSG 362	Clinical Health Promotion	3
NSG 373	Leadership in Organizations	3
NSG 372	Safety/Quality/informatics	2
NSG 461	Hlth Policy-Prof Nursing Pract	3
NSG 475	Applied Research/EBP - CA	4
NSG 465	Foundtns-Rsrch/Evdnc Bsd Pract	3
NSG 471	Cmmnty Hlth Nsg:Thry/Intrvntns	4
Total Hours		43

## Suggested Plan of Study for Full Time RN-BSN: 3 Semesters

### First Semester

Fall	Hours
NSG 333	3
NSG 361	3
NSG 362	3
GEC (statistics or other GEC)	3
	<b>12</b>

### Second Semester

Spring	Hours
NSG 461	3
NSG 465	3
NSG 372	
NSG 373	3
	<b>9</b>

### Third Semester

Summer	Hours
NSG 471	4
NSG 475	4
	<b>8</b>

Total credit hours: 29

## Suggested Plan of Study for Part-Time RN-BSN: 2 Years/5 Semesters

### First Year

Fall	Hours Spring	Hours Summer	Hours
NSG 333	3 NSG 373	3 GEC	3

NSG 361	3 GEC	3	
	<b>6</b>	<b>6</b>	<b>3</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
NSG 362	3 NSG 465	3 NSG 475	4
GEC	3 NSG 372	2 NSG 471	4
GEC	3 NSG 461	3	
	<b>9</b>	<b>8</b>	<b>8</b>

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Total credit hours: 40

## 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 transcribed 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/fl\\_ApplicantConnectLogin.asp?id=vvugrad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=vvugrad))
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

NSG 702	Population Health Promotion	3
NSG 703	Theory of Practice	3
NSG 704	Health Care Leadership	3
NSG 707	Evidence Based Practice	3
NSG 708	DNP Role Seminar	2
NSG 709	Health Care Informatics	3
NSG 710	Health Policy/Resource Mangmnt	3
NSG 711	Health Care Focus	3
NSG 713	DNP Role Application	1
NSG 724	Health Research Statistics 1	3
NSG 745	Clinical Immersion	1-8
NSG 760	DNP Clinical Project	3
NSG 763	DNP Capstone	1-6

**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>.

## 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/>)
  - Supplemental Application of Admission to PhD in the School of Nursing and PhD application checklist (available at <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

NSG 704	Health Care Leadership	3
NSG 727	Contemporary Nursing Science	2
NSG 728	Theoretical Basis of Nursing	3
NSG 732	Seminar in Nursing Scholarship	2
NSG 735	Principles:Nursing Education	3
NSG 736	Advanced Health Policy/Ethics	3

### 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 6

#### Research

NSG 724	Health Research Statistics 1	3
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:

NSG 781	Research Mentorship	3-9
NSG 783	Dissertation Seminar	1
NSG 795	Independent Study	1
NSG 797	Research	1-9

Total Hours 46-60

## Academic Progression Standards

- Nursing course 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

### First Year

Fall	Hours Spring	Hours Summer	Hours
NSG 724	3 NSG 704	3 NSG 728	3
NSG 735	3 NSG 725	3 NSG 732	2
	<b>6</b>	<b>6</b>	<b>5</b>

**Second Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
NSG 729	4 NSG 781	1-3 NSG 731	3
NSG 727	2 Cognate	3 NSG 736	3
	<b>6</b>	<b>4-6</b>	<b>6</b>

**Third Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
Cognate	3 NSG 783	1 NSG 733	2
NSG 781	1-3 Cognate (if not already complete)	NSG 734	3
NSG 795	1-9 NSG 797	1-9 NSG 781	1-3
	<b>5-15</b>	<b>2-10</b>	<b>6-8</b>

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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

### 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/AYApplicantLogin/fl\\_ApplicantConnectLogin.asp?id=wwugrad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=wwugrad))
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 Sciences 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**

NSG 622	Theory & Disciplined Reasoning	3
NSG 623	Concepts of Advanced Nursing	2
NSG 624	Advanced Pathophysiology *	4
NSG 626	Lifespan Health Promotion *	2
NSG 627	Research/Systematic Analysis	5
NSG 628	Health Policy/Finance/Ethics	3
NSG 629	Advanced Practice/Families	2
NSG 685	Clinical Scholarship	1
Total Hours		22

\* Neonatal NP Students will take NSG 654 and NSG 655 in place of NSG 624 and NSG 626.

**Family NP Courses**

NSG 631	Advanced Pharmacotherapeutics	3
NSG 632	Advanced Assessment	2
NSG 633	Primary Care: Rural Families 1	3
NSG 634	Primary Care: Rural Families 2	4
NSG 635	Rural Family Hlth Practicum 1	5
NSG 636	Rural Family Hlth Practicum 2	5
Total Hours		22

**Pediatric NP Courses**

NSG 631	Advanced Pharmacotherapeutics	3
NSG 644	Pediatric Primary Care 2	4
NSG 645	Pediatric Practicum 1	5
NSG 646	Pediatric Practicum 2	5
NSG 647	Assessment/Pediatric Care 1	5
Total Hours		22

**Neonatal NP Courses**

NSG 631	Advanced Pharmacotherapeutics	3
NSG 654	Neonatal Pathophysiology	4
NSG 655	Neonatal Health Promotion	2
NSG 663	Neonatal Assessment/Care 1	5
NSG 664	Neonatal Care 2	4
NSG 665	Neonatal Practicum 1	5
NSG 666	Neonatal Practicum 2	5
Total Hours		28

**Women's Health NP Courses**

NSG 683	Primary Care:Women/Girls 1	3
NSG 684	Primary Care:Women/Girls 2	4
NSG 686	WHNP Practicum 1	5
NSG 687	WHNP Practicum 2	5
Total Hours		17

**Leadership Courses**

NSG 610	Leadership in Health Care	3
NSG 611	System Based Decision Making	2
NSG 612	Leading Health System Change	4

NSG 613	Managing Health Care Resources	3
NSG 614	Health Care Informatics	3
NSG 615	Program Planning/Evaluation	3
NSG 617	Leadership Practicum 1	2-5
NSG 618	Leadership Practicum 2	2-5
Total Hours		22-28

## 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

NSG 632	Advanced Assessment	2
NSG 633	Primary Care: Rural Families 1	3
NSG 634	Primary Care: Rural Families 2	4
NSG 635	Rural Family Hlth Practicum 1	5
NSG 636	Rural Family Hlth Practicum 2	5
Total Hours		19

### Required Courses for Post Master's Pediatric Nurse Practitioner

NSG 644	Pediatric Primary Care 2	4
NSG 645	Pediatric Practicum 1	5
NSG 646	Pediatric Practicum 2	5
NSG 647	Assessment/Pediatric Care 1	5
Total Hours		19

### Required Courses for Post Master's Neonatal Nurse Practitioner

NSG 654	Neonatal Pathophysiology	4
NSG 655	Neonatal Health Promotion	2
NSG 663	Neonatal Assessment/Care 1	5
NSG 664	Neonatal Care 2	4
NSG 665	Neonatal Practicum 1	5
NSG 666	Neonatal Practicum 2	5
Total Hours		25

### Required Courses for Post Master's Women's Health Nurse Practitioner

NSG 632	Advanced Assessment	2
NSG 683	Primary Care:Women/Girls 1	3
NSG 684	Primary Care:Women/Girls 2	4
NSG 686	WHNP Practicum 1	5
NSG 687	WHNP Practicum 2	5
Total Hours		19

**Required Courses for Post Master's Nursing Leadership**

NSG 610	Leadership in Health Care	3
NSG 611	System Based Decision Making	2
NSG 612	Leading Health System Change	4
NSG 613	Managing Health Care Resources	3
NSG 614	Health Care Informatics	3
NSG 615	Program Planning/Evaluation	3
NSG 617	Leadership Practicum 1	2-5
NSG 618	Leadership Practicum 2	2-5
Total Hours		22-28

All students in post-master's certificate programs will complete a minimum of 600 supervised clinical hours.

# Health Sciences School of Pharmacy

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## 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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## ADMINISTRATION

### DEAN

- Patricia A. Chase - Ph.D. (University of Colorado)

### ASSOCIATE DEAN FOR ACADEMIC AFFAIRS AND EDUCATIONAL INNOVATION

- Mary K. Stamatakis - Pharm.D. (The Ohio State University)  
Associate Professor, Department of Clinical Pharmacy

### ASSOCIATE DEAN FOR STUDENT SERVICES

- Mary L. Euler - Pharm.D. (University of Missouri-Kansas City School of Pharmacy)  
Professor, Department of Clinical Pharmacy

### ASSOCIATE DEAN FOR RESEARCH AND GRADUATE PROGRAMS (INTERIM)

- Peter M. Gannett - Ph.D. (University of Wisconsin)  
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- Mary E. Davis - Ph.D. (Michigan State University)  
Pharmacology

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- James M. Shumway, Jr. - Ph.D. (University of North Carolina Chapel Hill)  
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## Pre-Pharmacy

The primary objective of the Doctor of Pharmacy (Pharm.D.) program is to educate practitioners for current and future roles in the profession of pharmacy. The Pharm.D. program comprises four years of professional study preceded by a minimum of two years of pre-pharmacy coursework in a U.S. or Canadian accredited college of arts and sciences. To prepare for the professional curriculum, students must complete a pre-pharmacy curriculum that emphasizes the biological and chemical sciences. In addition, pre-pharmacy students must complete a variety of courses of their choosing in the arts, humanities, and social sciences. Student will go through a competitive application process in the year prior to intended matriculation to the four year professional curriculum. Details regarding the pre-pharmacy course requirements can be found on the major tab.

## 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 bachelors 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.pharmacas.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:

**NCS Pearson, Inc.**  
**PCAT Customer Relations**  
**19500 Bulverde Road**  
**San Antonio, TX 78259**  
**1-800-622-3231 or (210) 339-8710**  
**Fax 1-800-727-0811 or 1-800-999-5941**  
**or <http://www.PCATweb.info>**

## Personal Interview

The 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.

## Conditions Following Acceptance of Admission

An applicant accepted into the first year, or an advanced standing transfer student, is expected to have met all entrance requirements and satisfactorily completed all pre-pharmacy coursework in progress prior to matriculation or, if a transfer student prior to transfer. A satisfactory performance in the completion of such coursework is defined as one that is consistent with the student's previous academic record and must include no grades of D or lower in prerequisite courses. While it is preferred that all prerequisite coursework be completed by the end of the spring term prior to matriculation, it is possible to complete up to two non-sequential prerequisite courses before the start of pharmacy student orientation in the fall semester of matriculation. Failure to do so will result in revocation of the acceptance by the Admissions Committee.

Applicants must remain free of any violations of local, state, or federal law that would prohibit their ability to obtain an intern license from the West Virginia Board of Pharmacy.

Furnishing or causing to furnish false or incorrect information for the purpose of gaining admission to the School of Pharmacy constitutes grounds for disciplinary action including, but not limited to, expulsion or revocation of acceptance.

Students in the School of Pharmacy agree to abide by the provisions of the Student Code of Academic and Professional Integrity. Upon admission, each student is required to return a signed statement to the Office of Student Services indicating the student has read and understands the Policy on Academic and Professional Standards and the Student Code of Academic and Professional Integrity of the West Virginia University School of Pharmacy. The code and copies of the statement are available in the Office of Student Services in the School of Pharmacy, and on the School of Pharmacy website.

## Academic and Technical Standards

Please see this section under the Pharm.D. program heading for details.

## Pre-Pharmacy Curriculum Requirements

### Biochemistry Requirement

Select one of the following:		3-4
AGBI 410	Introduction to Biochemistry	
BIOC 339	Intro To Biochemistry	
BIOL 115	Principles of Biology	4
BIOL 101-104 can be taken in place of BIOL 115. BIOL 115 is preferred.		
BIOL 117	Introductory Physiology	4
BIOL 215	Cell-Biology for Pre-Pharmacy	3
BIOL 219 (4 cr. hrs.) may be taken in place of BIOL 215 for biology majors only. If cell biology is not available at your institution, please contact the WVU School of Pharmacy Office of Student Services (304-293-1552) for an alternative course.		
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory	4
ECON 201	Principles of Microeconomics	3
ENGL 101	Composition And Rhetoric	3
ENGL 102	Composition And Rhetoric (ENGL 103 replaces ENGL 101 & 102)	3

### Math Requirement

Select one of the following:		3-8
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
<b>Microbiology Requirement</b>		
Select one of the following:		3-4
AEM 341	General Microbiology	
AEM 401	Environmental Microbiology	
MICB 200	Medical Microbiology	
SPA 270	Effective Public Speaking	3
STAT 211	Elementary Statistical Inference	3
or ECON 225	Elementary Business/Economics Stat	
WVUE 191	First Year Seminar (or equivalent)	1
<b>General Education Curriculum</b>		
GEC Requirements:		12
GEC #3		
GEC #5		
GEC #7		
GEC #9		
Total Hours		64-71

## Suggested Plan of Study

### First Year

Fall	Hours Spring	Hours Summer	Hours
BIOL 115	4 BIOL 117	4 Only required for students who took Math 153 in the Fall semester	
CHEM 115	4 CHEM 116	4 MATH 154	4
Select one of the following:	3-4 ENGL 101	3	
MATH 150	GEC #3	3	
MATH 153	STAT 211 or ECON 225	3	
MATH 155			
SPA 270	3		
WVUE 191 (or equivalent)	1		
	<b>15-16</b>	<b>17</b>	<b>4</b>

### Second Year

Fall	Hours Spring	Hours
Select one of the following:	3-4 Select one of the following:	3-4
AEM 341	AGBI 410	
AEM 401	BIOC 339	
MICB 200	CHEM 234	3
BIOL 215	3 CHEM 236	1

BIOL 219 (4 cr. hrs.) may be taken in place of BIOL 215 for biology majors only. If cell biology is not available at your institution, please contact the WVU School of Pharmacy Office of Student Services (304-293-1552) for an alternative course.	ECON 201	3
CHEM 233	3 GEC #7	3
CHEM 235	1 GEC #9	3
ENGL 102	3	
GEC #5	3	
	<b>16-17</b>	<b>16-17</b>

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Total credit hours: 68-71

## PharmD

### 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/student-services/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

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## 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/student-services/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 pharmacy. More information can be found at <http://pharmacy.hsc.wvu.edu/student-services/Description-of-the-Professional-Program/Areas-of-Emphasis/Emphasis-in-Research-Proposal>.

### 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/student-services/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 complements the core curriculum. Additional information can be found at <http://socialwork.wvu.edu/certificate-programs/graduate-certificate-in-gerontology>.

### CURRICULUM REQUIREMENTS

#### Program Course List:

BIOC 531	General Biochemistry	4
NBAN 301	Principles of Human Anatomy	3
PCOL 743	Pharmacology 1	3
PCOL 744	Pharmacology 2	3
PSIO 743	Fundamentals of Physiology	5
PHAR 700	Pharmacy as a Profession	1
PHAR 701	Pharmaceutical Care Lab 1	2
PHAR 702	Pharmaceutics 1	3
PHAR 703	Pharmacy Practice Experience 1	1
PHAR 708	Pharmaceutics 2	3
PHAR 709	Immunology/Biotechnology	2
PHAR 710	Pharmacy Practice Experience 2	1
PHAR 711	Chemical Properties of Drugs	2
PHAR 712	Pharmaceutical Care Lab 2	2
PHAR 737	Disease Prevent Health Promo	2
PHAR 714	Intro Community Rotation	4
PHAR 715	Pharmacotherapeutics 1	4
PHAR 716	Chemistry of Drug Action 1	3
PHAR 717	Pharmacy Practice Experience 3	1

PHAR 719	Pharmacy Practice Experience 4	1
PHAR 720	Patient Health Education	2
PHAR 723	Pharmaceutical Care Lab 3	1
PHAR 724	Pharmaceutical Care Lab 4	2
PHAR 725	Pharmacotherapeutics 2	4
PHAR 726	Chemistry of Drug Action 2	2
PHAR 727	Medical Literature Evaluation	2
PHAR 728	Pharmacy Management	2
PHAR 729	Intro Institutional Rotation	2
PHAR 730	Pharmacotherapeutics 3	4
PHAR 731	Biopharm & Pharmacokinetics	3
PHAR 732	Non-Prescription Drugs	3
PHAR 733	Pharmacy Systems	2
PHAR 734	Pharmacy Law and Ethics	3
PHAR 735	Pharmaceutical Care Lab 5	1
PHAR 736	Pharmaceutical Care Lab 6	1
PHAR 738	Outcomes Asesmnt/Quality Imprv	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

Fall	Hours Spring	Hours Summer	Hours
NBAN 301	3 BIOC 531	4 PHAR 714	4
PSIO 743	5 PHAR 708	3	
PHAR 700	1 PHAR 709	2	
PHAR 701	2 PHAR 710	1	
PHAR 702	3 PHAR 711	2	
PHAR 703	1 PHAR 712	2	
PHAR 720	2 PHAR 737	2	
	Elective *	2-3	
	<b>17</b>	<b>18-19</b>	<b>4</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
PHAR 715	4 PHAR 719	1 PHAR 729	2
PHAR 716	3 PHAR 724	2	
PHAR 717	1 PHAR 725	4	
PHAR 723	1 PHAR 726	2	
PHAR 727	2 PHAR 728	2	
PCOL 743	3 PCOL 744	3	
Elective *	2-3 Elective *	2-3	
	<b>16-17</b>	<b>16-17</b>	<b>2</b>

### Third Year

Fall	Hours Spring	Hours
PHAR 730	4 PHAR 734	3
PHAR 731	3 PHAR 736	1
PHAR 732	3 PHAR 738	2

PHAR 733	2 PHAR 739	3
PHAR 735	1 PHAR 740	4
PHAR 742	1 PHAR 741	3
Elective <sup>*</sup>	2-3 PHAR 746	1
	Elective <sup>*</sup>	0-2
	<b>16-17</b>	<b>17-19</b>

**Fourth Year**

<b>Spring</b>	<b>Hours</b>
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)**	
<b>0</b>	

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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.

## Pharmaceutical and Pharmacological Sciences

### 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, pharmacoeconomics, 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  
email: 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

BMS 700	Scientific Integrity	1
BMS 706	Cellular Methods	1

BMS 715	Molecular Genetics	3
BMS 720	Scientific Writing	2
BMS 797	Research	1-5
BMS Course - Fundamentals of Contemporary Biomedical Research		1-8
PHAR 796 Graudate Seminar		6
PHAR 797 Research		40-50
PHAR 798 Thesis or Dissertation		6-12
Advanced Courses/Elective Modules		14-21
Journal Clubs (Select from the following)		6
PHAR 783	Pharm Cell Biology Seminar	
PHAR 784	Pharmacology Journal Club	
PHAR 787	Drug Discovery & Development	
Laboratory Rotations 1		1-3
Laboratory Rotations 2		1
Laboratory Rotations 3		1
Qualifying Exams		
Proposal Defense		
Total Hours		84-120

## Advanced courses/Electives Modules

BIOC 791	Advanced Topics	1-6
CHEM 335	Method:Structure Determination	4
CHEM 346	Physical Chemistry	3
CHEM 514	Mass Spec Principles & Practic	3
CHEM 531	Advanced Organic Chemistry 1	3
CHEM 532	Advanced Organic Chemistry 2	3
PCOL 743	Pharmacology 1	3
PCOL 744	Pharmacology 2	3
PCOL 745	Advanced Pharmacology1	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	Introductio-Molecular Modeling	4
PHAR 781	Drug Metabolism	3

## Suggested Plan of Study

### First Year

Fall	Hours Spring	Hours Summer	Hours
BMS 700	1 BMS 715	3 BMS 720	2
BMS 706	1 Laboratory Rotations 2	1 PHAR 797	2
Laboratory Rotations 1	1-3 Laboratory Rotations 3	1	
BMS Course - Fundamentals of Contemporary Biomedical Research	1-8 Advanced Courses/ Elective Modules (selected from the list)	5-9	
BMS 797	1-5		

\*Students must sign up for a minimum of 9 hours

	5-18	10-14	4
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
Advanced Courses/ Elective Modules (Select from the list)	3-6 Advanced Courses/ Elective Modules (select from list)	3 PHAR 797	6
PHAR 796	1 PHAR 796	1	
Journal Club (Select from the following)	1 Journal Club (Select from the following)	1	
PHAR 783	PHAR 783		
PHAR 784	PHAR 784		
PHAR 787	PHAR 787		
PHAR 797	4-5 PHAR 797 Take Qualifying Exams	4-7	
	<b>9-13</b>	<b>9-12</b>	<b>6</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
Advanced Courses/ Elective Modules (Select from list)	3 PHAR 798	2-4 PHAR 797	6
PHAR 796	1 PHAR 796	1	
Journal Club (Select from the following)	1 Journal Club (Select from the following)	1	
PHAR 783	PHAR 783		
PHAR 784	PHAR 784		
PHAR 787	PHAR 787		
PHAR 797	3-4 PHAR 797	3	
Proposal Defense	*Students must sign up for a minimum of 9 hours		
*Students must sign up for a minimum of 9 hours			
	<b>8-9</b>	<b>7-9</b>	<b>6</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
PHAR 797	3-6 PHAR 797	3-5 PHAR 797	6
PHAR 798	2-4 PHAR 798	2-4	
PHAR 796	1 PHAR 796	1	
Journal Club (Select from the following)	1 Journal Club (Select from the following)	1	
PHAR 783	PHAR 783		
PHAR 784	PHAR 784		
PHAR 787	PHAR 787		
	*Students must sign up for a minimum of 9 hours		
	<b>7-12</b>	<b>7-11</b>	<b>6</b>

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>.

### 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/Bhvrl Thry/Hlth Otrcm 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	Pharmacoeconomics	
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

### Suggested Plan of Study

#### First Year

Fall	Hours Spring	Hours Summer	Hours
BIOS 601	3 BIOS 603	3 BMS 720	2
BIOS 602	1 Select one of the following:	3 ECON 301	3
Select one of the Following:	3 PHAR 754	PHAR 798	1-6
BMS 700	PHAR 786	PHAR 797	1-15
PHAR 758	PHAR 788	1 Electives	1-12
PHAR 788	1 Electives	2-6	
Select one of the Following:	3		

PHAR 753			
PHAR 758			
Select one of the following:	3		
PHAR 753			
PHAR 756			
	<b>14</b>	<b>9-13</b>	<b>8-38</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
Select one of the following:	3 Select one of the following:	3	
PHAR 755	BIOS 604		
PHAR 758	PSYC 612		
Select one of the following:	3 PHAR course "Intro-OR/PR Outcome"	3	
PHAR 753	SBHS 701	3	
PHAR 756	Select one of the following:	3	
Select one of the following:	3 PHAR 754		
PUBA 670	PHAR 786		
PHAR 758	PHAR 788	1	
PHAR 756	Electives	0-2	
PHAR 769	3		
PHAR 788	1		
Electives	0-6		
	<b>13-19</b>	<b>13-15</b>	

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Total credit hours: 57-99

# Health Sciences Public Health

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## 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.
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## 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 Healthy 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 bachelors' degrees from a wide range of disciplines, who have a strong interest in community/population health and preventive medicine. Our faculty and staff look forward to your decision to become a public health practitioner, researcher, and educator by enrolling in one of our master degree programs. Each department and major can be explored by visiting our website <http://publichealth.hsc.wvu.edu>.**

### Program Description

Public Health is shaped by our nation's public health agencies via health assessment, policy development, and public health services. The WVU School of Public Health addresses the core functions of public health by offering the MPH 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:

**Sherry Kuhl, Director of Student Services**

**West Virginia University**

**School of Public Health**

**P.O. Box 9190**

**1 Medical Center Drive**

**Morgantown, WV 26505-9190**

Phone (304) 293-2505

## **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>) for more information on current rates.

## FACULTY

### INTERIM CHAIR

- Matthew J. Gurka - Ph.D. (University of North Carolina at Chapel Hill)

### PROFESSOR

- George A. Kelly - 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.
- SOPHAS grants fee waivers based upon financial need for Peace Corps Volunteers ([http://www.sophas.org/Documents/fee\\_waiver\\_request\\_form\\_PeaceCorps.pdf](http://www.sophas.org/Documents/fee_waiver_request_form_PeaceCorps.pdf)), McNair Scholars ([http://www.sophas.org/Documents/fee\\_waiver\\_request\\_form\\_Mcnair.pdf](http://www.sophas.org/Documents/fee_waiver_request_form_Mcnair.pdf)), Gates Millennium Scholars Program ([http://www.sophas.org/Documents/fee\\_waiver\\_request\\_form\\_GMSP.pdf](http://www.sophas.org/Documents/fee_waiver_request_form_GMSP.pdf)), AmeriCorps ([http://www.sophas.org/Documents/fee\\_waiver\\_request\\_form\\_AmeriCorps.pdf](http://www.sophas.org/Documents/fee_waiver_request_form_AmeriCorps.pdf)), U.S. and International applicants ([http://www.sophas.org/Documents/fee\\_waiver\\_request\\_form\\_Intl.pdf](http://www.sophas.org/Documents/fee_waiver_request_form_Intl.pdf))

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=vvugrad>)
- 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=vvugrad>
- 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:

BIOS 610	Intermediate Biostatistics	4
EPID 601	Public Health Epidemiology	3
or EPID 610	Principles of Epidemiology	
HPML 601	Foundations of Health Policy	3
OEHS 601	Environmental Health	3
PUBH 696	Graduate Seminar	1
SBHS 601	Social and Behavioral Theory	3

### Curriculum Concentration:

BIOS 611	Data Management and Reporting	3
BIOS 612 or STAT 561	Pb Hlth Statistcal Inference 1 Theory of Statistics 1	3
BIOS 620	Applied Linear Models HS	3
BIOS 621	Categorical Data Analysis HS	3
BIOS 623	Biostatistical Consulting	1
BIOS 696	Graduate Seminar	1

**Practice based/Culminating Experiences:**

PUBH 622 or BIOS 628	MPH Practice-Based Experience (Practice Based Experience) Biostatistics Practicum	3
BIOS 629	Apply BIOS-Pub Hlth Data: CAPS	3

**BIOS Electives:**

Elective Courses (select 2): 6

BIOS 622	Analysis of Time-to-Event Data
BIOS 660	Applied Bioinformatics 1
BIOS 662	Statistics in Clinical Trials
BIOS 663	Introduction to Meta-Analysis
EPID 611	Advanced Epidemiologic Theory
STAT 562	Theory of Statistics 2

Total Hours 43

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**

Fall	Hours Spring	Hours Summer	Hours
BIOS 610	4 BIOS 620	3 PUBH 622	3
BIOS 612	3 BIOS 621	3	
EPID 610	3 BIOS 623	1	
BIOS 611	3 BIOS 696	1	
PUBH 696	1		
	<b>14</b>	<b>8</b>	<b>3</b>

**Second Year**

Fall	Hours Spring	Hours
OEHS 601	3 BIOS 629	3
SBHS 601	3 Electives	6
HPML 601	3	
	<b>9</b>	<b>9</b>

Total credit hours: 43

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

EPID 710	Adv Principles-Epidemiology	3
EPID 711	Adv Epidemiologic Theory	3
PUBH course - Foundations of Public Health		3
BIOS 797	Research	15
BIOS 797	Research	15
BIOS 797	Research	15
BIOS 797	Research	15
C&I 789	Teaching In Higher Education	3
PUBH 790	Teaching Practicum	3
BMS 700	Scientific Integrity	1
BMS 720	Scientific Writing	2

### BIOS Required Courses

BIOS 623	Biostatistical Consulting *	1
BIOS 624	Consulting Experience	2
BIOS 700	Foundtns-Modrn Statstcl Infrnc	3
BIOS 701	Modern Statistical Inference	3

Select one of the following:

BIOS 720	Theory/Applicatn-Linear Models	4
OR		
STAT 645 & BIOS 745	Linear Models and Adv Application-Linear Models	
BIOS 721	Advanced Caregorical Data	4
BIOS 740	Adv Longitudinal Data Analysis	4
BIOS 788	Grant Writing-Biostatisticians	2
BIOS 796	Graduate Seminar	1
BIOS 796	Graduate Seminar	1

Electives Courses 15

### Elective Courses

BIOS 622	Analysis of Time-to-Event Data	
BIOS 764	Bayesian Biostatistics	
BIOS 765	Adv Structural Equation Models	
STAT 547	Survival Analysis	
STAT 745	Data Mining	
STAT 761	Theoretical Statistics 1 **	
STAT 762	Theoretical Statistics 2 **	
STAT 763	Stochastic Processes	
STAT 765	Stat Methods-Bioinformatics	

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

Fall	Hours Spring	Hours Summer	Hours
BIOS 700	3 BIOS 701	3 C&I 789	3
EPID 710	3 BIOS 721	4 BMS 720	2
STAT 645	3 BIOS 623	1 BIOS 797	1
BIOS 745	1 BIOS 788	2	

BMS 700	1			
	<b>11</b>		<b>10</b>	<b>6</b>
<b>Second Year</b>				
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours Summer</b>	<b>Hours</b>
STAT 765	3 BIOS 624		2 BIOS 797	6
STAT 761	3 EPID 711		3	
BIOS 740	4 PUBH course - Foundations of Public Health		3	
BIOS 765	3 BIOS 797		1	
BIOS 797	1 PUBH 790		3	
	<b>14</b>		<b>12</b>	<b>6</b>
<b>Third Year</b>				
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours Summer</b>	<b>Hours</b>
BIOS 797	10 BIOS 662		3 BIOS 797	6
BIOS 796	1 BIOS 796		1	
STAT 547	3 BIOS 797		10	
	<b>14</b>		<b>14</b>	<b>6</b>
<b>Fourth Year</b>				
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours Summer</b>	<b>Hours</b>
BIOS 797	9 BIOS 797		10 BIOS 797	6
	<b>9</b>		<b>10</b>	<b>6</b>

Total credit 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.

## FACULTY

### INTERIM CHAIR

- Jefferson Frisbee - Ph.D. (University of Guelph, Canada)

### 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

- Baqiyyah Conway - Ph.D. (University of Pittsburgh)
- Kelly Gurka - Ph.D. (University of North Carolina)
- Motao Zhu - Ph.D. (State University of New York at Albany)

## 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.

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.

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.

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.

## 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

Students in the MPH program in Epidemiology will complete a total of forty-two 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 six credit hours of elective courses). The culminating experience, taken over the last two semesters, requires completing a proposal (two credit hours), implementing a research-based practicum project (six credit hours), and submitting a publishable paper and poster. This degree will typically take four semesters to complete.

## DEPARTMENT OF EPIDEMIOLOGY MASTER LEVEL COURSES

### MPH Core Curriculum:

BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
EPID 610	Principles of Epidemiology	3
HPML 601	Foundations of Health Policy	3
OEHS 601	Environmental Health	3
PUBH 696	Graduate Seminar	1
SBHS 601	Social and Behavioral Theory	3

### MPH Concentration Curriculum:

BIOS 603	Applied Biostatistics 2	3
BIOS 611	Data Management and Reporting	3
EPID 611	Advanced Epidemiologic Theory	3
EPID 612	Applied Epidemiology for PH	3
EPID 696	Graduate Seminar	1

### Practice based/Culminating Experiences:

PUBH 622	MPH Practice-Based Experience	3
EPID 629	Epidemiology Capstone	3

### Electives (6 hours):

BIOS 621	Categorical Data Analysis HS	6
EPID 625	Principles of Clinical Trials	
EPID 760	Demography/Transitions	
EPID 763	Injury Epidemiology	
EPID 764	Mind-body Medicine	
EPID 765	EPID of Transportation Safety	
EPID 766	Physical Activity Epidemiology	
OEHS 622	Public Health Toxicology	

OEHS 732	Occupational Injury Prevention	
EPID 740	Gene X Envrn Intrctns/Chrc Ds	
PUBH 586	Public Mental Health	
PUBH 605	Intro to Global Public Health	
SBHS 660	Survey Research Methods	
Total Hours		42

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours Spring	Hours
BIOS 601	3 EPID 611	3
BIOS 602	1 EPID 612	3
EPID 610	3 PUBH 696	1
BIOS 611	3 BIOS 603	3
EPID 696	1 OEHS 601	3
	<b>11</b>	<b>13</b>

### Second Year

Fall	Hours Spring	Hours
SBHS 601	3 EPID 629	3
HPML 601	3 ELECTIVE	3
PUBH 622	3	
ELECTIVE	3	
	<b>12</b>	<b>6</b>

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

EPID 625	Principles of Clinical Trials	3
EPID 710	Adv Principles-Epidemiology	3
EPID 711	Adv Epidemiologic Theory	3
EPID 712	Quantitative Methods-Epidemlgy	3
EPID 796	Graduate Seminar	3
BIOS 603	Applied Biostatistics 2	3
BIOS 604	Applied Biostatistics 3	3
BIOS 610	Intermediate Biostatistics	4
BIOS 611	Data Management and Reporting	3
SBHS 601	Social and Behavioral Theory	3
SBHS 660	Survey Research Methods	3
SBHS 701	Public Health Grant Writing	3
SBHS 712	Qualitative Research Methods	3
BMS 700	Scientific Integrity	1
BMS 720	Scientific Writing	2
C&I 789	Teaching In Higher Education	3
EPID 797	Research	57
EPID 790	Teaching Practicum	2
<b>Electives - Select from the following:</b>		9
EPID 740	Gene X Envrn Intrctns/Chrc 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

### First Year

Fall	Hours Spring	Hours Summer	Hours
BIOS 610	4 EPID 711	3 BMS 720	2
EPID 797	1 EPID 712	3 C&I 789	3
EPID 710	3 SBHS 701	3 EPID 797	2
BIOS 611	3 BIOS 603	3	
BMS 700	1 EPID 797	2	
Elective	3		
	<b>15</b>	<b>14</b>	<b>7</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
BIOS 604	3 EPID 625	3 EPID 797	6
SBHS 601	3 EPID 790	1	
EPID 796	1 SBHS 660	3	
EPID 790	1 EPID 797	3	
SBHS 712	3 Elective	3	
EPID 797	1		
Elective	3		
	<b>15</b>	<b>13</b>	<b>6</b>

### Third Year

Fall	Hours Spring	Hours Summer	Hours
EPID 797	9 EPID 797	9 EPID 797	6
EPID 796	1		
	<b>10</b>	<b>9</b>	<b>6</b>

### Fourth Year

Fall	Hours Spring	Hours
EPID 796	1 Dissertation Defense	
EPID 797	9 EPID 797	9
	<b>10</b>	<b>9</b>

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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

- Jeffrey Coben - MD (University of Pittsburgh)
- Gilbert Ramirez - Ph.D., CPH (University of Texas)

### ASSOCIATE PROFESSOR

- Warren Eller - Ph.D. (Texas A&M University)

### ASSISTANT PROFESSORS

- Lauri Andress - Ph.D. (University of Texas), JD (S 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:

BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
EPID 601	Public Health Epidemiology	3
HPML 601	Foundations of Health Policy	3
OEHS 601	Environmental Health	3
PUBH 696	Graduate Seminar	1
SBHS 601	Social and Behavioral Theory	3

#### Concentration Curriculum:

HPML 610	Health Economics-Popln Health	3
HPML 620	Pub Hlth Leadership/Managmnt 1	3
HPML 622	Anlytc Mthd-Hlth Plcy/Mang/Ldr	3
HPML 624	Policy Tools for Popltn Health	3
HPML 696	Graduate Seminar	1

#### Practice-based/Culminating Experiences:

PUBH 622	MPH Practice-Based Experience	3
HPML 629	Capstone	3

#### Electives:

HPML 670	Policy Analysis-Popln Hlth 1	9
HPML Course - Health Insurance Policy:Medicaid, Medicare, and the Affordable Care Act		
HPML Course - Performance and Economic Evaluation for Public Health		
HPML 695	Independent Study	

Total Hours

45

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours Spring	Hours
BIOS 601	3 OEHS 601	3
BIOS 602	1 EPID 601	3

HPML 601	3	HPML 622	3
HPML 620	3	HPML 624	3
PUBH 696	1	HPML 696	1
SBHS 601	3		
	<b>14</b>		<b>13</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>		<b>Hours</b>
HPML 610	3	HPML 629	3
PUBH 622	3	Elective	3
Electives	6		
	<b>12</b>		<b>6</b>

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

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## FACULTY

### INTERIM CHAIR

- Michael McCawley - Ph.D. (New York University)

### PROFESSOR

- Alan M. Ducatman - MSc (City University of New York)

### ASSOCIATE PROFESSORS

- Lan Guo - Ph.D. (West Virginia University)
- Charles L. Wertz, III - DO (Kirksville College of Osteopathic Medicine)

### ASSISTANT PROFESSORS

- Rachel T. Abraham - MD (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:

BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
EPID 601	Public Health Epidemiology	3
HPML 601	Foundations of Health Policy	3
OEHS 601	Environmental Health	3
PUBH 696	Graduate Seminar	1
SBHS 601	Social and Behavioral Theory	3

### Concentration Curriculum:

OEHS 610	Environmental Practice	3
OEHS 622	Public Health Toxicology	3
OEHS 696	Graduate Seminar	1

### Practice Based/Culminating Experiences:

PUBH 622	MPH Practice-Based Experience	3
OEHS 629	Capstone	1

### Electives (6 hours):

OEHS 630	Public Health Biology	3
OEHS 665	Worksite Evaluation	2
OEHS 691 - Advanced Topics (subject matter changes)		varies
OEHS 626	Internship	1-6

Total Hours		40-45
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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

### First Year

Fall	Hours Spring	Hours Summer	Hours
EPID 601	3 OEHS 610	3 Elective	3
BIOS 601	3 OEHS 622	3	
BIOS 602	1 PUBH 696	1	
OEHS 601	3 SBHS 601	3	
PUBH 696	1 Elective (Optional)	3	
HPML 601	3		
	<b>14</b>	<b>13</b>	<b>3</b>

### Second Year

Fall	Hours Spring	Hours
IENG 561	3 OEHS 626	1-6
Electives	6	
	<b>9</b>	<b>1-6</b>

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.

## 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

OEHS 601	Environmental Health	3
OEHS course - Occupational and Environmental Hazard Assessment		4
OEHS 732	Occupational Injury Prevention	3
EPID 745	Epigenetics/Systems Biology	3
OEHS 796	Graduate Seminar	1
OEHS 790	Teaching Practicum	2
EPID 601	Public Health Epidemiology	3
EPID 769	Occupational Epidemiology	3
HPML 601	Foundations of Health Policy	3
BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
BIOS 603	Applied Biostatistics 2	3
SBHS 601	Social and Behavioral Theory	3
SBHS 701	Public Health Grant Writing	3
PUBH course - Special Topics Seminar		1
BMS 700	Scientific Integrity	1
BMS 720	Scientific Writing	2
Electives		18
Research		58
OEHS 797	Research	
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

Fall	Hours Spring	Hours Summer	Hours
EPID 601	3 HPML 601	3 BMS 720	2
BIOS 601	3 SBHS 601	3 OEHS 797	2
BIOS 602	1 BIOS 603	3 Elective	3
OEHS 601	3 OEHS 797	1	
OEHS 732	3 SBHS 701	3	
BMS 700	1 Elective	3	
OEHS 797	1		
	<b>15</b>	<b>16</b>	<b>7</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
EPID 769	3 Elective	6 OEHS 797	6
EPID 745	3 Elective	3 Dissertation Proposal	
OEHS 797	3 OEHS 797 - Research	3	
PUBH 793 - Special Topics (subject matter changes)	1 Elective	4	
Elective	3 Qualifying Exam		
	<b>13</b>	<b>16</b>	<b>6</b>

### Third Year

Fall	Hours Spring	Hours Summer	Hours
PUBH 790	1 PUBH 790	1 OEHS 797	6
OEHS 797	8 OEHS 797	10	
Proposal Defense			
	<b>9</b>	<b>11</b>	<b>6</b>

### Fourth Year

Fall	Hours Spring	Hours
OEHS 796	1 OEHS 797	9
OEHS 797	9	
	<b>10</b>	<b>9</b>

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/ApplicantConnectLogin.asp?id=vvugrad>
- 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.

C&I 604	School Curriculum	3
CHPR 655	Fndtns-Pub Hlth:Schl Hlth Educ	3
CHPR 680	School Health Concepts	3
C&I 687	Advanced Teaching Strategies	3
C&I 688	Classroom Organization & Mang	3
CHPR 671	Public and Community Health	3
CHPR 509	Community Hlth:Drug Education	3
CHPR 507	Community Hlth:Human Sexuality	3
CHPR 640	School Health Program Design	3

## 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.

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## FACULTY

### INTERIM CHAIR

- Keith Zullig - 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 Shafron - EdD (West Virginia University)

### ASSISTANT PROFESSORS

- Christiaan Abildso - Ph.D. (West Virginia University)
- Haslyn Hunte - Ph.D. (University of Michigan)
- Alfgeir Kristjansson - Ph.D. (Karolinska Institute)
- Michael Mann - Ph.D. (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),
- Melissa Olfert - Ph.D. (Loma Linda University)
- Judith Sedgeman - EdD (West Virginia 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)

### PROFESSOR 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=vvugrad>
- 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>
- 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

### MPH Core Curriculum:

BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
EPID 601	Public Health Epidemiology	3
HPML 601	Foundations of Health Policy	3
OEHS 601	Environmental Health	3
SBHS 601	Social and Behavioral Theory	3
PUBH 696	Graduate Seminar	1

### Concentration Curriculum:

SBHS 610	Public Health Research Methods	3
SBHS 611	Community Assessment	3
or SBHS 660	Survey Research Methods	
SBHS 614	Community-Based Participatory Research	3
or SBHS 615	Intervention Design	
SBHS 613	Public Health Program Evaluation	3
SBHS 696	Graduate Seminar	1

### Practice Based/Culminating Experiences:

PUBH 622	MPH Practice-Based Experience	3
SBHS 629	Capstone Course	2

### Electives: (9 hours):

Total Hours		44
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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

Fall	Hours Spring	Hours Summer	Hours
EPID 601	3 OEHS 601	3 PUBH 622	3
BIOS 601	3 HPML 601	3	
BIOS 602	1 PUBH 696	1	
SBHS 601	3 SBHS 611 or 660	3	
SBHS 610	3		
PUBH 696	1		
	<b>14</b>	<b>10</b>	<b>3</b>

### Second Year

Fall	Hours Spring	Hours
SBHS 613	3 Elective	3
SBHS 615 or 614	3 SBHS 629	2
Electives	6	
	<b>12</b>	<b>5</b>

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

### First Year

Fall	Hours Spring	Hours Summer	Hours
EPID 601	3 OEHS 601	3 Elective	3
BIOS 601	3 HPML 601	3 PUBH 622	3
BIOS 602	1 PUBH 696	1	
PUBH 696	1 SBHS 601	3	
SBHS 610	3		
	<b>11</b>	<b>10</b>	<b>6</b>

### Second Year

Fall	Hours Spring	Hours
SBHS 613	3 SBHS 660 or 611	3
Elective	3 Elective	3
SBHS 614 or 615	3 SBHS 626	2
	<b>9</b>	<b>8</b>

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:

- Design needs and resource assessments relative to the implementation of a work-site wellness program
- Create and evaluate work-site wellness interventions
- Discern the individual, organizational, structural, and societal factors that contribute to health and safety in the workplace
- Derive the value of public health and wellness programs and policies to justify investment by business organizations

PUBH 536	Worksite Wellness	3
HPML Course Performance and Economic Evaluation for Public Health		3
OEHS 623	Occupational Injury Prevention	3
SBHS 633	Women and Violence	3
Total Hours		12

## SUGGESTED PLAN OF STUDY

### First Semester

Summer	Hours
SBHS 633	3
	3

### Second Semester

Spring	Hours
PUBH 536	3
	3

### Third Semester

Spring	Hours
OEHS 623 or 732	3
	3

### Fourth Semester

Spring	Hours
HPML Course Performance and Economic Evaluation for Public Health	3
	3

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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

SBHS 601	Social and Behavioral Theory	3
SBHS 610	Public Health Research Methods	3
SBHS 611	Community Assessment	3
SBHS 613	Public Health Program Evaluatn	3
SBHS 701	Public Health Grant Writing	3
SBHS 711	Research Translation - Health	3
SBHS 715	Intervention Design	3
SBHS 760	Survey Research Methods	3
SBHS 761	Qualitative Research Methods	3
SBHS 763	Adv Evaluation Public Health	3
BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
BIOS 603	Applied Biostatistics 2	3
BIOS 604	Applied Biostatistics 3	3
EPID 601	Public Health Epidemiology	3
C&I 789	Teaching In Higher Education	3
BMS 700	Scientific Integrity	1
BMS 720	Scientific Writing	2
SBHS 796 Graduate Seminar		3
SBHS 797 Research		53
Electives		12
Total Hours		117

### 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.

## SUGGESTED PLAN OF STUDY

### First Year

Fall	Hours Spring	Hours Summer	Hours
EPID 601	3 BIOS 603	3 BMS 720	2
BIOS 601	3 SBHS 611	3 SBHS 797	1
BIOS 602	1 SBHS 701	3 C&I 789	3
SBHS 610	3 SBHS 760	3	
SBHS 601	3 SBHS 797	2	
BMS 700	1		
SBHS 797	1		
	<b>15</b>	<b>14</b>	<b>6</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
BIOS 604	3 SBHS 761	3 SBHS 797	9
SBHS 613	3 SBHS 763	3	
SBHS 711	3 Elective	3	
SBHS 715	3 SBHS 797	3	
SBHS 796	1 Qualifying Exam		
	<b>13</b>	<b>12</b>	<b>9</b>

### Third Year

Fall	Hours Spring	Hours Summer	Hours
SBHS 796	1 Elective	3 SBHS 797	9
SBHS 797	6 SBHS 797	6	
Elective	3		
	<b>10</b>	<b>9</b>	<b>9</b>

### Fourth Year

Fall	Hours Spring	Hours
Elective	3 Dissertation Defense	
SBHS 796	1 SBHS 797	10

SBHS 797

6

**10**

**10**

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Total credit hours: 117

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