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Academic Policies and Procedures

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Official Program Designations

• Degree Program. A degree program is an area of study approved as such by the West Virginia University Board of Governors and the Higher Education Policy Commission (HEPC) and listed on the official HEPC inventory of degree programs, e.g., English, social work, and physical education. The degree is represented by the official degree designation, e.g., master of arts (M.A.), master of science (M.S.), and doctor of philosophy (Ph.D.). The degree program completed would be listed on the student’s diploma.

• 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. The major may be included on the student’s transcript.

• Area of Emphasis. An area of emphasis is a specific subject area of study that has defined course offerings within an approved degree program and major. Normally, a minimum of six and no more than 12 credit hours would be expected for an area of emphasis within a graduate degree. Areas of emphasis completed would appear on the student’s transcript, but would not be included on the diploma.
• 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. The certificate program is not attached to a degree program, although credit hours earned in a certificate program may be applied to a degree if they are deemed appropriate by the degree program. The awarding of a certificate upon completion of the program is not contingent upon completion of a degree program. The certificate would appear on the student’s transcript and the University may issue an official certificate of completion.

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 40 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 Loads
Graduate students are strongly recommended to limit their credit loads if they are also involved in extensive research, teaching, or service activities or who hold outside employment. Nine credit hours per semester is the minimum load to be considered a full-time graduate student. In general, persons working full-time for the University or another employer are advised to enroll for no more than six hours of coursework in any one term. Recommended credit loads may be lower for employed graduate students in some academic colleges, schools, and departments.

Graduate students are not permitted to take more than 16 hours in any one term and no more than 12 hours during the summer term. Credit overloads must be approved for students by their college and by the Office of Graduate Education and Life. Some school or college dean’s offices may also choose to monitor overloads in their academic units.

Degree Progress
Students seeking master’s or doctoral degrees are expected to enroll regularly and make steady progress toward their degree objectives.

Master’s degree students are permitted to continue in a program for a maximum of eight years under their original application. Students who have been inactive for two or more years are required to apply for, and be accepted for readmission. The application fee is assessed for reapplication.

At the doctoral level, the number of years involved in attaining or retaining competency cannot be readily specified. The doctoral student’s competency is generally assessed and verified through the qualifying examination in a reasonable period of time after acceptance into a program. Because the qualifying 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. In general, doctoral candidates are allowed no more than five years in which to complete the remaining requirements after being admitted to candidacy.

Experiential Learning Transcript
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.

Required Student Information
The University must have current information (name, address, telephone number, email, major, and advisor) about students enrolling for classes in order to communicate with students and maintain permanent records. When individuals do not enroll in classes for substantial periods of time, it is costly and time-consuming to continue to maintain their records on active status. For these reasons, the Office of Admissions and the Office of the University Registrar periodically deletes degree and non-degree student records from active status. Students who return after this deletion must reactivate their records by reapplying.

Advising
Academic and scholarly advising varies by graduate program across the University. Each graduate academic unit has one or more graduate advisors, and every graduate student is assigned an advisor at the time of admission or shortly thereafter. This advisor may be the student’s thesis or dissertation advisor. The advisor and student typically meet before the first semester of enrollment to formulate a plan of study and to form a graduate advisory committee as appropriate.
Records

The Office of the University Registrar maintains the official records of grades earned and degrees awarded. The schools and colleges maintain records for monitoring student progress and are responsible for certifying students for graduation. Among the records maintained by the academic units are plans of study (subject to the school/college dean’s approval), graduate committees (subject to the school/college dean’s approval), etc.

Required Minimum Enrollment

If a graduate student is using University libraries, research facilities, or consulting with graduate committee members, the student must enroll for at least one hour of graduate credit so that the University can receive credit for its contribution to graduate study, attest to student status, and guarantee the protection to which the student is entitled. 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 semester as a condition of their continued candidacy. 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. Registration for one credit of 799 Graduate Colloquium will satisfy this University requirement.

Enrollment During Final Term

All graduate students must enroll for at least one credit hour (e.g., 799 Graduate Colloquium) during the term (or summer) of graduation. Graduate students who are on campus will be required to register by the normal registration deadlines. Graduate students who have left the campus will be allowed to register until the tenth week of classes in fall and spring terms and the sixth week of summer term.

Full-Time and Part-Time Classification

A student is classified as full-time or part-time for any given enrollment period. A graduate student is classified as full-time if enrolled for nine or more hours in the fall or spring terms or six or more hours altogether in the summer.

Enrollment Regulations of Non-Degree Students

Non-degree students are normally adults taking classes for enrichment purposes, public school teachers taking classes for certification renewal, or students taking classes as prerequisites for admission to degree programs. Since these students have not made a commitment to a degree program, are not subject to time limits, and may enroll on an irregular basis, the University policies concerning active/inactive status are more liberal than those for degree students. 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 12 hours of previously earned credit toward a degree.

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 school or college. The mechanism may be the designation of a faculty member to advise non-degree students or the assignment of non-degree students to an advising office or center. Non-degree students who express an interest in programs in two colleges may be assigned to either by the Office of Admissions. It is expected that the assigned advisor will consult the other unit for information to assist the student. Students with no specific interest should not be admitted to graduate study. Courses taken under the audit option are counted toward attaining full-time enrollment status.

Auditors

Students may enroll in courses without working for a grade or for credit by registering as auditors. Change in status from audit to credit or from credit to audit may be made during the registration period. Attendance requirements for auditors are determined by the instructor of the course being audited. It is the prerogative of the instructor to strike the name of any auditor from grade report forms and to instruct the Office of the University Registrar to withdraw the auditor from the class if attendance requirements are not met. Auditors are required to follow the same admission procedures as students taking the course for credit.

Joint Graduate/Professional Programs

Any student who is in a professional program such as MD, DDS, JD, PharmD, etc. would be eligible to take graduate courses so long as the student meets normal requirements for admission to the course (e.g. course pre-requisites, appropriate major code if courses are limited to certain majors, etc.).
Absences

• Importance of Class Attendance — At WVU, class attendance contributes significantly to academic success. Students who attend classes regularly tend to earn higher course grades. Excessive absences may jeopardize students’ grades or even their ability to continue their courses.

• 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 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.

West Virginia University Policy on the Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act (FERPA) of 1974 is a federal law that states that: (a) a written institutional policy must be established and (b) a statement of adopted procedures covering the privacy rights of students be made available. The law provides that the institution maintain the confidentiality of student educational records.

West Virginia University accords all the rights under the law to students who are declared independent. No one outside WVU shall have access to nor will WVU disclose any information from students’ educational records without the written consent of students, except to personnel within WVU and the West Virginia Higher Education Policy Commission, persons or organizations providing students’ financial aid, accrediting agencies carrying out their accreditation function, persons in compliance with judicial order, organizations conducting studies for, or on behalf of, education agencies or institutions for the purpose of developing, validating, or administering predictive testing student aid programs, and improving instruction, and persons in an emergency in order to protect the health or safety of students and/or other persons. All these exceptions are permitted under the act.

FERPA also permits disclosure of information from students’ educational records, without the written consent of students, to parents of a dependent student of such parents, as defined in Section 152 of the Internal Revenue Code of 1954, as amended. West Virginia University considers all students as “dependent” for purposes or disclosure of information to parents unless the students specifically notify in writing the Office of The University Registrar that they are not a dependent of their parents for federal income tax purposes. Students need to give such written notification only once.

The West Virginia University Policy on the Family Educational Rights and Privacy Act explains in detail the procedures to be used for compliance with the provisions of the act. Copies of the policy can be found in the offices of all deans and directors. The offices of the deans and directors can inform students as to the locations of all education records maintained on students by West Virginia University.

Research Policy Guidelines

Research Involving Animals or Human Subjects

Any graduate student who conducts research with experiments using animals must have a protocol approved by the Animal Care and Use Committee before starting the research. Information about procedures and protocol forms may be obtained from the Office of Sponsored Programs.

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 about procedures and approval forms may be obtained from the Office of Sponsored Programs, 886 Chestnut Ridge Road, Morgantown, WV 26505-6845, (304) 293-3998.

Research Integrity at West Virginia University

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 are governed by Policy and Procedures for Responding to Allegations of Misconduct in Research and Scholarship at West Virginia University. This policy can be found at osp.research.wvu.edu/policies_and_regulations/institutional_policies/misconduct.

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, WVU Office of Research (304) 293-2867. Regular reviews of the status of research integrity at WVU are conducted by the Research Integrity Policy Committee.
University Patent Policy

West Virginia University is committed to supporting faculty members and staff in all matters related to patents based on discoveries and inventions created solely or jointly by them. This policy encourages and aids research at the University, provides financial compensation and professional recognition to inventors, and protects and serves the public interest.

The University recognizes that discoveries and inventions may, and frequently do, include equities. The use of University facilities, equipment, personnel, supplies, or services, the particular assignment of duties or conditions of employment, the possible claims of a cooperating agency, as in research supported from extramural funds, and other situations may give rise to complex rights involving the inventor, the University, and a sponsoring agency. Such rights must be evaluated and an agreement reached on their appropriate disposition. Policies and procedures involving the rights and obligations of the University, its sponsors, and its inventors with respect to inventions resulting from research, development, or other work performed at the University are overseen by the Office of Technology Transfer and can be obtained at http://www.wvu.edu/~research/techtransfer/policy.

Final Grade Appeal Procedures (Not Involving Charges of Academic Dishonesty) including Dismissal from an Academic Program

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. This procedure provides a mechanism whereby a student may appeal a failing grade or a grade low enough to cause the student to be dismissed from some program or to require the repetition of a course. Grade appeals that do not meet this classification are not precluded.

Procedure

- **Step 1** - The student shall discuss the complaint with the instructor involved prior to the mid-semester of the succeeding regular semester, whether the student is enrolled or not. If the two parties are unable to resolve the matter satisfactorily, if the instructor is not available, or if the nature of the complaint makes discussion with the instructor inappropriate, the student shall notify the chairperson of the instructor’s department or division (or, if none, the dean). The chairperson or dean shall assume the role of an informal facilitator and assist in their resolution attempts. If the problem is not resolved within five academic days from when the complaint is first lodged, the student may proceed directly to Step 2.
- **Step 2** - The student must prepare and sign a document that states the facts constituting the basis for the appeal within five academic days from when the original complaint was lodged. Copies of this document shall be given to the instructor and to the instructor’s chairperson (or, if none, to the dean). If, within five academic days of receipt of the student’s signed document, the chairperson does not resolve the problem to the satisfaction of the student, the student will forward the complaint to the instructor’s dean (see Step 3).
- **Step 3** - Within five academic days of receipt of the complaint, the instructor’s dean shall make a determination regarding the grade, making any recommendation for a grade change to the instructor involved. If the instructor involved does not act on the dean’s recommendation, or if the student disagrees with the decision of the dean, the dean will refer the case to a representative committee, appointed by the dean, for final resolution. This committee shall consist of three or more faculty members, including at least one person outside the instructor’s department.

1. Upon receiving an appeal, the committee will notify in writing the faculty member involved of the grade challenge, which shall include a statement of the facts and evidence to be presented by the student.
2. The committee shall provide to the faculty member involved and the student making the appeal written notification of their right to appear at a hearing to be held before the department, college, or school representative committee, together with the notice of the date, time, and place of the hearing.
3. The administrative procedure is not adversarial in nature; the formal rules of evidence do not apply.
4. The final decision of this committee shall be forwarded to the instructor and to the dean involved. If the decision requires a change of grade, the instructor shall take action in accordance with the committee’s decision.
5. If the instructor does not act within five academic days, the dean shall make any necessary grade adjustment.
6. In the case of grade appeals, the dean functions as the president’s designee; therefore, implementation of this decision shall end the appeal procedure.

Uniform Academic Suspension Regulations

Students failing to maintain satisfactory academic standing or progress towards their degree as delineated by the letter of probation may be suspended from their degree program. Academic suspension normally follows a sanction of probation, above, in cases where students have been counseled regarding academic stipulations and fail to attain those stipulations. Normally, students are suspended at the end of a semester or summer school session and are notified formally by the department and/or the dean of the college or school of academic suspension.

Academic suspension identifies the status of a student who has failed to meet the departmental minimum standards and who has been notified formally by the department and/or the dean of the college or school of academic suspension. Suspension from the University means
that a student will not be permitted to register for any classes, including those in summer sessions, offered by the University for academic credit 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 from the date of a student’s first suspension. 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, the appropriate transfer credit will be entered into the student’s record and certification that the conditions of suspension have been met; a student who has pre-registered and is subsequently suspended shall have his or her registration automatically cancelled.

### 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. The college that reinstates the student removes the student’s suspension restriction in the Office of the University Registrar and accepts the student.

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.

### Academic Probation-GPA

Graduate students with a cumulative grade point average below 2.75 may be subject to probation by the dean of their college or school. Individual academic units may designate an even higher GPA for students to remain in good standing. The College of Law maintains specific policies for academic standing in the Student Handbook available at [http://law.wvu.edu/academics](http://law.wvu.edu/academics).

A letter of probation delivered by the graduate program to the student should outline the reason for the sanction as well as delineate academic benchmarks for the student to attain in order to have the probation sanction removed. Students may request review of the sanction of academic probation by the academic official who imposed it at any point in a semester. Academic probation, which is not recorded on a student’s permanent record, constitutes a warning to the student that standards are not being met. If academic progress or benchmarks are not attained in accordance with the letter of probation, the student may be suspended by the program (see below).

### Academic Probation-Other

Graduate students may also be placed on probation by the dean of the college or school by failing to maintain acceptable performance beyond the GPA, for example, through unacceptable research progress. A letter of probation delivered by the graduate program to the student should outline the reason for the sanction as well as delineate performance benchmarks for the student to attain in order to have the probation sanction removed. Students may request review of the sanction of academic probation by the academic official who imposed it at any point in a semester.

Academic probation, which is not recorded on a student’s permanent record, constitutes a warning to the student that standards are not being met. If academic progress or benchmarks are not attained in accordance with the letter of probation, the student may be suspended by the program (see below).

### Removal of Academic Probation

At the conclusion of the semester in which a student was placed on probation, the academic program shall review the academic record of the student and the probation letter. 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 be suspended by the academic unit.

### Appeal of Suspension

Imposition of academic suspension based on grade point average, failure to meet the conditions previously specified for removal of academic probation, or failure to meet the conditions of admission may be appealed under the following conditions:

- The student may appeal individual final course grades and, if successful, may be reinstated;
- The student may make an appeal to the appropriate dean based on erroneous calculation of the grade point average or on erroneous calculation of the time period within which a grade point average must be achieved. The decision of the dean, as the president’s designee, is final.

Students have the right to appeal academic suspensions based on requirements or standards other than grades or grade point average that they believe reflect capricious, arbitrary, or prejudiced academic evaluation, or reflect discrimination based on race or color, gender, sexual
orientation, veteran status, religion, age, disability, ethnicity, or political affiliation (procedure, above). At the dean’s discretion, suspensions may remain in effect until appeal procedures are completed. The student shall discuss the complaint with the dean within 30 calendar days of the action taken.

Academic Dismissal Regulations

Academic dismissal can result from repeated failure to make academic progress and/or to meet probationary terms set forth in writing by the student’s college or school. A student who is academically dismissed from the University will not be permitted to register for any classes, including those in summer sessions.

After five calendar years from the effective date of academic 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 entered. Failure to meet these terms will result in permanent academic dismissal.

Students returning to a graduate program may need to have their coursework re-validated by the program if courses were taken more than eight years prior to the planned date of graduation after re-instatement.

Appeal of Dismissal—Failure to Meet Academic Standards

A decision to dismiss a student for failure to meet academic standards (as distinguished from academic dishonesty) may be made only after the student has been counseled by the appropriate departmental committee or representative, with counseling to take place as soon as possible after discovery of the problem. After the student is given a reasonable opportunity to correct deficiencies, formal review of the student’s status by the appropriate departmental or program committee will be held to determine whether the student shall be retained or dismissed. The student may provide the committee written documentation of his or her efforts to correct deficiencies.

Academic Integrity and Dishonesty

The academic development of students and the overall integrity of the institution are primary responsibilities of WVU. Academic dishonesty is condemned at all levels of life, indicating an inability to meet and face issues and creating an atmosphere of mistrust, disrespect, and insecurity. In addition, it is essential in an academic community that grades accurately reflect the attainment of the individual student. Faculty, students, and administrators have shared responsibilities in maintaining the academic integrity essential for the University to accomplish its mission.

For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see Board of Governors Policy 31 at bog.wvu.edu/policies and the Student Conduct Code at http://www.studentlife.wvu.edu/judicial.html. Note: The University is evaluating the process of academic dishonesty prosecution and appeal and students should contact the Office of Student Life/Student Judicial Affairs for current procedures at http://www.studentlife.wvu.edu/judicial.html.

Responsibilities

The integrity of the classes offered and research and scholarship undertaken by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Students should act to prevent opportunities for academic dishonesty to occur and in such a manner to discourage any type of academic dishonesty. Faculty members are expected to remove opportunities for cheating, whether related to test construction, test confidentiality, test administration, or test grading. This same professional care should be exercised with regard to oral and written reports, laboratory assignments, and grade books.

Deans and department chairpersons are expected to acquaint all faculty with expected professional behavior regarding academic integrity, and to continue to remind them of their responsibility. Deans and department chairpersons shall assist faculty members and students in handling first-offense cheating allegations at the lowest possible level in the University, and with discretion to prevent damage to the reputation of any person who has not been found guilty in the prescribed manner.

Each member of the teaching faculty and all other WVU employees, including but not limited to assistants, proctors, office personnel, custodians, and public safety officers, shall promptly report cases of academic dishonesty to the appropriate supervisor, department chairperson, or dean of the college or school concerned, and to the Office of Judicial Affairs, Office of Student Life.

Academic Dishonesty Defined

WVU expects that every member of its academic community shares the historic and traditional commitment to honesty and integrity. Academic dishonesty is defined to include, but is not limited to, any of the following:

1. Plagiarism is defined in terms of proscribed acts. Students are expected to understand that such practices constitute academic dishonesty regardless of motive. Those who deny deceitful intent, claim not to have known that the act constituted plagiarism, or maintain that what they did was inadvertent are nevertheless subject to penalties when plagiarism has been confirmed. Plagiarism includes, but is not limited to, submitting, without appropriate acknowledgment, a report, notebook, speech, outline, theme, thesis, dissertation, or other written, electronic, visual, or oral material that has been copied in whole or in part from the work of others, whether such source is published or not, including, but not limited to, another individual’s academic composition, compilation, or other product, or commercially prepared paper.
2. Cheating and dishonest practices in connection with examinations, papers, and projects, include, but are not limited to:

1. Obtaining help from another student during examinations.
2. Knowingly giving help to another student during examinations, taking an examination or doing academic work for another student, or providing one’s own work for another student to copy and submit as his or her own.
3. The unauthorized use of notes, books, or other sources of information during examinations.
4. Obtaining an examination or any part thereof without authorization.

3. Forgery, misrepresentation, or fraud includes, but is not limited to:

1. Forging or altering, or causing to be altered, the record of any grade in a grade book or other educational record.
2. Use of University documents or instruments of identification with intent to defraud.
3. Presenting false data or intentionally misrepresenting one’s records for admission, registration, or withdrawal from the University or from a University course.
4. Knowingly presenting false data or intentionally misrepresenting one’s records for personal gain.
5. Knowingly furnishing the results of research projects or experiments for the inclusion in another’s work without proper citation.
6. Knowingly furnishing false statements in any University academic proceeding.

Process to Initiate a Charge of Academic Dishonesty

To initiate and process a charge of academic dishonesty, including plagiarism, cheating, and academic fraud, and/or to begin the process of issuing an Unforgivably F, the instructor must do the following:

1. Notify the student in writing of the charge and the penalty and schedule a conference within five academic days of discovering the infraction. West Virginia University Undergraduate Catalog
2. Meet with the student to discuss the issue, to review all relevant materials, and to complete the Notification of Academic Misconduct (NAM) form (http://facultysenate.wvu.edu) as soon as possible but no longer than five academic days following the discovery of the violation.

3. Responsibility/Resolution

1. If the student accepts responsibility for both the charge and the sanctions, he or she signs the NAM, and the case is closed. Within five academic days of resolution of the case, faculty should make three copies of the NAM form: one for the student, one for faculty records, and one for the Office of Student Judicial Affairs (84 Boreman North, P.O. Box 6430).
2. If the student does not accept responsibility as charged, he or she may appeal to the chair of the department. If the student and chair reach a resolution, the chair should make three copies of the NAM form: one for the student, one for departmental records, and one for the Office of Student Judicial Affairs (84 Boreman North, P.O. Box 6430). These copies should be distributed within five academic days of resolution of the case.
3. If the student and the chair do not reach a resolution, the student may appeal to the Student Conduct Board, which is comprised of members of the University Committee on Students Rights and Responsibilities. This appeal must be initiated within five academic days of the student’s meeting with the chair.
4. If the student appeals to the Student Conduct Board, a panel of three faculty and two students or any odd number with faculty comprising the majority will be convened, the case will be examined, and a decision will be reached.
5. If the student disagrees with the decision of the Student Conduct Board, he or she may appeal to the provost, whose decision is final.

Appeal Procedures for Cases Involving Academic Dishonesty

Academic dishonesty includes plagiarism, cheating, and dishonest practices in connection with examinations, papers, and projects, as well as forgery, misrepresentation, and fraud. Some cases of forgery, misrepresentation, or fraud that occur outside the context of courses or academic requirements may be referred directly to the Office of Student Life/Judicial Affairs by any member of the University community. In such cases, the Office of Student Life/Judicial Affairs will arrange a hearing following the procedures outlined in the BOG Policy 31.

An Unforgivable F (UF) is a University sanction levied as a result of a violation of the Student Conduct Code Article III (B) 1. Thus, the appeal process for a UF as well as for other cases involving academic dishonesty is different than a standard grade appeal (see above), which follows academic channels that end with a decision by the dean of the college involved. This sanction can be given only after a student has gone through the University student conduct process.

Military Credit/Leave

Awarding Course Credit to Students Called to Serve in the Military (Updated July 28, 2010)

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 in 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**

Many students at West Virginia University choose to serve in the military while pursuing their degrees. West Virginia University is a “Veteran Friendly” institution and recognizes its obligations to our students who serve in the military. Although there is a university expectation that all students will attend all of their classes, the choice to serve in the military where two week training sessions may be mandatory should not negatively impede academic progress. The following section outlines the appropriate steps to follow should you miss class due to call ups for military service training during a semester. A typical call up is 1-2 weeks.

If you are a student with the potential for being called to military training during the course of the semester or academic year, we recommend that you review the syllabi for specific attendance policies for each course prior to the beginning of every semester. In addition, we strongly encourage you to meet with or have substantial email contact with all of your course professors and/or instructors no later than the Monday of the first week of class in order to address the class attendance policy and the impact a short-term military leave will have on your ability to succeed in the class for the semester. Any agreements between you and your professors should be agreed upon by the end of the first week of class. Share this information with your academic advisor so the appropriate notes are made in DegreeWorks.

In the rare case that an unresolved issue arises due to absences from a course because of military obligation, the West Virginia University process for final grade appeal is outlined under the “Final Grade Appeal Procedures” in the West Virginia University Undergraduate Catalog.

In the spirit of WVU, faculty make every effort to allow students who are members of the Armed forces to make up test and assignments that may be missed during the semester if it can be proven that the student was called up for military training; and if missing the coursework will not irreversibly impact the students’ ability to master the subject matter in question within the terms of the semester.

**Graduate Education at West Virginia University**

**Page Contents:**
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Application for Graduate Study

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.

Students should apply for admission as early as possible to the department, division, school, or college offering the program of interest. Information relevant to the application process can be found on the web at http://adm.wvu.edu/graduate with additional information regarding the program of interest on the individual program’s website.

Minimum Admission Standards

The University Graduate Council establishes the minimum standards for admission to graduate study. 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, only the specific program faculty may grant permission for the pursuit of a graduate degree.

Forms and Application Fees

Application for admission to graduate study must be made online or on standard forms provided online at http://adm.wvu.edu/graduate. If using a paper application, the completed form may be returned to the Office of Admissions, P.O. Box 6009, West Virginia University, Morgantown, WV 26506, and must be accompanied by payment of a nonrefundable special service fee.

Transcripts

Applicants must arrange for official transcripts to be sent directly to the Office of Admissions by the Office of the University Registrar or records office of their previous institutions. Transcripts should be requested from all institutions attended in the course of undergraduate or graduate study. Transcripts received by the Office of Admissions become the property of WVU.

GRE/GMAT

Many programs at WVU require graduate record examination (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, such as the Miller Analogies. Specific admission requirements are found in the program sections of the online catalog (http://catalog.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 Admissions. (The code identifying WVU to the GRE is 5904.) In addition, students are encouraged to send a machine-reproduced copy of GRE or GMAT scores, if available, along with the initial application to the Office of Admissions in order to facilitate the WVU evaluation process.

Information on the GRE may be obtained at http://www.ets.org/gre and for the GMAT at http://www.gmac.com/gmac/thegmat. Information about the Miller Analogies Test may be obtained from the psychology department or the counseling service of the applicant’s undergraduate institution. At WVU, call the University Testing Center at (304) 293-0699.

Admission Acceptance

Once a complete application and required documents are received, the Office of Admissions forwards a copy of the application packet to the faculty of the program of interest. Any graduate degree program is permitted to set admission requirements beyond the minimum admission standards of the University. No one may pursue an advanced degree at WVU unless admitted to the appropriate degree program. A student
who wishes to take courses after completing a degree must submit a new application and pay the nonrefundable service fee. Any applicant who fails to enroll within a year after acceptance must reapply.

**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/she can document factual errors in processing the application or if the decision was deemed arbitrary and capricious or discriminatory in nature.

If the matter is not resolved satisfactorily within 30 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 20 calendar days of the receipt of the appeal and is final.

**Graduate Credit via Senior Petition**

Undergraduate students wishing to obtain graduate credit by senior petition must obtain the standardized permission form from the Office of the University Registrar. This form requires the signature of the student’s undergraduate advisor, the dean of the college granting the undergraduate degree, and the dean of the college of the intended graduate degree (if different). The policies regulating an undergraduate’s enrollment in the graduate-level course for graduate credit are:

- Enrollment is permitted only in courses numbered 400–599.
- Undergraduates must be within 12 credit hours of their baccalaureate degrees and have a grade point average of 3.0 on a 4.0 scale.
- The maximum number of hours of graduate credit permitted by senior petition is 12 credit hours.
- The senior petition must be approved prior to or at the time of enrollment.
- No more than 20 percent of the total enrollment in any 500-level course may consist of undergraduate students.

Approved senior petitions are returned to the Office of the University Registrar so that a notation of graduate credit may be placed on the student’s transcript. Any exceptions to the regulations must be approved by the dean of the school or college in which the student seeks graduate credit. Note: Students receiving graduate credit for a course do not receive credit toward their undergraduate degree with the same course.

**Transfer Students**

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

A student wishing to apply credit earned at another accredited institution of higher education to a degree program at WVU must obtain a transfer of graduate credit form from their department. This form requires the signature of the student’s unit chairperson or designee. The student must also have an official transcript from the other institution sent to the Office of Admissions. Only credit earned at institutions accredited regionally at the graduate level may be transferred. Students should have transfer credit approved prior to enrolling in coursework. Non-degree graduate students are not permitted to transfer credit to WVU from another institution.

Graduate programs may accept up to a maximum of 40 percent of their required coursework as transfer graduate credit. Individual graduate units may require higher percentages to be earned under their direction.

**Transfer to Another Program**

A student may initiate a transfer to another program within WVU by contacting the dean’s office of the school or college where enrolled. Following the student’s request, the dean’s office will send the student’s record to the school or college that the student wishes to enter. The school or college receiving the record is required to acknowledge receipt of the record and notify the Office of University Registrar of the status of the student’s application within 30 days. If a student is accepted by the new school or college, the school or college retains the student’s record and notifies the student of acceptance. If a student is rejected, he or she is notified and the student’s record is returned to the original school or college. The Office of the University Registrar is responsible for updating students’ records to reflect new majors and new advisors.

When a student transfers from one unit or program to another unit or program within the University, the faculty of the new unit determines if any credit earned under the guidance of the prior unit may be applied to a degree, certificate, or other educational offering of the new unit.

Programs may establish admission requirements in addition to those set by the University Graduate Council, such as a higher grade point average, the submission of scores on standardized tests, and the receipt of letters of recommendation.
Non-degree Applicants

Students not wishing to pursue an advanced degree may apply for admission as non-degree graduate students. Applicants must complete the standard application form, pay the nonrefundable special service fee, state the area of intended study, and present an official transcript with a baccalaureate degree indicated.

Reapplication

When students graduate or complete the program for which they applied, they must reapply and be readmitted before taking further coursework at WVU. This policy assures that the University is informed of students’ objectives and assigns them an appropriate advisor. Students are assessed a service fee for each new application.

Readmission

Degree students who have been inactive for two or more years must reapply for admission by completing the graduate application process.

International Student Admission

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 stated academic requirements for admission and with certain additional academic and nonacademic requirements.

International applicants should forward a letter of inquiry one year before they intend 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 after which applications cannot be 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 service fee.
- The official results of the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) sent directly to WVU by the testing service.
- 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.
- For visa documents, certification of financial support and a copy of current passport or visa.

The items above should be sent to the Office of Admissions, West Virginia University, P.O. Box 6009, 2nd Floor, One Waterfront Place, Morgantown, West Virginia 26506-6009. All materials must be received by the application deadline. Admissions will only accept original or certified transcripts/academic documents. Scanned, copied, or emailed documents are not considered official. If possible, all application materials should be submitted at one time (TOEFL or 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. 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).

Required Academic Credentials

Applicants for graduate programs must submit academic records from all post-secondary education. In some cases, it may be necessary for graduate applicants to submit records from the secondary school.

West Virginia University requires that original academic documents 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 the 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.

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

Applicants who are currently enrolled in an institution and who cannot submit the final academic record and certification of degree may be granted admission if the incomplete record indicates that the applicant will unquestionably meet WVU admission standards. Final admission, however, cannot be approved until the complete academic record and certification of degree have been received and evaluated by the Office of Admissions.
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) and the International English Language Testing System (IELTS) as measures of English language proficiency. A score of 213 on the computer-based TOEFL, 550 on the paper-based TOEFL, or 79 on the internet-based TOEFL, or 6.5 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 6154, Princeton, NJ 08541, USA, or by contacting the local office of the United States Information Service (USIS).

Applicants who have received a high school diploma or a bachelor’s degree in the United States, UK, Canada, NZ, or Australia need not submit TOEFL/IELTS results. However, applicants having only a master’s degree from an accredited U.S. college or university must still provide acceptable TOEFL or IELTS scores.

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 U.S. dollars. Generally, the student must 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 other 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.

Intensive English Program

In some cases, it may be possible to consider applications for students who lack adequate TOEFL/IELTS scores and will enroll in the West Virginia University Intensive English Program. Such applicants must contact the Intensive English Program directly and notify the Office of Admissions of their intentions. Applicants for graduate programs should also notify the academic department of interest of their intentions. Admission to the Intensive English Program does not guarantee admission to the University or to a specific program of study. Applicants admitted to an academic program under the condition of successful completion of the Intensive English Program will be required to meet a certain level of English language proficiency before being permitted to begin the academic portion of their studies, e.g., a grade of B or better in the highest level of IEP or 79 on the internet based TOEFL, a TOEFL score above 550 or an IELTS score of 6.5. Inquiries about the Intensive English Program should be directed to the Intensive English Program, Department of Foreign Languages, West Virginia University, P.O. Box 6298, Morgantown, WV 26506-6298.

Transferring Within the USA

International students applying to transfer from accredited schools within the United States are not permitted to register at WVU until they have complied with all transfer procedures as required by the United States Bureau of Citizenship and Immigration Services DS-2019.

Upon arrival on the campus, the student must be prepared to present the I-20 or IAP 66 to the international student advisor for formal processing. No student should move to Morgantown without having received an assurance of admission and immigration documents from WVU.

Admission to Graduate Study

Classifications

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

- Provisional Graduate Students — A student may be admitted as provisional by any unit when the student possesses a baccalaureate degree from an accredited college or university, but clearly 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 less than the 2.75 grade point average required for regular admission. The letter of acceptance from the graduate program should outline the steps necessary for the graduate student to be re-classified as a regular graduate student.

- Non-Degree Students — A non-degree student is a student not admitted to a program. Admission as a non-degree student does not guarantee admission to any course or program. The reasons for non-degree admission may be late application, incomplete credentials, scholarship deficiencies, or lack of a degree objective. Even though a non-degree student has not been admitted to a graduate program, a unit may allow a non-degree student to enroll in its courses. To be admitted as a non-degree student, a student must only present evidence of a baccalaureate degree from an accredited college or university and a 2.5 grade point average. The student must obtain a 2.5 grade point average on the first 12 credit hours of coursework taken at WVU and maintain this average as long as enrolled. (See Previous Graduate Study for an exception to this rule.) To be eligible to enter a degree program, the student must maintain a minimum of a 2.75 grade point average on all coursework taken since admission as a graduate student.
The standards cited are the minimum standards established by the University. Individual academic units or graduate programs may establish higher standards.

**Academic Standards**

The minimum academic standards for the different classifications are as follows. To be in good standing, regular students must obtain a 2.75 grade point average in the first 12 hours of graduate study and maintain this average throughout the time they are enrolled in graduate work. A student failing to achieve this standard will be placed on probation and must achieve a cumulative grade point average of 2.75 by the end of the next enrollment period at West Virginia University. Part-time graduate students must obtain a 2.75 cumulative grade point average in the next nine hours of graduate study. A student who cannot earn the required average will be suspended. A student must be in good standing to graduate.

A provisional student has been admitted to the University with one or more deficiencies. Consequently, by completion of 18 credit hours, the student must meet the provisions stated by the department and attain a minimum grade point average of 2.75. A student who fails to meet the provisions of admission or who fails to achieve the required grade point average will be suspended. Students who meet the provisions of admission and the required grade point average will be reclassified as regular students, and the regulations governing good standing for regular students will apply.

To be in good standing, a non-degree student must obtain a 2.5 grade point average in the first 12 hours of graduate study and maintain this average throughout the time enrolled in graduate work. A student failing to achieve this standard will be placed on probation and must achieve a cumulative grade point average of 2.5 by the end of the next enrollment period (or nine credit hours for part-time students) at West Virginia University. Students who do not earn the required average will be suspended. A non-degree student who later wishes to apply for admission to a degree program must have achieved a minimum grade point average of 2.75 on all coursework taken since admission as a graduate student in order to be considered.

**Reclassification of Provisional Students**

The provisions of a student’s provisional status are specified by the graduate department or program, but also may include satisfactory performance in ESL courses. To be reclassified as a regular student, a student must meet the provisions stated by the department and achieve a minimum grade point average of 2.75 on all coursework. 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 the completion of 18 credit hours, a student who has met the provisions of admission and achieved the required grade point average will be reclassified as a regular 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.

Upon notification by the appropriate academic unit, the Office of Admissions will prohibit the registration of all provisional graduate students who have reached the maximum of 18 credit hours. Registration will not be permitted until the student is reclassified as a regular student, an exception is granted by an academic dean, or the student is transferred. A student may be admitted as a provisional graduate student more than one time, but not by the same graduate program.

All credit hours taken since admission as a provisional graduate student or those to be applied to a degree count in the 18 credit-hour limit, i.e., undergraduate or graduate credit, P/F, S/U, graded courses, credit by senior petition, and transfer credit.

**Other Re-classifications**

Regular and provisional students may become non-degree students by choice. This includes students who fail to meet admission or academic standards or who withdraw voluntarily. To change a student to non-degree status, the advisor must process an Academic Status Change Form through the school or college dean’s office.

Non-degree students who later wish to become degree students must present all the credentials required by the degree program and process an Academic Status Change Form signed by the student, their advisor, and the Office of Admissions. For admission to a degree program, a non-degree student must have achieved a minimum grade point average of 2.75 on all coursework taken since admission as a graduate student.

**Classification and Previous Graduate Study**

The same three admission classifications (regular, provisional, non-degree) apply to those applicants who have undertaken previous graduate study. In general, the cumulative grade point average regulations apply to any transfer student who has not completed a graduate degree. However, an applicant who has received a master’s degree from an accredited college or university may be admitted to whatever category is deemed most appropriate by the faculty of the program of interest.
# West Virginia University Calendar

## Fall 2012

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<th>Activity</th>
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<td>New Student Orientation</td>
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<tr>
<td>Friday, August 17</td>
<td>General Registration</td>
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<tr>
<td>Monday, August 20</td>
<td>On Campus First Day of Classes</td>
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<tr>
<td>Monday, August 20</td>
<td>Late Registration Fee in Effect for All Students</td>
</tr>
<tr>
<td>Friday, August 24</td>
<td>Last day to Register. Add New Courses, Make Section Changes, Change Pass/Fail and Audit</td>
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<tr>
<td>Monday, September 3</td>
<td>Labor Day Recess: University Closed</td>
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<td>Monday, September 17</td>
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<td>Friday, October 5</td>
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<tr>
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<td>Mid-Semester Reports Due</td>
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<td>Friday, October 26</td>
<td>Last Day to Drop a Class</td>
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<tr>
<td>Friday, October 26</td>
<td>Eid-al-Adha (Day of Special Concern)</td>
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<tr>
<td>Tuesday, November 6</td>
<td>Election Day</td>
</tr>
<tr>
<td>Monday, November 12</td>
<td>Birth of Baha’u’llah (Day of Special Concern)</td>
</tr>
<tr>
<td>Monday, November 12</td>
<td>Veterans’ Day (Day of Special Concern)</td>
</tr>
<tr>
<td>Saturday, November 17 thru Sunday, November 25</td>
<td>Thanksgiving Recess</td>
</tr>
<tr>
<td>Thursday, December 6</td>
<td>Last Day to Withdraw from the University</td>
</tr>
<tr>
<td>Friday, December 7</td>
<td>Last day of Classes</td>
</tr>
<tr>
<td>Sunday, December 9</td>
<td>December Convocation</td>
</tr>
<tr>
<td>Monday, December 10 thru Saturday, December 15</td>
<td>Final Examination Week</td>
</tr>
<tr>
<td>Sunday, December 16</td>
<td>Winter Break Begins</td>
</tr>
<tr>
<td>Tuesday, December 25</td>
<td>Christmas Day Observed</td>
</tr>
<tr>
<td>Friday, December 28</td>
<td>Degree Conferring Date</td>
</tr>
<tr>
<td>Friday, January 4</td>
<td>Dean’s reports on Graduates Due in Office of University Registrar</td>
</tr>
</tbody>
</table>

## Spring 2013

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Tuesday, January 1</td>
<td>New Year’s Day</td>
</tr>
<tr>
<td>Thursday, January 10</td>
<td>New Student Orientation</td>
</tr>
<tr>
<td>Friday, January 11</td>
<td>General Registration</td>
</tr>
<tr>
<td>Monday, January 14</td>
<td>On Campus First day of Classes</td>
</tr>
<tr>
<td>Monday, January 14</td>
<td>Late Registration Fee in Effect for All Students</td>
</tr>
<tr>
<td>Friday, January 18</td>
<td>Last day to Register. Add New Courses, Make Section Changes, Change Pass/Fail and Audit</td>
</tr>
<tr>
<td>Monday, January 21</td>
<td>Martin Luther King’s Birthday Recess: University Closed</td>
</tr>
<tr>
<td>Friday, March 1</td>
<td>Mid-Semester</td>
</tr>
<tr>
<td>Thursday, March 21</td>
<td>Naw-Ruz (Special Day of Concern)</td>
</tr>
<tr>
<td>Thursday, March 21 at noon</td>
<td>Mid-Semester Reports Due</td>
</tr>
<tr>
<td>Friday, March 22</td>
<td>Last Day to Drop a Class</td>
</tr>
<tr>
<td>Saturday, March 23 thru Sunday, March 31</td>
<td>Spring Recess</td>
</tr>
<tr>
<td>Friday, March 29</td>
<td>Friday Before Easter Recess: University Closed</td>
</tr>
<tr>
<td>Thursday, May 2</td>
<td>Last Day to Withdraw from the University</td>
</tr>
<tr>
<td>Friday, May 3</td>
<td>Last day of Classes</td>
</tr>
<tr>
<td>Monday, May 6 thru Saturday, May 11</td>
<td>Final Examination Week</td>
</tr>
<tr>
<td>Wednesday, May 15</td>
<td>Dean’s Reports on Graduates Due in Office of University Registrar</td>
</tr>
<tr>
<td>Saturday, May 18</td>
<td>Alumni Day</td>
</tr>
</tbody>
</table>

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*Note: This calendar includes important dates for both fall and spring semesters, including registration deadlines, holidays, and recess periods.*
Graduate education at West Virginia University began in the late 1800s, with the awarding of the first master’s degree in 1899 and the first doctoral degrees in 1932. Over the years, graduate education has grown to become a significant enterprise at WVU, with the awarding of approximately 1,500 master’s degrees in 106 major fields and 190 doctorates in 43 major fields annually. These advanced degrees are awarded for specialized training in the full spectrum of academic programs across West Virginia University and reflect the mastery of knowledge, attainment of technical capabilities, and creation of new work needed for students to advance in their careers or practice in their chosen fields of study.

While enrolled in graduate study at WVU, graduate students have the opportunity to work in close collaboration with expert faculty and have access to state-of-the-art facilities needed to excel in the students’ desired field of study. At the same time, graduate students have opportunities for professional and personal growth provided by the greater community of scholars represented by the university. Thus, graduate study at WVU provides a foundation and catalyst for advanced training leading to careers in a broad range of disciplines.

**Abbreviations Used in Course Listings**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>a course given in the first (fall) semester</td>
</tr>
<tr>
<td>II</td>
<td>a course given in the second (spring) semester</td>
</tr>
<tr>
<td>I, II</td>
<td>a course given each semester</td>
</tr>
<tr>
<td>I and II</td>
<td>a course given throughout the year</td>
</tr>
</tbody>
</table>

**Degree Requirements**

**Page Contents:**

- Abbreviations Used in Course Listings
- Credit hours (p. 22)
- Degree Programs Offered by WVU
- Electronic Theses and Dissertations
- ETD Approval
- ETD Contact Information
- ETD Submission
- Format (p. 27)
- Graduate Council
- Health Sciences Center
- Office of Graduate Education and Life
- Organization of Graduate Education
- Request for Degree
- Schools and Colleges
- Summary of Doctoral Degree Requirements
- Summary of Master’s Degree Requirements
Graduate Information

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yr</td>
<td>a course continued through two semesters</td>
</tr>
<tr>
<td>S</td>
<td>a course given in the summer</td>
</tr>
<tr>
<td>HR</td>
<td>credit hours per course</td>
</tr>
<tr>
<td>Lec</td>
<td>lecture period</td>
</tr>
<tr>
<td>Rec</td>
<td>recitation period</td>
</tr>
<tr>
<td>Lab</td>
<td>laboratory period</td>
</tr>
<tr>
<td>GLAB</td>
<td>graded lab</td>
</tr>
<tr>
<td>WEB</td>
<td>Web-based course</td>
</tr>
<tr>
<td>Conc</td>
<td>Must register prior to or at the same time</td>
</tr>
<tr>
<td>PR</td>
<td>prerequisite</td>
</tr>
<tr>
<td>Coreq</td>
<td>corequisite</td>
</tr>
<tr>
<td>Consent</td>
<td>consent of instructor required</td>
</tr>
<tr>
<td>CR</td>
<td>credit but no grade</td>
</tr>
</tbody>
</table>

Credit Hours

West Virginia University courses offered for credit are based on semester hours. Semesters are 15 weeks long plus one week for final exams. A single credit hour is equivalent to 50 minutes of guided instruction within the classroom. An hour of preparation, or related activity outside of the classroom, is equivalent to 60 minutes.

Face-to-Face Classroom Learning

One credit hour is equivalent to one hour of guided instruction (50 minute class) and a minimum of two hours of out-of-class student work each week for approximately 15 weeks for one semester or the equivalent amount of work over a different amount of time such as during the summer sessions, which may be variable. 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 is defined at least by an equivalent amount of work as required in the preceding paragraph and outlined in more detail below.

Online Classroom Learning

One credit hour of online learning is equivalent to 15 hours of direct instruction via computer-assisted (modules), multi-media interaction, discussions, and/or engagement for exams/quiz/assessments as documented in the course syllabus and approved to meet best practices in online learning, and 30 hours of student work (e.g. readings, supplemental home work) 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 15 hours of guided instruction and 30 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 1.5 hours of guided instruction and three hours for studio class preparation each week for 15 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 15 contact hours of guided instruction (e.g., student progress meetings, assessment) and 30 hours of student work to complete the requirements set forth by the advisor or course instructor (e.g., team
meetings, review sessions, thesis/dissertation preparation) over a 15 week period. Instructors/Mentors and students should discuss the appropriate number of total credit hours for a given course based on the time needed to attain outcomes of the particular endeavor.

## Degree Programs Offered by WVU

### College of Business and Economics

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>B.S.B.Ad.</td>
<td></td>
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</tr>
<tr>
<td>Business Administration</td>
<td></td>
<td>M.B.A</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Business Management</td>
<td>B.S.B.Ad.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>B.S.</td>
<td>M.A.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Finance</td>
<td>B.S.B.Ad</td>
<td>M.S.</td>
<td></td>
</tr>
<tr>
<td>Industrial Relations</td>
<td></td>
<td></td>
<td>M.S.</td>
</tr>
<tr>
<td>Management Information</td>
<td>B.S.B.Ad.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>B.S.B.Ad.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Accountancy</td>
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<td>M.P.A.</td>
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</table>

### College of Creative Arts

<table>
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<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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<tr>
<td>Art</td>
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<tr>
<td>Art History</td>
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<td>M.A.</td>
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<tr>
<td>Art and Design</td>
<td>B.F.A.</td>
<td>M.F.A</td>
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</tr>
<tr>
<td>Music</td>
<td>B.A., B.M.</td>
<td>M.M.</td>
<td>D.M.A, Ph.D.</td>
</tr>
<tr>
<td>Multidisciplinary Studies</td>
<td>B.M.D.S.</td>
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<tr>
<td>Theatre</td>
<td>B.A., B.F.A</td>
<td>M.F.A.</td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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</thead>
<tbody>
<tr>
<td>Aerospace Engineering</td>
<td>B.S.A.E.</td>
<td>M.S.A.E.</td>
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<tr>
<td>Biometric Systems</td>
<td>B.S.B.S.</td>
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<tr>
<td>Chemical Engineering</td>
<td>B.S.Ch.E.</td>
<td>M.S.Ch.E.</td>
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<tr>
<td>Civil Engineering</td>
<td>B.S.C.E.</td>
<td>M.S.C.E.</td>
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<tr>
<td>Computer Engineering</td>
<td>B.S.Cp.E.</td>
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<td>Computer Science</td>
<td>B.S.</td>
<td>M.S.C.S</td>
<td>Ph.D.</td>
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<tr>
<td>Electrical Engineering</td>
<td>B.S.E.E.</td>
<td>M.S.E.E.</td>
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<td>Engineering</td>
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<tr>
<td>Industrial Engineering</td>
<td>B.S.I.E</td>
<td>M.S.I.E</td>
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<tr>
<td>Industrial Hygiene</td>
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<td>M.S.</td>
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<tr>
<td>Mechanical Engineering</td>
<td>B.S.M.E.</td>
<td>M.S.M.E.</td>
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<tr>
<td>Mining Engineering</td>
<td>B.S.Min.E.</td>
<td>M.S.Min.E.</td>
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<tr>
<td>Petroleum &amp; Natural Gas</td>
<td>B.S.PNGE.</td>
<td>M.S.PNGE.</td>
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<tr>
<td>Engineering</td>
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<tr>
<td>Safety Management</td>
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<td>M.S.</td>
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<tr>
<td>Software Engineering</td>
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<td>M.S.S.E</td>
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### College of Human Resources and Education

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<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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<tbody>
<tr>
<td>Audiology</td>
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<td>Au.D.</td>
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<tr>
<td>Child Development and Family Studies</td>
<td>B.S.</td>
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<tr>
<td>Communication Sciences and Disorders</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Counseling</td>
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<td>M.A.</td>
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</table>
### Counseling Psychology
- **Education**: Ph.D.
- **Educational Leadership**: M.A.
- **Educational Psychology**: M.A.
- **Elementary Education**: B.A.
- **Instructional Design and Technology**: M.A.
- **Multidisciplinary Studies**: B.M.D.S.

### Reading
- **M.A.

### Rehabilitation Counseling
- **M.S.

### Secondary Education
- **M.A.

### Special Education
- **M.A.

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

### Speech Pathology
- **M.S.

### College of Law
<table>
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<th>Program</th>
<th>Bachelor's</th>
<th>Master's</th>
<th>Doctoral/Professional</th>
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<tbody>
<tr>
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### College of Physical Activity and Sports Science
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<th>Master's</th>
<th>Doctoral/Professional</th>
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<td>Ph.D.</td>
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<tr>
<td><strong>Physical Education</strong></td>
<td>B.S.</td>
<td>M.S.</td>
<td>Ed.D.</td>
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<tr>
<td><strong>Sport Studies</strong></td>
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### Davis College of Agriculture, Forestry, and Consumer Sciences
<table>
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<th>Bachelor's</th>
<th>Master's</th>
<th>Doctoral/Professional</th>
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<tbody>
<tr>
<td><strong>Agricultural and Resource Economics</strong></td>
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<td>M.S.</td>
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<tr>
<td><strong>Agricultural and Extension Education</strong></td>
<td>B.S. Agr.</td>
<td>M.S.</td>
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<tr>
<td><strong>Agriculture, Forestry, and Consumer Sciences</strong></td>
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<td>M.Agr.</td>
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<tr>
<td><strong>Animal and Nutritional Sciences</strong></td>
<td>B.S., B.S. Agr.</td>
<td>M.S.</td>
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<tr>
<td><strong>Design and Merchandising</strong></td>
<td>B.S.</td>
<td>M.S.</td>
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<tr>
<td><strong>Forest Resources Management</strong></td>
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<td><strong>Forest Resource Science</strong></td>
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<td><strong>Forestry</strong></td>
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<td>M.S.F.</td>
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<tr>
<td><strong>Genetics and Developmental Biology</strong></td>
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<td>M.S.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td><strong>Landscape Architecture</strong></td>
<td>B.S.L.A.</td>
<td>M.L.A.</td>
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<tr>
<td><strong>Multidisciplinary Studies</strong></td>
<td>B.M.D.S.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plant and Soil Sciences</strong></td>
<td>B.S., B.S.Agr.</td>
<td>M.S.</td>
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</tr>
<tr>
<td><strong>Recreation, Parks, and Tourism Resources</strong></td>
<td>B.S.R.</td>
<td>M.S.</td>
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</tr>
<tr>
<td><strong>Reproductive Physiology</strong></td>
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<td>M.S.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td><strong>Resource Management and Sustainable Development</strong></td>
<td></td>
<td></td>
<td>Ph.D.</td>
</tr>
<tr>
<td><strong>Wildlife and Fisheries Resources</strong></td>
<td>B.S.</td>
<td>M.S.</td>
<td></td>
</tr>
<tr>
<td><strong>Wood Science and Technology</strong></td>
<td>B.S.</td>
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# Eberly College of Arts and Sciences

<table>
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<th>Doctoral/Professional</th>
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</thead>
<tbody>
<tr>
<td>Biology</td>
<td>B.A., B.S.</td>
<td>M.S.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>B.A., B.S.</td>
<td>M.S.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>B.A.</td>
<td>M.A.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Computer Science</td>
<td>B.S.</td>
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</tr>
<tr>
<td>Creative Writing</td>
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<td>M.F.A</td>
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</tr>
<tr>
<td>Economics</td>
<td>B.A.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>B.A.</td>
<td>M.A.</td>
<td>Ph.D.</td>
</tr>
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<td>Forensic and Investigative Science</td>
<td>B.S.</td>
<td>M.S.</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>B.A.</td>
<td>M.A.</td>
<td>Ph.D.</td>
</tr>
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<td>Geology</td>
<td>B.A., B.S.</td>
<td>M.S.</td>
<td>Ph.D.</td>
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<td>History</td>
<td>B.A.</td>
<td>M.A.</td>
<td>Ph.D.</td>
</tr>
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<td>Interdepartmental Studies</td>
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<tr>
<td>Legal Studies</td>
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<td>M.L.S.</td>
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<tr>
<td>Liberal Studies</td>
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<td>M.A.L.S.</td>
<td></td>
</tr>
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<td>Mathematics</td>
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<td>M.S.</td>
<td>Ph.D.</td>
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<tr>
<td>Multidisciplinary Studies</td>
<td>B.M.D.S., B.A.</td>
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<tr>
<td>Philosophy</td>
<td>B.A.</td>
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<tr>
<td>Physics</td>
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<td>M.S.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Political Science</td>
<td>B.A.</td>
<td>M.A.</td>
<td>Ph.D.</td>
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<tr>
<td>Professional Writing and Editing</td>
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<td>M.A.</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>B.A., B.S.</td>
<td>M.A., M.S.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Public Administration</td>
<td></td>
<td>M.P.A.</td>
<td></td>
</tr>
<tr>
<td>Regents Bachelor of Arts</td>
<td>R.B.A.</td>
<td></td>
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<tr>
<td>Social Work</td>
<td>B.S.W.</td>
<td>M.S.W.</td>
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<tr>
<td>Sociology</td>
<td></td>
<td>M.A.</td>
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<tr>
<td>Sociology and Anthropology</td>
<td>B.A.</td>
<td></td>
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<tr>
<td>Statistics</td>
<td></td>
<td>M.S.</td>
<td></td>
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<tr>
<td>World Languages, Literature, and Linguistics</td>
<td>B.A.</td>
<td>M.A.</td>
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</tbody>
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# Perley Isaac Reed School of Journalism

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Marketing Communications</td>
<td></td>
<td>M.S.</td>
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</tr>
<tr>
<td>Journalism</td>
<td>B.S.J.</td>
<td>M.S.J.</td>
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# School of Dentistry

<table>
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<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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<tbody>
<tr>
<td>Dental Hygiene</td>
<td>B.S.</td>
<td>M.S.</td>
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<tr>
<td>Dental Specialties</td>
<td></td>
<td>M.S.</td>
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<tr>
<td>Dentistry</td>
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<td>D.D.S.</td>
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# School of Medicine

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<tr>
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<th>Doctoral/Professional</th>
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<tbody>
<tr>
<td>Biochemistry and Molecular Biology</td>
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<td>Ph.D.</td>
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<tr>
<td>Biomedical Sciences</td>
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<td>M.S.</td>
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<tr>
<td>Cancer Cell Biology</td>
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<td>Ph.D.</td>
</tr>
<tr>
<td>Cellular and Integrative Physiology</td>
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<td>Ph.D.</td>
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</table>
Clinical and Transitional Science          M.S.  
Exercise Physiology                        B.S.  
Immunology and Microbial Pathogenesis      M.S.  Ph.D.  
Pathologist's Assistant (Master's in Health Sciences) M.H.S.  Ph.D.  
Medical Laboratory Science                 B.S.  
Medicine                                    M.D.  
Neuroscience                               Ph.D.  
Occupational Therapy                       M.O.T.  
Physical Therapy                           D.P.T.  

School of Nursing

<table>
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<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
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<tbody>
<tr>
<td>Nursing</td>
<td>B.S.N.</td>
<td>M.S.N.</td>
<td>D.N.P., Ph.D.</td>
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School of Pharmacy

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical and Pharmacological Sciences</td>
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<td>Ph.D.</td>
</tr>
<tr>
<td>Pharmacy</td>
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<td>Pharm.D.</td>
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(Emerging) SCHOOL OF Public health

<table>
<thead>
<tr>
<th>Program</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Doctoral/Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Health Promotion</td>
<td>M.S.</td>
<td></td>
<td></td>
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<tr>
<td>Public Health</td>
<td>M.P.H.</td>
<td></td>
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<tr>
<td>Public Health Sciences</td>
<td></td>
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<td>Ph.D.</td>
</tr>
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</table>

Organization of Graduate Education

West Virginia University is both the comprehensive and the land-grant university in the West Virginia system of higher education. The graduate programs are administered by the Office of Graduate Education and Life, the University Graduate Council, and the 14 schools and colleges of the University. West Virginia University has been designated “Research Activity High” in the Carnegie Classification of Institutions of Higher Education.

Office of Graduate Education and Life

The associate provost for Graduate Academic Affairs oversees the policies governing graduate education, monitors the quality of graduate programs, and sets goals for enhancing graduate education at West Virginia University. The associate provost reports to the provost and oversees program evaluation and policy and procedure issues related to graduate education. Additional information on graduate education governance may be obtained by going to http://graduateeducation.wvu.edu/ or calling (304) 293-7173.

Graduate Council

The University Graduate Council consists of 16 elected faculty representatives from the schools and colleges offering graduate programs and five ex-officio non-voting members representing the provost, the associate provost for Graduate Academic Affairs, the vice president for Health Sciences, and the Senate Executive Committee. The council derives its authority from the faculty and from the provost and vice president for Academic Affairs and Research. This body formulates, reviews, and recommends University-wide graduate education policies. The council reviews proposals for new graduate programs, evaluates major revisions in graduate curricula, coordinates periodic program reviews, establishes the University criteria for graduate faculty membership, and considers such other matters affecting graduate education as are brought to the council by an administrative officer of the University, a graduate faculty member, or a graduate student. The duties of the University Graduate Council include oversight of graduate programs both on and off campus.

Schools and Colleges

Schools, colleges, and their departments manage most of the day-to-day operation of graduate education. They determine the level of participation by individual faculty members, specify requirements for programs under their jurisdiction, and certify students for graduation. Graduate program coordinators in each unit are responsible for graduate assistantship appointments, tracking student progress, academic code issues, and maintaining graduate student academic and personnel files.
Health Sciences Center

The Admissions Office at the WVU Health Sciences Center is responsible for admission to the dentistry, medicine, nursing, and pharmacy schools. The WVU Health Sciences Center Catalog contains complete information about these programs. Answers to additional questions may be sought from: Admissions, 1170 Health Sciences Center North, P.O. Box 9815, Morgantown, WV 26506-9815; (304) 293-3521.

Format

The Office of Graduate Education and Life and the University Libraries have combined their efforts to create The West Virginia University Guide to the Preparation of Master’s Theses and Doctoral Dissertations (http://www.libraries.wvu.edu/theses/index.htm). The guide describes the regulations under which master’s theses and doctoral dissertations are to be submitted to WVU. It gives the general requirements applicable to all fields of study and provides guidance on the arrangement and format of the student’s manuscript. Since practices vary greatly in different disciplines, students should learn the styles of their respective field and are advised to follow the recommendations of their advisor and committee members on all matters not covered in the guide. A master’s thesis and a doctoral dissertation checklist is provided in the guide to aid students in properly depositing material in the university libraries.

Electronic Theses and Dissertations

Since West Virginia University is a charter member of the Networked Digital Library of Theses and Dissertations, it has been agreed that all dissertations written in partial fulfillment of the requirements for any doctorate degree conferred by the University as well as all theses written in partial fulfillment of the requirements of an master’s degree must be filed electronically with the WVU Library system according to its procedures for such filing. Candidates are to follow the WVU Guide to the Preparation of Master’s Theses and Doctoral Dissertations as well as general electronic thesis and dissertation (ETD) policy guidelines regarding format and organization of the thesis or dissertation. Complete program policy and collection access information is available online at http://www.libraries.wvu.edu/theses/index.htm. Exceptions to filing electronically must be approved by the Office of Graduate Education and Life. Copyright to electronic theses and dissertations is subject to the appropriate provisions of the WVU Copyright Policy (http://www.wvu.edu/~osp/policies.htm).

WVU electronic theses and dissertations are made available online and through the University Libraries. Various Web access levels are available to accommodate students’ needs. Comprehensive technical assistance for the development and conversion of electronic documents is available from the Office of Information Technology Customer Support. All theses and dissertations will be microfilmed and their abstracts published through Pro-Quest of Ann Arbor, Michigan. This requirement will not be satisfied by any other publication, but does not preclude publication elsewhere, which is both permitted and encouraged.

ETD Submission

The following must be completed by the student no later than one week before the close of the period in which the degree is expected to be completed (one week before the end of the summer term, by the last day of the final examination period at the end of the first semester, or one week before commencement day at the end of the second semester).


2. Deliver a completed ETD submission packet with original signatures and required fee(s) in person or by mail to the Charles C. Wise Jr. Library (downtown campus), Acquisitions Department, P.O. Box 6069. Download, print, and complete the ETD submission packet, available online at the above-mentioned checklist. Print copies are available from the University Libraries or your college graduate coordinator. The completed packet includes:

- Completed and signed ETD submission signature form.
- Submission fees: dissertations $80.00; theses $70.00. Cash, check, or money order payable to West Virginia University Libraries.
- Completed and signed ProQuest master’s thesis or doctoral dissertation agreement form.
- Printed copy of title page.
- Printed copy of abstract (dissertations: 350-word limit, theses: 150-word limit).
- Copyright fee: $45.00 check or money order payable to West Virginia University Libraries (copyright is optional, but recommended).
- Completed and signed Survey of Earned Doctorates (doctoral students only).
- Problem reports may be submitted for a $15.00 fee (ProQuest submission is optional, fees apply as indicated above).
- Fees may be subject to change.

ETD Contact Information

WVU Libraries, Acquisitions Department, P.O. Box 6069, 1549 University Avenue, Morgantown, WV 26506-6069, (304) 293-4040 x4025, or by e-mail at John.Hagen@mail.wvu.edu.
ETD Approval

Upon submission, the University Libraries will review the ETD. Committee chairs are included in all e-mail communications with the student and have the opportunity to review the document online as well. If the ETD is acceptable and the ETD submission packet is complete, the University Libraries will approve the submission electronically, indicating that all obligations regarding submission of the dissertation to the University Libraries have been fulfilled. An official e-mail notification will be sent to the student, the committee chair, and to the appropriate office in the college, school, or department granting the degree. The ETD will be cataloged and distributed on the World Wide Web according to the distribution option the student and committee have chosen.

Request for Degree

At the time of registration for the enrollment period in which all degree requirements are expected to be met, or at the latest within two weeks after such registration, each candidate is to submit an Application for Graduation obtainable from the school or college dean’s office. Doctoral candidates must apply for graduation online via MIX. The candidate must complete all requirements at least one week before the end of that enrollment period. If the degree is not actually earned during that term, the student must submit a new Application for Graduation when registering for the term in which completion is again anticipated.

Colleges and schools are responsible for seeing that master’s and doctoral students meet the minimum requirements of the University as well as any additional college or school requirements. Deans’ offices are responsible for maintaining all student records necessary to certify students for graduation. Attendance at the spring commencement is voluntary. Anyone not planning to attend should leave a complete mailing address with the Office of the University Registrar so that the diploma can be mailed.

Summary of Master’s Degree Requirements

1. Shortly after admission to the program (usually within the first nine to 12 semester hours of coursework), an advisory committee is formed, and the committee and the student produce a plan of study.
2. The student completes requisite coursework and other program requirements.
3. The student confers with the advisor and, if applicable, the chairperson of the thesis committee to see if all requirements can be met by the end of the semester in which he or she plans to graduate. This should be done no later than the beginning of the final semester.
4. The student registers for at least one credit hour. No one may graduate who is not registered as a student during the term of graduation.
5. The student checks with the University to insure that there is concordance between departmental and University records and that there are no remaining deficiencies.
6. The student completes an Application for Graduation. This should be done no later than two weeks after registration.
7. The student presents a printed draft of the thesis to each committee member (if applicable).
8. The student should remind the committee chairperson to request clearance from the school or college dean’s office at least two weeks before the date of the final examination (or thesis defense).
9. Results of the final examination (or thesis defense) must be reported to the dean’s office by the graduate advisor or the committee chairperson not later than one week before the end of the semester or summer session in which the degree is expected to be granted.
10. If the requirements for the master’s degree include a thesis, the printed copies of the thesis must bear the original signatures of at least all but one of the committee members. If more than one member of the committee, whatever the size of the committee, dissents from approving the thesis, the degree cannot be recommended. If a substitute faculty member attends the final examination, the substitute signs the shuttle sheet; however, the original committee member signs printed copies of the thesis.
11. One electronic copy of the thesis in approved computer-generated form must be submit- ted online to the WVU ETD archive and a completed ETD submission packet with original signatures and required fee(s) must be delivered to the Charles C. Wise Jr. Library no later than one week before the close of the period in which the degree is expected to be completed.

Summary of Doctoral Degree Requirements

1. Shortly after admission to the program (usually within the first nine to 12 semester hours of coursework), an advisory committee is formed and the committee and the student produce a plan of study.
2. The student completes requisite coursework and other program requirements, satisfying also the stipulated residency requirement.
3. The student takes the language examination (if applicable).
4. The student takes the written and/or oral comprehensive (qualifying) examination for admission to candidacy. The results are communicated to the appropriate office by the student’s graduate program advisor.
5. The student undertakes a doctoral dissertation under the guidance of a dissertation committee. The dissertation phase begins with approval of a dissertation prospectus by the dissertation committee, the department chairperson, and the school or college dean.
6. A copy of the preliminary draft of the dissertation is given to each committee member at least one month prior to the final oral examination.
7. The dissertation advisor (committee chairperson) requests a clearance for the final examination from the school or college dean’s office no later than three weeks before the scheduled examination date.
8. The time and place of the examination is announced.
9. The student completes an Application for Graduation. This should be done no later than two weeks after registration.
10. The student defends the dissertation in an oral defense.
11. One electronic copy of the thesis in approved computer-generated form must be submitted online to the WVU ETD archive and a completed ETD submission packet with original signatures and required fee(s) must be delivered to the Charles C. Wise Jr. Library no later than one week before the close of the period in which the degree is expected to be completed.

Graduate Committee

General requirements for all graduate committees — The majority of the members of any graduate committee must be 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 committees are subject to the approval of the chairperson or designee of the department/division and the dean or designee of the college/school. Once a graduate committee has been officially established, it will not be necessary to alter it if the graduate faculty status of member(s) of the committee is downgraded.

Master's 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. Master’s committees of students choosing a thesis option must be chaired by a regular graduate faculty member and the majority of the committee must have regular graduate faculty status. Master’s committees of programs not requiring a thesis generally consist of no fewer than three members, one of whom must be a regular graduate faculty member. No more than one person may be a non-member, and the non-member cannot chair or advise.

Plan of Study

Shortly after entrance into a degree program and usually before nine to 12 hours of graduate coursework have been completed, the student, the advisor, and the committee (if appointed) draw up a plan of study (or prospectus). Depending on the degree sought and the field of study, the plan may also contain an outline of the research problem to be undertaken. In some graduate programs, the student and committee meet at a later date to delineate the research project more formally. The plan of study is subject to approval and becomes a formal agreement between student and program faculty regarding the conditions to be met to complete the degree. Any subsequent changes in the plan of study or prospectus can be made only through mutual agreement because of the binding nature of these documents. Should a disagreement arise at any time, the responsibility for arbitration rests with the dean of the school or college.

Master’s Degree Coursework Requirements

Students in a master’s program must complete a minimum of 24 hours of coursework other than thesis credit. A minimum of 30 total hours is also considered standard.

Master’s Degree Time Limit

Graduate work planned with the student’s advisory committee (e.g., plan of study) must be satisfactorily completed within a period of eight years immediately preceding the conferring of the degree. A course taken more than eight years previously must be revalidated if it is to be used towards meeting degree requirements. Revalidation can be accomplished by submitting the following information for approval to the Office of Graduate Education and Life:

- A letter from the course instructor listing the criteria used to revalidate the course material;
- A copy of the student’s performance on the student’s revalidation examination; and
- A letter from the college/school graduate coordinator and/or dean supporting the revalidation.

Thesis Research

Many master's 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.

Thesis Defense

In cases where a thesis is a component of the master’s student’s plan of study, the student must present the thesis to the committee for evaluation. After the committee has tentatively approved the student’s written thesis, the final presentation and defense of the thesis can be scheduled. This presentation is not given until the term in which all other requirements for the degree are to be met. The student’s committee chairperson must indicate in advance the time, place, and committee members and receive clearance from the office of the school or college dean before the thesis is presented. Such notifications of thesis presentations must be received at least three weeks before the defense date.

The student cannot be considered as having satisfactorily passed their master’s program if there is more than one unfavorable vote among members of the thesis committee. Results of each defense must be reported to the school or college dean within 24 hours. Re-examination may not be scheduled without approval of the request by the school or college dean. All committee members are to be present for the thesis defense. One committee member (but not the chair) may attend by audio or videoconference, but should be available electronically
during the entire time of the defense. If an examination cannot be scheduled at a time convenient to all committee members, the dean or designee may permit another faculty member to substitute for the original committee member, 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 prior to the examination. The request for a substitute should be signed by the committee chair, the student, and both the original faculty member and the substitute faculty member. A substitute faculty member must have the same or higher graduate faculty status as the original faculty member and represent the same academic discipline or specialization.

**Thesis Submission**

The requirements for a master's degree include acceptance of the thesis defense and submission of the electronic thesis (as noted below). If there is a substitute faculty member scheduled for the defense, the substitute signs the shuttle sheet; however, the original committee member is to sign printed copies of the thesis if generated. The electronic thesis must be presented to the University not later than the last day of classes of the semester or summer session in which the degree is expected to be granted.

**Additional Master’s Degrees**

University policy permits students to obtain more than one master’s degree. In these cases, 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 master’s degree must successfully complete sufficient additional credit hours to constitute 75 percent of the credit hours required by each additional master's degree program as well as any specific program requirements. Individual graduate units may require higher percentages to be earned under their direction.

**Concurrent Master’s Degree Programs**

West Virginia University offers several concurrent or dual master’s degree programs. Concurrent degree programs are programs in which courses between collaborating units are accepted for credit by each unit. Total coursework credit requirements for the concurrent degrees must be at least 75 percent 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 inquire of the individual units regarding admission and academic requirements and regulations for these concurrent degree programs.

**Combined Undergraduate and Master’s Degree Programs — Accelerated Master’s Degree Programs (4+1, 3+2 Programs)**

The purpose of the Accelerated Master’s Degree (AMD) program is to allow academically talented students the opportunity to obtain both a bachelor’s and master’s degree from West Virginia University. In many cases, this option might be selected early in a student's academic career as an opportunity to gain an advanced degree through a guiding curriculum designed to accelerate degree completion. Students may apply to departments/academic programs offering AMD programs for admission after having completed a minimum of two semesters as a full-time student at WVU, with a minimum of 24 credit hours, provided they have a minimum 3.0 GPA. Individual units may establish more stringent requirements.

Accelerated Master’s Degree students are permitted to take graduate courses leading to the master’s degree when prerequisites for such courses have been fulfilled. Up to 12 credit hours of graduate coursework may be applied towards the requirements for the bachelor’s degree. The bachelor’s degree is awarded at the end of the normal senior year (determined by program specific credit hours). During the remaining period of study, accelerated degree students complete the remaining courses and any other degree requirements needed to complete the master’s degree and must maintain satisfactory academic standing at the graduate level determined by the individual academic units.

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 for the comprehensive qualifying and final examinations and writing of the dissertation.

**Graduate Committee**

General requirements for all graduate committees — The majority of the members of any graduate committee must be 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 committees are subject to the approval of the chairperson or designee of the department/division and the dean or designee of the college/school. Once a graduate committee has been officially established, it will not be necessary to alter it if the graduate faculty status of member(s) of the committee is downgraded.

Doctoral dissertation committees consist of no fewer than five members, the majority of whom must be regular graduate faculty, including the chairperson. At least one member of the committee must be from a department other than the one in which the student is seeking a degree.
Plan of Study

Shortly after entrance into a degree program and usually before nine to 12 hours of graduate coursework have been completed, the student, the advisor, and the committee (if appointed) draw up a plan of study (or prospectus). Depending on the degree sought and the field of study, the plan may also contain an outline of the research problem to be undertaken. In some graduate programs, the student and committee meet at a later date to delineate the research project more formally. The plan of study is subject to approval and becomes a formal agreement between student and program faculty regarding the conditions to be met to complete the degree. Any subsequent changes in the plan of study or prospectus can be made only through mutual agreement because of the binding nature of these documents. The responsibility for arbitration rests with the dean of the school or college should a disagreement arise at any time.

Doctoral Degree Coursework 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 degree signifies that the holder has the competence to function independently at the highest level of endeavor in the chosen profession. Hence, the number of years involved in attaining or retaining competency cannot be readily specified. Rather, it is important that the doctoral student’s competency be assessed and verified in a reasonable period of time prior to conferral of the degree, generally five years from the admission to candidacy.

Graduate education, especially at the doctoral level, 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 these kinds of informal learning, doctoral programs at WVU generally require one year in residence in full-time graduate study. However, because of the contractual nature of graduate study, an individual student or graduate committee may propose an alternative plan by which the student can gain equivalent educational experience. For example, the plan of study may require the student to spend time in residence at a national or foreign laboratory, institute, archive, or research center as partial fulfillment of the residency requirement.

Regulations described in the preceding sections governing admission, registration, scholarship, etc., must be followed. In addition, the student must satisfy requirements specified by the faculty responsible for the major field. Students applying for admission to a doctoral program, after having received a master’s degree at WVU, must file a new application for graduate work with the Office of Admissions.

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. Language examinations are arranged by the Department of Foreign Languages. Students should contact the graduate program coordinator or chair in that department for more information.

When only reading competence is required, the foreign language examiner may waive the examination in those cases where the student’s transcript shows, at a date that falls no earlier than seven years before promotion to doctoral candidacy, either completion of 12 semester hours or equivalent coursework in an approved foreign language with a grade of B or better in the last three hours or completion of one course at the 300-level with a grade of B or better at WVU.

Promotion to 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. This is accomplished only by satisfactorily passing a comprehensive or qualifying examination (either oral, written, or both) and by meeting specified language and/or other requirements.

A student will be given a comprehensive examination to demonstrate knowledge of the important issues in the field of study, their relation to other fields, and the ability to employ the instruments of 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 as soon as a student has completed the major portion of the course requirement. Successful passage of this examination is the University-wide minimal determination of acceptance to candidacy: it is at this point that the five-year to completion rule begins. Individual degree programs may require additional requirements such as the acceptance of a prospectus, a grant exercise, or other form of student evaluation.

It must be the consensus of the doctoral committee that the student has passed the examination, although the committee may permit one dissenting vote. A single portion of the examination may be repeated at the discretion of the committee, but, if two or more members are dissatisfied, the entire qualifying examination must be repeated. The student must petition through the doctoral committee in order to be permitted to repeat a qualifying examination. Academic tradition does not allow a qualifying examination to be administered more than three times; many units limit administration to two times.

Doctoral Degree Time Limit

Because the qualifying examination attests to the academic competence of the student who will become an independent researcher or practitioner, the examination cannot precede the conferring of the degree by an extended period. Consequently, doctoral candidates are allowed no more than five years in which to complete remaining degree requirements. In the event a student fails to complete the doctorate within five years after admission to candidacy, an extension that may be obtained only by repeating the qualifying examination and meeting
any other requirements specified by the student’s committee, including the setting of deadlines by which all degree requirements must be completed. A request for an extension of time in order to complete degree requirements should include the following:

- A statement documenting the circumstances that justify the request;
- A statement of the impact the proposed extension would have on the validity of the student’s coursework and program; and
- Evidence of endorsement of the request from the student’s advisory committee and the office of the dean. Extension requests are made to the Associate Provost for Graduate Academic Affairs, 249 Mountainlair, P.O. Box 6897.

**Dissertation Research**

The candidate must submit a dissertation pursued under the direction of the faculty of the University on some topic in the field of the major subject. The dissertation must present the results of the candidate’s individual investigation and must embody a definite contribution to knowledge. While conducting research or writing a dissertation, the student must register at the beginning of each term or summer during which credit is being earned. No residence credit will be allowed for special field assignments or other work taken off the University campus without prior approval by the associate provost for Graduate Academic Affairs.

**Final Examination/Dissertation Defense**

The final examination/dissertation defense is not given until the term in which all other requirements for the degree are to be met. After the candidate’s dissertation has been tentatively approved, the final oral defense of the dissertation may be scheduled. At the option of the faculty responsible for the degree program, a comprehensive final written examination also may be required. The student’s committee chairperson must indicate in advance the time, place, and recommended examining committee members, and receive clearance from the office of the school or college dean before the examination can be given. Such notifications of doctoral examinations/defenses must be received at least three weeks before the examination date. All doctoral final examinations and dissertation defenses are to the public and the university community.

The student cannot be considered as having satisfactorily passed the final examination/dissertation defense if there is more than one unfavorable vote among members of the examining committee. Results of each examination/defense must be reported to the school or college dean within 24 hours. Re-examination may not be scheduled without approval of the request by the school or college dean. All committee members are to be present for the final examination/dissertation defense. One committee member (but not the chair) may attend by audio or videoconference, but should be available electronically during the entire time of the defense. If an examination cannot be scheduled at a time convenient to all committee members, the dean or designee may permit another faculty member to substitute for the original committee member, 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 prior to the examination/defense. The request for a substitute should be signed by the committee chair, the student, and both the original faculty member and the substitute faculty member. A substitute faculty member must have the same or higher graduate faculty status as the original faculty member and represent the same academic discipline or specialization.

**Dissertation Submission**

The requirements for a doctorate include acceptance of the dissertation and submission of the electronic dissertation. If there is a substitute faculty member scheduled for the final examination, the substitute signs the shuttle sheet; however, the original committee member is to sign printed copies of the dissertation. The dissertation must be presented to the University not later than the last day of classes of the semester or summer session in which the degree is expected to be granted.

The candidate is required to maintain close contact with the supervisor or chairperson of the graduate committee on these matters in developing a dissertation so as to incorporate the special requirements of the subject discipline.

**Distinguished Professors**

- Jame Abraham, Bonnie Wells Wilson Distinguished Professor and Eminent Scholar
- Daniel Alkon, Toyota Chair for Neurodegenerative Disease Research
- 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 Opthalmology
• Patricia Chase, Gates E. Wigner Dean for the School of Pharmacy
• Nigel N. Clark, George B. Berry Chair of Engineering
• Franklin D. Cleckley, Arthur B. Hodges Professor of Law
• Roger Congleton, BB&T Chair of Economics
• Robert Dailey, Davis-Michael Professor of Animal and Veterinarian Sciences
• Robert DiClerico, Eberly Family Professor for Outstanding Teaching
• Charles R. DiSalvo, Woodrow A. Potesta Professor of Law
• James Ebel, Harrison/Omnicom Professorship in Integrated Marketing Communications
• Barry A. Edelstein, Eberly Family Distinguished Professor of Clinical Psychology
• Eloise Elliott, The Ware Family Distinguished Professorship
• John Ernest, Eberly Family Distinguished Professor of American Literature
• Ali Feliachi, Electric Power Systems Chair
• Donald C. Fidler, Dana L. and Peggy M. Farnsworth Chair of Educational Psychiatry
• 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
• Takanori Fukushima, Hazel Ruby McQuain Neurosurgery Chair
• Hota Gangarao, Wadsworth Professorship
• Keith Garbutt, Eberly Family Professor for Outstanding Teaching
• Laura Gibson, Alexander B. Osborn Distinguished Professor in Hematological Malignancies Research
• Robert L. Goodman, E. J. Van Liere Medicine Professorship
• 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
• Alison Helm, J. Bernard Schultz Endowed Professor of Art
• JoAnn Hornsby, Interim Hazel Ruby McQuain Arthritis/Rheumatic Disease Chair
• Arthur I. Jacknowitz, The Arthur I. Jacknowitz Distinguished Chair of Clinical Pharmacy
• Abnash Jain, Abnash C. Jain Distinguished Professorship in Cardiology
• Thomas Kammer, Eberly College Centennial Professor of Geology
• 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
• Diana Martinelli, Widmeyer Professorship in Public Relations
• Michael Mays, Eberly Distinguished Professor of Outstanding Teaching
• Joyce E. McConnell, William J. Maier, Jr. Dean and Thomas R. Goodwin Professor
• Marjorie A. McDermid, Steptoe and Johnson Professor of Law and Technology
• Patrick C. McGinely, Charles H. Haden, Jr. Professor of Law
• Gerald McGonigle, Mabel DeVries Tanner Endowed Professor of Theatre and Dance
• 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
• 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
• 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
• Aaron Sheehan-Dean, Eberly Family Professor of Civil War Studies
• Deborah Shelton, E. Jane Martin Professorship in Nursing
• Kenneth Showalter, C. Eugene Bennett Chair of Chemistry
• Janice Spleth, Armand E. and Mary Singer Professorship of the Humanities
• Donley Studlar, Eberly Family Professor of Political Science
• 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
• 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
• Bernard R. Cooper, Claude W. Benedum Professor of Physics, Emeritus
• Hayne W. Reese, Centennial Professor of Psychology, Emeritus
• Mohindar Seehra, Eberly Professor in Physics, Emeritus

Extended Learning

Sue Day-Perroots, Dean
http://elearn.wvu.edu/

WVU Extended Learning coordinates online and off-campus programming, Summer Sessions, Continuing and Professional Education, and the Instructional Technology Resource Center.

WVU Online and Off-Campus Programs (http://elearn.wvu.edu/)

Extended Learning takes West Virginia University courses around the state, the nation, and the globe. Some classes are offered in off-campus locations but most are delivered via the web. WVU Extended Learning offers:

• More than 20 graduate degrees (http://online.wvu.edu/degrees/index.php?level) and certificates
• Three undergraduate (http://online.wvu.edu/degrees/index.php?level) degree completion programs
• ACCESS (http://elearn.wvu.edu/access/) classes for high school students
• Travel Study (http://elearn.wvu.edu/Travel/) classes for adult learners

Summer Sessions (http://summer.wvu.edu/)

West Virginia University offers a robust and flexible summer term. Extended Learning provides marketing and administrative oversight of summer academic programs.
Continuing and Professional Education (http://continuinged.wvu.edu/)

Extended Learning has an extensive catalog of non-credit classes for personal and career enrichment.

Instructional Technology Resource Center (http://oit.wvu.edu/itrc/)

The Instructional Technology Resource Center supports WVU faculty in the development of online instructional materials. The staff provides consultation and technical support to create engaging, interactive courses.

For more information about online and off-campus courses contact WVU Extended Learning at http://online.wvu.edu, elearn@mail.wvu.edu, 1-800-253-2762, or P.O. Box 6800, 150 Clay Street, Morgantown, WV 26506-6800.

Extended Learning coordinates all online and off-campus programs. Enrollment counselors can help students determine which program is best for them and assist with the application process.

There are more than 20 graduate degree (http://online.wvu.edu/degrees/index.php?level) and certificate programs offered through WVU Online or Extended Learning. Depending on the program, courses can be delivered in the following ways:

- Completely online
- Online with some campus visits (a blended format)
- Off-site at locations in the State of West Virginia.
- 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/index.php?level). Students should carefully review the information provided by individual programs.

The Extended Learning staff is available to help students from the day they inquire through their enrollment into a program. Extended Learning offers information sessions around the state and online through a series of webinars or virtual information sessions (http://online.wvu.edu/). Students can contact the office through

- the toll-free telephone number, 1-800-253-2762
- the chat feature at the website, online.wvu.edu
- e-mail at wvuonline@mail.wvu.edu.

The WVU transcript does not differentiate the method of program delivery. Students planning to enroll in a course must be admitted as graduate students using the same procedures as on-campus. Online and off-campus graduate students abide by the policies and procedures included in the Graduate Handbook.

The specific requirements for each degree program are available from the college of the selected program. Advising and scholarship standards are governed by individual academic units.

Teachers, in the private and public school system, may seek professional development (http://online.wvu.edu/Teachers/courselist.php) credit which counts toward their re-certification but not toward a degree. These specialized courses are designated by a 900-950 course level and cannot be applied to a graduate degree.

Admission to West Virginia University (http://online.wvu.edu/Registration/admission.php#grad)

Admission to West Virginia University is required to enroll in credit courses.

Graduate Student (https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id)

Students who wish to enroll in graduate degree courses must be officially admitted to West Virginia University. Each program has specific requirements for admission so please review them carefully. Online Graduate Application (https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id).

Professional Development Students (K-12 Educators) (http://online.wvu.edu/Registration/forms/ProfDev.pdf)

K-12 educators who need to take a graduate level class for their certification hours can earn professional development credit through Extended Learning. These courses can be used for recertification (depending on state requirements) but do not count as graduate credit toward a degree program. Educators who seek a master’s degree to enhance their skills and possible salary should explore the graduate degree page (http://online.wvu.edu/degrees/index.php?level) for options. Professional Development courses are designated with a “900” level course number (e.g. C&I 930; IDT 930; RDNG 930) The current list of professional development courses can be found here (http://online.wvu.edu/Teachers/courselist.php). Visit the website (http://online.wvu.edu/Teachers/courselist.php) to read about additional
professional development opportunities through WV Department of Education, WV Center for Professional Development, and County Boards of Education and RESA offices.

For assistance, contact Extended Learning at 1-800-253-2762 or elearn@mail.wvu.edu.

Application form for Professional Development Courses (http://online.wvu.edu/Registration/forms/ProfDev.pdf)

Student Resources (http://online.wvu.edu/students/)

The Extended Learning staff can answer questions about programs (http://online.wvu.edu/degrees/index.php?level), applying to WVU (http://online.wvu.edu/Registration/admission.php), billing (http://online.wvu.edu/Registration/billingquestions.php), registration (http://online.wvu.edu/Registration/), WVU IDs (http://wvucard.wvu.edu/), getting started in an online course (http://online.wvu.edu/students/images/NewStudentOrientationManual_101910.pdf), or serve as the first point-of-contact for off-campus students.

Tuition and Fees (http://online.wvu.edu/Registration/tuitionFees.php)

The cost of courses offered through Extended Learning varies according to program and residency. Students should inquire of individual programs and view the fee schedule (http://online.wvu.edu/Registration/tuitionFees.php). Some programs are available to non-residents at resident rates through the Southern Regional Education Board or at a reduced rate through the Regional Incentive Fee for counties bordering West Virginia. Note: not all programs are available in all areas.

For more information about online and off-campus courses Extended Learning at http://online.wvu.edu, elearn@mail.wvu.edu, 1-800-253-2762, or P.O. Box 6800, 150 Clay Street, Morgantown, WV 26506-6800.

Fellowships and Assistantships

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Graduate Assistantships

West Virginia University annually awards about 1,800 graduate assistantships supported from state appropriations, federal funds, private grants, and contracts as well as approximately 200 fellowships and traineeships derived from federal agencies and from industries and private foundations. Fellowships are awarded on the basis of academic merit and require no service in return. Graduate fellows are expected to be engaged full time in their studies, but may teach to the extent that the particular degree program requires. Most traineeships, provided through institutional grants, are also for full-time study without scheduled duties.

All graduate assistants and fellows must be accepted into a graduate degree program and are required to be full-time (nine hours or more) graduate students. The individual is primarily a student and secondarily an employee. Tuition and some fees are remitted (see below). Awards are made by degree programs or by the nonacademic unit where service is to be rendered. Applications should be made to the dean or director concerned or to the chairperson of the program in which the graduate work will be pursued. Early application is strongly recommended.

Graduate assistantships and fellowships at WVU are accompanied by a waiver of tuition. These waivers cover the cost of coursework required by the students’ Plan of Study. Students covered by assistantships or fellowships during the academic year may also qualify for summer tuition waivers through their departments. Some programs may limit the number of credit hours that can be taken under a waiver in a given semester. In addition, programs and departments are allocated “meritorious waiver hours,” which can be used at the discretion of the departments for recruiting and/or retaining students in their degree programs. Students should inquire of their departments whether such waivers are available. In general, online programs and summer courses are not covered by tuition waivers.
Graduate Teaching Assistant

A person who holds a graduate teaching assistantship (GTA) is obligated to teach two three-hour courses per semester, the equivalent in laboratory classes, or, for other forms of departmental assistance, except research assistance, the equivalent of a minimum of 15 hours and no more than 20 hours per week. The terms of employment would be stated in the letter of appointment. These assistantships are generally available only through the academic units. No graduate student can be appointed to a GTA position after the second week of the semester.

English Language Proficiency and Graduate Teaching Assistantships

To be considered for a graduate teaching assistantship (GTA), students must complete GTA Application Forms for the department in which they seek the GTA. Students must be accepted into a graduate program within the university and be registered as full-time students to receive a GTA.

International students whose native language is not English must score a 50 on the WVU SPEAK test in order to qualify for a GTA. Students who do not score a 50 on the SPEAK test should take (English as a Second Language offered by the Department of Foreign Languages) to improve their speaking skills and retake the SPEAK test in order to qualify for university graduate teaching assistantships. Students with speak scores below 45 should sign up for.

Those who are seeking to teach English as a Second Language in the Intensive English Program must present a minimum TOEFL score of 600 (paper version)/250 (computer version)/100 (Internet version) and a minimum SPEAK test score of 60.

More information on the SPEAK test, see http://www.wvu.edu/~iep/esl/index.htm

Graduate Research Assistants

A graduate research assistant (GRA) is a graduate student whose duties consist of assisting in the research of a faculty member with an obligation of not fewer than 15 or more than 20 hours per week in any semester. No graduate student can be appointed to a GRA position after the fifth week of the semester.

Graduate Administrative Assistants

A student employed as a graduate administrative assistant (GA) works part-time in one of the administrative offices of WVU. Assistantships obligate the student to no fewer than 15 or more than 20 hours of work per week in any semester. The terms of employment should be stated in the letter of appointment at the time of assigning the assistantship.

Graduate Residence Assistants

Resident assistant (RA) positions are available for single undergraduate and graduate students. The University-supervised residence halls house approximately 4,500 undergraduate residents. Resident assistants are required to provide educational, cultural, recreational, and social opportunities and programs for their residents. Remuneration for resident assistant positions is room, board, and monthly stipend. Graduate students may also receive a tuition waiver for a few specialized, live-in positions.

To obtain further information about the resident assistant recruitment and selection process, contact the Associate Dean of Residential Education, P.O. Box 5430, West Virginia University, Morgantown, WV 26506–6430.

Graduate Advising Assistants

Graduate assistantships are available through the Undergraduate Academic Services Center (UASC) for students who have been admitted to a graduate program. Those awarded a UASC assistantship will provide academic advising services to undergraduate students. A tuition waiver is provided and a stipend is paid and the graduate student. Contact the UASC for information and applications.

Remission of Tuition and Fees

Students appointed as GAs or as University fellows or trainees are eligible for remission of tuition and certain fees. Some colleges have non-waivable college-specific fees that are the responsibility of students. All students must pay Special Fees, i.e., the Mountainlair, radio station, student health service, recreation center, athletic, technology, library, and Daily Athenaeum fees.

Terms of Employment

The terms of employment for GAs should be explicitly stated in the GA letter of appointment. This should include the title of the position (e.g., teaching assistant, research assistant), department and college of appointment, term of appointment, salary, and provision of injury insurance. The total hours of work, as well as the particular days of service (e.g., weekends and/or holidays) required, must be made clear to the student by the appropriate graduate department at the time of assigning the assistantship.

Federal law requires that all employees, including graduate assistants, must complete an Employment Eligibility Verification (I-9) on or before the day they begin work for the University. It is important that GA’s not be given a work assignment until they are formally processed as an employee. Violation of this rule places the University in a situation where substantial fines may be imposed against it.
Stipends for graduate assistantships are generally stated in terms of nine or 12-month appointments, although single term appointments are acceptable. The term of assistantships normally runs from August 16 to May 15 for nine-month appointments, or from August 16 to December 31 for the fall semester, or January 1 until May 15 for the spring semester.

Students may not hold more than the total equivalent of one assistantship. This rule applies even if the appointment comes from several sources (e.g., graduate teaching assistantship, graduate research assistantship, graduate administrative assistantship, graduate residence hall assistantship, and/or teaching fellowship).

Graduate teaching assistants, in order to fulfill their teaching obligations, must be appointed by no later than the end of the second week of classes. Since graduate research assistantships are primarily funded by grants and other third party sources, and since the arrival of these funds at the University often does not coincide with the beginning of an academic semester, University policy is that the deadline for GRA appointments is no later than the end of the fifth week of classes. Exceptions to these deadlines generally will not be made unless extenuating circumstances exist. Requests for late appointments must be made in writing from the hiring unit, signed by the college/school dean, and sent to the assistant vice president for Graduate Education.

Any student who has a full-time graduate assistantship may not be employed at the University for more than 100 hours per regular semester beyond the assistantship without the permission of the Office of Graduate Education and Life. The 100-hour rule allows units to hire a graduate student for incidental hourly work that is not normally associated with the assistantship, such as tutoring, grading, ticket collections at sports events, etc., without seeking permission prior to hiring the student. In cases where a unit wishes to hire a graduate assistant in an hourly position beyond the 100 hours during a regular semester, written permission must be sought from the student’s home academic unit(s) (department, college) and the Associate Provost for Graduate Academic Affairs. The memo should describe why the hiring is critical for the individual involved and how the assignment will reinforce that student’s academic program.

Termination of a GA’s employment at a time other than at then end of the stated contract period must follow the standard procedure for termination of any university employee. This includes initial verbal counseling, written warnings, etc. Such a termination will generally result in the immediate suspension of the GA’s pay and tuition waiver.

Policy on Remuneration

The following principles apply to remuneration for duties performed by graduate assistants.

1. Graduate assistant (other than GRHA) salaries must meet or exceed the University minimum on a nine-month equated basis as set by the Office of the Provost, with the minimum salary for doctoral (post-master’s) students set higher than the minimum for master’s-level students. The University mandated minimum stipend in effect for 2012–2013 is $10,000 for nine months. Many academic units provide substantial salary caps augmenting this minimum stipend.

2. Academic and other units are required to establish discipline-based salary ranges by student level (i.e., master’s, doctoral, first-professional) for graduate assistants funded in their units.

3. International students must meet financial support criteria for 12 months (includes tuition and fee charges, living expenses, etc.) from an assistantship and/or other sources in order to qualify for a Certificate of Eligibility (I-20 or IAP-66) and, subsequently, a student visa.

4. Graduate assistants who have worked for academic and non-academic units in both the fall and spring semesters may have their summer session tuition waived. This policy is college specific.

5. Graduate assistants are salaried, not hourly, employees and are not eligible for over time.

Graduate Fellowships

Teaching Fellows

A teaching fellow is an advanced graduate student, usually in a doctoral program, who would qualify for a junior faculty position if he or she were not a graduate student at WVU. A teaching fellow may be given major responsibilities for the design and/or operation of a course.

Swiger Fellowships

Arlen G. and Louise Stone Swiger are special benefactors who have established this fellowship program through the West Virginia University Foundation, Inc. Both were WVU graduates. Arlen G. Swiger, a successful New York attorney, bequeathed to the University half of his estate, which became available to the WVU Foundation upon the death of his widow, Louise Stone Swiger. These fellowships are open to doctoral students only. The stipend amount is $22,000 for 12 months, and the award requires some teaching or other academic service obligation. Selection is competitive on the basis of academic merit. Application should be made early in the year proceeding the year of anticipated enrollment in a doctoral program. Inquiries should be directed to the graduate program of choice or the Office of Graduate Education and Life. Application materials can be found at http://graduateeducation.wvu.edu/financing_your_education/fellowships.

W. E. B. Du Bois Fellowships

Dr. William Edward Burghardt Du Bois, born in 1868, was educated at Fisk University and received his Ph.D. from Harvard University in 1896. Dr. Du Bois was one of the founders of the National Association for the Advancement of Colored People and the Pan-African Congress Movement. The author of many historical and analytical studies of American and African society, Du Bois provides a standard of excellence for scholarship in any discipline and an especially inspiring model for black scholars. Because of the achievements of Dr. Du
Bois, West Virginia University has named this fellowship program in his honor. The fellowships are open to African American graduate and professional students, excluding those in the Health Sciences, who are native or naturalized U.S. citizens. The stipend amount is $18,000 for 12 months, and requires some service obligation. Selection is competitive on the basis of academic merit and potential for success in graduate or professional study. Inquiries should be directed to the graduate or professional program of choice or to the Office of Graduate Education and Life. Application materials can be found at http://grad.wvu.edu.

**WVU University Fellowships**

The WVU University Fellowship Program consists of three fellowship opportunities that support doctoral or terminal degree students within the general university. Provost Fellowships are first year awards designed to attract highly competitive students to WVU and to provide them with support for the first year to concentrate on establishing their programs of study. A $16,000 stipend and waiver of tuition accompany the Provost Fellowships. The Enrichment Fellowships are designed to attract doctoral students who contribute to the diversity of the campus community in the broadest sense. Students may be underrepresented minorities, students with unique experiences within their fields, or students who in some other way enhance the cultural experience of the WVU academic community. A $16,000 stipend and waiver of tuition accompany the Enrichment Fellowships. Dissertation Fellowships are provided to students in their last semester of dissertation writing to facilitate timely completion of students’ doctoral programs. A $8,000 stipend and waiver of tuition accompany the Dissertation Fellowships, which support students for one semester. Application materials can be found at http://graduateeducation.wvu.edu/financing_your_education/fellowships.

**WVU Foundation Fellowships**

To commemorate its 50th anniversary in 2005, the West Virginia University Foundation established the WVU Foundation Distinguished Doctoral Fellowships. Each year, the University awards four $5,000 fellowships to exceptional doctoral students in the humanities, social sciences, life sciences, and physical sciences and technology. The award may be used to defray expenses of travel, supplies, and other costs that may be incurred in the final stages of completing a dissertation. Nominees for the WVU Foundation Distinguished Doctoral Fellowships must be absolutely excellent students with academic records to match. Moreover, nominees must contribute to the teaching mission of the institution by serving as teaching assistants. Research assistants are not eligible. Inquiries should be directed to the graduate or professional program of choice or to the Office of Graduate Education and Life.

**Other Fellowships Within the United States and Abroad**

Students are encouraged to submit applications to outside agencies that support graduate-level study and research. Among the opportunities available are programs sponsored by the Fulbright-Hays Training Grants, the National Science Foundation, the Marshall Scholarship Program, the National Institutes of Health, the Oak Ridge Associated Universities, and the Rhodes Scholarships. Several national agencies publish information about fellowships and financial aid opportunities for graduate students. Individuals interested in reviewing this information should consult the reference personnel at the Charles C. Wise Jr. Library as well as the Office of Fellowships and Graduate School Advising at http://honors.wvu.edu.

**Financial Aid**

Each year, two out of three WVU students qualify for some type of financial aid, totaling over $350 million. To receive an offer of aid you must be admitted to WVU as a degree seeking student. If you feel you need financial assistance, apply—and apply early. The application process is free and easy.

**Application Process**

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

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

**Aid Offer Notification**

WVU will receive your information electronically if you included our school code on your FAFSA. After your FAFSA is reviewed for accuracy, an award notification will be sent. You will receive this notification by letter which will direct you to go online to review the aid offer.

**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 of both a quantitative (required gpa) and qualitative (successful completion of at 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 - 1.6 gpa
- 29-58 attempted hours - 1.9 gpa
- 59 or more attempted hours - 2.0 gpa

Graduate students must complete at least 80% of all attempted hours with a 2.75 gpa.

Professional students must complete at least 80% 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

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

Veterans Support/Education Assistance

WVU is dedicated to helping veterans and those currently in the armed forces succeed in their academic pursuits. The WVU Veterans Advocate will help students through the application process and throughout their academic career. The Veterans Advocate acts as the central point of contact for this population of students and works with administration, faculty and staff to insure needs are being addressed. The Veterans Advocate and VA Certifying Official are also available to help students apply for and maintain their VA Education benefits.

You can reach the Veterans Advocate at 304-293-8262. You can reach the VA Certifying Official at 304-293-5242 or you can email veterans@mail.wvu.edu. You can obtain additional information from the Veterans website at: http://wvuveterans.wvu.edu.

Consequences of Withdrawal

If you receive financial aid and you withdraw, you 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 as 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 the (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. Subsidized Direct Stafford Loan
3. Perkins Loan
4. 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 that was earned by the student, the student is entitled to a post-withdrawal disbursement within 30 days of withdrawal.

Additional Information

For more information on applying and maintaining financial aid eligibility while enrolled at WVU visit our website at www.finaid.wvu.edu.
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1. Unsubsidized Direct Stafford Loan
2. Subsidized Direct Stafford Loan
3. Perkins Loan
4. Direct PLUS (Graduate Student)
5. Direct PLUS (Parent)
6. Pell Grant
7. FSEOG
8. TEACH Grant

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.

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Grading

Page Contents:

• Grades (p. 41)
• Grading System (p. 42)
• Satisfactory- Unsatisfactory and Pass-Fail Grading (p. 42)
• Grade Point Average Calculations (p. 42)
• Incompletes (p. 42)
• Grades Lower Than C (p. 42)
• Official Transcripts (p. 43)
• Repeated Courses (p. 43)
• Withdrawals (p. 43)

Grades

Letter grades are assigned in many graduate courses, however, better than average performance is expected of graduate students. They are enrolled for fewer credit hours than they were as undergraduates, nine to 12 hours being the norm for a full-time graduate student, and are expected to spend more time on each course and achieve above-average mastery of the material. A few grades of C may be tolerated in graduate programs if there are higher grades in other courses compensate for them. Although a grade of C is considered average performance for an undergraduate student, it is unacceptable for graduate study.
Grading System

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent (given only to students of superior ability and attainment)</td>
</tr>
<tr>
<td>B</td>
<td>Good (given only to students who are well above average, but not in the highest group)</td>
</tr>
<tr>
<td>C</td>
<td>Fair (substandard for graduate students)</td>
</tr>
<tr>
<td>D</td>
<td>Poor but passing (cannot be counted for graduate degree credit)</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal from a course before the date specified in the University calendar</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
</tr>
<tr>
<td>X</td>
<td>Auditor (no grade and no credit)</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory (computes as an F)</td>
</tr>
<tr>
<td>INC</td>
<td>Permanent Incomplete</td>
</tr>
<tr>
<td>IF</td>
<td>Incomplete grade not removed by next regular term (computed as an F)</td>
</tr>
<tr>
<td>UF</td>
<td>Unforgivable F</td>
</tr>
</tbody>
</table>

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

Satisfactory- Unsatisfactory/Pass-Fail Grading

At the graduate level, the satisfactory-un satisfactory ("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, which does apply to the GPA.

Grade Point Average Calculations

The grade point average listed on the student’s official transcript will be computed from all work (including any undergraduate courses taken) for which the student has registered while a graduate student, except for courses with grades of I, S, W, P, and X. The GPA is based on the following grade point values:

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

Faculty have the option of adding +/- scales to the letter grades but the +/- scales are not used in calculating the grade point average. In order to determine whether a student meets the program’s stated minimum GPA to remain in good academic standing, a given program may, for its own internal purposes, calculate the student’s graduate GPA solely from the courses listed in the student’s plan of study. However, on the official transcript, the GPA will be calculated as indicated above.

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 sometime 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 you do not remove the "I" grade within the next semester, the grade of "I" is treated as an "IF" (failure). The Academic Standards Committee of the appropriate college or school may allow you to postpone removal of the "I" grade if you can justify a delay.

In the case of withdrawal from the University, a student with a grade of "I" should discuss that grade with the appropriate instructor.

Grades Lower Than C

Credit hours for courses in which the grade is lower than C will not be counted toward satisfying graduate degree requirements.
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.

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.

Withdrawal Policy

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

Withdrawal/Drop From Individual Classes

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

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

Withdrawal From All Classes for the Term

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

Procedures

1. To withdraw from all classes through the last day to drop a class with a W, a student would log on to their MIX account and drop their classes through STAR.
2. To withdraw from the term after the last day to drop a class with a W, you may do any of the following:
   A. Visit the Office of the University Registrar.
   B. Send an e-mail from your MIX Account only to registrar@mail.wvu.edu. Please include:
      1. full name
      2. last four digits of your student identification number
      3. reason for your withdrawal
      4. address
      5. telephone number
C. Mail a request to Office of University Registrar, West Virginia University, P.O. Box 6009, Morgantown, WV 26506. Please include:
1. full name
2. student identification number
3. reason for your withdrawal
4. address
5. telephone number
6. signature

D. Fax a request to (304) 293-8991. Please include:
1. full name
2. student identification number
3. reason for your withdrawal
4. address
5. telephone number
6. signature

Important Notice: Financial aid recipients who withdraw from all classes before 60 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 60 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, 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 Undergraduate Advising Services Center.

Programs and Courses

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 by 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 40 percent of the credits counted for meeting requirements for a graduate degree can be at the 400-level.

Courses 500 Undergraduate Seniors and Master’s Level: Courses intended for advanced undergraduate and graduate students. Seniors may enter via petition/special permission. Undergraduates in any class carrying a 500-level course number must have a 3.0 cumulative grade point average and written approval on special forms from the course instructor and the student’s advisor.

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 60 percent at the 500–level and above.

Abbreviations Used in Course Listings

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>a course given in the first (fall) semester</td>
</tr>
<tr>
<td>II</td>
<td>a course given in the second (spring) semester</td>
</tr>
<tr>
<td>I, II</td>
<td>a course given each semester</td>
</tr>
<tr>
<td>I and II</td>
<td>a course given throughout the year</td>
</tr>
<tr>
<td>Yr</td>
<td>a course continued through two semesters</td>
</tr>
<tr>
<td>S</td>
<td>a course given in the summer</td>
</tr>
<tr>
<td>HR</td>
<td>credit hours per course</td>
</tr>
<tr>
<td>Lec</td>
<td>lecture period</td>
</tr>
<tr>
<td>Rec</td>
<td>recitation period</td>
</tr>
<tr>
<td>Lab</td>
<td>laboratory period</td>
</tr>
<tr>
<td>GLAB</td>
<td>graded lab</td>
</tr>
<tr>
<td>WEB</td>
<td>Web-based course</td>
</tr>
<tr>
<td>Conc</td>
<td>Must register prior to or at the same time</td>
</tr>
<tr>
<td>PR</td>
<td>prerequisite</td>
</tr>
<tr>
<td>Coreq</td>
<td>corequisite</td>
</tr>
<tr>
<td>Consent</td>
<td>consent of instructor required</td>
</tr>
<tr>
<td>CR</td>
<td>credit but no grade</td>
</tr>
</tbody>
</table>

An asterisk (*) following credit hours listed as variable indicates that the course normally carries three credit hours. Exceptions are made only in emergencies and must be approved by the departmental chair and by the professor teaching the course.

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.

595/695/795. Independent Study. I, II, S. 1-6 hr. Faculty-supervised study of topics not available through regular course offerings.

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

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

698/798. Thesis or Dissertation. 2-4 hr. PR: Consent. This is an optional course for programs that wish to provide formal supervision is needed during the writing of student reports (698), theses (698), or dissertations (798). (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.

Regional Research Institute

Randall W. Jackson, Director
http://www.ri.wvu.edu

The Regional Research Institute is dedicated to multidisciplinary research on the economic and social development of lagging regions. Our area interests cover the globe, with a special focus on our own Appalachian region. Our research focuses on theories and history of regional development, methods for studying regions, and policies for stimulating their development. We seek to advance our understanding of socioeconomic processes and our ability to explain regional differences in rates of growth and levels of development. The Institute creates learning opportunities and provides research support for faculty members and students. It is an internationally prominent center for the advancement of regional science—an interdisciplinary field at the intersection of economics, geography, and planning. Throughout its distinguished 44-year history, the Institute has been a separate unit, independent of any college. Currently the Institute brings together 31 faculty associates drawn from 13 departments in five colleges, a core of regional science faculty, an extended network of scholars elsewhere in the United States and abroad, and an outstanding group of graduate students.

The Institute has a long-standing reputation for its many contributions to regional science. Regional scientists use quantitative methods and mathematical models to study economic and social phenomena in a regional setting. The Institute’s forte has been its pioneering research on methods for analyzing regions and its multidisciplinary approach to studying regional development. Visiting scholars and graduate students from abroad are an integral part of the Institute community. The Institute’s Web Book of Regional Science attracts thousands of hits per day from around the world.

The Institute provides research experience and training to students but offers no degree program. Its regional science faculty has long staffed doctoral courses in related departments, and its alumni are among the nation’s leading scholars.

Graduate research assistants are nominated by their departments or by faculty associates. The Institute prefers to hire doctoral candidates who have completed one year of graduate study, but master’s candidates, undergraduates, and entering graduate students are considered. Most students are in economics, geography, or natural resource economics, but history, law, and sociology students are regularly represented, too. The students have an office at the Institute and state-of-the art computing equipment. As their educations progress, so do their roles in research projects. They learn skills, conduct and publish research, and present papers at conferences. The Institute has a well-established student tradition of writing articles or prizewinning papers while serving as research assistants.

For further information about the Institute, contact the Regional Research Institute, West Virginia University, 886 Chestnut Ridge Road, P.O. Box 6825, Morgantown WV 26506-6825;
Telephone (304) 293-2896, Fax (304)293-6699, or visit our website at http://www.ri.wvu.edu/.

Special Opportunities

International Center for Disability Information (ICDI)

http://www.icdi.wvu.edu

The International Center for Disability Information (ICDI) was established in 1965 as a rehabilitation research and training center. This organization houses information databases on vocational rehabilitation, job accommodations, and disability legislation. Faculty and staff are involved in research, training, and service activities. Students in assistantships and internships learn about rehabilitation research and practice. Special studies involving disability include projects on consumer needs assessment, program evaluation of vocational rehabilitation, and emergency-service research and development. The Job Accommodation Network is an information service about job accommodations and the employability of people with functional limitations. It has operated in the ICDI since 1983 and is funded through the Office of Disability Employment Policy of the U.S. Department of Labor.

National Research Center for Coal and Energy

http://www.nrcce.wvu.edu

The National Research Center for Coal and Energy at West Virginia University develops, coordinates, and conducts multidisciplinary research and service programs about energy and environmental issues. The center works with faculty and students from departments throughout the university and with collaborators from other universities, government laboratories, and private industry.
NRCCE obtains funding by working with WVU faculty to submit proposals to agencies such as the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, the U.S. Department of Energy, the U.S. Geological Survey, and others. NRCCE may provide cost sharing or seed monies for WVU faculty seeking federal research funding.

Some of the many NRCCE programs are: the Appalachian Oil and Natural Gas Research Consortium, the Petroleum Technology Transfer Council Regional Lead Organization for the Appalachian region, Industries of the Future—West Virginia and its Save Energy Now program, the U.S. DOE-WV Experimental Program to Stimulate Competitive Research, the National Alternative Fuels Training Consortium, the National Environmental Services Center, the US-China Energy Center which leads the Advanced Coal Technology Center of the US Department of Energy’s US-China Clean Energy Research Center, and the West Virginia Water Research Institute including the National Mine Land Reclamation Center, the Northern West Virginia Brownfields Assistance Center, the MonRiver Quest program.

The center is located on the Evansdale campus in a building that includes offices, wet/dry laboratories, an analytical laboratory, a high bay laboratory for pilot scale research projects, and a multimedia meeting facility.

Students in a variety of disciplines may find a limited number of graduate assistantships at the NRCCE in areas such as public affairs and communications, environmental sciences, or analytical laboratory sciences. Generally however, research funds are disbursed directly to the faculty in the colleges across the University who then recruit their own graduate students. To learn more about the research and service programs of the NRCCE, students are encouraged to visit http://www.nrcce.wvu.edu.

Support Services

West Virginia University has a variety of support programs, services, and information available to students. On this page you will find information on University Housing, Information Technology, University Libraries, Social Justice, Disability Services, divisional campuses, and the city of Morgantown.

Page Contents:

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- Commitment to Social Justice (p. 48)
- Disability Services (p. 48)
- Divisional Campuses (p. 48)
- Frequently Contacted Offices (p. 49)
- Housing and University Apartments (p. 50)
- Instructional Technology Resource Center (p. 50)
- Libraries (p. 50)
- Office of Information Technology (p. 51)
- Social Justice (p. 51)

Clinical Education Facilities

The West Virginia University Health Sciences Center includes a diverse group of health care facilities, providing a training ground for patient care and research for students in the health professions. West Virginia University Hospitals, the Physician Office Center, the Mary Babb Randolph Cancer Center, Health South Rehabilitation Hospital, the Eye Institute, Health Works Rehab and Fitness, and the National Institute of Occupational Safety and Health (NIOSH) are modern facilities that advance medical research and accommodate the demands of contemporary medical, dental, nursing, and pharmacy care.

WVU Hospitals entered a new era in 1988 with the opening of a 376-bed tertiary teaching facility, Ruby Memorial, the primary teaching hospital for the Health Sciences Center. It is equipped and staffed to provide the most comprehensive and advanced care available in West Virginia, thus making it a superb clinical education site for students. Ruby also houses the Jon Michael Moore Trauma Center and WVU Children’s Hospital with their specialized care units.

The Physician Office Center, the Health Sciences Center’s outpatient facility for education and patient care, accommodates the largest multi-specialty group practice in West Virginia, with 60 primary and specialty care areas. Dental facilities, the eye center, and the outpatient pharmacy are integral parts of the Physician Office Center.

Chestnut Ridge Hospital, a 70-bed psychiatric hospital, is also part of the WVU Hospitals. It is staffed clinically by faculty from the School of Medicine and is the focal point of education in the behavioral and psychiatric sciences.

Health South Regional Rehabilitation Hospital provides unique educational opportunities for students in neurological disease, trauma rehabilitation, and physical and occupational therapy. Many WVU students experience part of their clinical training at the Charleston Division
of the Health Sciences Center, which is affiliated with Charleston Area Medical Center. In addition, WVU students train at off-campus sites where they learn the demands of rural health care firsthand.

The School of Dentistry dental student clinic accepts patients who have particular problems of teaching value. Faculty members closely supervise those students assigned to clinic patients. The students get invaluable experience and several thousand patients receive a much-needed service.

**Commitment to Social Justice**

West Virginia University’s role as the doctoral degree-granting, research, land-grant University gives the institution a special responsibility as a leader in the area of social justice. The pursuit of truth underlying the University’s mission focuses attention on issues of diversity, power, and perspective, so that students, faculty, and staff may study and work in a climate of academic freedom and social responsibility, developing the skills, knowledge, and self-esteem necessary for participation as world citizens.

Equal opportunity is a fundamental goal in a democratic society, and WVU shares the responsibility for achieving that equity. The institution is committed, therefore, 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 benefit from the many opportunities the institution provides.

In keeping with this responsibility, 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 President’s Office for Social Justice, B 1 Stewart Hall. Additional information is also available on the WVU website http://socialjustice.wvu.edu.

The importance of WVU’s social justice program goes beyond the benefits that accrue to any one person or group to strengthening the University itself and enhancing its ability to accomplish the missions entrusted to it by the people and the State of West Virginia.

**Office of Disability Services**

The Office of Disability Services is located at G30 Mountainlair, phone (304) 293-6700, http://disabilityservices.wvu.edu/. The office provides accommodations to qualified students with documented permanent or temporary disabilities as they pursue their academic careers at WVU. Its services and accommodations are in keeping with the WVU commitment to provide both architectural and programmatic accessibility. Accommodations vary from student to student, are based on the functional limitations of each individual student, and are provided free of charge.

**Accommodations may include:**

- Priority preregistration,
- Arranging for classroom accommodations,
- Alternative testing accommodations such as extended time and/or a separate testing environment,
- Class materials in accessible formats,
- Providing accessible transportation to and from class,
- Providing referrals for assistive technology, and numerous other services.

Any student who requires accommodations must contact the Office of Disability Services as soon as possible, as it takes time to submit and review documentation as well as provide accommodations. Students are responsible for providing appropriate documentation of their disabilities, which usually comes from a physician, psychologist, or other licensed professional. The documentation must clearly state a current diagnosis and specific functional limitations, and provide test data that substantiates a “significant impairment” in functioning.

All information provided about a student’s disability is confidential and is stored separately from other records. Information about a student’s disability will not be disclosed without the written authorization of the student unless required by law or a need-to-know basis.

Prospective students with disabilities should also contact WVU Admissions, (304) 293-2121, and the program of interest for specific information concerning application procedures and admission requirements. All students admitted to WVU must meet current admission requirements.

**Divisional Campuses**

**Potomac State College of West Virginia University**

Potomac State College of West Virginia University, situated in West Virginia’s Eastern Panhandle in the town of Keyser, offers over 50 associate degrees, eight two-year, fast-track career and technical programs and provides students with undergraduate liberal arts and sciences and pre-professional studies. Additionally, the college offers two four-year degrees in business management and criminal justice. See http://www.potomacstatecollege.edu for more information.
West Virginia University Institute of Technology

The West Virginia University Institute of Technology is WVU’s southernmost campus. Located in Montgomery, WVU Tech serves the region and the state by preparing students at the associates’ and baccalaureate levels for careers in the basic and applied sciences. WVUIT addresses the statewide and regional needs for delivery of engineering and technical programs through extension offerings, continuing education, and consultative activities of the faculty. WVU Tech currently offers certificates and associate’s degrees in 15 fields, and baccalaureate degrees in 26 fields. See http://www.wvutech.edu for more information.

Morgantown Area

Greater Morgantown has 28,000 permanent residents; Monongalia County, 84,000. WVU is the largest single employer in the county. On the east bank of the Monongahela River, which flows north to Pittsburgh, Morgantown is situated on rugged terrain in the Appalachian highlands. The altitude varies from 960 feet above sea level in Morgantown to 2,100 feet at nearby Cooper’s Rock. The area’s temperate climate has four distinct seasons of about equal length. Morgantown averages 40 inches of precipitation a year. Autumn is beautiful when the leaves turn red, orange, and yellow. A north-south interstate highway (I-79) is one mile west of Morgantown. U.S. 19 and U.S. 119 pass through Morgantown in a north-south direction. Interstate 68, an east-west highway, links I-79 at Morgantown to I-81 and I-70 in the Cumberland/Hagerstown, Maryland, region.

Because of WVU’s resources, the Morgantown area is a major research center in the Appalachian region. Five federal agencies have research facilities in the area. The Department of Health and Human Services (Appalachian Laboratory for Occupational Safety and Health), The Forest Service (Forestry Sciences Laboratory), the National Energy Technology Laboratory of the Department of Energy, the Natural Resource Conservation Service (West Virginia headquarters), and the National Institute for Occupational Safety and Health.

Frequently Contacted Offices

Academic Programs

Provost and Vice President for Academic Affairs
West Virginia University
P.O. Box 6203
Morgantown, WV 26506-6203
Phone: (304) 293-5701
FAX: (304) 293-7554
http://provost.wvu.edu/

Office of Admissions
West Virginia University
P.O. Box 6009
Phone: (304) 293-2121 or 1-800-344-WVU1
FAX: (304) 293-8832
http://adm.wvu.edu/

Office of the University Registrar
West Virginia University
P.O. Box 6878
Morgantown, WV 26506-6897
Phone: (304) 293-4491
FAX: (304) 293-4491
http://registrar.wvu.edu

Graduate Programs

Office of Graduate Education and Life
West Virginia University
P.O. Box 6897
Morgantown, WV 26506-6897
Phone: (304) 293-7173
FAX: (304) 293-8657
http://grad.wvu.edu/

Housing and University Apartments

West Virginia University
P.O. Box 6430
Morgantown, WV 26506-6430
Phone: (304) 293-4491
Scholarships, Work-Study, and Veterans Educational Assistance

Student Financial Aid Office
West Virginia University
P.O. Box 6004
Morgantown, WV 26506-6004
Financial Aid
Phone: (304) 293-5242
FAX: (304) 293-4890
Scholarships
Phone: (304) 293-4126
FAX: (304) 293-4544
http://www.finaid.wvu.edu

Student Life
Dean of Students
West Virginia University
P.O. Box 6411
Morgantown, WV 26506-6411
Phone: (304) 293-5611
FAX: (304) 293-7028
http://studentlife.wvu.edu

Housing and University Apartments
The University owns and operates 16 residence halls with a capacity of approximately 5,500. All single, first-year students (including transfer students with freshman class status) are required to live in University housing. Exceptions include students living at home with parents within a 50 mile radius of WVU, students age 21 or older, married students, and students with children. After the first year, students have the option to live on campus and receive priority in room selection. Accessible housing is available. The Assignments Office, M63 Brooke Tower, (304) 293-2811, provides information about on-campus, undergraduate housing.

The Office of Housing and University Apartments also operates apartment complexes. The Medical Center Apartments offers housing to graduate students, professional students, non-traditional students, married students, and students with dependents. Vandalia Hall offers housing for undergraduate (with the exception of first time freshman students), graduate, professional, and non-traditional students. Information about University-owned apartments is available by calling the Medical Center Apartments at (304) 293-5840 or Vandalia Hall at (304) 293-0543.

More information on University operated housing may be obtained online at http://housing.wvu.edu.

Instructional Technology Resource Center
The Instructional Technology Resource Center (http://itrc.wvu.edu) increases the extent to which technology enhances the quality of teaching and learning at WVU. Our mission is to support, promote, and enhance teaching effectiveness at the University through instructional strategies and faculty development. We promote methods that enable the University to achieve its goals of providing a student-centered, technology-enhanced educational experience for all students. To accomplish this mission we engage in the following activities:

- Provide resources so that faculty can broaden their pedagogical exploration and reflection.
- Provide assistance with course development and integration of technologies into the course curriculum.
- Design, promote, and host faculty development opportunities through collaborative projects, training, and consulting services.

University Libraries
The West Virginia University Libraries include the Downtown Campus Library; the Charles C. Wise Jr. Library; the Evansdale Library; the Health Sciences Library, located in the Robert C. Byrd Health Sciences Center; and the Law Library, located in the Law School.

The WVU Libraries provide access to electronic resources 24 hours a day at http://www.libraries.wvu.edu. These resources include the online catalog, eBooks, journals, and databases. The WVU Libraries’ collections parallel the University’s academic offerings. Books, periodicals, electronic resources, microforms, government publications, databases, maps, manuscripts, media, and access to information via the Internet provide a major academic resource for students and faculty. Also, library staff members provide a wide range of in-person and online services including reference assistance, circulation, interlibrary loan, and library instruction.

The WVU Libraries’ onsite collections include over 2.1 million books and more than 48,000 current journal subscriptions. In keeping with WVU’s mission of technological excellence, the WVU Libraries offer students electronic access to more than 246 networked databases,
more than 30,000 eBook, and more than 45,700 online electronic journals. Macs and PCs enable students to create multi-media presentations for class. Whether in the library, in class, or at home, students can use their smartphones to access the Libraries' mobile website, http://m.lib.wvu.edu/.

Through the Libraries' membership in the Pennsylvania Academic Library Consortium, WVU students and faculty have access to over 36 million books in 75 member libraries. The West Virginia and Regional History Collection houses manuscripts, folk music, newspapers, photographs, and public records, and is the foremost historical library and archive in the state. The Libraries' Appalachian Collection is one of the nation’s best resources for Appalachian regional culture. The WVU Libraries are a depository library for U.S. government publications, and the Evansdale Library is a patent depository for U.S. patents.

The WVU Libraries are innovators in identifying, acquiring, and making accessible a broad range of electronic library resources. The Libraries constantly update technology and add resources to provide the most current and convenient information resources and services to its users. The Libraries were pioneers in the management of electronic theses and dissertations and in electronic course reserves.

Library hours vary with the academic term and are available online.

The WVU Health Sciences Library serves the Robert C. Byrd Health Sciences Center institutes, specialized care facilities, and programs, including the Schools of Dentistry, Medicine, Nursing, and Pharmacy; the Allied Health and graduate biomedical programs; WVU faculty, staff, and students; the West Virginia University Hospitals, and University Health Associates. The Health Sciences Library also supports the center’s activities in the Eastern and Charleston Divisions and at the Oman Medical College.

As the West Virginia state resource library in the National Network of Libraries of Medicine, the Health Sciences Library also supports the biomedical information needs of health professionals throughout the state, offering advanced information retrieval services and access to a collection of over 200,000 volumes, extensive holdings of multimedia materials, approximately 350 current print journal subscriptions, and health-related government documents. The library offers electronic access to biomedical literature through the Internet and locally mounted databases. MEDLINE (PubMed) and other National Library of Medicine databases, Web of Science, Clinical Pharmacology, CINAHL (Nursing and Allied Health), International Pharmaceutical Abstracts (IPA), MD Consult, HAPI (Health and Psychosocial Instruments), Health Source: Nursing Academic Edition, Health Source: Consumer Edition, the Cochrane Library, RefWorks, Up-To-Date, and numerous other electronic resources are available. The Health Sciences Library now provides access to over 5,100 electronic journals related to health and biological sciences. University-wide, the e-journal collection numbers over 35,000 titles.

The library is open an average of 96 hours per week for most of the year. Additional library services are available through the WVU Libraries system, a network of general and specialized libraries within a two-mile radius of the Health Sciences Library, from the Health Sciences Library located at the Charleston Division, and through interlibrary loan and the E-Z Borrow service.

The Health Sciences Library maintains a web presence at http://www.hsc.wvu.edu/library where library users can access many electronic resources, request online reference assistance (Ask A Librarian), document delivery (ILLiad), or other services, and keep up-to-date on new library materials and services.

The Office of the Chief Information Officer & Office of Information Technology

The Office of the Chief Information Officer and the Office of Information Technology (OIT) are committed to the land-grant mission of West Virginia University.

The Office of Information Technology’s mission is to provide a secure, reliable, and robust information technology infrastructure that supports innovation and discovery, pedagogy, public service, and maintain essential production services and systems. The goals of OIT are to be customer focused and a performance driven organization that empowers the University community through the use of information technology, to enrich the academic experience for students, and to strengthen the ability of faculty and staff to teach, learn, conduct research, and to provide public service throughout West Virginia, the nation, and beyond.

OIT endeavors to be the state, regional, and national leader in information technology and to be recognized for its expertise and best practices in the delivery of secure and reliable technology services and solutions.

OIT supports University computing facilities, high technology classrooms (http://oit.wvu.edu/ctec/), paid printing services, and test and survey scanning services. OIT provides a Help Desk that offers a broad range of technical support. A listing of Help Desk services is available at http://oit.wvu.edu/helpdesk/. In addition, OIT offers free Wi-Fi network access (encrypted and unencrypted) at various locations on campus (http://oit.wvu.edu/wireless/), instructional technology software and services (http://oit.wvu.edu/slic/), and training workshops (http://oit.wvu.edu/tss/).

A comprehensive list of technology resources can be found at http://oit.wvu.edu/services/.

Office of Social Justice

West Virginia University's role as the doctoral degree-granting, research, land-grant University gives the institution a special responsibility as a leader in the area of social justice. The pursuit of truth underlying the University’s mission focuses attention on issues of diversity, power, and perspective, so that students, faculty, and staff may study and work in a climate of academic freedom and social responsibility, developing the skills, knowledge, and self-esteem necessary for participation as world citizens.
Equal opportunity is a fundamental goal in a democratic society, and WVU shares the responsibility for achieving that equity. The institution is committed, therefore, 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 benefit from the many opportunities the institution provides.

In keeping with this responsibility, 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 President’s Office for Social Justice, B 1 Stewart Hall. Additional information is also available on the WVU website http://socialjustice.wvu.edu/.

The importance of WVU’s social justice program goes beyond the benefits that accrue to any one person or group to strengthening the University itself and enhancing its ability to accomplish the missions entrusted to it by the people and the State of West Virginia.

Graduate Education Expenses

Page Contents:

• Academic Common Market (p. 52)
• Cost of an Academic Year’s Work (p. 52)
• Tuition and Fees (p. 53)
• SREB Academic Common Market (p. 52)
• Fee Regulations (p. 53)
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Academic Common Market

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

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

SREB Academic Common Market

Through the Southern Regional Education Board (SREB) Academic Common Market, WVU allows students from SREB member states to enroll in certain WVU programs at in-state tuition rates. Typically these degree programs are not available to students in their home state. In addition to West Virginia, SREB member states are Alabama, Arkansas, Delaware, Florida (graduate only), Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina (graduate only), Oklahoma, South Carolina, Tennessee, Texas (graduate only), and Virginia. Please refer to the SREB website for the most current information about programs offered to residents of your state. See Academic Common Market on page 23 for more information.

Cost of an Academic Year’s Work

The WVU Financial Aid Office makes available to students with an estimate of the total cost of attendance for an academic year through the Admissions Department. This estimate includes tuition/fees, books/supplies, off campus room/board, transportation, and personal expenses in amounts designed to provide a modest, but adequate, lifestyle for students. The cost of attendance for the 2009–2010 academic year for
resident students is $17,492; for non-resident students the current cost is $28,574. Figures are updated annually and you are encouraged to contact the Financial Aid Office for the most recent information at http://adm.wvu.edu/home/cost_of_attendance.

Many students attending WVU use graduate student graduate teaching assistantships (GTAs), graduate research assistantships (GRAs), or other graduate assistantships offered by many academic and non-academic units across campus. In addition to the waiver of tuition, these assistantships also provide stipends that range in value according to the college, program, or work to be undertaken (see Graduate Assistantships, Fellowships, and Waivers, on page 41).

**Tuition and Fees**

The WVU Office of Admission assigns enrolling students a residency classification for admission, fee, and tuition purposes. Students who are legal residents of West Virginia pay “resident” tuition at WVU; students who are residents of other states and nations pay “non-resident” tuition.

Tuition and fee structures additionally vary by academic program at WVU. Current tuition and fee costs can be found at http://adm.wvu.edu/home/cost_of_attendance.

**Fee Regulations**

All West Virginia University fees are subject to change without notice. A nonrefundable service fee of $50 must accompany the application for admission to graduate studies. All fees are payable to the Office of Student Accounts at registration. Arrangements with the Office of Student Accounts for payment of officially accepted scholarships, loan funds, grants, or contracts shall be considered sufficient for acceptance of registration. All students should register on days scheduled for registration at the beginning of each semester or summer session. No student will be permitted to register at the University after the eighth day of a semester or the fourth calendar day of the summer sessions or a single summer session. Days are counted from the first day of registration. Any student failing to complete registration on regular registration days is subject to a late registration fee.

Registering students pay the fees shown in the fee charts, plus special fees and deposits as required.

WVU places restrictions on students who have outstanding debts to a unit or units of 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.

**Types of Fees**

Special Fees, Library Fee, and Technology Fee

Special Fees provides students with access to the WVU Mountainlair Student Center, the Daily Athenaeum newspaper, University Radio Station, Student Recreation Center, and Student Health Services, Athletics (student admission to WVU football, basketball, and other sporting events), student affairs activities, and the Personal Rapid Transit (PRT) system. The Library Fee provides students with access to and support from the University Libraries. The Technology Fee supports University computer centers and campus technology development. All students, regardless of whether or not they have been granted a tuition waiver must pay these mandatory fees.

Laboratory Fees

Many departments assess laboratory or other equipment fees to provide availability to consult specific departments concerning nonrefundable equipment deposits and laboratory fees.

Music Fees

All music majors must pay a fee that entitles them to assigned practice space daily. Band and orchestra instruments may be rented by the semester. Contact the College of Creative Arts for details regarding these fees.

Extended Learning Fees

Fees for credit hours for Extended Learning courses vary by program. Students should inquire of individual programs and view fee schedules at http://elearn.wvu.edu/registration/tuitionFees.html.

Other Fees*

There are other fees for certain services and functions provided by the University. Check with the University office providing the service or function in question to find out the current fee. Also, individual programs may have additional fees.

Remission of Fees

Students appointed as graduate assistants are eligible for remission of tuition and certain fees (see Graduate Assistantships, Fellowships, and Waivers, p. 41).
Refund of Tuition and Fees

Current information on refunding can be found on the WVU Finance Division’s webpage http://finance.wvu.edu/osa/refunds.cfm

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. A copy of the policy is available in the Office of Student Accounts. A service charge of $25.00 is collected on each check returned unpaid by the bank upon which it was drawn. The service charge on unpaid, returned check(s) is subject to change in accordance with state law.

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 the on-campus fees have free access to Student Recreation Center, the PRT, Student Health, 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 and the Mountainlair’s WVU Up-All Night activities. 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 http://www.wvu.edu/~wvucard/ or contact them at wvucard@mail.wvu.edu.

Residency Policy

Residency policy is established by the WV Higher Education Policy Commission Series 25 and is posted at http://adm.wvu.edu/home/residency_classification. Section 1 of the residency policy bulletin contains general information regarding its scope and dates of adoption. Remaining sections are excerpted below.

Higher Education Policy Commission Series 25

Section 2. Classification for Admission and Fee Purposes

1. Students enrolling in a West Virginia public institution of higher education shall be assigned a residency status for admission, tuition, and fee purposes by the institutional officer designated by the president. In determining residency classification, the issue is essentially one of domicile. In general, the domicile of a person is that person’s true, fixed, permanent home and place of habitation. The decision shall be based upon information furnished by the student and all other relevant information. The designated officer is authorized to require such written documents, affidavits, verifications, or other evidence as is deemed necessary to establish the domicile of a student. The burden of establishing domicile for admission, tuition, and fee purposes is upon the student.

2. If there is a question as to domicile, the matter must be brought to the attention of the designated officer at least two weeks prior to the deadline for the payment of tuition and fees. Any student found to have made a false or misleading statement concerning domicile shall be subject to institutional disciplinary action and will be charged the nonresident fees for each academic term theretofore attended.

3. The previous determination of a student’s domiciliary status by one institution is not conclusive or binding when subsequently considered by another institution; however, assuming no change of facts, the prior judgment should be given strong consideration in the interest of consistency. Out-of-state students being assessed resident tuition and fees as a result of a reciprocity agreement may not transfer said reciprocity status to another public institution in West Virginia.

Section 3. Residence Determined by Domicile

1. Domicile within the state means adoption of the state as the fixed, permanent home and involves personal presence within the state with no intent on the part of the applicant or, in the case of a dependent student, the applicant’s parent(s) to return to another state or country. Residing with relatives (other than parent(s)/legal guardian) does not, in and of itself, cause the student to attain domicile in this state for admission or fee payment purposes. West Virginia domicile may be established upon the completion of at least 12 months of continued presence within the state prior to the date of registration, provided that such 12 months’ presence is not primarily for the purpose of attendance at any institution of higher education in West Virginia.

2. Establishment of West Virginia domicile with less than 12 months’ presence prior to the date of registration must be supported by evidence of positive and unequivocal action. In determining domicile, institutional officials should give consideration to such factors as the ownership or lease of a permanently occupied home in West Virginia, full-time employment within the state, paying West Virginia property tax, filing West Virginia income tax returns, registering of motor vehicles in West Virginia, possessing a valid West Virginia driver’s license, and marriage to a person already domiciled in West Virginia. Proof of a number of these actions shall be considered only as evidence which may be used in determining whether or not a domicile has been established.

3. Factors militating against the establishment of West Virginia domicile might include such considerations as the student not being self-supporting, being claimed as a dependent on federal or state income tax returns or the parents’ health insurance policy if the parents reside out of state, receiving financial assistance from state student aid programs in other states, and leaving the state when school is not in session.
Section 4. Dependency Status

1. A dependent student is one who is listed as a dependent on the federal or state income tax return of his or her parent(s) or legal guardian or who receives major financial support from that person. Such a student maintains the same domicile as that of the parent(s) or legal guardian. In the event the parents are divorced or legally separated, the dependent student takes the domicile of the parent with whom he or she lives or to whom he or she has been assigned by court order. However, a dependent student who enrolls and is properly classified as an in-state student maintains that classification as long as the enrollment is continuous and that student does not attain independence and establish domicile in another state.

2. A non-resident student who becomes independent while a student at an institution of higher education in West Virginia does not, by reason of such independence alone, attain domicile in this state for admission or fee payment purposes.

Section 5. Change of Residence

1. A person who has been classified as an out-of-state student and who seeks resident status in West Virginia must assume the burden of providing conclusive evidence that he or she has established domicile in West Virginia with the intention of making the permanent home in this state. The intent to remain indefinitely in West Virginia is evidenced not only by a person’s statements, but also by that person’s actions. In making a determination regarding a request for change in residency status, the designated institutional officer shall consider those actions referenced in Section 2. The change in classification, if deemed to be warranted, shall be effective for the academic term or semester next following the date of the application for reclassification.

Section 6. Military

1. An individual who is on full-time active military service in another state or foreign country or is an employee of the federal government shall be classified as an in-state student for the purpose of payment of tuition and fees, provided that the person established a domicile in West Virginia prior to entrance into federal service, entered the federal service from West Virginia, and has at no time while in federal service claimed or established a domicile in another state. Sworn statements attesting to these conditions may be required. The spouse and dependent children of such individuals shall also be classified as in-state students for tuition and fee purposes.

2. Persons assigned to full-time active military service in West Virginia and residing in the state shall be classified as in-state students for tuition and fee purposes. The spouse and dependent children of such individuals shall also be classified as in-state students for tuition and fee purposes.

Section 7. Aliens

1. An alien who is in the United States on a resident visa or who has filed a petition for naturalization in the naturalization court, and who has established a bona fide domicile in West Virginia as defined in Section 3, may be eligible for in-state residency classification, provided that person is in the state for purposes other than to attempt to qualify for residency status as a student. Political refugees admitted into the United States for an indefinite period of time and without restriction on the maintenance of a foreign domicile may be eligible for an in-state classification as defined in Section 3. Any person holding a student or other temporary visa cannot be classified as an in-state student.

Section 8. Former Domicile

1. A person who was formerly domiciled in the state of West Virginia and who would have been eligible for an in-state residency classification at the time of his or her departure from the state may be immediately eligible for classification as a West Virginia resident provided such person returns to West Virginia within a one-year period of time and satisfies the conditions of Section 3 regarding proof of domicile and intent to remain permanently in West Virginia.

Section 9. Residency Decisions/Appeals

Following is the process for initially determining residency for tuition purposes and how students appeal if they disagree with those decisions. Initial residency decisions are made at the admission level. Any questionable decisions are referred to the designated institutional official who determines whether the student meets the residency requirements or additional information is needed to make the decision. If additional information is needed, the student is requested to submit further documentation. If a student feels he or she has been improperly classified as a non-resident for tuition purposes, he or she should request an application for classification as a resident student at West Virginia University. To request this application write: Residency Officer, Office of Admissions, P.O. Box 6009, Morgantown, WV 26506-6009, or call (304) 293-2121.

Once this application and supporting documents are received, a decision is made by the designated institutional official. If the student meets the requirements as outlined by the Board of Governors Policy Bulletin #34, the student is granted residency for the upcoming semester. If the student does not meet the necessary requirements, the student is denied in-state residency. If denied, the student has the option of appealing the decision to the WVU Council on Residency. The council consists of faculty and student representatives, whose number shall be at least three. The student representative(s) shall be appointed by the president of West Virginia University Student Administration while the faculty representative(s) shall be selected by the University Faculty Senate. The student contesting a residency decision shall be given the opportunity to appear before the institutional committee on residency appeals.
If the council overturns the initial denial, the student becomes a resident for the semester in question. Should the council uphold the original denial, the student has the option of appealing to the president of WVU. The president, again, may either uphold the original denial or overturn the decision of the council.

Residency appeals shall end at the institutional level.

**Governance and Administration**

- Governor of West Virginia (p. 56)
- West Virginia Higher Education Policy Commission (p. 56)
- West Virginia University Board of Governors (p. 56)
- West Virginia University Administration (p. 57)
  - Senior Administration (p. 57)
  - Deans (p. 58)
  - Directors (p. 56)

**Governor of West Virginia**

- Earl Ray Tomblin, Governor

**West Virginia Higher Education Policy Commission**

- Jenny Allen, Shepherdstown, WV
- Bruce Berry, Morgantown, WV
- Bob Brown, Ex-Officio, Chair, WV Council for Community and Technical College Education, Charleston, WV
- Kathy G. Eddy, Secretary, Parkersburg, WV
- John Estep, Richwood, WV
- Kay H. Goodwin, Ex-Officio, Secretary of Education and the Arts, Charleston, WV
- David K. Hendrickson, Chairman, Charleston, WV
- Paul L. Hill, Chancellor, Charleston, WV
- John Leon, Fairmont, WV
- Jorea Marple, Ex-Officio, State Superintendent of Schools, Charleston, WV
- David R. Tyson, Huntington, WV

**West Virginia University Board of Governors**

- David B. Alvarez, Bridgeport, WV
- Jason Bailey, Student Representative
- Ellen S. Cappellanti, Charleston, WV
- Thomas S. Clark, Bruceton Mills, WV
- Lesley Cottrell, Faculty Representative, Morgantown, WV
- James W. Dailey II, Vice Chairman, Martinsburg, WV
- Thomas V. Flaherty, Secretary, Charleston, WV
- Robert K. Griffith, Faculty Representative, Morgantown, WV
- Raymond J. Lane, Menlo Park, CA
- Diane Lewis, Morgantown, WV
- Dixie Martinelli, Morgantown, WV
- William O. Nutting, Wheeling, WV
- Andrew A. Payne III, Chairman, Charleston, WV
- Edward L. Robinson, Charleston, WV
- J. Robert Rogers, Hurricane, WV
- Charles M. Vest, Washington, DC
- William D. Wilmoth, Wheeling, WV

*Current as of April, 2012.*
West Virginia University is governed by the West Virginia University Board of Governors and the West Virginia Higher Education Policy Commission. James P. Clements is the 23rd President of West Virginia University.

West Virginia University is a member of the Higher Learning Commission. The University’s educational programs are accredited by the Higher Learning Commission North Central Accreditation (NCA) of Colleges and Schools and by the appropriate accreditation agencies for professional programs.

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.

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- Chancellor for Health Sciences, Christopher C. Colenda
- Chief of Staff, Jay Cole
- Executive Officer for Policy Development, Jennifer Fisher
- Executive Officer for Social Justice, Jennifer A. McIntosh
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- Vice President for Human Resources, Margaret R. Phillips
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- Senior Associate Provost, Russell K. Dean
- Campus Executive Officer, WVU Institute of Technology, Carolyn D. Long
- Campus Provost, Potomac State College of WVU, Kerry S. Odell
- Associate Provost for Graduate Academic Affairs, Jonathan Cumming
- Associate Provost for Undergraduate Academic Affairs, Elizabeth A. Dooley
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- Associate Provost for Academic Personnel, Cecil B. Wilson
- Associate Vice President, Academic Strategic Planning, Nigel Clark
- Interim Director of Cooperative Extension Service, Steven C. Bonanno
- University Registrar, Stephen E. Robinson
- Interim Executive Director of Information Technology, Mark Six
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- Special Assistant to the President, Sara A. Master
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- Associate Vice President for Planning and Treasury Operations, Elizabeth Reynolds
- Assistant Vice President for Finance, Anjali Halabe
- Assistant Vice President for Facilities Management, Randy Hudak
- Vice President for Planning and Operations, Fred R. Butcher
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- Associate Vice President for Health Sciences–Eastern Division, C. H. Mitch Jacques
- President, West Virginia University Hospitals, Inc, Bruce McClymonds
- Senior Deputy General Counsel, April Min
Graduate Information

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- **Deputy General Counsel**, David Fryson
- **Associate Vice President for Research and Economic Development**, Mridul Gautam
- **Assistant Vice President for Research Administration and Director of Sponsored Programs**, Alan Martin
- **Associate Vice President for Student Affairs and Enrollment Management Services**, Brenda Thompson
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- **Associate Vice President for University Relations Operations**, Tricia Petty
- **Assistant Vice President for University Communications**, Becky Lofstead
- **President and CEO, West Virginia University Alumni Association**, Steve Douglas
- **Chair, West Virginia University Faculty Senate**, Lesley Cottrell
- **Chair, West Virginia University Staff Council**, Jo Morrow
- **President, West Virginia University Student Government Association**, Jason Bailey

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- **Davis College of Agriculture, Natural Resources, and Design**, Rudolph P. Almasy (Interim)
- **Dean of Students**, G. Corey Ferris (Interim)
- **Eberly College of Arts and Sciences**, Robert H. Jones
- **Extended Learning**, Sue Day-Perroots
- **Honors College**, Keith Garbutt
- **Perley Isaac Reed School of Journalism**, Maryanne Reed
- **School of Dentistry**, David A. Felton
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- **Accounting and Financial Systems**, Anjali Halabe
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- **Center on Aging**, Alan M. Ducatman (Interim)
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• Internal Auditing, William R. Quigley
• Mary Babb Randolph Cancer Center, Scot C. Remick
• Military Science, Air Force ROTC, Lt. Col Jeremy Anfinson
• National Research Center for Coal and Energy, Richard Bajura
• Parents Club, Sabrina Cave
• Physical Plant HSC, Leonard Lewis
• Printing Services, Geraldine M. Ireland
• Procurement Services, Philip Charneskie
• Public Safety/Police Department, Robert E. Roberts
• Regional Research Institute, Randall W. Jackson
• Research Compliance, Daniel Vassgird
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• Student Health Services, Jan Palmer
• Student Recreation Center, David H. Taylor
• Technology Transfer, Bruce Sparks
• Telecommunications, Timothy P. Williams
• Undergraduate Academic Services Center, Anita Mayer
• University Affiliated Center for Developmental Disabilities, Ashok Dey
• University Events, Stephanie Ballard Conrad
• University Housing, Corey Farris
• University Relations-Design, Angela M. Caudill
• University Relations-News, John Bolt
• University Relations-Video, John E. Duwall
• University Relations-Web, Cathy Orndorff
• Visitors Center, Danica Ann Wilburn
• WVU Press, Carrie Mullen
School of Medicine

**Degrees Offered**

- M.D., Doctor of Medicine
- M.D. /Ph.D., Joint Doctor of Medicine and Doctor of Philosophy
- Ph.D., in Biochemistry and Molecular Biology
- Ph.D. in Cancer Cell Biology
- Ph.D. in Cellular and Integrative Physiology
- Ph.D. in Immunology and Microbial Pathogenesis
- Ph.D. in Neuroscience
- M.H.S. in Pathologists' Assistant
- B.S., M.S., Ph.D., Exercise Physiology
- M.S. in School Health Education
- B.S. in Medical Laboratory Science
- M.O.T., Master of Occupational Therapy
- D.P.T., Doctor of Physical Therapy
- Ph.D., Pharmaceutical and Pharmacological Sciences
- M.D. /M.P.H., Doctor of Medicine and Master of Public Health
- Ph.D., Public Health Sciences
- 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.

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.

The public health sciences Ph.D. program offers training in two tracts: Social and behavioral sciences; and population epidemiology and biostatistics. First-year graduate students take a common core curriculum and match with a faculty mentor and choose a specialty area in year two.

The Department of Human Performance and Applied Exercise Sciences incorporates exercise physiology, physical therapy, and occupational therapy. Additionally, the Department of Community Medicine has a M.P.H. program in public health with five specialty tracts, a generalist M.P.H online program, and a M.S. in school health. These programs complement all of the other existing programs in the other health professions schools (dentistry, nursing, and pharmacy).

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 course work 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:

• 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 40 to 45 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 10 to 15 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:

- 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 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; (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.), 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 coauthors 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.

Faculty

Dean
• Arthur J. Ross III - MD

Vice Dean for Medical Education & Academic Affairs
• Norman D. Ferrari III - MD

Vice Dean for Clinical Services & CMO WVU Healthcare
• Judie Charlton - MD

Associate Dean
• Scott A. Cottrell - EdD
  Student Services & Curriculum
• James P. Griffith - MD
  Charleston Campus Student Services
• Rosemarie Cannarella Lorenzetti - MD
  Eastern Campus Student Services
• Timothy Palencik
  Finance
• James M. Stevenson - MD
  Development
• Marie Kolar - MD
  Veterans Affairs
• Barbara Ducatman - MD
  Faculty Services

Assistant Dean
• James Brown - MD
  Eastern Campus
• Kathleen Bors - MD
  Charleston Campus
• Hannah Hazard - MD
Admissions
• Fred L. Minnear - PhD
  Graduate Studies
• David Wilks - MD
  Medical Education Technology
• James O’Donnell - PhD
  Research
• Jamal Mustafa - PhD
  Research

Associate Dean for Professional and Undergraduate Programs
• MaryBeth Mandich - PhD
  Professional & Undergraduate Programs

Associate Vice President for Health Sciences
• Clark Hansbarger - MD
  Dean, Charleston Campus
• Konrad Nau - MD
  Dean, Eastern Campus

Senior Associate Dean/Chief Administrative Officer
• John Worth

Biochemistry and Molecular Biology
lsalati@hsc.wvu.edu

Degrees Offered
• Doctor of Philosophy
• Joint Doctor of Medicine and Doctor of Philosophy

The disciplines of biochemistry and molecular biology seek to understand biology by exploring the functions of the molecular components of cells. A major goal of this program is to foster your 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 your 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, you 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.

Doctor of Philosophy

Upon successful completion of the undifferentiated first year, as outlined earlier, students choose a dissertation research advisor, at which time emphasis is placed on research. During the second year, specialized courses in biochemistry are offered as students continue their research projects. During subsequent years, students emphasize independent dissertation research, and a few formal courses may be taken.

Completion of the Ph.D. 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.

Faculty

Graduate Program Director
• Dr. Lisa Salati

Biomedical Sciences

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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 graduate training 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 under the guidance of a graduate faculty advisor, and then complete the last two years of medical school.

Our seven graduate training programs are: 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, As, Bs, or S in research, passages of the qualifying examination, which usually includes a defense of the research proposal and dissertation defense, and at least one first-author manuscript, based on the Ph.D. dissertation research, published or in press in a peer-reviewed journal before the formal defense of the dissertation.

The goal of all seven biomedical sciences graduate Ph.D. programs is to train highly qualified students for academic and scientific careers as research investigators. 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 includes three to five years of postdoctoral research training.

Admissions

Ph.D. Students

Applicants to the Ph.D. graduate programs in the biomedical sciences and the Schools of Medicine and Pharmacy must submit an official application for admission to the WVU Office of Admissions, P.O. Box 6009, Morgantown, WV 26506-6009. Applicants should request to have their GRE and TOEFL/IELTS scores sent to WVU. Additionally, applicants are also required to furnish official copies of transcripts or marks sheets directly to the Office of Admissions. The online application and instructions can be found online at http://grad.wvu.edu

Applicants must have a bachelor's degree and excellent GRE scores. Three letters of recommendation and a personal statement are required. Students are invited in groups of ten to fifteen for paid, two-day visit/interviews from January through March. Students are admitted
as a class by a common graduate admissions committee comprised of the graduate directors of each of our seven Ph.D.-degree granting programs, a senior Ph.D. student from the Graduate Student Organization (GSO), and the assistant dean for Graduate Studies.

Applicants must have a bachelor’s or equivalent academic degree and should demonstrate a strong background in the biological sciences, inorganic and organic chemistry, physics, and mathematics through calculus. Courses in biochemistry, cell biology, molecular genetics, and physical chemistry, and experience in research are recommended. Students with demonstrated abilities but lacking some recommended courses should correct these deficiencies in the summer preceding or after enrollment. Recommended are a minimum GPA of 3.0 and a GRE total of 1,000 for verbal and quantitative with a 4.0 in the analytical essay.

M.D./Ph.D. Students

Formal application requires successful application to the School of Medicine through the American Medical College Application Service (AMCAS), followed by a separate application to the director of the M.D./Ph.D. scholars program. M.D./Ph.D. candidates interview with two current M.D./Ph.D. scholars, the director of the scholars program, and selected graduate faculty.

Financial Aid

All Ph.D. and M.D./Ph.D. students matriculated in the biomedical sciences graduate programs in the WVU Health Sciences Center receive full financial support during their training, provided that they remain in good academic standing, a 3.0 GPA, and excellent performance in research. Stipend levels are considered for adjustment approximately every two years. Such support currently includes a $20,000 annual stipend, full tuition coverage, and student health insurance (hospitalization and disability).

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
- Larger numbers of available graduate faculty to select from for a research advisor
- Students develop important intellectual and social connections
- Enhances future collaborations among research laboratories

In year one, students:

- 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 three active research laboratories supported by federal grants

First semester:

*Cellular Structure and Function*, *Cellular Methods and Fundamentals of Integrated Systems* are the three major courses. Journal clubs are incorporated and complement the didactic information, emphasizing discussions of literature articles led by students and facilitated by the faculty. *Biostatistics for the Basic Sciences* provides an introductory background to statistics. Students take *Discussions on Scientific Integrity* that meets weekly, is led by individual faculty, and incorporates small and large group discussions of ethical and moral issues presented as scientific case studies.

Second semester:

*Molecular Biology*, 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 take *Scientific Writing*. Students attend weekly lectures and complete assignments in two separate writing skills, a scientific journal article, and an NIH pre-doctoral fellowship grant.

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 1 of the United States Medical Licensing Examination (USMLE), students enter the research portion of their Ph.D. training. There are two 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. There are two M.D./Ph.D. training programs: Biomedical sciences and public health sciences. 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.

Faculty

Assistant Dean for Graduate Studies

• Fred L. Minnear - Ph.D.
  M.D./Ph.D. Scholars Program

Chair

• Jason Huber

Assistant Director for Graduate Studies

• Renee Seitz

Staff Assistant

• Penny Phillips
  M.D./Ph.D. Scholars Program

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:

• Tumor Microenvironment: Tumor cell resistance to anoikis; effects of chemotherapy on the bone marrow microenvironment, stem cell regulation, leukemia/stromal interactions, effects of the extracellular matrix on angiogenesis and tumor cell invasion.
• Mechanisms of Metastasis: Role of proteases in cell motility, regulation of the actin cytoskeleton in invadopodia formation and migration, signaling pathways in invasion and metastasis, imaging of metastasis in animal models.
• Genetic Regulation of Cancer: Tumor suppressor genes and transcriptional regulation, post-translational modifications in transcriptional regulation.
• Heavy Metals and Cancer: Effects of heavy metals on signal transduction pathways governing angiogenesis and tumor cell motility.
Signal Transduction in Cancer: Receptor tyrosine kinase signaling in cancer growth and metastasis, non-receptor tyrosine kinases in cell adhesion and proliferation, ROS in tumor progression, lipid kinase signaling in angiogenesis.

Cancer Bioinformatics: Biomarker classification in cancer, predictive models of carcinogenesis.

Cancer cell biology investigators working in these research areas routinely incorporate biochemical, molecular, cellular, animal and computational-based techniques that are currently utilized at the forefront of leading basic cancer research laboratories around the world. The main tumor types that are the current focus of cancer cell biology investigators are based on cancers with disproportionate incidences in West Virginia, including breast, leukemia, ovarian, cervical, lung, and head and neck cancers.

The doctor of philosophy program in cancer cell biology is designed to expose Ph.D. and M.D./Ph.D. level graduate students to a wide spectrum of opportunities available in basic and translational cancer research. In addition to mechanistic and therapeutic approaches to studying problems in cancer at the bench, students have the opportunity for exposure to more clinical elements of cancer practice, including participation in tumor boards, shadowing clinicians, and participation in the design and approval of clinical trials. The cancer cell biology program at WVU is a member of the Cancer Biology Training Consortium (CABTRAC), a national organization of similar cancer-specific Ph.D. programs that interact through annual regional and national meetings to improve and refine Ph.D. cancer training. Graduates of the cancer cell biology program are therefore well equipped to enter into a number of different career paths. These include postdoctoral research, biotechnology, industry, government, science writing, core facilities management, and legal counsel as examples.

Qualifying Examination

The qualifying examination consists of two parts. The written portion is conducted at the end of the first year of study, and is an evaluation of the student’s performance and aptitude conducted by the rotation mentors the student had during their first year. Students are judged on their competency at the bench, in-depth knowledge of each research topic they worked on, overall enthusiasm, and potential for success at the Ph.D. level. After successful completion of the second academic year, the students take an oral examination that consists of the writing and defense of the student’s research dissertation project in the format of a NIH grant proposal. Upon successful completion of both elements of the qualifying examination, the student is admitted to candidacy for the degree of doctor of philosophy.

Faculty

Graduate Program Director

• Dr. Scott Weed

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

• 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:

- Hemodynamics and Cardiovascular Control in Health and Disease
- Microcirculation and Cellular Biophysics
- Respiratory Function and Control in Health and Disease
- Neuroendocrine Control of Reproduction
- Neural Control of Sensory Physiology

The goal of the cellular and integrative physiology graduate program is to engage students in creating a new approach to the life sciences, with the aim of explaining how the higher-level properties of complex systems appear from the interactions amongst their parts. Students will leave our program better able to identify important unsolved scientific problems, and with an appreciation of how to select problems for which quantitative and theoretical approaches will be most productive.

Qualifying Examination

After successful completion of their second academic year, students take a two-part qualifying examination. The exam consists of an oral examination covering the major areas of physiology, followed by a written and oral research defense of the student’s research proposal. Upon successful completion of the qualifying examinations, the student is admitted to candidacy for the degree of doctor of philosophy. Our graduates obtain excellent postdoctoral research training opportunities in prestigious laboratories and develop productive and satisfying careers in academics, industry, and government. Graduates have become departmental chairs, industrial department heads, university vice presidents, and entrepreneurs.

Faculty

Graduate Program Director

- Dr. Robert W. Brock

Occupational Therapy

Degree Offered

- Master of Occupational Therapy

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 50 to 55 hours of prerequisite courses, which in most instances will take two years to fulfill.

The Profession of Occupational Therapy

Occupational therapy is a health profession which provides services to people of all ages with physical, mental, or developmental disabilities. The purpose of occupational therapy is to help individuals achieve a maximum level of independence. The focus is on developing the capacity to function in all activities (occupations) of daily life, including self care, work, and leisure. Hence the name occupational therapy.

Occupational therapy is a health and rehabilitation profession designed to help people regain and build skills that are important for health, well-being, security, and happiness.

Occupational therapists work with people of all ages who, because of physical, developmental, social, or emotional deficits, need specialized assistance in learning skills to enable them to lead independent, productive, and satisfying lives.

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, P.O. Box 31220, Bethesda, M.D. 20824-1220. AOTA’s phone number is (301) 652-AOTA. The OT program at WVU was initially awarded accreditation in 1998, and awarded re-accreditation in 2003. The next scheduled onsite visit for accreditation will be 2013.
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). 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 obtaining a state license. For further information on NBCOT’s Character Review Program, interested parties can obtain information from that Board or their website.

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

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<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
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<tr>
<td>ENGL 102</td>
<td>Composition And Rhetoric</td>
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<td>PSYC 101</td>
<td>Introduction to Psychology</td>
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<td>PSYC 241</td>
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<tr>
<td>or SOCA 105</td>
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<td>General Biology</td>
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<td>PSIO 241</td>
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<td>or PSIO 441</td>
<td>Mechanisms Body Function</td>
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<td>STAT 211</td>
<td>Elementary Statistical Inference *</td>
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<tr>
<td>COMM 102</td>
<td>Human Comm-Interprsnl Context</td>
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</table>

Applicants are also required to complete a Medical Terminology course such as OTH 201 Medical Terminology in OT (1 credit).

* Check for prerequisites for PHYS 101, PSIO 241, and/or STAT 211 by contacting either the Division of Occupational Therapy, or the department under which those courses are housed.

Fulfillment of WVU's General Education Curriculum (GEC) not covered by the above.

(See the WVU Undergraduate Catalog)

These include one three-credit course in each of the following objectives: 3, 5, 8, 9; plus the one-credit WVUE 191 University Orientation.

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

WVU students must consult the Undergraduate Academic Services Center prior to enrolling in prerequisite courses. These courses may be taken at any institution which offers equivalent courses. Any questions regarding pre-requisite courses may be directed to the Undergraduate Academic Services Center, (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

Admission Standards

Normally, students apply to the program during their second year of college. They must have a minimum of 50 to 55 hours of college credit which includes the per-requisites 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 60 hours of volunteer experience with a licensed occupational therapist. 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 name of supervising occupational therapist. Forms to record volunteer experience can be found online at http://www.hsc.wvu.edu/som/ot.
Two recommendations are also required, one from an occupational therapist who supervised the volunteer/work experience and the other from a college/university professor who has recently taught the applicant. These recommendation forms are included in the application packet.

Completion of all prerequisite courses by the end of the semester of application (normally, second semester of sophomore year) is normally required.

Application packets are available from the Health Sciences Center Admissions and Records office beginning November 15 (P.O. Box 9815, Morgantown, WV 26505-9815; (304) 293-3523). 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.

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 will include courses in basic sciences 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.

Occupational Therapy Curriculum Plan

Note: This curriculum plan is subject to change without notice.

The following Plan of Study is based on two years of college prerequisite work with

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Program Timeframe

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 18 months following completion of academic coursework while remaining within the five-year time frame.

Entry-Level Master’s Program in Occupational Therapy

First Year

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17 16

Total credit hours: 118

Faculty

O.T.R./L.

- Randy P. McCombie - Ph.D.
  Chair

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, 2011 for ten years. Forty full-time students are admitted each year.
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 to those completing the program, and 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 reach their maximum potential and to contribute to society while learning to live within the limits of 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 health care 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 health care team. They work with other health care 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.

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 40 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 pre-requisite 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 physics courses, two statistics, anatomy, and human physiology. Applicants must have a minimum of 60 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.
• 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 pre-requisite course.
• Applicant must have completed or be enrolled in the required courses listed below:

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<tr>
<th>Pre-requisite Courses</th>
<th>WVU Course Number</th>
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<tr>
<td>Biology with lab (8 hours)</td>
<td>BIOL 101/103, 102/104</td>
</tr>
<tr>
<td>Chemistry with lab (8 hours)</td>
<td>CHEM 115, 116</td>
</tr>
<tr>
<td>Physics with lab (8 hours)</td>
<td>PHYS 101, 102</td>
</tr>
<tr>
<td>General psychology (3 hours)</td>
<td>PSYC 101</td>
</tr>
<tr>
<td>Developmental psychology (3 hours), should include development across the human lifespan</td>
<td>PSYC 241</td>
</tr>
</tbody>
</table>
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://tes.sa.wvu.edu/) 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 pre-requisites for the physical therapy program as described no later than the Spring semester of the year of application.

Students who want careers in health care 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 pre-requisites 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 pre-requisites.

Additional Information and Updates

For updates, be sure to periodically check the WVU Division of Physical Therapy website http://www.hsc.wvu.edu/som/pt. You may also contact the program manager for the physical therapy program, Brenda Wolfe, at bwolfe@hsc.wvu.edu.

Applications

The physical therapy program participates in the national electronic physical therapy standard application system, known as PTCAS (Physical Therapist Centralized Application Service). The website for PTCAS is http://www.ptcas.org. Typically, PTCAS opens for applications in mid-July. The deadline for first round applications is usually December 1st of the year before entry. A second round of applications will typically be reviewed prior to a January 15th deadline. Serious applicants are encouraged to meet the first round deadline. Applicants should receive initial communication regarding their application within 35 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.

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<td>PT 716</td>
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Total Hours: 118-137

**First Year**

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**Second Year**

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**Third Year**

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<td>PT 761</td>
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<td>PT 790</td>
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</table>
Pre-First Year Summer
* The professional curriculum begins in summer before first year. Students should plan for these courses to begin on or around June 1st.

Faculty

Chair
- MaryBeth Mandich - PT, PhD (WVU)
  Neuroscience and Pediatric PT

Professors
- John J. Petronis - PT, MS (WVU)
  Orthopedic Physical Therapy
  Status: Assistant Chairperson
- Bill Stauber - PhD
  Electrotherapy, Muscle Physiology
  Status: Joint Appointment
- Anne Swisher - PT, PhD
  Cardiopulmonary PT, Oncology
  Status: Director of Faculty Scholarship and Development

Associate Professor
- Duane Scott Davis - PT, PhD OCS (WVU)
  Orthopedic Physical Therapy
  Status: Director of Professional Education
- Mia Erickson - PT, EdD, CHT, ATL (WVU)
  Education, Professional Roles, Hand Therapy
  Status: Co-Director of Clinical Education
- Corrie Mancinelli - PT, PhD (WVU)
  Anatomy and Orthopedic Physical Therapy
- Ralph Utzman - PT, MPH (WVU)
  Health Policy, Professional Roles
  Status: Co-Director of Clinical Education
- Dina Jones - PT, PhD
  Public Health, Arthritic disease
  Status: Joint Appointment

Assistant Professor
- Kimeran Evans - DPT
  Clinical Education; General Physical Therapy Practice
- Valeriya Gritsenko - PhD
  Neurosciences, Motor Control
- Teresa Rice - PR NCS (WVU)
  Neurorehabilitation
- Krystal Thomas-Whetsel - DPT, MS (WVU)
  Women’s Health Physical Therapy
- Carol Waggy - PT, PhD (WVU)
  Anatomy and Hand Physical Therapy
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., Director of Doctoral Graduate Studies, johollander@hsc.wvu.edu;
http://www.hsc.wvu.edu/ResOff/PhDPrograms/Biomedical-Sciences/Phd_Training_Programs/Exercise_Physiology/Default.aspx

Stephen E. Alway, Ph.D., Professor and Chair and Director of Graduate Studies Master’s Program, salway@hsc.wvu.edu; http://medicine.hsc.wvu.edu/ep/Education/Master-of-Science

Randall W. Bryner, Ed.D, Associate Professor, Vice Chair, and Director of Undergraduate Education, rbryner@hsc.wvu.edu; http://medicine.hsc.wvu.edu/ep/Education/Bachelor-of-Science

Introduction

The WVU exercise physiology program was established in the Health Sciences Center’s School of Medicine in July 1993. The program offers a four-year curriculum leading to a bachelor of science degree in exercise physiology, a two-year program leading to a masters of science (clinical or thesis track) and a doctoral program leading to a Ph.D. in exercise physiology.

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 health care. 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 has provided a foundation for many types of medical treatment in areas that include but 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 health care system. Employment opportunities are expanding and increasing with experience and level of education.

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 adaptation’s and pathological tissue remodeling associated with aging, diabetes, and cardiovascular disease. Current areas of inquiry include:

- Aging and sarcopenia in skeletal muscle; muscle stem cells
- Mitochondria dysfunction and pathophysiological mechanisms of diabetic cardiomyopathy
- Regulation of renal and hepatic microvascular environments in diabetes
- Role of uncoupling protein-3 in aging and exercise; reactive oxygen species development in muscles with aging
- Biomechanical, biochemical and molecular investigation of acute and chronic skeletal muscle 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 findings 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 PHD students in Basic Biomedical Sciences. Students will begin the curriculum program in year 2. Students should complete the requirements for the comprehensive examination by the end of year 2.

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<tr>
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<td>EXPH 786</td>
<td>Musculoskeletal Biology</td>
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<td>EXPH 787</td>
<td>Cardiopulmonary Physiology</td>
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<tr>
<td>EXPH 791C</td>
<td>ADTP:Cardiovascular/Exrcs Phys</td>
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<td>EXPH 797</td>
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<td>EXPH 798</td>
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<tr>
<td>EXPH 799</td>
<td>Graduate Colloquium</td>
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</table>

Master of Science
The master of science program in exercise physiology prepares students for careers in adult fitness, hospital or corporate-based wellness programs, or cardiac rehabilitation. This is a two-year program. We have a clinical track and thesis track. Clinical track students take course work, obtain experience in various medical settings (e.g., heart cath lab 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., or MD or similar postgraduate program. Students specialize by completing a 200-hour clinical internship or a research thesis.
**CLINICAL TRACK COURSES**

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<td>Lab Techniques &amp; Methods 2</td>
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<td>EXPH 671</td>
<td>Stress Testing</td>
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<td>EXPH 672</td>
<td>Professional Field Placement</td>
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<td>EXPH 673</td>
<td>Exercise Prescription</td>
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<td>EXPH 680</td>
<td>Adv Clinl Exercise Physiolgy</td>
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<td>EXPH 691</td>
<td>ADTP:Exercise Prescriprtn</td>
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<td>EXPH 691A</td>
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<td>ADTP:Aquatic Therapy-Pool Mang</td>
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**THESIS TRACK COURSES**

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**Faculty**

**Professor**

- Stephen E. Alway - PhD  
  Sarcopenia, muscle wasting, diabetes and muscle injury  
  Status: Chair of Exercise Physiology, Director of Master's Program

**Associate professors**

- Randall W. Bryner - EdD  
  Diabetes, exercise, and cancer  
  Status: Vice Chair, Director of Undergraduate Studies
- John M. Hollander - PhD  
  Cardiovascular research in Diabetes  
  Status: Director of Graduate Education
- Guyton W. Hornsby Jr. - PhD  
  Diabetes and depression

**Assistant professors**

- Paul D. Chantler - PhD  
  Metabolic Syndrome, vascular biology, the effects of aging and CV diseases on arterial and ventricular structure and function
- Gregory Dick - PhD  
  Regulation of ion channels in vascular smooth muscle
- David A. Donley - MS
Obesity, vascular function
Status: Coordinator for Clinical Track MS degree
- Jean L. McCrory - PhD
  Biomechanics in obesity and pregnancy
- I. Mark Olfert - PhD
  COPD, vascular function, angiogenesis
- Emidio Pistilli - PhD
  Muscular dystrophy, muscle injury, cytokines
- Sergiy Yakovenko - PhD
  Neuromuscular integration of movement

Adjunct associate professors
- Robert W. Brock - PhD
  Renal function in diabetes
- Jefferson C. Frisbee - PhD
  Alterations to microvascular structure and function during metabolic syndrome development
- Ming Pei - MD, PhD
  Stem cells, cartilage repair

Immunology and Microbial Pathogenesis

jbarnett@hsct.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 the 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).

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, write to the Chairperson:

Admissions and Scholarship Committee
Department of Microbiology and Immunology
P.O. Box 9177
West Virginia University
Morgantown, WV 26506-9177

or visit our website at http://www.hsc.wvu.edu/micro/.

Faculty

Graduate Program Director
• Dr. John Barnett

Medicine

Degrees Offered

• Doctor of Medicine
• Joint Doctor of Medicine and Doctor of Philosophy
• Joint Doctor of Medicine and Master's in Public Health

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).

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 6 semester hours
- Biological sciences (with lab) 8 semester hours
- Inorganic chemistry (with lab) 8 semester hours
- Organic chemistry (with lab) 8 semester hours
- Physics (with lab) 8 semester hours
- Social or behavioral sciences 6 semester hours

**Biochemistry and Cellular and Molecular Biology** are strongly recommended. A total of 90 semester hours, exclusive of ROTC and general physical 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

The admission process is initiated by completing the online American Medical College Application Service (AMCAS) forms. They are online at [http://www.aamc.org](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 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. No 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.

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), satisfactory (S), or unsatisfactory (U) at the completion of the course in lieu of other letter grades. The H, S, and U 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 Office of Student Services. A grade of U 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 (unsatisfactory) 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 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 Office of Student Services, and on the 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 for record, the Office of Student Services, School of Medicine.

Interruption of academic work must be approved by the Office of Student Services.

**Medical Education Program of Study**

On the most recent restructuring of medical education curriculum the most significant changes include:

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.

**First Year**

Medical students’ first year: 38-week academic year divided into three blocks (16 weeks, 15 weeks, and seven weeks). Approximately 24 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 (16 weeks) contains a multidisciplinary run course: Human function (physiology, biochemistry, and genetics.). Second block (15 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.

**Second Year**

Medical students’ second academic year is 34 weeks. The schedules of course material from Microbiology and Immunology, Pathology, Pharmacology, and Physical Diagnosis and Clinical Integration-2 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 26 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. 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 is selected during their first year to spend the 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 clinical work on 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 in the Office of 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 5 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://education.hsc.wvu.edu/ms4catalog](http://education.hsc.wvu.edu/ms4catalog).

Students interested in other extramural opportunities are advised to consult with the fourth-year curriculum coordinator in the Office of Student Services. 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.

### Curriculum

#### First Year

<table>
<thead>
<tr>
<th>Course Description</th>
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<tr>
<td>CCMD 730</td>
<td>16</td>
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<tr>
<td>CCMD 745 (PDCI-1)</td>
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<td>CCMD 712</td>
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<tr>
<td>NBAN 703</td>
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<td>CCMD 775</td>
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<tr>
<td>CCMD 788 (Billing Course )</td>
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#### Second Year

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<td>MICB 701</td>
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<td>PATH 751</td>
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<td>PCOL 761</td>
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<td>CCMD 721 (PDCI-2)</td>
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<tr>
<td>CCMD 778</td>
<td>1</td>
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<td>CCMD 788 (Summer Billing Course)</td>
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<td>USMLE Step 1</td>
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#### Third Year

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<td>MED 731</td>
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<td>PEDI 731</td>
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<tr>
<td>OBST 741</td>
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<td>BMP 741</td>
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<td>NEUR 741</td>
<td>2</td>
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<tr>
<td>CCMD 788 (Summer Billing Course)</td>
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<tr>
<td>SURG 741</td>
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#### Fourth Year

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<td>CCMD 781</td>
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<td>CCMD 782</td>
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<tr>
<td>USMLE Step 2 CK</td>
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<tr>
<td>USMLE Step 2 CS</td>
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</tbody>
</table>
Community Service

All students of the Health Sciences Center are required to perform community service or service learning as a component of their curriculum. Medical students must complete 100 hours of service prior to graduation.

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:

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.
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.

Faculty
Graduate Program Director
• Dr. Albert Berrebi

Pathologists Assistant
cgermain@hsc.wvu.edu
jfalcon1@hsc.wvu.edu

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 24-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
• West Virginia University Hospital and Medical Examiner’s Office, Morgantown, WV
• Allegheny General Hospital, Magee-Women’s Hospital of UPMC, UPMC Presbyterian and UPMC Shadyside, Pittsburgh, PA
• University of Pittsburgh Health Sciences Tissue Bank at UPMC Shadyside, Pittsburgh, PA
• Thomas Memorial Hospital, Charleston, WV

The WVU pathologists’ assistant program is accredited by
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).
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 pre-requisite 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
• 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.

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

Shadowing or Work Experience

Applicant must complete a shadowing experience with a practicing pathologists’ assistant or have applicable work experience in surgical or autopsy pathology. A statement regarding this experience is required in the application packet. Please contact the program director for assistance if necessary.

Admissions Classifications

Students must have a baccalaureate degree prior to beginning the professional sequence. However, the program has established the following admissions classifications:

• Direct Admit. A limited number of students completing the bachelor of science program in Medical Laboratory Science or Histology 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, application will be submitted in January-May 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- May31 for the class beginning the following January. The application fee is $25 for residents and $40 for non-residents. Each applicant must arrange for transcripts to be sent directly from all undergraduate institutions attended to the Admissions Office. When the application is complete, the file is sent to the Pathologists’ Assistant Admissions Committee. A complete admissions packet contains: Completed application form and personal statement, official transcripts, two references**, and the essential functions form. Please note that the admissions office 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.

**Letters of reference should be mailed to: Cheryl Germain, Program Director, WVU Pathologists' Assistant Program, P.O. Box 9203, Morgantown, WV 26506-9203.**

**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 these 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 health care 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?

Curriculum

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Total credit hours: 76

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.

Faculty

Program Director and Assistant Professor
- Cheryl Germain - MHS, P.A. (ASCP)

Medical Director and Assistant Professor
- Tiffany Harper - M.D.

Clinical Coordinator
- Justin Falcon - MHS, P.A. (ASCP)

Clinical Instructors
- Carie Coffindaffer - MHS, P.A. (ASCP)
- Michelle Costas - MHS, P.A. (ASCP)
College of Business and Economics

Degrees Offered

- Master of Arts in Economics
- Master of Business Administration
- Master of Science in Finance
- Master of Professional Accountancy
- Master of Science in Industrial Relations
- Doctor of Philosophy in Business Administration
- Doctor of Philosophy in Economics

The College of Business and Economics was founded in November of 1951 and graduated its first class in the spring of 1953. Since that time, the College of Business and Economics has become one of the largest colleges at West Virginia University. In 1954, the college became fully accredited by the AACSB International (http://www.aacsb.edu), the highest level of business accreditation.

In 1990, the new College of Business and Economics building was completed on the site of Old Mountaineer Stadium on the downtown campus adjacent to historic Woodburn Hall. The four-story facility houses modern classrooms, two auditoriums, state-of-the-art computer laboratories, and space for the college’s research and service centers.

Overview of Programs

The doctor of philosophy and master of arts degrees in economics prepare students for careers in business, government, and higher education. Students receive in-depth education in the concepts and methods of economic analysis and econometrics; and specialize in two fields of study from financial, international, monetary, public, regional, and urban economics, and resource economics. These programs are well-suited to students with undergraduate degrees in economics, finance, mathematics, statistics, public policy, history, and other humanities majors.

The master of business administration (M.B.A.) program is especially attractive for the student with a non-business undergraduate major since no previous business courses are required for admission. Coursework includes an even exposure to all of the functional areas of business and provides a broad general management orientation. The M.B.A. program is offered during the day for full-time students in Morgantown. The M.B.A. program is also offered for working professionals online and in the evenings at various locations throughout West Virginia and is referred to as the executive M.B.A.

The master of science in industrial relations (M.S.I.R.) provides a flexible, interdisciplinary education for the student desiring a career in human resources management and industrial relations. All undergraduate majors are acceptable. Elective areas of study may include the functional areas of business, counseling, law, safety, and others.

The master of professional accountancy (M.P.A.) program is available to students with undergraduate degrees in accounting. Students without accounting undergraduate degrees can fulfill specific accounting prerequisites and be admitted to the program. The program follows the AICPA’s recommendations for a five-year accounting education and meets the requirements of most states with 150-hour requirements for CPA certification. The division of accounting also offers a graduate certificate in forensic accounting and fraud investigation.

The master’s programs can be completed by a full-time student in one to one-and-a-half years. Specific information about graduate programs in the College of Business and Economics may be obtained from Office of Graduate Programs, 340 Business and Economics Building,
P.O. Box 6027, West Virginia University, Morgantown, WV 26506-6027, Telephone (304) 293-5408.

Special Requirements

Admissions to the M.B.A., M.P.A., M.S. in finance, and M.S. in industrial relations and the M.A. and Ph.D. in economics programs require a bachelor’s degree from an accredited institution. The D.B.A. requires a master of business administration degree. Overall grade point average is considered, with additional attention given to the grade point average achieved in the last 60 hours of coursework. The Graduate Management Admissions Test (GMAT) is required for all of the business graduate programs. For the M.S.I.R. program, the Graduate Record Examination (GRE) may be substituted for the GMAT. The economics programs require the GRE. A resume is a requirement of the admission process for all programs. Under certain circumstances the GRE may substitute for the GMAT for the M.P.A. program.

Faculty

Interim Dean
- William Trumbull - Ph.D.
Given the changing environment in both the public and private sectors of the economy, many accountants will need an educational background that goes beyond that obtained in an undergraduate degree program. Accountants must be proficient in applying professional concepts and principles to a wide variety of existing and emerging situations as an effective member of a team and also have the ability to adapt to new standards and methods of doing business. Competing in such an environment requires a solid technical foundation, adeptness in analyzing complex business situations, and the ability to effectively communicate recommended solutions and conclusions. Thus, the objectives of the M.P.A. program include the integration of financial and nonfinancial data in problem-solving and decision-making; the application of relevant research techniques and information technologies; the integration of varying viewpoints and techniques of conflict resolution; and the importance of adhering to a strong ethical code.

The accounting programs at WVU, both undergraduate and graduate, have separate accounting accreditation by the AACSB International—The Association to Advance Collegiate Schools of Business. At the date of this printing, there are relatively few colleges and universities in the nation that have achieved this status at both the undergraduate and graduate levels.

The M.P.A. program is a 30 credit-hour program, which can be completed in approximately ten months of full-time study or 22 months half-time. The program requires that the student have the equivalent of an undergraduate degree in accounting and meet very specific accounting and business course prerequisites. Work experience is not a requirement for admission. Students may enter the program on either a full-time or halftime basis. Fall is the preferred starting date, but students may start in May or January. Careful selection of degree candidates limits the size of classes, leads to high-quality efforts in the program, and permits frequent and direct contact between students and faculty. The full-time program consists of two 12-hour semesters and one four-week summer session. Half of the courses each term are taught in the early evening and the other half in the late afternoon to provide the opportunity for part-time employment for full-time students and part-time study for full-time employees. The afternoons and evening time slots are rotated so that all courses are provided in the evenings every other year for the benefit of part-time students.

No thesis is required in the program, but communication skills are emphasized in all courses. Extensive use is made of information technology in accounting applications.

Admission to Program

Admission to the M.P.A. program is determined by a committee of accounting faculty members. The committee acts upon individual applications within a short period of time after receipt of the completed application.

The Admission Committee prefers applicants who possess a 3.0 cumulative grade point average or higher (calculated on all college courses completed or the last 60 hours); an accounting grade point average of 3.0 or higher (calculated exclusive of principles, proctoring, internship, and independent study courses); and GMAT scores at the 50th percentile or higher.

Applicants who have passed the Certified Public Accountant examination are exempt from the GMAT requirement. Candidates who meet most of the above requirements will still be considered. Other factors such as work experience and other graduate degree work may also be a part of the committee’s decision-making.

The above requirements apply to both full and part-time student applicants. As an AACSB-accredited program in accounting, these requirements must also be met by non-degree students who desire to take any of the graduate courses required by the M.P.A. program.

Students who possess appropriate GMAT scores and grade point averages but do not possess a bachelor’s degree with a major in accounting (or equivalent) may apply for non-degree or provisional status while they are taking undergraduate prerequisite courses in accounting and business. Provisional students must complete the prerequisite courses before enrolling in M.P.A. courses. Applicants with accounting undergraduate degrees must also satisfy all the prerequisite courses for the M.P.A. program.

Students receiving provisional admission to the M.P.A. degree will meet with the M.P.A. coordinator to develop a written plan for the completion of the prerequisite courses. Failure to satisfactorily complete the plan will result in the cancellation of the applicant’s provisional M.P.A. graduate student status.
Provisional students may not enroll in any graduate accounting courses until prerequisite courses have been successfully completed. After completing prerequisite coursework, the student must request a change from provisional to regular M.P.A. status which is subject to approval by the M.P.A. Admission Committee. The M.P.A. degree is designed to follow an undergraduate degree in business. Students without a bachelor's degree with a major in accounting (or equivalent) will be required to take additional business and accounting courses.

International students should note that the College of Business and Economics TOEFL requirement is higher than the University’s. Applicants must have a TOEFL score of 580 (paper), or 237 (computer), or 92 (internet-based). If applicants have taken the IELTS instead of the TOEFL, the minimum score must be 7.0. International students who do not meet the College of Business and Economics TOEFL or IELTS requirement may be admitted “conditionally” provided that they enroll in the University’s Intensive English Program.

**Prerequisites**

To assure that all students in the program have the same foundation in business, the following prerequisite courses, or their equivalent, must be completed before enrolling in M.P.A. graduate courses: principles of accounting (six hours), intermediate accounting (six hours), cost accounting, income tax accounting, auditing, principles of microeconomics, principles of marketing, principles of management, principles of finance, statistics, business law (six hours, three of which may be taken concurrently with graduate courses), and computer science. A student without the necessary prerequisite courses may be approved to enter the M.P.A. program as a provisional graduate student.

**Academic Standards**

The M.P.A. program requires that the student maintain a grade point average of at least 3.0 on all work taken as a graduate student while enrolled in the College of Business and Economics, including prescribed work taken to remove undergraduate deficiencies. A student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the graduate program. A course with a grade below C will not count for the 30 semester-hour requirement for graduation unless repeated with a grade of C or above. A student must have a grade point average of 3.0 or above on the 30 semester hours required for the degree. Complete information about the M.P.A. program may be obtained from http://www.be.wvu.edu/MPA/index.htm.

**Requirements to Sit for CPA Examination**

The specific requirements to sit for the Uniform CPA Examination vary with each state board of accountancy. Some states (or other jurisdictions such as the District of Columbia or Guam) require candidates to have a bachelor’s degree with a specified distribution of accounting and business courses as the minimum educational requirement to take the examination, whereas others require a bachelor’s degree and the completion of 150 semester hours of academic credit (including a specified distribution of courses) as the minimum. These standards are subject to change. Thus, students should occasionally review the requirements (including the distribution of courses) of the board in the jurisdiction in which they plan to sit for the examination. Incidentally, these are the requirements to sit for the examination, not to be certified. Most boards of accountancy require 150 semester hours of academic credit for certification.

The West Virginia Board of Accountancy requires a bachelor’s degree with a specified distribution of coursework as the minimum qualification to sit for the CPA examination. This includes 27 semester hours of accounting (excluding principles), six hours of business law, and 27 hours of related business courses. West Virginia also requires a three semester credit-hour ethics course for all individuals applying to sit for the exam. This course may be counted as either an accounting or a business elective. West Virginia requires 150 semester hours of academic credit to be completed prior to certification.

For the specific requirements to sit for the CPA examination in West Virginia, go to the Board’s Web site at http://www.boa.wv.gov or call (304) 558-3557. For requirements in other jurisdictions, go to the National Association of State Boards of Accountancy’s website at http://www.nasba.org and use the links to the web pages for all boards of accountancy under the “Members” section.

Content specification of the CPA examination and related information may be found at http://www.cpa-exam.org and using the “Prepare for the Exam” and then “How to Prepare” links.

**Financial Assistance**

WVU has a strong comprehensive financial aid program to help you finance your education. Although the cost to attend WVU is relatively low, more than half of our students qualify for financial aid awarded on the basis of need, merit, or a combination of the two. The free application for Federal Student Aid (FAFSA) must be completed before March 1. Contact the Student Financial Aid Office at (304) 293-5242 or at finaid@mail.wvu.edu for more information or go to the website at http://adm.wvu.edu/.

The Division of Accounting in the College of Business and Economics has a very limited number of graduate assistantships and tuition waivers for M.P.A. students. This is common among many master’s degree programs in accounting and business at public universities. Applicants are encouraged to note that the WVU M.P.A. program is a quality, but relatively short (30 credits over 10 ½ months), master’s program of only two semesters and one summer session.
Master of Professional Accountancy

Courses will be offered in Morgantown.

M.P.A. Course Offerings

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<tr>
<td>ACCT 512</td>
<td>Mergers and Acquisitions</td>
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</tr>
<tr>
<td>ACCT 521</td>
<td>Information Technology Auditing</td>
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<td>ACCT 541</td>
<td>Federal Tax Research/Writing</td>
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<tr>
<td>ACCT 551</td>
<td>Assurance Srvces/Profsnl Stnds</td>
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</tr>
<tr>
<td>ACCT 556</td>
<td>Fraud Detection and Deterrence</td>
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Total Hours 30

* Select the topic that was not studied at the Undergraduate level.

Note: Students who have not completed Accounting Systems (ACCT 322, three hours) and Law for the CPA (BLAW 420, three hours) as part of their undergraduate program must also take these two courses in addition to the above 30 hours. These courses may be taken concurrently with the graduate courses.

Graduate Certificate in Forensic Accounting and Fraud Examination (FAFE)

Forensic Accountants in Demand

The widespread growth in white-collar crime and the increased need for homeland security have greatly raised the demand for forensic accountants and fraud examiners. Federal, state, and local governmental agencies, such as the Securities and Exchange Commission, the Internal Revenue Service, and the Offices of Inspector General all need accountants with forensic investigation skills. In the private sector, recent legislation (Sarbanes-Oxley Act of 2002) and auditing standards (Statement on Auditing Standard No. 99) require companies and their auditors to be more aggressive in detecting and preventing fraud.

The Department of Accounting has responded to this demand by developing a unique academic program designed to prepare entry-level accountants and others for forensic accounting and fraud examination careers. Although many schools have added a single graduate or undergraduate course to their curricula, very few offer a multi-course graduate certificate program. WVU offers a 12-credit graduate Certificate in Forensic Accounting and Fraud Examination during the summer on campus and throughout the year online. Students may take three paths to earn this certificate:

- Option 1: Complete a four-course-stand-alone, non-degree certificate program curriculum on campus; or
- Option 2: Complete a master of professional accountancy (M.P.A.) degree plus two additional certificate courses either on campus or online; or
- Option 3: Complete the certificate program courses online with cohorts starting in both fall and spring.

WVU set the national standards

The forensic accounting faculty has solidified WVU’s reputation as a leader in forensic curricula. Two professors led the effort to develop national curriculum guidelines for fraud and forensic accounting programs for the National Institute of Justice, and one of them, Dr. Richard A. Riley Jr., has been recognized by the Association of Certified Fraud Examiners as Professor of the Year and by the American Accounting Association as Innovative Professor of the Year.

For admittance to the Graduate Certificate program, you may qualify under one of the following criteria:

1. Have a bachelor’s degree with an overall GPA of 2.9 or above, and a score of 500 or above on the Graduate Management Admission Test (GMAT). In some instances a score of 1,000 or above on the Graduate Record Examination (GRE) may be accepted in lieu of a GMAT score. Entrance criteria provide some flexibility so that a higher GPA may offset a lower GMAT score and vice versa; or
2. Hold a certified public accountant certificate, law degree, or be admitted to an accredited law school.

If appropriate, an applicant should have the GMAT score sent to the Department of Accounting, 300 Business and Economics Bldg., West Virginia University, Morgantown, WV 26506-6025.
FAFE Program Details

COURSE REQUIREMENTS

Students complete four courses for the certificate. All four courses are taught using actual and simulated case materials. Students are required to perform actual examination tasks and report their findings.

The four courses are:

- ACCT 581 - Types of fraud, documents, sources of evidence, and analysis of internal and external fraud schemes with an emphasis on the skills needed to identify and investigate fraud. *(Please note: M.P.A. students seeking the certificate will complete ACCT 556 instead of ACCT 581)*

- ACCT 582 - Computer-aided data analysis techniques for detecting and investigating fraud cases, issues related to the collection and use of digital evidence and collection of data from electronic devices. *(Please note: M.P.A. students seeking the certificate will complete ACCT 521 instead of ACCT 582)*

- ACCT 583 - Sociological and psychological theories of criminal behavior, laws, rules of evidence, the rights of persons under investigation, interrogation and interviewing, report writing, and ethics, as these topics relate to forensic accounting.

- ACCT 584 - Major fraud case investigation with an emphasis on forensic and litigation support aspects, including presentation of cases in a moot court setting. This course also contains the capstone experience as explained below.

ACCT 581 (or 556) and ACCT 582 (or ACCT 521) must be completed before taking ACCT 584.

CAPSTONE EXPERIENCE

Advanced fraud examination includes an integrative capstone experience using three case presentations/projects over the course of the session or term. In order to complete the assignments in this course, students must integrate and draw upon the knowledge and skills developed in the other courses in the forensic accounting and fraud examination curriculum.

The purpose is to provide students with experience in performing complex investigative tasks and analyses. These projects will involve analyzing real-world “case” information as well as corporate and business records to determine if fraud has occurred. Students mimic investigative processes found in practice by conducting analytical reviews, soliciting information from clients, and reporting suspicious activity for a fictitious client company. Finally, the capstone experience culminates when students testify to their findings in a moot court scenario.

Forensic accounting and fraud examination professionals such as certified public accountants and FBI personnel mentor students in their preparation for the moot court presentations. Legal professionals such as trial judges, prosecuting attorneys, and defense attorneys serve as moot court judges.

The moot court experience provides an excellent evaluation mechanism of the knowledge and skills developed by students. Based on their mentoring of students in preparing for the moot court and their observation of the presentations before the court, the professionals are asked to assess the overall effectiveness of the program and to provide recommendations for strengthening the curriculum.

Faculty

Chair
- Robert S. Maust
  Status: Interim

Professors
- Barbara Apostolou - Ph.D. (L.S.U.) C.P.A
  Auditing, Assurance services, Fraud and forensic accounting
  Governmental accounting, Public sector accounting
  Financial accounting, Accounting theory.
- Adolph A. Neidermeyer - Ph.D. (U. Iowa)
  Federal and state income taxation, Estate planning, Financial accounting, Personal financial planning.
- Presha Neidermeyer - Ph.D. (VC U.) C.P.A.
- David B. Pariser - Ph.D. (So. Ill.). C.P.A., C.M.A., C.C.A., C.G.F.M.
- Richard Riley - Ph.D. (U. Tenn.). C.P.A.
Associate Professor

- Richard Dull - Ph.D. (Va. Tech.), CPA/CFF, CFE, CISA. Accounting information systems, Forensic accounting, IT auditing
- Christian Schaupp - Ph.D. (Va. Tech.), CFE. Accounting information systems, IT auditing.

Assistant Professor

- Jack Dorminey - Ph.D. (VCU) Intermediate financial accounting, regulatory accounting
- Scott Fleming - Ph.D. (VPI), C.P.A. Auditing, IT auditing, Accounting information systems, Managerial cost accounting.

Visiting Professor


Business Administration

Master of Business Administration

The master of business administration program is accredited by the AACSB. It is offered as a full-time, day-class program in Morgantown and requires 13 ½ months to complete. It is also offered in the evening via distance learning in Charleston, Morgantown, and Parkersburg, and online. The evening and online program, referred to as the Executive M.B.A. Program, is designed for working professionals and requires two years to complete. The standards of excellence that support accreditation by the AACSB are maintained at all instructional sites.

The M.B.A. degree program recognizes the need for future managers to be able to anticipate and recognize change and then to manage resources advantageously in that environment. Thus, the curriculum emphasizes a general, broad-based approach to graduate education in management which provides the student with the qualitative and quantitative skills necessary for a manager to succeed in such an environment. The program develops a managerial perspective that is primarily line oriented as opposed to staff oriented and is relevant to those in both private and public organizations.

Full-time M.B.A. Program

The full-time M.B.A. plan of study requires a total of 50 credit hours of graduate credit. The program is designed for individuals with varying educational and professional backgrounds. Students must have pre-requisite courses to be eligible for the program: ACCT 201, ECON 201, and (ECON 225 or STAT 211). If students are applying to the M.B.A. program from outside WVU, the course descriptions can be used to match courses at other institutions. Students not able to meet the prerequisite course work prior to completing their undergraduate degree can meet this requirement via an online software program. No master's thesis is required for completion of the degree.

The full-time M.B.A. degree program is completed on the Morgantown campus. A full-time student can enter the program only in June of each year and graduate in mid-August of the following year. Students may enter the executive M.B.A. program at the start of either the Fall or Spring semester and complete the program two years later.

Admission

To gain admission to the full-time M.B.A. program, an applicant must have a bachelor’s degree from an accredited institution. Admissions decisions are based on an assessment of expected success in the program shown by the application materials and on space available. The Admissions Committee considers grade point average in all previous college-level work and also the grade-point average in the last 60 hours of coursework. Applications for admission to the M.B.A. program and official transcripts of all prior academic work should be submitted to the WVU Office of Admissions as early as possible. Applicants who have attended institutions other than WVU must request the registrar or records office of those institutions to forward a complete official transcript directly to the WVU Office of Admissions. The Graduate Management Admissions Test (GMAT) is required and the Admissions Committee takes no action on an application for admission to the full-time program until the applicant submits a GMAT score. Each applicant must submit a resume with the application. Additionally, applicants are encouraged to submit a statement of purpose and no more than three letters of reference. The deadline for the full-time M.B.A. program is March 1st of each year.

Executive M.B.A. Program

The executive M.B.A. plan of study requires 48 credit hours of graduate credit. The program is designed for working professionals with varying educational and professional backgrounds. The program requires a minimum of 2 years of work experience. There are two program offerings, online and evening. The online program begins twice a year, fall and spring. In addition to the online curriculum, four 3-4 day
residencies are required. The residencies occur once a semester. The evening program is offered in Morgantown, Parkersburg and Charleston. Classes are two evenings a week with an occasional Saturday. The evening program begins once a year in the summer.

Admission

To gain admission to the executive M.B.A. program, an applicant must have a bachelor’s degree from an accredited institution and a minimum of 2 years of full-time work experience post bachelor’s degree. Admissions decisions are based on an assessment of expected success in the program shown by the application materials and on space available. The Graduate Management Admissions Test (GMAT) is required unless an applicant has a terminal degree. GMAT waivers may also be granted if the applicant has 5 or more years of professional work experience and an undergraduate GPA of 3.0 or better. Applicants must apply for the GMAT waiver, these requests are reviewed by the Admissions Committee. The applicant must have submitted an application to be considered for a GMAT waiver. Each applicant must submit a resume showing prior work experience. For applicants with less than five years of work experience, the GMAT and the undergraduate record provide the strongest indicators of success. For applicants with five or more years of experience, the Admissions Committee will place greater emphasis on the work history. For applicants with terminal degrees, the Admissions Committee may waive the GMAT requirement. Additionally, applicants are encouraged to submit a statement of purpose and no more than three letters of reference.

The priority deadline for receipt of applications and transcripts in the College’s Office of Graduate Programs is June 1st the summer and fall intakes and December 1st is the priority deadline for the spring intake. Admission to the program is competitive and subject to space being available.

Dual Degree Programs

The College of Business of Economics offers a number of joint programs through both the full-time and the executive M.B.A. programs. Please contact the Office of Graduate Programs for details regarding admission criteria and plan of study.

Dual Degree Programs in conjunction with the full-time M.B.A.

- M.B.A./M.S.I.R.
- M.B.A./M.S. of Sport Management
- M.B.A./M.S. in Finance
- M.B.A./M.D.
- M.B.A./D.D.S.
- M.B.A./J.D.
- M.B.A./Pharm.D.

Financial Aid

Scholarships are available for the full-time M.B.A. program on a competitive basis. Additional information and application forms can be obtained from the director of masters programs.

Academic Standards

The M.B.A. requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

M.B.A. Program

The M.B.A. degree program requires 51 hours of graduate credit, presented in the following format.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 511</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 512</td>
<td>Law/Ethics and Diversity</td>
<td>3</td>
</tr>
<tr>
<td>BADM 522</td>
<td>Business Research/Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 523</td>
<td>Decision Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BADM 524</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BADM 525</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>BADM 527</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 528</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BADM 531</td>
<td>Operations/Supply Chain</td>
<td>3</td>
</tr>
<tr>
<td>BADM 532</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
</tbody>
</table>
The executive M.B.A. program requires 48 hours of graduate credit, presented in the following format.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 611</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BADM 612</td>
<td>Managerial and Team Skills</td>
<td>3</td>
</tr>
<tr>
<td>BADM 613</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 621</td>
<td>Business Research</td>
<td>3</td>
</tr>
<tr>
<td>BADM 622</td>
<td>Financial Statements Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BADM 623</td>
<td>Strategy</td>
<td>3</td>
</tr>
<tr>
<td>BADM 631</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 632</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>BADM 633</td>
<td>Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BADM 641</td>
<td>Decision Analysis-Executives</td>
<td>3</td>
</tr>
<tr>
<td>BADM 644</td>
<td>Legal Environment and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 652</td>
<td>Marketing Strategy</td>
<td>3</td>
</tr>
<tr>
<td>BADM 653</td>
<td>Integrated Global Business</td>
<td>3</td>
</tr>
<tr>
<td>BADM 661</td>
<td>Executive Project 1</td>
<td>1</td>
</tr>
<tr>
<td>BADM 662</td>
<td>Executive Project 2</td>
<td>2</td>
</tr>
<tr>
<td>Choose two of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BADM 638</td>
<td>Operations/Supply Chain Mgmt</td>
<td>6</td>
</tr>
<tr>
<td>BADM 651</td>
<td>Personal Financial Planning</td>
<td></td>
</tr>
<tr>
<td>ILR 543</td>
<td>Negotiation Strategy</td>
<td></td>
</tr>
<tr>
<td>MKTG 440</td>
<td>Course MKTG 440 Not Found</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 48

The doctorate of business and administration program is offered through a combination of face-to-face and distance learning instruction to various sites in the United States and Europe. The D.B.A is designed for working professionals seeking to increase their research and problem-solving abilities beyond an M.B.A. Emphasis is placed on workplace solutions to workplace problems using current research techniques. Graduates will have the ability to function as change agents in their organization or in a consultancy role. The program requires three years to complete. The standards of excellence that support accreditation by the AACSB are maintained at all instructional sites.

**Credit Hours**

The plan of study requires a total of 56 credit hours of graduate study distributed as follows:

- Concentration courses – 18 semester credit hours
- Research methods – 12 semester credit hours
- Current issues – six semester credit hours
- Dissertation – 20 semester credit hours

The D.B.A. degree program is completed on the Morgantown and selected European campuses. Students can enter the program only in May of each year. A dissertation is required to complete the program.
Admission

To gain admission to the D.B.A. program, an applicant must have an M.B.A degree or equivalent from a recognized university. Admissions decisions are based on an assessment of expected success in the program shown by the application materials and on space available. The Admissions Committee considers grade point average in all previous college-level work and also the grade-point average in the last 60 hours of coursework. The Graduate Management Admissions Test (GMAT) is required and the Admissions Committee takes no action on an application for admission to the full-time program until the applicant submits a GMAT score. Each applicant must submit a resume showing prior work experience. A minimum of two years work experience post bachelor’s degree is required for admission into this program. Additionally, applicants are encouraged to submit a statement of purpose and no more than three letters of reference.

Transcripts and Deadlines

Applications for admission to the D.B.A. program and official transcripts of all prior academic work should be submitted to the appropriate Office of Admissions as early as possible. Applicants who have attended institutions other than WVU must request the registrar or records office of those institutions to forward a complete official transcript directly to the appropriate Office of Admissions. The deadline for receipt of applications and transcripts in the appropriate Office of Graduate Programs is November 1.

Financial Aid

Scholarships are available on a competitive basis. Additional information and application forms can be obtained from the director of graduate programs.

Academic Standards

The D.B.A. requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

Faculty

Director of M.B.A. Programs

• Gary S. Insch - Ph.D.

PHD Business Administration-Accounting

Overview

The Doctor of Philosophy in Business Administration with a concentration in Accounting is designed to prepare qualified individuals for a career in scholarly accounting research and teaching at the university level. The doctoral program is offered to a relatively small, highly qualified, and motivated group of students who demonstrate the potential to become highly regarded scholars in the field. Doctoral students are expected to be in residence on a full-time basis throughout the duration of the program, and they will work closely with faculty on a one-on-one basis. The anticipated duration of the full-time residency is four years.

Highly Individualized Program

Each doctoral student is paired to a faculty member with similar research interests. The faculty member will work closely with the student and will serve as a research mentor throughout the duration of the program. Currently, the training, background, and interests of the doctoral faculty support behavioral and archival research in fraud, forensics, and ethics across the functional accounting areas of audit, financial, governmental, information systems, international, and managerial accounting. The individual plan of study for each candidate will be determined by the student, the faculty mentor, and the Ph.D. committee.

General Plan of Study

Although the plan of study for each candidate will be highly individualized, a certain number of courses are required for the doctoral program. Generally, the plan of study will include 5 courses in accounting, which include 4 seminars; 5 courses in statistics; and 5 courses in a supporting area(s):

Forty-five hours of coursework is required for the concentration in accounting.

• 4 Doctoral Seminars (12 hours)
• 1 Accounting Independent Study – research project (3 hours)
• 5 Statistical courses (15 hours)
• 5 Supporting area course (15 hours)

The first doctoral seminar provides an introduction to research and the philosophy of research. This course will be taken with other business doctoral students within the College. Then, each student must take at least three out of the four accounting focused seminars: Behavioral Research; Archival Research; Accounting Information Systems; and/or Fraud and Forensic Accounting. The seminars will be determined by the student, the faculty mentor, and the Ph.D. committee. Each course will cover seminal research within the functional areas of accounting.

One graduate independent study course is required. The course will be centered on a research project selected in conjunction with the faculty mentor.

A minimum of fifteen semester hours of graduate course work is required in a collateral supporting area. A collateral area is one that is outside, but complementary to, the major area of accounting and the research in which the candidate is interested. Examples include information systems, finance, economics, public finance, statistics, psychology, sociology, operations management, law, and industrial engineering. The collateral area focus and courses will be selected with the faculty mentor.

A minimum of fifteen semester hours of graduate course work is required in graduate statistical research methods and analysis.

A minimum of 29 or more of dissertation hours is required.

Throughout the student’s tenure at West Virginia University, the faculty expect the doctoral students to attend the accounting workshops. These workshops consist of internal (faculty and students) and external scholars invited to present their research. Doctoral students are expected to read the research papers carefully and are encouraged to participate in the workshop by asking questions and making comments.

**PHD Business Administration-Finance**

The Finance Ph.D. program is a relatively small, high-quality program. The primary goal of the program is to prepare students for careers in research and teaching. Small classes and an "open-door" policy allow for close interaction between students and faculty, with plenty of opportunity to discuss ideas and work on joint research projects. We involve our students in research projects early, so that by the time students complete the Ph.D. they have experience of presenting their work at professional conferences and have one or more research articles accepted in academic journals. Students also acquire teaching experience through teaching undergraduate finance courses during the third and fourth year of the program.

Our program is built around an applied curriculum with a strong theoretical and quantitative foundation. The program involves taking doctoral courses, passing a finance comprehensive exam, and defending a dissertation. The program curriculum includes 14 doctoral courses.

**Curriculum Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 701</td>
<td>Adv Micro-Economic Theory 1</td>
<td>4</td>
</tr>
<tr>
<td>ECON 702</td>
<td>Adv Macro-Economic Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 721</td>
<td>Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 725</td>
<td>Econometrics 1</td>
<td>3</td>
</tr>
<tr>
<td>ECON 726</td>
<td>Econometrics 2</td>
<td>3</td>
</tr>
<tr>
<td>ECON 727</td>
<td>Econometrics 3</td>
<td>3</td>
</tr>
<tr>
<td>FIN course Portfolio Theory</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FIN course Asset Pricing</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FIN course Corporate Finance Theory</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FIN course Corporate Finance Seminar</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FIN course Investments Seminar</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FIN course Topics in Finance</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electives (requires approval of Finance Program Coordinator)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>


If you have an M.S. in Finance or an MBA with concentration in finance from an accredited academic institution, you can enter into the Ph.D. program directly. Alternatively, if you lack sufficient academic background in finance, our M.S. in Finance program will serve as an essential preliminary step towards a Ph.D. degree.

Pre-Ph.D. Year: M.S. in Finance Program Suggested Plan of Study

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 512</td>
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</tr>
<tr>
<td>BADM 631</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credit hours:</strong> 6</td>
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</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 520</td>
<td>3</td>
<td>FIN 525</td>
<td>3</td>
<td>FIN 591</td>
<td>1-6</td>
</tr>
<tr>
<td>FIN 521</td>
<td>3</td>
<td>FIN 527</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIN 526</td>
<td>3</td>
<td>FIN 522</td>
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<tr>
<td>FIN 523</td>
<td>3</td>
<td>FIN 528</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 721</td>
<td>3</td>
<td>ECON 725</td>
<td>3</td>
<td></td>
<td></td>
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<td><strong>Total credit hours:</strong> 31-36</td>
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</table>

**First Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td>Select one of the following:</td>
<td>3</td>
<td>FIN 697</td>
<td>1-15</td>
</tr>
<tr>
<td>ECON 735</td>
<td></td>
<td>FIN 736</td>
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<td></td>
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<tr>
<td>FIN course Portfolio Theory</td>
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<td>FIN course Asset Pricing</td>
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<td></td>
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</tr>
<tr>
<td>ECON 701</td>
<td>4</td>
<td>FIN course Corporate Finance Theory</td>
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<tr>
<td>ECON 726</td>
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<td>ECON 727</td>
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<td></td>
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<td>6</td>
<td>1-15</td>
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**Second Year**

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<tr>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN course Corporate Finance Seminar</td>
<td>3</td>
<td>FIN course Investments Seminar</td>
<td></td>
<td>FIN 797</td>
<td>1-15</td>
</tr>
<tr>
<td>ECON 702</td>
<td></td>
<td>FIN course Topics in Finance</td>
<td></td>
<td>Finance Comprehensive Exam</td>
<td></td>
</tr>
<tr>
<td>FIN 797</td>
<td>1-15</td>
<td>FIN 797</td>
<td>1-15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-21</td>
<td></td>
<td></td>
<td></td>
<td>1-15</td>
<td></td>
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**Third Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 797</td>
<td>1-15</td>
<td>FIN 797</td>
<td>1-15</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>April or May Defend Dissertation Proposal</td>
<td></td>
<td>1-15</td>
<td></td>
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</tbody>
</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 797</td>
<td>1-15</td>
<td>FIN 797</td>
<td>1-15</td>
</tr>
<tr>
<td>1-15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total credit hours:** 30-142

**Notes:**

- Electives include Monetary Economics 1 and 2, Game Theory, Microeconomic Theory 2, Macroeconomic Theory 2, Econometrics 4 (ARE 693L), Dynamic Methods (1 credit), advanced mathematics and statistics courses.
- First year research paper. Present to faculty and doctoral students by the end of the first summer. The paper should be original work with a clear potential for publication.
- Second year research paper. A completed paper must be presented to faculty and doctoral students early in the fall semester of the third year. The paper must be of sufficient quality to be submitted to a good academic journal. The paper will be evaluated by faculty as part of the finance comprehensive exam.
PHD Business Administration-Management

Overview

The mission of the program is to prepare students to excel in knowledge creation and knowledge dissemination. The goal is to strive for continuous improvement in training world-class researchers and college professors who are able to conduct independent, original academic research and teach university-level courses in their major areas of study. We involve our students in research projects early, so that by the time they complete the Ph.D. many have one or more research articles accepted in academic journals.

Highly individualized program

Typically, cohorts of 4-5 students will be registered for formal course work and in residence working toward their dissertations. From the start, each doctoral student will be assigned a faculty member to serve as research mentor and a senior doctoral student "buddy" to facilitate transition into the program. Small classes and an "open-door" policy allow students plenty of opportunity to discuss ideas with faculty.

Management Ph.D. Course Descriptions

The coursework in marketing is designed to provide a theoretical and methodological foundation for conducting independent research. Students in the Ph.D. in Business Administration with a Concentration in Management will take six courses in their major area. They will also take the mandatory research methods course (MANG 710. Philosophy of Research). In addition, they will take a minimum of four more courses in research methods and statistics. They are required to take three minor area courses. Therefore, there are 14 courses required toward the 42 credit hours in the classroom. Two research papers will contribute 6 credit hours for a total of 48 credit hours. In addition, the student will register for at least 29 dissertation credits.

Placement

The Ph.D. degree in Business Administration is designed to prepare graduates for professional careers in university research and teaching, as well as select research positions in industry and government. Most commonly, our graduates will initially look for employment in academia. To help placement in the academic field, each doctoral student is offered full responsibility for teaching undergraduate classes. This preparation, together with their success in publishing research articles, is designed to assist our graduates in becoming competitive in the job market.

Admissions Timeline

Typically, students begin their graduate work in the fall semester. January admissions are very rare. To be assured full consideration for August admission and/or financial aid, the department must have received completed applications by February 1. The department makes most admission and financial aid decisions during February and March. Subject to availability of space, the department will continue to accept applications for August admission until July 20. Given application processing time, early applications are strongly encouraged.

Application Process

An on-line application, three letters of reference, a résumé, a statement of purpose, and a submission of a GMAT or GRE score are required for admission. Please include any other supporting materials you wish to have considered with your application.

The WVU Office of Graduate Programs is currently taking applications online. Click here to complete the online application procedure.

Or you may send to:
Office of Admissions and Records
West Virginia University
PO Box 6009
Morgantown, WV 26506-6009

Contact Information

For additional questions concerning the Management Ph.D. program please contact:

Dr. Joyce Heames
Chair, Department of Management
Email: MgmtPhd@mail.wvu.edu
Office: 304-293-7920

Website: http://be.wvu.edu/phd_business/index.htm

An official GMAT (Graduate Management Admissions Test) score. Applicants with a 650 or higher GMAT or GRE equivalent scores will receive first consideration for admission to the Ph.D. Program in Business Administration with a concentration in Management.
## Faculty

### Chair
- Joyce Thompson Heames - Ph.D.
  - Talent Acquisition, Org Behavior, Human Resource Management, Corporate Social Responsibility

### Associate professors
- David Dawley - Ph.D.
  - Strategic management; Strategic turnaround decisions and organization commitment
- Mark Gavin - Ph.D.
  - Org Behavior, HRM, Research Methods, SEM
- Jodi Goodman - Ph.D.
  - Research Methods for HRM, Training, Org Behavior, Entrepreneurship
- Jeff Houghton - Ph.D.
  - International human resource management, Organizational behavior, Self leadership, Team processes
- Gary Insch - Ph.D.
  - International business and strategic management
- Nancy McIntyre - Ph.D.
  - Management, Organizational behavior
- Abhishek Srivastava - Ph.D.
  - Organizational behavior, Leadership, Team effectiveness
- Edward Tomlinson - Ph.D.
  - Organization behavior; Trust; Negotiation and conflict resolution; Compensation and benefits

## PHD Business Administration-Marketing

The Marketing doctoral program is a full-time, residential program that seeks to prepare students to contribute to the marketing discipline though the discovery, development, and dissemination of knowledge. The goal is to strive for continuous improvement in training world-class researchers and college professors who are able to conduct independent, original academic research and teach university-level courses in their major areas of study.

### Suggested Plan of Study

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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Total credit hours: 72-86
Economics

Degrees Offered

- Master of Arts
- Doctor of Philosophy

The master of arts and doctor of philosophy degrees in economics enable students to broaden and refine their knowledge of the concepts and methods of economic analysis. These programs are designed to prepare students for careers in higher education, government, and business. Student programs are planned with the assistance of a faculty advisor and approval of the director of graduate programs. Additional information about the graduate programs in economics, and the regulations and requirements pertaining to them, is available at http://www.be.wvu.edu/phd_economics/index.htm. Students are bound by these regulations and requirements, as well as those of the College of Business and Economics.

Prerequisites

Applicants with a bachelor’s degree may apply directly to the Ph.D. program. To be admitted as a regular M.A. or Ph.D. student, applicants must have a grade point average of 3.0 or better for all undergraduate work completed. Applicants must also complete the general aptitude portion of the Graduate Record Examination (GRE) and receive a minimum combined score of 1,000 for the verbal and quantitative sections and a minimum score of 3.0 for the analytical writing section. International students must submit their scores on the Test of English as a Foreign Language (TOEFL) or, alternatively, the scores on the International English Language Testing System (IELTS). In addition, applicants must have completed at least one semester of each of the following courses: intermediate microeconomic theory, intermediate macro-economic theory, calculus, and statistics. Applicants not meeting these entrance requirements may be admitted on a provisional and/or deficiency basis, subject to certain performance conditions during their first semester in residence.

Assistantships

A limited number of graduate assistantships and tuition scholarships are available on a competitive basis to full-time Ph.D. students. Major selection criteria include prior academic performance and GRE scores. Graduate assistants receive a cash stipend that is comparable in amount to that offered at other universities. Graduate assistants engage in research and/or teaching activities. The faculty of the Department of Economics also nominates outstanding applicants for University fellowships. Special scholarships are available on a competitive basis to minority students. For further information see http://www.be.wvu.edu/phd_economics/prospective.htm.

Academic Standards

To qualify for a graduate degree in economics, students must earn a cumulative grade point average (GPA) of 3.0 or better for all courses completed as a graduate student at WVU. A regular graduate student in economics whose cumulative GPA falls below 3.0 (B) upon completion of the first nine hours of graduate study is not in good standing and will be placed on probation at the end of the semester in which the GPA fell below 3.0. Such a student, placed on probation, who fails to raise his or her cumulative GPA to 3.0 by the end of the semester succeeding that in which his or her GPA fell below 3.0 is subject to suspension from the program at the end of that probationary semester.

Other academic reasons for suspension from the program include failing grades on more than 50 percent of the coursework taken in any semester, a third failure on either a micro-economic theory or macroeconomic theory comprehensive examination, a fourth failure on comprehensive field examinations, or failure to complete all degree requirements within the specified time limits.

Comprehensive Examinations

Students must pass written comprehensive examinations in microeconomic theory, in macroeconomic theory, and in two fields. For detailed rules, see http://www.be.wvu.edu/phd_economics/rulesregulations.htm.

Candidacy and Dissertation

When an applicant has passed the written comprehensive examinations, the applicant will be formally promoted to candidacy for the Ph.D. degree. The candidate must submit a dissertation pursued under the supervision of a member of the graduate faculty in economics on some problem in the area of the candidate’s major interest. The dissertation must present the results of the candidate’s individual investigation and must embody a definite contribution to knowledge. It must be approved by a committee of the graduate faculty in economics. After approval of the candidate’s dissertation and satisfactory completion of other graduate requirements, a final oral examination on the dissertation is required.

Each Ph.D. candidate is required to present a dissertation proposal to the graduate director after approval by at least three members of his or her Dissertation Committee including the chairperson. This proposal will include a statement of the problem (topic summary), a preliminary survey of the literature, a description of the research methodology, and other pertinent material. With the approval of the graduate director, the student is then required to present the proposal in a faculty-student seminar. Credit for dissertation research and writing is available under ECON 797, but only if the student has a dissertation chairperson and an approved topic.
Master of Arts Program

The master of arts program requires a total of 37 hours of graduate credit, including 22 hours of economics. At least 25 hours of coursework completed must be at the 700 level. To qualify for the M.A. degree, graduate students in economics must earn a grade of B- or better in ECON 701 and ECON 702, and a grade point average of 3.0 in all courses attempted as a graduate student at WVU. The M.A. program has a thesis and a non-thesis option. Specific course requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECON 701</td>
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<td>ECON 702</td>
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Statistics Requirement

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<tr>
<td>ECON 425</td>
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</tr>
</tbody>
</table>

Or for students who consider going into the Ph.D. program, these two courses may be replaced by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 725</td>
<td>Econometrics 1</td>
<td>3</td>
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</tbody>
</table>

The student must also select either the thesis or the non-thesis alternative:

- Thesis alternative: An acceptable thesis for six hours is required and the student must pass a final oral examination.
- Non-thesis alternative: In lieu of a thesis, the requirements for the M.A. are met by completion of two 700-level courses in one field of concentration in economics and submission of a research paper that gives evidence of substantial ability to conduct scholarly research.

Doctor of Philosophy

At least four years of full-time graduate work beyond the baccalaureate degree are usually required to complete the doctorate. A minimum of two consecutive semesters in actual residence as a full-time graduate student is required. To qualify for the doctor of philosophy degree in economics, a student must earn a cumulative grade point average of 3.0 in courses completed as a graduate student at WVU.

The Ph.D. degree is not awarded for the mere accumulation of course credits nor for the completion of the specified residence requirements. All students are required to complete the graduate core curriculum, prepare themselves in two fields of concentration, and pass at least two additional 700-level economics courses with grades of B or better. Each student must also submit an acceptable dissertation. A minimum of 45 hours of graduate work in economics at the 700 level is required for all candidates for the Ph.D. degree in economics.

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECON 701</td>
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<tr>
<td>ECON 702</td>
<td>Adv Macro-Economic Theory 1</td>
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<td>Adv Micro-Economics Theory 2</td>
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<td>ECON 712</td>
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<td>ECON 721</td>
<td>Mathematical Economics</td>
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<tr>
<td>ECON 723</td>
<td>Dynamic Methods of Economics</td>
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<td>ECON 726</td>
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First Year

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Second Year

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</table>

Total credit hours: 38

Six semester hours (or the equivalent) must be taken in each of the student’s two fields of concentration. The areas of concentration offered by the Department are financial economics, international economics, monetary economics, public economics, regional and urban...
economics, and resource economics. Other fields, conducted in cooperation with other units on campus, may possibly be approved in very unusual cases. Only one of the fields of concentration may be in an outside area; selection must be approved by the graduate economics faculty.

Faculty

Chair
- Clifford Hawley
  Professor of Economics

Professors
- Ronald J. Balvers - Ph.D. (U. Pitt.)
  Financial economics, Macroeconomic theory
  Status: Regular
- Roger Congleton - Ph.D. (VT)
  Public Choice
- William S. Reece - Ph.D. (Wash. U., St. Louis)
  Public economics.
  Status: Regular
- Tom S. Witt - Ph.D. (Wash. U., St. Louis)
  Econometrics, Energy economics, Regional economics.
  Status: Regular

Associate Professor
- Arabinda Basistha - Ph.D. (U. of Wash.)
  Monetary.
  Status: Regular
- Brian J. Cushing - Ph.D. (U. Md.)
  Urban and regional economics, Econometrics, Public finance.
  Status: Regular
- Stratford M. Douglas - Ph.D. (U. N.C.)
  Econometrics, Industrial organization, Corporate finance.
  Status: Regular
- George Hammond - Ph.D. (Ind. U.)
  Regional economics, economic forecasting.
  Status: Regular
- Donald Lacombe - Ph.D.
- Santiago Pinto - Ph.D. (U. of Ill.)
  Public economics, Urban economics, Regional economics.
  Status: Regular
- William Trumbull - Ph.D. (U. N.C.)
  Public finance, Law and economics, Applied microeconomics.
  Status: Regular
- Andrew Young - Ph.D.

Assistant Professor
- Eran Guse - Ph.D. (U. of Ore.)
  Macroeconomics, Monetary economics.
  Status: Associate
- Shuichiro Nishioka - Ph.D. (U. of Co.)
  International trade.
  Status: Associate
- Adam Nowak - Ph.D. (Arizona State University)
  Status: Assistant Professor
- Amanda Ross - Ph.D. (Syracuse)
  Urban Economics, Public Finance, Real Estate Economics
  Status: Assistant Professor
- Feng Yao - Ph.D. (Ore. St. U)
Finance

Degree Offered

- Master of Science in Finance

The M.S. in finance program provides students with the theory, tools, and applications to support their goal of becoming proficient financial researchers and analysts and acquiring the most recognized global market credentials via the CFA charter designation. We provide students with the theoretical underpinnings that provide the basis for becoming a practicing analyst. We prepare students to become competent investment professionals.

The CFA Designation

The designation CFA stands for chartered financial analyst. This is the industry designation for expertise regarding securities from assessments of risk to interpretation of value. The CFA designation is awarded after the successful candidate passes three levels of testing over an expansive list of topics from ethical practice to general technical knowledge of investment and securities. The M.S. in finance program of study includes the CFA candidate body of knowledge among its core offerings. The program is designed so that a student may sit for the CFA Level One exam in December and sit for the CFA Level Two exam the following June.

Credit Hours

The 36-hour program is comprised of a core of advanced finance classes, laboratory experiences, and practical application of theory for success in this career path. Students complete an intensive, 12-month program that starts in June. The program includes a quantitative finance tools course, a course in ethical and professional standards, a firm foundation in the general theory of economics, seven advanced finance courses, and a three credit-hour internship. A subset of the coursework provides graduates with a thorough understanding of the material in the CFA Candidate Body of Knowledge (CBOK).

Admission

To gain admission to the M.S. in finance program, an applicant must have a bachelor’s degree from an accredited institution. Admissions decisions are based on an assessment of expected success in the program shown by the application materials and on space available. The Admissions Committee considers grade point average in all previous college-level work and also the grade point average in the last 60 hours of coursework. The Graduate Management Admissions Test (GMAT) is required and the Admissions Committee takes no action on an application for admission to the full-time program until the applicant submits a GMAT score. Each applicant must submit a resume with the application. For applicants with a significant amount of work experience in a financial field, the GMAT may be waived. Additionally, applicants are encouraged to submit a statement of purpose and two letters of reference. Each applicant will be interviewed either in person or by phone prior to admission. Provisional admissions are very rare and will be evaluated on a case-by-case basis.

The following prerequisite courses may be taken at other institutions but must be successfully completed prior to entering the M.S. in finance program:

- Principles of Economics – six hours
- Principles of Accounting – six hours
- Investments
- Business finance
- Statistics
- Calculus

Transcripts and Deadlines

Application for admission to the M.S. in finance program and official transcripts of all prior academic work should be submitted to the WVU Office of Admissions as early as possible. Applicants who have attended institutions other than WVU must request the registrar or records office of those institutions to forward a complete official transcript directly to the WVU Office of Admissions. Review of applications and consideration of financial awards will begin on January 15 and continue until April 15.
Financial Aid

A limited number of tuition scholarships are available on a competitive basis to full-time students. Major selection criteria include prior academic performance and GMAT scores. Further information and applications can be obtained from the director of the MS in Finance program.

Academic Standards

The M.S. in finance requires that the candidate achieve a cumulative grade point average of at least 3.0 on all work counting toward the graduate degree. A regular graduate student whose cumulative grade point average falls below 2.75 will be placed on probation. If the average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree.

M.S. in Finance Program Schedule

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<thead>
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<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
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<td>FIN 521</td>
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<td>FIN 512</td>
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</table>

Total credit hours: 33

Faculty

Coordinator

• K. Victor Chow
  M.S. in Finance Program

Professors

• Victor Chow - Ph.D. (U. Ala.)
  Corporate finance, Portfolio management.
• William B. Riley - Ph.D. (U. Ark.)
  Investments, Capital markets.

Associate Professor

• Ashok Abbott - Ph.D. (VPI & SU)
  Financial institutions, Corporate Finance, Mergers and acquisitions.
• Alex Kurov - Ph.D. (SUNY Binghamton)
  Financial Market Microstructure and Futures Markets
• Terry L. Rose - Ph.D. (U. of Ill.)
  Insurance, Risk management.
• Paul J. Speaker - Ph.D. (Purdue U.)
  Financial institutions, Modeling, Uncertainty.

Assistant Professor

• Costanza Meneghetti - Ph.D. (Ga. St. U.)
  Corporate Finance
• Naomi Boyd - Ph.D. (Geo. Wash. U.)
  Financial market microstructure, Behavioral finance
• Ann Marie Hibbert - Ph.D. (Fla. Intl. U.)
  International finance, Asset pricing, Behavioral finance.
Teaching Assistant Professor

- Frank DeGeorge, CPA - MSA (Duquesne)
  Financial Statement Analysis

Degree Offered

- Master of Science in Industrial Relations

The Department of Management offers a master of science in industrial relations (M.S.I.R.). The AACSB accredited program of study prepares students for professional positions in human resources (employee relations) and labor relations. Coursework can be structured to prepare students for doctoral studies in industrial relations, economics, management, or law.

Entry-level professional opportunities for M.S.I.R. graduates include such positions as human resource generalist, human resource managers, labor relations specialist, compensation analyst, and benefits administrator. Other positions include staff representative with organized labor, apprentice arbitrator, labor-management consultant, National Labor Relations Board field examiner, government employee relations representative, and employment analyst. Many graduates are employed by Fortune 500 companies. Some find positions with organized labor, all levels of government, and advocacy organizations. The department, in conjunction with the College of Business and Economics Center for Career Development, makes a concerted effort to place graduates in positions that fulfill student job objectives.

IRSA

Students are encouraged to participate in academic-related extracurricular activities. Many are cosponsored by the Industrial Relations Student Association including: the IRSA Newsletter, the mentorship program, company site visits, guest speakers, community service efforts, social events, and honors banquets. Outstanding academic achievement is recognized by membership in the Industrial Relations Honor Society. The faculty makes Outstanding IR Student awards yearly to persons selected on the basis of scholarship, informal leadership, and extracurricular activities.

Financial Aid

More than half of all M.S.I.R. students qualify for financial aid on the basis of need, merit, or a combination of both. A limited number of scholarships and tuition waivers are awarded each year on a competitive basis. Additional information can be obtained from the graduate programs office.

Academic Common Market

The WVU M.S.I.R. program is a member of the Southern Regional Education Board’s Academic Common Market program. Residents of Delaware, Florida, Georgia, Kentucky, Maryland, North Carolina, and Virginia who are admitted to the M.S.I.R. program can pay tuition at West Virginia University’s in-state (resident) rates. http://www.sreb.org.

Admission

The MSIR degree is interdisciplinary in nature and no specific undergraduate major is required. Coursework in computer science, labor economics, statistics, and business disciplines is helpful. To gain admission into the M.S.I.R. program, an applicant must have a bachelor’s degree from an accredited institution. Overall grade point average is considered with additional attention given to the grade point average achieved in the last 60 hours of coursework. Either the Graduate Record Examination (GRE) or the Graduate Management Admissions Test (GMAT) is required. No action is taken on an application for admission until a GRE/GMAT score is submitted. International students must also submit a satisfactory TOEFL score.

Applicants must also send additional supportive material, including a personal statement in support of their application, a minimum of two reference letters, and a professional resume of their school and work experiences.

Application Deadlines

Students with a non-business undergraduate major must apply for Summer admission. Students with a business undergraduate major must apply for Fall admission. The application deadline is March 1. Later applications, while acceptable, may diminish the chances for admission due to the graduate class being filled. Because no admission decision can be made without the applicant’s GRE/GMAT score being submitted, applicants should keep in mind the GRE/GMAT test schedule.

Institute of Industrial and Labor Relations

The mission of the Institute of Industrial and Labor Relations (ILIR) is to coordinate instruction, research, and public service activities, which embrace a study of the elements of human resources development uniquely identified with the economy of West Virginia. Membership is open to faculties who have an interest in the mission of the ILIR. The ILIR serves as a means of rational response to economic trends...
based on an amalgamation of the three University functions: faculty/student research on a continuing basis in search of human resource development possibilities; use of research results in credit instruction to produce a growing cadre of graduates aware of and trained to be able to contribute to the state’s economic goals; and, using both of the former extension and public service efforts designed to place the state’s human resource development and use activities on their most economically rational courses.

**Industrial Relations Degree Program**

**Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
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<tr>
<td>ILR 501</td>
<td>Accounting/Economics/Finance</td>
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<tr>
<td>ILR 502</td>
<td>ILR Management/Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ILR 505</td>
<td>Employment Law</td>
<td>3</td>
</tr>
<tr>
<td>ILR 506</td>
<td>Performance Management/Training</td>
<td>3</td>
</tr>
<tr>
<td>ILR 507</td>
<td>Conflict Management Processes</td>
<td>3</td>
</tr>
<tr>
<td>ILR 508</td>
<td>Organizational Change/Renewal</td>
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</tr>
<tr>
<td>ILR 509</td>
<td>Talent Acquisition</td>
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<tr>
<td>ILR 520</td>
<td>HR Information Systems</td>
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<td>ILR 522</td>
<td>International Industrial Relations</td>
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</tr>
<tr>
<td>ILR 530</td>
<td>Compensation Issues</td>
<td>3</td>
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<tr>
<td>ILR 534</td>
<td>Work Group Dynamics Leadership</td>
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<td>ILR 543</td>
<td>Negotiation Strategy</td>
<td>3</td>
</tr>
<tr>
<td>ILR 544</td>
<td>Benefits</td>
<td>3</td>
</tr>
<tr>
<td>ILR 548</td>
<td>Strategic Management for HR</td>
<td>3</td>
</tr>
<tr>
<td>ILR 549</td>
<td>Advanced Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>ILR 580</td>
<td>Human Resources Practicum</td>
<td>3</td>
</tr>
<tr>
<td>ILR 591 - Advanced Topics (subject matter changes)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>ILR course - Project Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ILR 595</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>ILR 689</td>
<td>MS-IR Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Typical Course Scheduling**

Select one elective each semester or term.

**Program Requirements for Non-Business Related Undergraduate Majors**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td></td>
</tr>
<tr>
<td>ILR 501</td>
<td>3</td>
</tr>
<tr>
<td>ILR 502</td>
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<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Second</td>
<td></td>
</tr>
<tr>
<td>ILR course - Human Capital Management</td>
<td>3</td>
</tr>
<tr>
<td>ILR 505</td>
<td>3</td>
</tr>
<tr>
<td>ILR 562</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Third</td>
<td></td>
</tr>
<tr>
<td>ILR 509</td>
<td>3</td>
</tr>
<tr>
<td>ILR 530</td>
<td>3</td>
</tr>
<tr>
<td>ILR 506</td>
<td>3</td>
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<tr>
<td>ILR 522</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Fourth</td>
<td></td>
</tr>
<tr>
<td>ILR 520</td>
<td>3</td>
</tr>
<tr>
<td>ILR 689</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Fifth</td>
<td></td>
</tr>
<tr>
<td>ILR 508</td>
<td>3</td>
</tr>
<tr>
<td>ILR 544</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
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<tr>
<td>ILR 534</td>
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### Sixth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR 548</td>
<td>3</td>
</tr>
<tr>
<td>ILR 580</td>
<td>3</td>
</tr>
<tr>
<td>ILR course - Training/Development</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>ILR 543</td>
<td>3</td>
</tr>
<tr>
<td>ILR course - Collective Bargaining</td>
<td></td>
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</table>

Total credit hours: 12

### Program Requirements for Business Related Undergraduate Majors

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR course - Human Capital Management</td>
<td>3</td>
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<tr>
<td>ILR 505</td>
<td>3</td>
</tr>
<tr>
<td>ILR 562</td>
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</table>

Total credit hours: 9

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR 509</td>
<td>3</td>
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<tr>
<td>ILR 530</td>
<td>3</td>
</tr>
<tr>
<td>ILR 522</td>
<td>3</td>
</tr>
<tr>
<td>ILR 506</td>
<td>3</td>
</tr>
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</table>

Total credit hours: 12

#### Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR 520</td>
<td>3</td>
</tr>
<tr>
<td>ILR 689</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credit hours: 6

#### Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR 508</td>
<td>3</td>
</tr>
<tr>
<td>ILR 544</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>ILR 507</td>
<td>3</td>
</tr>
<tr>
<td>ILR 534</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours: 9

#### Fifth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR 548</td>
<td>3</td>
</tr>
<tr>
<td>ILR 580</td>
<td>3</td>
</tr>
<tr>
<td>ILR course - Training/Development</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>ILR 543</td>
<td>3</td>
</tr>
<tr>
<td>ILR course - Collective Bargaining</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours: 12

### 1 Year MSIR and Dual Degree Option

Some graduates with a JD or MBA degree from a US institution may apply to complete the MSIR degree program in one year. Not all applicants will be approved for the one-year option, but each application will be evaluated individually by the admissions committee. Combining study for the MSIR and the MBA degrees is another option available to qualified candidates. Students apply separately for admission to each program. The required 30 credit hours for individuals with a JD, an MBA, or those enrolled in the MBA/MSIR dual degree program are as follows:

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR course - Human Capital Management</td>
<td>3</td>
</tr>
<tr>
<td>ILR 505</td>
<td>3</td>
</tr>
<tr>
<td>ILR 562</td>
<td>3</td>
</tr>
<tr>
<td>ILR 508</td>
<td>3</td>
</tr>
<tr>
<td>ILR 544</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credit hours: 15

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILR 509</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credit hours: 3
ILR 530 3
ILR 548 3
ILR 506 3
ILR 522 3
ILR 591 Advanced Topics (subject matter changes) 3

Total credit hours: 33

GPA

The industrial relations program requires that the student maintain a grade point average of at least 3.0 on all work taken as a graduate student while enrolled in the College of Business and Economics. In addition, the student must maintain a 3.0 average in all work counting toward the graduate degree. A student whose cumulative grade point average falls below 2.75 will be placed on probation. If the student’s average is not brought up to 2.75 by the end of the following semester, the student will be suspended from the program. A grade below C in more than one course taken while enrolled as a graduate student will result in suspension from the program.

Faculty

Chair, Department of Management

- Joyce T. Heames - Ph.D.
  Talent Acquisition, Org Behavior, Management, Corporate Social Responsibility

Professor

- Neil S. Bucklew - Ph.D.
  Past WVU president. Industrial relations, Collective bargaining, Labor management relations, Negotiations and conflict resolutions

Associate Professor

- Mark Gavin - Ph.D.
  Org Behavior, HRM, Research Methods, SEM
- Jodi Goodman - Ph.D.
  Research Methods for HRM, Training, Org Behavior, Entrepreneurship
- Joyce T. Heames - Ph.D.
  Talent Acquisition, HRM, Training & Development, Corporate Social Responsibility
- Jeffery D. Houghton - Ph.D.
  International human resource management, Organizational behavior, Self leadership, Team processes

Assistant Professor

- Linda Sypolt - J.D.
  Business law, Employment law.

Teaching Assistant Professor

- Suzanne Gosden Kitchen - ED.D.

Executive in Residence

- Bill Hutchinson - M.S.I.R.
  Collective bargaining, Performance management, Compensation and benefits

Emeritus

- Randyl Elkins - Ph.D.
- Dieter Schaupp - Ph.D.
  Emeritus
The College of Creative Arts, composed of the Schools of Art & Design, Music, and Theatre and Dance, serves an academic and cultural function and provides an educational and interdisciplinary environment for the exploration, advancement, and understanding of the visual and performing arts. The college boasts a distinguished faculty of actors, artists, composers, conductors, directors, instrumentalists, vocalists, scholars, and writers who bring to the college a commitment to a creative process of artistic growth which is shared with each student. Through teaching, research, and service, the faculty of the college provides students the professional preparation to achieve the highest level of performance, scholarly research, and creative activity.

Graduate programs in art, music, and theatre are characterized by quality of faculty, students, and curricular opportunity. Each school is an accredited member of the nationally recognized accrediting agency for professional instruction in the discipline: art programs by the National Association of Schools of Art and Design; music programs by the National Association of Schools of Music; and theatre programs by the National Association of Schools of Theatre.

The College of Creative Arts is committed to providing the highest levels of creative, intellectual, and cultural experiences in art, music, and theatre to the University, the state, and the region. In an environment rich with art exhibitions, concerts, performances, and plays, students gain the knowledge, skills, experience, and inspiration necessary for professional success. Students, faculty, and visiting artists present a full calendar of performances and exhibitions which are open to the public.

The Creative Arts Center, which houses the college, is a modern, multimillion-dollar instructional and performance facility with four theatres, two recital halls/recording studios; scenery, painting, drawing, design, costume, printmaking, sculpture, ceramic, puppet, and instrumental studios; additional art studios; and two art galleries.

The doctor of musical arts (D.M.A.) curricula in performance (piano, voice, percussion, flute, oboe, clarinet, bassoon, saxophone, horn, trumpet, trombone, tuba, violin, viola, cello, or double bass) or composition, and the Ph.D. curriculum in music education prepares students for careers as teachers in higher education. The master of fine arts (M.F.A.) is a terminal degree in art and theatre that prepares students for careers in ceramics, graphic design, painting, printmaking, sculpture, acting, or theatre design/technology.

The master of music (M.M.) degree enhances undergraduate programs in performance, music education, theory, music history, and composition. The master of arts has concentrations in art education, art history, and studio art.

For further information, please contact:

- Graduate Advisor, School of Art & Design at (304) 293-4077
- Director of Graduate Studies, School of Music at (304) 293-4489
- Director, School of Theatre and Dance at (304) 293-6806

Our mailing address is College of Creative Arts, Creative Arts Center, West Virginia University, P.O. Box 6111 Morgantown, WV 26506-6111.

Special Admission Information

The College of Creative Arts offers graduate programs leading to terminal degrees in art, music, and theatre. Prospective students apply for admission through the University's Office of Admissions. All candidates for graduate degrees must conform to University regulations for graduate study. Requirements for admission to specific programs are included in the program descriptions. Most programs require an audition or a portfolio review as part of the admission process.

To assist in funding the cost of graduate education, West Virginia University and the College of Creative Arts offer a number of competitive financial aid packages for qualified applicants. These include assistantships, tuition waivers and scholarships.

Full graduate assistants receive a stipend and remission of tuition. Application for assistantships should be made directly to each school. Assistantship applications deadlines are:

- School of Art & Design: February 15
- School of Music: March 1
- School of Theatre & Dance: April 1
School of Art and Design

Degrees Offered

- Master of Arts
- Master of Fine Arts

The graduate programs in the School of Art and Design lead to a master of arts (M.A.) with emphasis in art history, art education, or studio art (two years and a minimum of 30 credit hours; 36 is recommended), or to a master of fine arts (M.F.A.) with emphasis in studio art (three years and a minimum of 60 credit hours; 72 is recommended). These programs are highly selective and closely integrated. All applicants are expected to have academic competence, artistic maturity, and the motivation to achieve excellence in their areas of concentration.

The master of fine arts is a professionally-oriented terminal degree in the studio arts, with concentration in ceramics, graphic design, intermedia/photography, painting, printmaking, or sculpture. Applicants typically hold a baccalaureate degree in art or its equivalent for admission. Recommended preparation includes 12 hours of art history, 70 hours of studio art or equivalent experience, and 36 hours of general education.

Accreditation

The School of Art and Design is an accredited institutional member of the National Association of Schools of Art and Design (NASAD), the only nationally recognized accrediting agency for professional art instruction. Applicants for graduate studies must comply with the standards for admission set by West Virginia University, the College of Creative Arts, and the School of Art and Design.

Reviews

All students enter the graduate programs in art as preliminary candidates. Students in the M.F.A. program are reviewed for advancement to degree candidacy at the end of their third semester of study or upon the completion of a minimum of 30 credit hours. Students in the M.A. program are reviewed for advancement to degree candidacy at the end of their first semester of study or upon the completion of a minimum of 12 credit hours. Candidacy status is obtained upon review by the full faculty of the School, and must be approved by the student’s Graduate Committee.

The School of Art and Design has high expectations for its graduate students. Because of this, certain standards of achievement exceed the minimum standards set by the University for all graduate students. The School of Art and Design reserves the right to impose stricter limitations on all art graduate students. Credit hours in courses with an earned grade of C do not automatically count toward graduate degree requirements. The Graduate Committee and the School Director have the right to declare such credit hours unacceptable.

Program Transfer

A preliminary candidate in a graduate art program is not guaranteed acceptance into another graduate art program. A change from the M.F.A. program to the M.A. program (or the reverse) must be approved by the graduate faculty of the School of Art and Design. Under normal conditions, such a change is not considered until the student has established credibility by successfully completing a minimum of 12 approved credit hours of study at WVU. Transfer to a program outside the School of Art and Design must be approved by the receiving unit. To make an application for a double degree program or a special interdepartmental program at the graduate level, students must have prior written approval of the School of Art and Design Director.

Thesis

All candidates for a graduate degree in art must prepare a written thesis (or graduate project) related to their work and activity as a graduate student. The chair of the student’s Graduate Committee supervises the preparation of the thesis. The thesis must be prepared according to the form prescribed in the WVU regulations governing the preparation and electronic submission of dissertations and theses as well as School guidelines, unless an exception is authorized in advance by the student’s Graduate Committee and the School Director. A final draft of the thesis must be submitted to committee members at least one month prior to the electronic filing date for review and approval.
Applications

Applicants for the M.A. in art history must submit a copy of a written research project, three letters of recommendation, a statement of purpose, and GRE scores.

Applicants for the M.A. (studio and art education) or the M.F.A. must present a portfolio for admission to the School of Art and Design. This portfolio must contain 20 jpg images with a minimum of 800 x 600 pixels or equivalent video documentation on DVD. Applicants should take care to select images of recent and representative work for inclusion in the portfolio. Each image should be documented with name, date of completion, size of work, and type of medium. Applicants must also submit a statement of purpose and three letters of recommendation from college faculty or persons knowledgeable of the applicant’s interests and abilities.

Application information can be located at: http://artanddesign.wvu.edu/graduate_students/application_process. Materials should be submitted to: Graduate Advisor, School of Art and Design, College of Creative Arts, West Virginia University, P.O. Box 6111, Morgantown, WV 26506-6111.

Provide a stamped, self-addressed mailer envelope to assure prompt, safe return of the CD.

In addition to the School of Art and Design’s graduate application and portfolio requirements, prospective students are required to fill out a separate West Virginia University student application form, which is to be submitted electronically to the Office of Admissions at: http://grad.wvu.edu/, along with an application fee and official transcripts.

Financial Aid

Financial aid information is available through the Student Financial Aid Office, West Virginia University, P.O. Box 6004, Morgantown WV 26506-6004.

Graduate Assistantships

Graduate assistantships and other forms of financial aid are awarded to students of exceptional promise by the faculty of the School of Art and Design.

Studio Art Master of Fine Arts

The master of fine arts is a terminal degree in studio art. Our selective and limited enrollment ensures regular individual contact with a dedicated, diverse faculty who are committed to a sustained professional exchange with each student. A collaboratively designed curriculum is augmented by regular critiques engaging all studio majors and faculty. Media experimentation is encouraged. Students must be able to apply and communicate a diverse body of knowledge relating historical, cultural, contemporary, and aesthetic issues to their professional practice. Students are expected to articulate and defend their position within the context of contemporary art discourse. The suggested distribution of studies for the three-year program is as follows:

Degree Requirements: Three-Year M.F.A. Program

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Art Concentration Courses</td>
<td>36</td>
</tr>
<tr>
<td>Studio/Academic Electives</td>
<td>6</td>
</tr>
<tr>
<td>Teaching Practicum</td>
<td>3</td>
</tr>
<tr>
<td>Graduate Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Art History</td>
<td>6</td>
</tr>
<tr>
<td>Graduate Exhibition and Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Studio/Academic Electives</td>
<td>3</td>
</tr>
<tr>
<td>Cognate Subjects</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>72</strong></td>
</tr>
</tbody>
</table>

Note: All graduate credits must be at the 500-level (graduate) or higher. A required graduate exhibition and thesis (ART 600) will include organized graduate seminars, committee meetings, and exhibition preparation discussions.

Transfers

In addition to the application materials listed, transfer students must ask to transfer graduate work completed elsewhere. Transcripts must accompany the written request. The acceptance of transfer credit is not automatic. The graduate faculty, the graduate advisor, and the School Director will determine how much, if any, previous graduate-level work may be transferred. The maximum allowable number of graduate credits toward the degree is 12. All transfer credits must be in place by the end of the first semester.
Residence Requirements

M.F.A. students take nine to 15 hours per semester. All students accepted into the M.F.A. program are required to spend six full-time semesters (excluding summer sessions) in residence. Approved study abroad semesters count toward the residency requirement.

Master of Arts in Studio Art

The studio art concentration promotes advanced study in ceramics, painting, printmaking, graphic design, intermedia/photography, and sculpture. This course of study requires a baccalaureate degree in art or its equivalent for admission. Preparation should include 12 hours of art history, 45 hours of studio art related to professional needs, and 36 hours of general education. The suggested distribution of studies is as follows:

Degree Requirements: Two-Year M.A. Program

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Art Concentration Courses</td>
<td>18</td>
</tr>
<tr>
<td>Art History</td>
<td>6</td>
</tr>
<tr>
<td>Studio/Academic Elective or Graduate Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Graduate Exhibition and Thesis</td>
<td>3</td>
</tr>
<tr>
<td>Studio Academic Electives</td>
<td>3</td>
</tr>
<tr>
<td>Cognate Subjects</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>36</td>
</tr>
</tbody>
</table>

The graduate art faculty recommends those students who may be required to hold a graduate exhibition.

Master of Arts in Art Education

Art education is a popular option for graduate study in art. Specialization in art education requires the completion of a minimum of 30 hours with a recommended total of 36. The exact course of study is determined through consultation with the student’s advisor and Graduate Committee.

Degree Requirements: Two-Year M.A. Program

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio/Academic Electives</td>
<td>12-18</td>
</tr>
<tr>
<td>Art Education or Approved Studies</td>
<td>12</td>
</tr>
<tr>
<td>ART 602 Master's in Art Ed Project</td>
<td>6</td>
</tr>
<tr>
<td>Total Hours</td>
<td>30-36</td>
</tr>
</tbody>
</table>

Each student is required to complete a graduate project. The graduate art faculty recommends those students who may be required to hold a graduate exhibition.

Master of Arts in Art History

The Master of Arts in Art History program at WVU offers a two-year degree that provides a solid foundation in historical and theoretical study of the history of Western Art, from Medieval to Contemporary. The program emphasizes independent exploration and interdisciplinary research.

Applicants for admission to the master’s program are expected to demonstrate competence in the history of art, equivalent to an undergraduate major, as well as reading competence of at least one language other than English (four-semester equivalent), and must submit GRE examination scores. The B.A. degree in an area of substantial humanistic research, plus a foreign language may also be considered appropriate preparation.

Reading proficiency in one language other than English and writing and speaking skills needed to communicate clearly and effectively are required and can be met through additional coursework or passing a proficiency exam.

Art history studies the traditions and techniques of the visual arts. It is an interdisciplinary field, drawing upon philosophy, history, literature, religion, and mythology to examine works of art and their contexts. The history of art provides means to penetrate cultural constructions and their aesthetic and artistic productions. To assist the student in developing skills needed to analyze and understand the object, the course of study includes requirements in academic course work and research.

The collection of the Art Museum of West Virginia University provides first-hand experience with works of significant aesthetic and cultural value, and introduces students to curatorial and museum practice. The Laura and Paul Mesaros Galleries in the Creative Arts Center and the Visiting Artist and Scholar program form a crucial link in the course of study, presenting installation and curatorial opportunities. Through the School of Art and Design’s association with regional institutions, museum and gallery internships are encouraged.

Completion of the program culminates in the Master’s thesis, which may take a variety of forms within the context of art historical and critical practices. The student will select a thesis topic that must meet with the approval of the art history faculty. The thesis consists of a research
paper demonstrating critical knowledge of relevant sources, skill in analysis and interpretation, and ability to present the results in a well-organized and intelligent manner. The thesis must be defended in an oral examination.

M.A. Art History Degree Requirements: Two-Year (30-hour) Program

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>21</td>
</tr>
<tr>
<td>Cognate Subjects*</td>
<td>6</td>
</tr>
<tr>
<td>Master’s Thesis</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

* Cognate subjects to be selected in support of research (e.g.: history, philosophy, classics/religious studies, anthropology, arts administration, historic preservation, etc.)

Faculty

Director
• Alison Helm

Graduate Advisor
• Joseph Lupo

Professors

• Eve Faulkes - M.F.A. (Rhode Island Sch. Design)
  Graphic design.
  Status: Regular

• Alison Helm - M.F.A. (Syracuse U.)
  Director, Sculpture.
  Status: Regular

• J. Bernard Schultz - Ph.D. (U. of Pitt.)
  Art history-Italian Renaissance.
  Status: Regular

• Janet Snyder - Ph.D. (Columbia U.)
  Art History-Ancient, Medieval, Northern Renaissance, Native American.
  Status: Regular

Associate Professor

• Victoria Fergus - Ph.D. (Purdue U.)
  Art education.
  Status: Associate

• Joseph Lupo - M.F.A. (U. of Georgia)
  Graduate Advisor, Printmaking.
  Status: Regular

• Kristina Olson - M.A. (Stony Brook U.)
  Assoc. Director, Art history-Modern and contemporary, Art criticism.
  Status: Regular

Assistant Professor

• Ronald Aman - Ph.D. (Penn. St. U.)
  Art education.
  Status: Associate

• Christopher Barr - M.F.A. (SUNY–Buffalo)
  Graphic design.
  Status: Associate

• Joseph Galbreath - M.F.A. (Maryland Inst. College of Art)
  Graphic design.
  Status: Associate

• Gerald Habarth - M.F.A. (U. of South Fla.)
  Electronic media.
  Status: Associate
• Jason Lee - M.F.A. (U. Wisc.-Madison)  
  Sculpture, foundations.  
  Status: Associate
• Robert Moore - M.F.A. (Utah St. U.)  
  Ceramics.  
  Status: Associate
• Erika Osborne - M.F. A. (U. of New Mexico)  
  Painting, drawing.  
  Status: Associate
• Rhonda Reymond - Ph.D. (U. of Georgia)  
  Art history-American, African American, 17th-19th century European art.  
  Status: Associate
• Shoji Satake - M.F.A. (Indiana U.-Bloomington)  
  Ceramics.  
  Status: Associate
• Michael Sherwin - M.F.A. (U. of Oregon)  
  Photography, Digital imaging.  
  Status: Associate
• Naijun Zhang - M.F.A. (West Virginia U.)  
  Painting, Drawing.  
  Status: Associate

Lecturers
• Dylan Collins - M.F.A. (Kent St. U.)  
  Sculpture.  
  Status: Associate
• Kristen Harkness - Ph.D. (U. of Pitt.)  
  Art history-Survey, Methodology.  
  Status: Associate

Professor emeritus
• Clifford Harvey - B.F.A. (Minn. College of Art & Design)  
  Graphic design.

School of Music

Degrees Offered
• Master of Music
• Doctor of Musical Arts
• Doctor of Philosophy

The School of Music is an accredited institutional member of the National Association of Schools of Music, the only nationally recognized accrediting agency for professional music instruction. All programs comply with the objectives and guidelines required by this organization.

Prospective graduate students in music are required to have completed the appropriate curriculum of undergraduate study in music at WVU or its equivalent at another institution of recognized standing. For acceptance into a degree program the applicant should make inquiry to:

Director of Graduate Studies  
School of Music, College of Creative Arts  
P.O. Box 6111  
Morgantown, WV 26506-6111

Applicants for degree study in composition, history, and performance, must take diagnostic tests in music theory, music history, and a piano proficiency. In addition, performance majors in voice and conducting take diagnostic tests in pedagogy and literature. Applicants for degree study in music education must take proficiencies in piano and voice. Applicants in music education have the option to take diagnostic exams in music history and music theory. The results of these tests may indicate the need for remedial study, which must be completed before admission to candidacy.
The degree of master of music may be taken in music education, performance, composition, music theory, or music history.

**Performance majors may specialize in:**

- piano
- piano pedagogy
- collaborative piano
- voice
- percussion
- flute
- oboe
- clarinet
- bassoon
- saxophone
- horn
- trumpet
- trombone
- tuba
- violin
- viola
- cello
- double bass
- guitar
- jazz pedagogy
- conducting

**Admission**

Applicants to the program leading to the degree of master of music must present necessary credentials for evaluation of previous training and experience to the School of Music. These include transcripts from all institutions previously attended showing a grade point average of at least 3.0 in all undergraduate study, submitted through the WVU Office of Admissions. Applicants for music history and music theory must also submit scores from the Graduate Record Examination General Aptitude Test. Three letters of recommendation from individuals who are qualified to judge the applicant’s potential success as a graduate student in music must be submitted directly to the director of graduate studies in music.

With the exception of applicants in composition, all applicants are also required to demonstrate, by audition, their level of attainment in a principal performance area. The evaluation of performance proficiency is based on technical ability, repertoire, and musicianship. A listing of representative material for each performance area, graded by proficiency level, is available upon request. A recording may be submitted in cases where travel makes an audition impractical. Each degree option has established standards which must be met for admission. For performance majors, the estimated proficiency level must be confirmed by a jury examination at the end of the first semester of performance study. Credit in performance may be counted toward degree requirements only after the proficiency-level prerequisite has been reached.

Applicants seeking admission as composition majors must submit representative compositions for evaluation and approval. When the application for composition is complete, it will be reviewed by the composition faculty. If this review is favorable, a representative of the composition faculty will contact the applicant to schedule an entrance audition and interview.

Applicants seeking admission as music theory or music history majors must submit a sample of writing, such as a term paper. A musical subject is recommended, but not required.

Applicants to music education curricula must submit the following:

1. An essay describing and discussing your training, experiences, present interests, and career aspirations in the field of music education.
2. A current résumé.
3. A video recording of teaching, preferably a K-12 music class or rehearsal. Please submit a detailed lesson plan for each class or rehearsal presented on your video of teaching. This is not required of those who are applying for the certification option. When the application for music education is complete, it will be reviewed by the music education faculty. If this review is favorable, a representative of the music education faculty will contact the applicant to schedule an entrance interview and audition.
Provisional Admission

Applicants whose admissions profile does not meet the qualifications outlined above may be considered for acceptance as provisional students. If, upon completion of up to 12 semester hours of graduate study, they have achieved a minimum of a B (3.0) average, and satisfied any previous undergraduate deficiencies or other conditions, such students may be accepted as degree students.

Additional Requirements for Master’s Degree Programs

In addition to fulfilling the degree requirements for each specific program, the following pertains to all students in master’s degree programs:

• Master’s degree students must establish an overall grade point average of 3.0.
• A representative public recital is required of candidates majoring in performance. Composition majors must submit a composition in a large form as a thesis.
• All candidates for the master of music degree are required to participate for credit for two semesters (or summer sessions) in a performing group which meets at least two clock-hours per week and which is selected with the advisor’s approval.
• A general comprehensive oral examination must be passed by all candidates for the master of music degree. Unsuccessful candidates may repeat this examination after a three-month period. The results of the second oral examination will normally be considered final. The Examining Committee will decide immediately after an unsuccessful second attempt whether a petition for a third attempt will be granted.
• Students must complete their programs within eight calendar years. Failure to do so will result in the loss of credit for courses taken at the outset of the program.

Graduate-Level Music Theory and Music History Courses

The following graduate-level courses in Music Theory and Music History can be taken to fulfill graduate degree program requirements; the credits for each course are noted:

Theory Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 460</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUSC 461</td>
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<td>2</td>
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<td>MUSC 462</td>
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<td>MUSC 463</td>
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<td>MUSC 464</td>
<td></td>
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<td>MUSC 465</td>
<td></td>
<td>2</td>
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<tr>
<td>MUSC 466</td>
<td></td>
<td>2</td>
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<tr>
<td>MUSC 468</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUSC 761</td>
<td>Theory Topics</td>
<td>3-5</td>
</tr>
<tr>
<td>MUSC 762</td>
<td>Pedagogy of Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 763</td>
<td>Analytical Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 764</td>
<td>Comp Techniques/Contemp Music</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>30-32</strong></td>
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</table>

HISTORY Courses

<table>
<thead>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUSC 470</td>
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<tr>
<td>MUSC 471</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MUSC 472</td>
<td></td>
<td>3</td>
</tr>
<tr>
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<td>MUSC 474</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MUSC 475</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MUSC 591 - Advanced Topics (subject matter changes)</td>
<td></td>
<td>1-6</td>
</tr>
<tr>
<td>MUSC 670</td>
<td>Perspectives of Music History</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 731</td>
<td>Keyboard Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 791 - Advanced Topics (subject matter changes)</td>
<td></td>
<td>1-6</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>26-36</strong></td>
</tr>
</tbody>
</table>

Music Education

The M.M. music education degree is designed to cultivate continued development of professional competence beyond the baccalaureate degree. High levels of musicianship and pedagogical expertise are integrated into a comprehensive program of study. Unique to the degree
in music education are four degree options that enable students to pursue individual interests and talents: Field Study Option, Recital Option, Thesis Option, and Certification Option.

At the core of each of the 30-hour degree options is coursework that immerses students in the foundations and research of music education, performance studies, music history, and music theory. Depending on the degree option a student selects, coursework and culminating projects are tailored to emphasize a specialization in performance, research, or teaching.

**Requirements in Music Education**

**Field Study Option**
This degree option emphasizes teaching and includes opportunities to integrate performance studies and research with a school-based field study that demonstrates application of knowledge and skills from graduate study as a culminating project.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 783</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 784</td>
<td>Intro-Research Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Advanced seminars *</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>One graduate-level music theory course and one graduate-level music history course **</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>MUSC 500 or MUSC 700 Performance</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Master's Field Study</td>
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<td></td>
</tr>
<tr>
<td>Music Electives</td>
<td>4-5</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>29-31</td>
</tr>
</tbody>
</table>

* Advanced seminars in music education, methods, workshops, directed studies. (Maximum of two hrs. from workshops, maximum of two hrs. from directed studies).

** Students who do not take the diagnostic exam in music theory must take MUSC 561 Graduate Theory Review as a prerequisite to any graduate-level theory course. Students who do not take the diagnostic exam in music history must take MUSC 670 Perspectives of Music History as a graduate-level history course.

**Recital Option**
This degree option emphasizes performance studies and includes opportunities to integrate research and teaching with a representative public recital that demonstrates advanced performance competence as a culminating project.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 783</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 784</td>
<td>Intro-Research Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Advanced seminars *</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>One graduate-level music theory course and one graduate-level music history course **</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>MUSC 500 or MUSC 700 Performance</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>MUSC 689</td>
<td>Masters Recital (total of 8 hours)</td>
<td>2</td>
</tr>
<tr>
<td>Music electives</td>
<td>2-3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>29-31</td>
</tr>
</tbody>
</table>

* Advanced seminars in music education, methods, workshops, directed studies. (Maximum of two hrs. from workshops, maximum of two hrs. from directed studies).

** Students who do not take the diagnostic exam in music theory must take MUSC 561 Graduate Theory Review as a prerequisite to any graduate-level theory course. Students who do not take the diagnostic exam in music history must take MUSC 670 Perspectives of Music History as a graduate-level history course.

**Thesis Option**
This degree option emphasizes research and includes opportunities to integrate performance and teaching with an original thesis that demonstrates advanced research and writing competence as a culminating project.

**Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 783</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 784</td>
<td>Intro-Research Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Advanced seminars *</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>One graduate-level music theory course and one graduate-level music history course **</td>
<td>5-6</td>
<td></td>
</tr>
<tr>
<td>MUSC 500 or MUSC 700 Performance</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MUSC 698</td>
<td>Thesis</td>
<td>4</td>
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</tbody>
</table>
Music electives 4-5
Total Hours 29-31

* Advanced seminars in music education, methods, workshops, directed studies. (Maximum of two hrs. from workshops, maximum of two hrs. from directed studies).
** Students who do not take the diagnostic exam in music theory must take MUSC 561 Graduate Theory Review as a prerequisite to any graduate-level theory course. Students who do not take the diagnostic exam in music history must take MUSC 670 Perspectives of Music History as a graduate-level history course.

Certification Option
This degree option is designed for persons who obtained an undergraduate degree in music other than music education. Coursework (including student teaching) leads to a professional certificate (birth-adult music, West Virginia) and is combined with a master’s degree in music education, with the generation of a professional portfolio as a culminating project. Students begin the program with a series of undergraduate courses that are necessary for certification. This block of undergraduate courses ranges from 0 to 20 credits depending on the student’s previous coursework.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUSC 487</td>
<td></td>
<td>2</td>
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<tr>
<td>MUSC 491</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>MUSC 686</td>
<td>Instrumental Methods/Materials</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 687</td>
<td>Choral Music Methods/Materials</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 688</td>
<td>General Music Methods/Materials</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 783</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 784</td>
<td>Intro-Research Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 500 or MUSC 700 Performance</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Advanced seminars*</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

One graduate-level music theory course and one graduate-level music history course ** 5-6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>C&amp;I 491</td>
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<tr>
<td>RDNG 422</td>
<td></td>
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</tr>
<tr>
<td>SPED 500</td>
<td>Legal/Educational Foundations: Spec Ed</td>
<td>3</td>
</tr>
<tr>
<td>SPED 601</td>
<td>Academic Interventions: Spec Needs</td>
<td>3</td>
</tr>
<tr>
<td>EDP 600</td>
<td>Educational Psychology</td>
<td></td>
</tr>
<tr>
<td>EDP 700</td>
<td>Psych Foundations of Learning</td>
<td>2</td>
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</tbody>
</table>

Ensemble (2 semesters) 2
Total Hours 60-61

M.M. Performance Program
MUSC 700 Performance (major performance area) 8
MUSC 771     Music Research & Bibliography 3
MUSC 689     Masters Recital 4
MUSC 689     Masters Recital 2
One graduate-level music theory course and one graduate-level music history course 5-6
Music Electives (no more than four hours in the major performance area) 7-8
Ensembles (2 semesters) 2
Total Hours 31-33

M.M. Conducting Program
MUSC 700 Performance (major performance area) 8
MUSC 771     Music Research & Bibliography 3
MUSC 710     Conducting 3
MUSC 711     Conducting Seminar 3
Select one survey course (major area) (3 credits)  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 631</td>
<td>Survey of Orchestral Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 632</td>
<td>Survey of Wind Music</td>
<td></td>
</tr>
<tr>
<td>MUSC 633</td>
<td>Survey of Vocal Music</td>
<td></td>
</tr>
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</table>

Select one Techniques course (secondary area) (2 credits)  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 780</td>
<td>Choral Techniques</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 781</td>
<td>Instrumental Techniques</td>
<td></td>
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</tbody>
</table>

One 700-level theory course  
One graduate-level music theory or music history course  
Ensemble (2 semesters)  
MUSC 689 Masters Recital  
Total Hours 31-34

**M.M. Piano Pedagogy Program**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 700E</td>
<td>Performance: Piano ((complete 8 hours))</td>
<td>1-4</td>
</tr>
<tr>
<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 689</td>
<td>Masters Recital</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 630</td>
<td>Keyboard Performance &amp; Pedagogy ((complete 6 hours))</td>
<td>1-3</td>
</tr>
<tr>
<td>MUSC course - Pedagogy Project</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

One graduate-level theory course or one graduate-level music history course  
Music Electives  
Ensembles (2 semesters)  
Total Hours 19-26

**M.M. Collaborative Piano Program**

Performance Level 10 required for admission. Undergraduate piano performance or collaborative piano degree required. Jury required at end of first semester (solo/collaborative). Students need to have appropriate amount of Diction at undergraduate level or will be required to register for Diction for every semester in residence.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 700E</td>
<td>Performance: Piano (total of 8 hours)</td>
<td>1-4</td>
</tr>
<tr>
<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 689 Recital (vocal)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUSC 689 Recital (instrumental)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUSC 647</td>
<td>Chamber Music: Piano</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 634</td>
<td>Jazz Performance/Pedagogy (total of 6 hours)</td>
<td>1-3</td>
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</tbody>
</table>

one graduate-level music theory course and one graduate-level music history course  
Music electives (no more than four hours in the major performance area)  
Ensembles (2 semesters)  
Total Hours 24-29

**M.M. Jazz Pedagogy Program**

Prerequisite: Level 9 in the major performance area; piano proficiency (level 3); one year of jazz pedagogy/group or equivalent teaching experience.

**Curriculum Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 700 Performance (major performance area)</td>
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<td>8</td>
</tr>
<tr>
<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 689</td>
<td>Masters Recital</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 634</td>
<td>Jazz Performance/Pedagogy (total of 6 hours)</td>
<td>1-3</td>
</tr>
</tbody>
</table>

One graduate-level music theory course or one graduate-level music history course  
Music Electives  
MUSC 797 Research  
Ensemble (2 semesters)  
Total Hours 24-29

Total Hours 26-30
## M.M. Composition Program

Prerequisite: Piano proficiency (level 4); evaluation of previously completed compositions at a graduate major level.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 660</td>
<td>Composition (total of 6 hours)</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 771</td>
<td>Music Research &amp; Bibliography</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 764</td>
<td>Comp Techniques/Contemp Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 761</td>
<td>Theory Topics</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 762</td>
<td>Pedagogy of Theory</td>
<td>3</td>
</tr>
<tr>
<td>Music Electives (must include of the following):</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>MUSC 465</td>
<td>Course MUSC 465 Not Found</td>
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</tr>
<tr>
<td>MUSC 763</td>
<td>Analytical Techniques</td>
<td></td>
</tr>
<tr>
<td>MUSC 765</td>
<td>Transcription and Arranging</td>
<td></td>
</tr>
<tr>
<td>MUSC 698</td>
<td>Thesis</td>
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## M.M. Music History Program

Prerequisite: Audition on principal instrument; submission of writing sample and GRE Scores; two semesters or equivalent proficiency in one language (French, German, or Italian, or a language pertaining to the thesis topic); four semesters of undergraduate music theory study; three semesters of undergraduate music history study.

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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MUSC 771</td>
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<td>MUSC 670</td>
<td>Perspectives of Music History</td>
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M.M. Music Theory Program

Prerequisite: Level 8 in the major performance area; piano proficiency (level 4); equivalent undergraduate courses of MUSC 461 16th century counterpoint and MUSC 462 18th century counterpoint (MUSC 461 and MUSC 462 will be required if not taken in the undergraduate degree)

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<tr>
<td>MUSC 763</td>
<td>Analytical Techniques</td>
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<td>Comp Techniques/Contemp Music</td>
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<td>MUSC 762</td>
<td>Pedagogy of Theory</td>
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<td>MUSC 761</td>
<td>Theory Topics</td>
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<td>One graduate-level music history course</td>
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The primary objective of the doctor of musical arts degree is the recognition of the highest achievement in music performance and teaching. The principal objective of the degree is to prepare artist-pedagogues for careers in higher education and in the professional world.

The degree may be taken in performance and literature (with specialization in piano, voice, vocal pedagogy, percussion, flute, oboe, clarinet, saxophone, bassoon, horn, trumpet, trombone, tuba, low brass, violin, viola, cello, double bass, conducting) or in composition. Historical and theoretical knowledge sufficient to support individualized interpretations for performers and original creative work for composers is expected, as are writing and speaking skills needed to communicate clearly and effectively. To assist the student in achieving these objectives, the course of study includes requirements in performance or composition, academic coursework, and research.

The doctor of musical arts curriculum in conducting prepares students for careers in higher education and in the professional world. During the program of study, students will study repertoire and technique specific to ensembles in all three major performance areas: wind band, choir, and orchestra. Demonstration of knowledge, skill, expressive fluency, and general conducting competency will be developed through public performance preparation with all three areas; however, most performing will be completed in the student’s primary area of emphasis.

Admission

Acceptance into doctoral programs is competitive. Applicants to the program leading to the D.M.A. must present necessary credentials for evaluation of previous training and experience. These include transcripts showing an average of at least a 3.0 grade point average in a minimum of 28 hours in liberal arts studies, submitted through the WVU Office of Admissions. Copies of programs of recent major recitals, and three letters of recommendation from individuals who are qualified to judge the applicant’s potential success as a graduate student in music must be submitted directly to the director of graduate studies in music. Normally, the admission process also includes an on-campus audition and interview with the faculty of the major performance area. Applicants to the D.M.A. in composition must also submit scores and recordings for review. Applicants who do not meet all of the criteria for regular admission to the D.M.A. degree program may be granted a provisional admission subject to the satisfactory completion of certain specified courses or the attainment of a specified grade point average within a semester’s work.

Applicants for the D.M.A. in conducting must meet language prerequisites: at least 2 years of undergraduate study of one language (French, Italian, German, Spanish), or appropriate undergraduate study in Diction (English, French, Italian, German, Latin). A demonstrated ability to read in a language other than English may be accepted as meeting the prerequisite, at the discretion of the conducting faculty. Students who have not taken the required courses at the undergraduate level may meet the prerequisite by passing a proficiency exam subsequent to admission, or may be directed to take additional language or diction courses to address any deficiencies, as determined by the conducting faculty, and as appropriate to the expectations of the degree.

Audition Requirements

Have a complete résumé and prepared list of your completed repertoire in hand for examination by the Audition Committee. On this list, using asterisks indicate those numbers that you have performed from memory. Auditions are approximately 60 minutes of performance. Live auditions are strongly recommended, but tapes or other recorded formats can be considered when travel distance poses a hardship.

The following repertoire guidelines are intended to be flexible and to encourage diversity of individual interests, but they also provide a sense of expected scope. Offering repertoire from all the categories listed below is not mandatory at your audition, but you should certainly choose a program that contains stylistic variety and represents your own strengths. Works customarily performed from memory in public recitals should be performed from memory at your audition.

Percussion

- Keyboard
1. Major contemporary marimba work
2. Solo violin work (one movement) from J.S. Bach Sonatas and Partitas
3. Vibraphone solo of any style
4. Perform six orchestral excerpts (xylophone and glockenspiel)

• Snare Drum
  1. Solo or etude from the advanced classical repertoire
  2. Solo or etude from the advanced rudimental repertoire
  3. Three orchestral excerpts

• Drumset
  1. Perform at least four varying styles
  2. World percussion (optional) (Possibilities include steel drums, African drumming, taiko, etc.)

• Multi-media
  1. Video recording of last solo percussion recital that includes multiple percussion and chamber music (if possible).

**Piano**

- A major Baroque work, such as a group of Scarlatti sonatas, a suite by Bach, or one or more preludes and fugues from the well-tempered Clavier.
- A complete sonata, variation set, or similar work by Beethoven or another classical composer.
- A major Romantic or Impressionist work.
- Another work of your choice, preferably a major composition (or several shorter pieces) representative of twentieth-century style.

**Voice**

Have a prepared list of your previous vocal teachers and vocal coaches and a precise statement of your present language background; foreign language study, diction, phonetics, etc.

1. An Aria from an Oratorio: Handel, Haydn, or Mendelssohn.
2. One selection of your own; preferably a major operatic aria.
3. At least two selections from each of the four language categories:
   - Italian - 17th and 18th century, Aria by Mozart, 19th and 20th century opera
   - German - An Aria by Bach, Lieder: Mozart, Schubert, Schumann, Brahms, Wolf, Mahler, Strauss
   - French - Art Songs: Debussy, Ravel, Faure, Poulenc
   - English - Early Songs: Purcell or Arne, Contemporary American and British songs: such as Britten, Menotti, or Floyd

**Strings**

Audition repertoire for the D.M.A. in music performance should be chosen to demonstrate the applicant’s current level of achievement. Early in the application process potential students should contact the major teacher in the area and discuss audition repertoire possibilities. Suggested repertoire could include a concerto, sonata, show piece, solo Bach, and for the double bass three major orchestral excerpts.

**Woodwinds, Brass**

Audition repertoire for the D.M.A. in music performance should be chosen that allows the applicants to demonstrate their current level of achievement. Early in the application process potential students should contact the major teacher in their area and discuss audition repertoire possibilities.

**Conducting**

An on-campus audition with the WVU Wind Symphony, University Choir, or Symphony Orchestra is preferred, although video recorded auditions are allowed when great distance precludes a visit to campus. The student is encouraged to audition in his/her strongest performance area: wind band, choir, or orchestra. Further audition requirements are as follows:

1. The applicant will perform a conducting audition with an appropriate WVU ensemble which will consist of 20–30 minutes of rehearsal of repertoire to be assigned at least two weeks in advance by the appropriate conducting faculty.
2. The applicant will perform an audition on his/her major instrument or voice before appropriate music faculty. Those who have been away from solo performance for a period of several years may offer evidence of past proficiency (e.g. recital programs, letters, reviews, video or audio recording, etc.)
3. Knowledge of literature and techniques appropriate to the applicant's desired area of emphasis will be assessed by appropriate faculty.
4. Applicants desiring a choral emphasis will also be asked to demonstrate knowledge of appropriate vocal pedagogy within the choral rehearsal, as well as appropriate piano skills.

Curriculum
The exact amount and nature of coursework undertaken will be determined by the student’s advisor with the approval of the Committee on Graduate Studies in light of previous preparation and field of specialization. A paradigm detailing recommended courses and other requirements is available upon request.

Candidacy
Upon completion of the requirements of the School of Music and the general WVU graduate studies requirements, the student will be recommended for admission to candidacy for the degree. These requirements are (in order of occurrence):

1. Pass written qualifying examinations satisfactorily to show:
   • Broad knowledge in music theory and music history and literature
   • In-depth knowledge of the literature of the field of specialization or of the craft of composition.
2. Satisfactorily pass a comprehensive oral qualifying examination.

The qualifying examinations shall be considered one integral examination consisting of written and oral parts. If the first attempt is unsuccessful, the student is allowed to try the entire examination a second time. The second attempt will be considered final. The applicant’s committee may elect to discourage a second attempt if the first does not indicate probable success upon repetition. Graduate students who have met these requirements and who have maintained a minimum average of B (3.0) in courses completed shall be admitted to candidacy.

Residency Requirements
Completion of the requirements for this degree normally requires at least three years of full-time graduate work. A minimum of two consecutive semesters must be spent in full-time graduate study at WVU beyond the master’s degree or its equivalent.

Academic Requirements
• Academic requirements include courses in music theory, music history, and music literature.
• Academic requirements for the D.M.A. in vocal pedagogy will also include courses in vocal pedagogy, voice pathology, and voice acoustics/teaching technology.

Performance Requirements (for D.M.A. in Performance)
Performance requirements include private lessons, master classes in applied repertory, and public performance of at least two solo recitals and other types of presentations appropriate for the preparation of an artist-teacher, such as chamber music programs, concerto performances, lecture recitals, major roles in opera oratorio, musical theater, or major accompaniments. Credit for each public performance is determined in advance, during the first semester of study, along with the establishment of the student’s Doctoral Committee. A performance prospectus indicating projected performance repertoire is prepared by the student in consultation with his/her committee and the major ensemble directors, as appropriate.

Composition Requirements (for D.M.A. in Composition)
Composition requirements include private lessons and the creation of a composition portfolio. The student will be encouraged by the major professor to compose works in a timely manner in a wide variety of genres from which can be drawn a select number of pieces for the portfolio. The comprehensive examination determines the admission to candidacy and is normally taken after the successful completion of required coursework in music theory and music history. Work on the major project and research document normally will commence only after admission to candidacy. The candidate will submit to his/her Doctoral Committee for approval a prospectus for the portfolio to include the proposed major work, the proposed research document, and the other compositions with proposed credit weighting for each.

Research Requirements (for all D.M.A. programs)
Research requirements are intended to develop theoretical and historical investigative techniques sufficient to enable the performer to form valid individualized interpretations and to assist the composer in developing an original style. These requirements consist of the course Music Research and Bibliography (MUSC 771), for composers a doctoral seminar, and for all students a research project culminating in an extended written study related to the student’s area, although not necessarily constituting original research. This project will be supervised by an approved graduate faculty member who is a member of the student’s Doctoral Committee in consultation with the entire Doctoral Committee.
Final Examination
For performers, the final examination will consist of a major solo recital (which will be regarded as the equivalent of the Ph.D. dissertation defense). Immediately following the public performance, the candidate’s committee will meet to evaluate the performance as evidence of mature musicianship and finished technique. The final recital will not occur in the same semester as the qualifying examination.

For composers, when all compositions and the major project have been approved and all other requirements have been fulfilled, the candidate’s Doctoral Committee will administer the final oral examination. At the option of the committee, a written examination may also be required. The final examination(s) shall be concerned with the compositions, the major project, and the candidate’s grasp of the field of specialization and its relation to other fields. The final examination will not be given in the same semester as the qualifying examination.

Time Limitation
Following admission to candidacy, doctoral students are allowed five years to complete all remaining degree requirements. An extension of time may be permitted only upon repetition of the qualifying examination and completion of any other requirements specified by the student’s Doctoral Committee.

Doctor of Philosophy in Music Education
The doctor of philosophy curriculum in music education prepares students for careers as teachers and researchers in higher education. A main purpose of the program is to develop skilled and knowledgeable professionals who will challenge the present and enrich the future with significant contributions to the field through teaching, research, and service. Acceptance into the doctoral program is competitive. A prospective doctoral student in music education is required to have completed appropriate undergraduate and master’s degrees in music or their equivalent at institutions of recognized standing. Also, an applicant must provide evidence of excellence in teaching and musicianship demonstrated during at least three years of successful, full-time contractual K-12 music teaching. Applicants to the program leading to the doctor of philosophy must present necessary credentials for evaluation of previous training and experience to the School of Music. These include transcripts showing at least a 3.0 grade point average in a minimum of 28 hours in liberal arts studies, submitted through the WVU Office of Admissions. The following items must be submitted directly to the Director of Graduate Studies in music:

1. An essay describing and discussing your training, experiences, present interests, and career aspirations in the field of music education.
2. A current résumé.
3. A video recording of teaching, preferably a K-12 music class or rehearsal. Please submit a detailed lesson plan for each class or rehearsal presented on your video of teaching. When the application for music education is complete, it will be reviewed by the music education faculty. If this review is favorable, a representative of the music education faculty will contact the applicant to schedule an entrance interview and possible audition.

Applicants who do not meet all of the criteria for regular admission to the Ph.D. degree program may be granted a provisional admission subject to the satisfactory completion of certain specified courses or the attainment of a specified grade point average within a semester’s work.

Coursework

Music Education Courses

Other Required Courses: (11–12 credits) Music History, Music Theory/Composition, Statistics, Educational Psychology

Cognate Courses (12 credits total, nine credits in same discipline)
Anthropology, applied music, art history, audiology, computer science, curriculum and instruction, educational administration, educational foundations, educational psychology, elementary education, foreign language, history, literature, music history, music theory/composition, philosophy, physics, psychology, secondary education, sociology, special education, statistics, theatre.

Elective Courses (eight to nine credits)
Selected at the discretion of the student in conjunction with an academic advisor.

Examinations

Written Qualifying
Each student must demonstrate the following areas of knowledge:
• A broad knowledge in the fields of music history and music theory.
• Appropriate knowledge in the cognate field.
• In-depth knowledge in the field of music education.

Oral Qualifying
The student’s Doctoral Committee will administer a comprehensive oral examination integral with the written examinations; passage of all is the basis for formal admission to candidacy.

Candidacy
Upon completion of the requirements of the School of Music and the general WVU graduate studies requirements, the student will be recommended for admission to candidacy for the degree. These requirements are (in order of occurrence):

1. Complete all coursework.
2. Complete a major project from a graduate music education seminar. This project should be appropriately refined and presented publicly under the supervision of a member of the graduate music education faculty. A concise written proposal articulating the scope and context of the project and the nature of its intended forum must be submitted to the graduate music education faculty for consensus approval.
3. Pass written qualifying examinations demonstrating:
   A. Broad knowledge in music history and music theory.
   B. Appropriate knowledge in the cognate field (usually integrated into the music education exam.)
   C. In-depth knowledge in the field of music education.
4. Pass a comprehensive oral qualifying examination.

The qualifying examinations shall be considered as one integral examination consisting of the written and oral parts. If the first attempt is unsuccessful, the student is allowed to try the entire examination a second time. The second attempt will be considered final. The applicant’s committee may elect to discourage a second attempt if the first does not indicate probable success upon repetition.

Dissertation Prospectus
1. The requirement for doctoral seminars must be completed before the presentation of the dissertation prospectus.
2. The prospectus must include the following: table of contents, introduction, statement of purpose, research hypothesis, summary of related literature, specifics of methodology, research design, data collection process, analysis procedures, appendices, comprehensive bibliography.

Dissertation
The candidate must submit a dissertation produced at WVU under the direction of a major professor that demonstrates a high order of independent scholarship, originality, and competence in research and that makes an original contribution to the field of specialization.

After the dissertation has been approved and all other requirements have been fulfilled, the candidate’s Doctoral Committee will administer the final oral examination. However, a final examination will not be given in the same semester as the qualifying examination. At the option of the student’s committee, a final written examination may also be required. The final examination(s) shall be concerned with the dissertation, its contribution to knowledge, its relation to other fields, and the candidate’s grasp of the field of specialization.

Residence Requirements
Completion of the requirements for this degree normally requires at least three years of full-time graduate work. A minimum of two consecutive semesters must be spent in residence in full-time graduate study at WVU beyond the master’s degree or its equivalent.

Time Limitation
Following admission to candidacy, Ph.D. students are allowed five years to complete all remaining degree requirements. An extension of time may be permitted only upon repetition of the qualifying examination and completion of any other requirements specified by the student’s Doctoral Committee.

Faculty
School of Music Director
• H. Keith Jackson
Director of Graduate Studies

- Cynthia Babin Anderson

Professors

- Peter Amstutz - D.M.A. (Peabody Cons.)
  Coordinator, Keyboard Instruments, Piano.
  Status: Regular
- John Beall - Ph.D. (U. of Rochester, Eastman Sch. of Music)
  Composition, Theory.
  Status: Regular
- James W. Benner
  Emeritus
- Thomas S. Brown
  Emeritus
- Philip J. Faini
  Emeritus
- William P. Haller - D.M.A. (N. Tx. St. U.)
  F.A.G.O. Organ, Theory.
  Status: Regular
- Barton Hudson
  Emeritus
- Leo Horacek, Jr.
  Emeritus
  Chair, Division of Music, Trombone, Euphonium, Jazz, Chamber music.
  Status: Regular
- Christine B. Kefferstan - D.M.A. (U. of Cincinnati)
  Piano.
  Status: Regular
- Gerald Lefkoff
  Emeritus
- James E. Mittenberger - D.M.A. (Eastman Sch. of Music)
  Piano, Piano repertoire, Jazz.
  Status: Regular
- Janet Robbins - Ph.D. (Ohio St. U.)
  General music education.
  Status: Regular
- William Skidmore - M.M. (U. Ill.)
  Coordinator of strings, Cello, Chamber music.
  Status: Regular
- Mike Sturm - Emeritus
- Robert H. Thieme Jr. - M.M. (WVU)
  Director, WVU opera theatre, Opera, Vocal repertoire, Accompanying- coaching.
  Status: Regular
- Virginia Thompson - D.M.A. (U. Iowa)
  Horn, Chamber music.
  Status: Regular
- Gilbert Trythall
  Emeritus
- Molly Weaver - Ph.D. (U. Mich.)
  Coordinator, Music Education, instrumental music education
  Status: Regular
- John F. Weigand - D.M.A. ( Fla. St. U.)
  Clarinet, Chamber music.
  Status: Regular
- Don G. Wilcox - M.A. (Cal. St. at Long Beach)
  Director of bands emeritus.
Christopher Wilkinson - Ph.D. (Rutgers U.)
Musicology, African-American music.
Status: Regular

Assistant vice president for faculty development, Musicology, Nineteenth century music, Orchestration.
Status: Associate

John Winkler - D. Mus. (Northwestern U.)
Coordinator, Brass instruments, Trumpet, Chamber music.
Status: Regular

Associate Professor

Cynthia Babin Anderson - M.M. (Manhattan Sch.)
Director of Graduate Studies, Oboe, Theory.
Status: Regular

Mitchell Arnold - D.M.A. (Northwestern U.)
Director of Orchestra Studies.
Status: Regular

David Bess - Ph.D. (WVU)
Instrumental music education.
Joyce A. Catalfano
Emeritus

Rose M. Crain
Emeritus

John E. Crotty - Ph.D. (Eastman Sch. of Music)
Theory, Analysis.
Status: Associate

Mary Ferer - Ph.D. (U. of Ill.)
Coordinator, Music history, Music history.
Status: Regular

John Hendricks - M.M. (WVU)
Director of Bands, Conducting, Undergraduate Advising Coordinator.
Status: Regular

Andrew Kohn - Ph.D. (U. of Pitt.)
Double bass, Theory.
Status: Regular

Mikylah McTeer - D.M.A (U. of Houston Moores School of Music)
Violin, string pedagogy
Status: Regular

Paul Scea - M.M. (U. of Iowa)
Theory, Jazz, Director of Jazz Studies.
Status: Regular

June D. Swartwout
Emeritus

David Taddie - Ph.D. (Harvard)
Theory, Director of electronic music, Coordinator, Theory composition.
Status: Regular

George Willis - M.M. (Temple University)
Director of Percussion
Status: Regular

Assistant Professor

Nina Assimakopoulos
Flute, chamber music

Dearl J. Drury - W.V.U.
Marching band, Varsity band, Concert band

Lynn Hileman - D.M.A. (Eastman Sch. of Music)
Bassoon, Theory.
Status: Regular
• Michael Ibrahim  
  Saxophone, chamber music  
• Hope Koehler - D.M.A. (U. Ky.)  
  Voice.  
  Status: Regular  
• Lucy Mauro - D.M.A. (Peabody Conservatory)  
  Piano, Piano pedagogy.  
  Status: Regular  
• Nicholas Perna  
  Voice  
  Status: Regular  
• Jeffrey Redding  
  Director of Choral Activities  
• Sandra Schwartz - Ph.D. (U. of Miami)  
  Vocal music education.  
  Status: Regular  
• Michael Vercelli  
  Director of World Music Performance Center  
  Status: Regular

Lecturers
• Scott Elliott  
  Guitar  
• Jeanne Frieben  
  Clarinet  
• Janna L. Kisner  
  Music education  
• William Koehler  
  Voice  
• Diana B. Love  
  Music education  
• David P. McCollum - M.M. (Duquesne U.)  
  Tuba.  
  Status: Associate  
• Brian Plitnik  
  Trombone, chamber music  
• Mandy Spivak  
  Voice  
• Albert J. Wrublesky - M.M. (WVU)  
  Percussion.  
  Status: Associate  
• Renee Wyatt  
  Music education

School of Theatre & Dance

e-mail: theatre@mail.wvu.edu

Degree Offered
• Master of Fine Arts Theatre  
  • Acting Emphasis  
  • Scene Design & Technology Emphasis  
  • Costume Design & Technology Emphasis  
  • Lighting Design & Technology Emphasis
The School of Theatre & Dance at WVU offers the master of fine arts as the terminal degree in acting and theatre design (scene, costume, and lighting). The program is fully accredited by the National Association of Schools of Theatre (NAST).

**Admission**

Prospective candidates for the degree of master of fine arts in theatre must have a B.A. or B.F.A. degree or equivalent from an accredited institution. Ordinarily, a minimum of 30 semester hours in theatre at the undergraduate level is expected to have been completed with a grade point average of no less than 2.75, although students with an undergraduate grade point average of 2.25 to 2.75 may be admitted with probationary status.

**Auditions**

Applicants must audition/interview. Applicants intending to specialize in acting must submit a complete resumé of their acting experience, at least two letters of recommendation from acting coaches or directors, and must present an audition before at least one member of the acting faculty. Those intending to specialize in design must submit a complete portfolio of their work, a resumé of their design experience, and at least two letters of recommendation from design instructors or directors. An interview with members of the design faculty is also required.

For further details regarding these requirements, address inquiries to:

School of Theatre & Dance  
West Virginia University  
P.O. Box 6111  
Morgantown, WV 26506-611  
or visit theatre.wvu.edu.

or call 304-293-2020

**Advanced Standing**

Students may be eligible for 18 hours of graduate transfer credit for advanced standing if they meet the regular requirements of graduate admission. Students admitted with advanced standing are required to be in residence at WVU for a minimum of two semesters and a summer session. The request for advanced standing should be made to the division chairperson at the time of application.

**Master of Fine Arts Degree Programs**

For the master of fine arts degree, students must complete requirements for one of the following two programs.

**Acting**

The M.F.A. acting program is an intensive three-year course of study designed to train students for the professional theatre world and its related fields including teaching pedagogy. The program offers conservatory-style actor training in all aspects of acting, voice/speech, and movement. In addition to the studio program, students are required to complete coursework in theatre history, text analysis, criticism, and research methods.

Graduation from the program is contingent upon completion of the following:

- Three years of graduate courses and production work totaling at least 66 designated credit hours and three elective graduate credits.
- A final thesis project including both a performance of a significant role or roles and a thesis paper exploring aspects of the creation and performance of this role.
- Oral defense of this thesis.
- A successful evaluation at the end of each semester of study.
- An overall grade point average of 3.0.

**Design**

The M.F.A. design program is an intense three-year course of study for students seeking professional preparation in scenic, costume, or lighting design.

Studio design courses, together with fully realized production experience offer expectations found in the real world.

- Three years of graduate courses and production work totaling at least 64 designated credit hours.
- A production or research thesis.
- Oral defense of the thesis project.
- A successful evaluation at the end of each semester of study.
- An overall grade point average of 3.0.
M.F.A. in Acting Suggested Program

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<td>THET course - Early Modern Theatre</td>
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<th>Second Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<td>THET 694 Seminar (subject matter changes)</td>
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<th>Fall</th>
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<th>Spring</th>
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<td>THET 600</td>
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<td>THET 698</td>
<td>3</td>
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<td>THET 740</td>
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<td>THET 600</td>
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<td>THET 750</td>
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<td>THET 751</td>
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<td>THET 650</td>
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<td>Select one of the following:</td>
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</table>

Total credit hours: 61

M.F.A. Scene Design Suggested Program

| Theatre Studies | THET 610 | Research Methods | 3 |
| THET 627 | Graduate Costume & Decor 1 | 3 |
| THET 628 | Graduate Costume & Decor 2 | 3 |
| THET 697 | Research | 3 |
| THET 698 | Thesis | 3 |

| Theatre Performance Design | THET 424 | Course THET 424 Not Found | 3 |
| THET 623 | Advanced Graduate Scene Design | 3 |
| THET 428 | Course THET 428 Not Found | 3 |
| THET 623 | Advanced Graduate Scene Design | 3 |
| THET 520 | Principles of Stage Lighting | 2 |
| THET 629 | Graduate CAD Seminar | 3 |
| THET 631 | Graduate Drafting for Stage | 3 |
| THET 630 | Graduate Rendering Techniques | 3 |
| THET 622 | Graduate Scene Design | 3 |
| THET 725 | Portfolio Development | 1 |

| Practicum | Five 600 Practicum | 5 |

| Theatre Electives | Five Theatre Electives | 15 |

Total Hours | 62 |
## M.F.A. in Costume Design Suggested Program

**Theatre Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
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<tr>
<td>THET 610</td>
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<tr>
<td>THET 697</td>
<td>Research</td>
<td>3</td>
</tr>
<tr>
<td>THET 627</td>
<td>Graduate Costume &amp; Decor 1</td>
<td>3</td>
</tr>
<tr>
<td>THET 698</td>
<td>Thesis</td>
<td>3</td>
</tr>
<tr>
<td>THET 628</td>
<td>Graduate Costume &amp; Decor 2</td>
<td>3</td>
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**Theatre Design and Technology**

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<td>THET 624</td>
<td>Graduate Costume Design 1</td>
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<td>THET 626</td>
<td>Graduate Costume Design 2</td>
<td>3</td>
</tr>
<tr>
<td>THET 520</td>
<td>Principles of Stage Lighting</td>
<td>2</td>
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<td>THET 626</td>
<td>Graduate Costume Design 2</td>
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<td>THET 621</td>
<td>Graduate Theatre Make-up</td>
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<td>THET 630</td>
<td>Graduate Rendering Techniques</td>
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<td>THET 622</td>
<td>Graduate Scene Design</td>
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</tr>
<tr>
<td>THET 725</td>
<td>Portfolio Development</td>
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</tbody>
</table>

**Practicum**

Four 600 Practicums 4

**Electives**

Four Theatre Electives 12

**Total Hours** 57

* Out of the 12 elective – one must be an art elective

## M.F.A. in Lighting Design Suggested Program

**Theatre Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>THET 610</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>THET 627</td>
<td>Graduate Costume &amp; Decor 1</td>
<td>3</td>
</tr>
<tr>
<td>THET 628</td>
<td>Graduate Costume &amp; Decor 2</td>
<td>3</td>
</tr>
<tr>
<td>THET 697</td>
<td>Research</td>
<td>3</td>
</tr>
<tr>
<td>THET 698</td>
<td>Thesis</td>
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<tr>
<td>THET 698</td>
<td>Thesis</td>
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**Theatre Performance/Design**

<table>
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<tr>
<th>Course</th>
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<td>Course THET 427 Not Found</td>
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<tr>
<td>THET 520</td>
<td>Principles of Stage Lighting</td>
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<tr>
<td>THET 613</td>
<td>Stage Management</td>
<td>3</td>
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<tr>
<td>THET 622</td>
<td>Graduate Scene Design</td>
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<td>THET 630</td>
<td>Graduate Rendering Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THET 625</td>
<td>Graduate Lighting Design</td>
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<tr>
<td>THET 625</td>
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<tr>
<td>THET 629</td>
<td>Graduate CAD Seminar</td>
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<td>THET 631</td>
<td>Graduate Drafting for Stage</td>
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</tr>
<tr>
<td>THET 725</td>
<td>Portfolio Development</td>
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</table>

**Practicum**

Four 600 Practicums 4

**Electives**

Four Theatre Electives 12

**Total Hours** 61

Possible electives: Sound Seminar
Faculty

Director

• Joshua Blackmer Williamson - M.F.A. (U. of Wisc.-Madison)

Professors

• Jerry McGonigle - M.F.A. (American Conservatory Theatre)
  Acting & Directing
  Status: Regular

• Joann Spencer Siegrist - M.F.A. (U. Ga.)
  Puppetry and creative drama.
  Status: Regular

Associate Professor

• Jessica Morgan Bishop - M.F.A. (Ohio St. U.)
  Stage movement.
  Status: Regular

• James Dylan Held - M.F.A. (U. Wash.)
  Theatre history and design.
  Status: Regular

• Laura Hitt - M.A. (Brown U.)
  Voice and speech.
  Status: Regular

• Robert Klingelhofer
  Scene Design
  Status: Regular

• Jay Malarcher - Ph.D. (LSU)
  Theatre history and criticism.
  Status: Regular

• Mary McClung - M.F.A. (WVU)
  Director of costuming, Costume design.
  Status: Associate

• Linda D. Milian - M.F.A. (Rutgers U.)
  Costuming.
  Status: Associate

• William J. Winsor - M.F.A. (Ohio St. U.)
  Associate Dean and Scene design.
  Status: Associate

• Joshua Blackmer Williamson - M.F.A. (U. of Wisc.-Madison)
  Director, Lighting and sound design.
  Status: Regular

Assistant professor

• Lee Blair - M.F.A. (U. Fla.)
  Acting
  Status: Associate

Clinical Assistant Professor

• Alan McEwen - M.F.A. (U. of Ore.)
  Lighting & Sound Design
  Status: Associate

• Steven Neuenschwander - M.F.A. (Yale U.)
  Production Management & Technical Direction
  Status: Associate
Benjamin M. Statler College of Engineering and Mineral Resources

e-mail: cemr-info@cemr.wvu.edu

Degrees Offered

- Aerospace Engineering: Master of Science and Doctor of Philosophy
- Chemical Engineering: Master of Science and Doctor of Philosophy
- Civil Engineering: Master of Science and Doctor of Philosophy
- Computer Engineering: Doctor of Philosophy
- Computer Science: Master of Science
- Computer and Information Science: Doctor of Philosophy
- Electrical Engineering: Master of Science and Doctor of Philosophy
- Engineering: Master of Science
- Industrial Engineering: Master of Science and Doctor of Philosophy
- Industrial Hygiene: Master of Science
- Mechanical Engineering: Master of Science and Doctor of Philosophy
- Mining Engineering: Master of Science and Doctor of Philosophy
- Occupational Safety and Health: Doctor of Philosophy
- Petroleum and Natural Gas Engineering: Master of Science and Doctor of Philosophy
- Safety Management: Master of Science
- Software Engineering: Master of Science

The Benjamin M. Statler College of Engineering and Mineral Resources (Statler College) graduate programs are administered through the Departments of Chemical Engineering, Civil and Environmental Engineering, the Lane Department of Computer Science and Electrical Engineering, Industrial and Management Systems Engineering, Mechanical and Aerospace Engineering, Mining Engineering, and Petroleum and Natural Gas Engineering.

The facilities are housed on the Evansdale campus in three buildings: the Engineering Sciences Building, the Mineral Resources Building, and the Engineering Research Building. These buildings house state-of-the-art research facilities, well-equipped teaching laboratories, classrooms, and offices for the faculty and administration of the graduate programs and Mining and Industrial Extension.

The college offers a doctor of philosophy in most disciplines. The Ph.D. program prepares graduates for leadership in industrial, governmental, or academic fields. The areas of specialization in engineering are aerospace, chemical, civil, computer, electrical, industrial, mechanical, mining, and petroleum and natural gas engineering. In addition, the college offers a Ph.D. in computer science and a Ph.D. in occupational safety and health.

Designated master’s degrees are offered in aerospace, chemical, civil, electrical, industrial, mechanical, mining, petroleum and natural gas engineering, software engineering, and computer science. A master of science in engineering (M.S.E.) degree is offered to qualified students as determined at the departmental level. The college offers two accredited master of science degrees in industrial hygiene, and in safety management. These programs are accredited by the Applied Science Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Currently the college offers graduate certificate programs in computer forensics, information assurance and biometrics, and software engineering. For specific information about a program, students should review research and graduate studies (http://www.cemr.wvu.edu) information of the college website.

Special Requirements

A student desiring to take courses for graduate credit in the college must comply with the appropriate University regulations for graduate study. To become enrolled in a Statler College graduate program, a student must apply for admission through the Office of Admissions to the department housing the student’s choice of major. Acceptance will depend upon review of the student’s academic background and available facilities in the major program’s department.

An applicant with a baccalaureate degree, or its equivalent, from a program accredited by the Accreditation Board for Engineering and Technology (ABET), Computer Science Accreditation Board (CSAB), or an internationally recognized program in engineering or computer science will be admitted on the same basis as engineering or computer science graduates of WVU. Lacking these qualifications, an applicant must first fulfill any special requirements of the department in which the student is seeking an advanced degree.
No credits which are reported with a grade lower than C are acceptable toward an advanced degree. To qualify for an advanced degree, the graduate student must have a grade point average of at least 3.0 based on all courses acceptable for graduate credit for which the student has received a grade from WVU. Graduate students in the college must also comply with the regulations of their major department.

Individual Departments may establish more stringent requirements than those adopted for (Statler College) as a whole. These departmental requirements are contained in the individual program sections of the graduate catalog.

Course Load
A full-time graduate student must register for at least nine, but no more than 15, credit hours during each regular semester, or at least six, but no more than 12, credit hours in the summer session. Permission to carry a heavier load must be obtained in writing from the dean.

Master’s Program
For all master’s degree students, an Advisory and Examining Committee consisting of at least three faculty members will be appointed. A plan of study must be jointly prepared and approved by the student and all members of the student’s Advisory and Examining Committee, the department chair, and the dean or dean’s designate, either at the end of the second semester of the student’s attendance or at the completion of the 12th course credit hour, whichever is later. The college is authorized to grant master’s degrees under each of the following three options:

- Thesis Option – This option requires a minimum of 24 credit hours of coursework and at least six credit hours of research leading to the thesis.
- Problem Report Option – This option requires a minimum of 30 credit hours of coursework and at least three credit hours of a research or design project leading to a formal written report.
- Coursework Option – This option requires a minimum of 33 credit hours of coursework. There are two ways this option is implemented. First, although rarely permitted, this option is open to students who have practical engineering experience and/or have demonstrated an ability to organize and develop a project and write a technical report. Approval to pursue this option must be obtained from the student’s Advisory and Examining Committee (AEC), the graduate program coordinator, and the department chair. Second, a department can choose to offer students within a designated program the coursework only option. Normally, for each option the coursework required is greater than that required for a student doing a thesis or problem report. In addition, the Department must require successful completion of a written or oral comprehensive examination.

For complete details about admission criteria and other governance details of the master’s of science programs please refer to the Guidelines for Master’s of Science Programs which can be found on the college’s home page.

Application for Transfer of Graduate Credit
A student wishing to apply graduate credit earned at another institution to a master’s degree at WVU must complete an application for transfer of graduate credit to WVU and have an official transcript submitted to the WVU Office of Admissions from the external institution. A maximum of 12 semester hours from other institutions may be acceptable for credit at WVU in master’s degree programs in (Statler College). Departmental programs may choose to accept fewer transfer credit hours with the restriction that only courses with grades of A or B may be considered for transfer.

Advisory Committee
The student, research advisor, academic advisor, and department chairperson appoint the student’s Advisory and Examining Committee (AEC). For the masters program, each committee must consist of at least three members. The specific makeup of the master’s AEC is described in the college’s Guidelines for Master’s of Science Programs.

Plan of Study
At the end of the second semester of a student’s attendance, or at the completion of the twelfth credit hour the student, with the advice and consent of the student’s academic advisor, graduate coordinator, and members of the student’s Advisory and Examining Committee, will submit a plan of study, initiated in the student’s department, to the dean or dean’s designee.

Time To Completion
All requirements for the master’s degree must be completed within eight years preceding the student’s graduation.

Doctor of Philosophy
Admission as a graduate student is required of all applicants for admission to a program of study and research leading to the Ph.D. degree. To be eligible for admission into a doctorate of engineering program, a candidate is expected to hold or to receive by time of enrollment a B.S. or an M.S. degree in:
• Some discipline of engineering from an institution which has an ABET-accredited program in that discipline or which has an internationally recognized program in engineering/mineral resources,
• Mathematics and physical sciences (as specified by individual programs)

To be eligible for admission into the computer sciences and information doctoral program, a candidate is expected to hold a B.S. or an M.S. degree in:
• Computer science
• Engineering
• Mathematics and physical sciences (as specified by the program)

To be eligible for admission into the occupational safety and health doctoral program, a candidate is expected to hold a B.S. or an M.S. degree in:
• Industrial hygiene
• Safety
• Engineering
• Mathematics and physical and life sciences (as specified by the program)

Although a bachelor’s degree is the minimum requirement, applicants are normally encouraged to hold a master’s degree in a relevant discipline. Admission to graduate study does not necessarily assure entrance into a (Statler College) doctoral program.

For complete details about admission criteria and other governance details of the doctor of philosophy programs please refer to the Guidelines for Doctor of Philosophy Programs which can be found on the college’s home page.

Application for Transfer of Graduate Credit

A student wishing to apply credit earned at another institution to a doctoral degree program at WVU must submit an application for transfer of graduate credit to WVU and have an official transcript from the institution forwarded to the WVU Office of Admissions. The approval of transfer credit is at the discretion of the student’s Advisory and Examining Committee with the restriction that only courses with grades of A or B may be considered for transfer.

Advisory Committee

The student, research advisor, academic advisor, and department chairperson appoint the student’s Advisory and Examining Committee. For the Ph.D. program, each committee must consist of at least five members—at least three, including the chairperson, from the student’s major department and at least one from another discipline related to the student’s area of interest. The specific makeup of the Ph.D. AEC is described in the college’s Guidelines for Doctoral Programs.

Plan of Study

At the end of the second semester of a student’s attendance or at the completion of the 12th credit hour the student, with the advice and consent of the student’s academic advisor, graduate coordinator, and members of the student’s Advisory and Examining Committee, will submit a plan of study, initiated in the student’s department, to the dean or dean’s designee. Some Departments may require that a preliminary dissertation research proposal be submitted along with the plan of study.

Candidacy Examination

After admission to the program and after the residence requirements are met, the applicant will take a candidacy examination in which the student must demonstrate: (a) a grasp of the important phases and problems of the field of study and an appreciation of their relation to other fields of human knowledge and accomplishments, and (b) the ability to employ the instruments of research developed in the student’s area of interest. When an applicant has passed the candidacy examination, the student will be formally admitted to candidacy for the doctoral degree. A student will have only one opportunity for reexamination. Some programs may require a student to successfully pass a qualifying examination before taking the candidacy examination.

Credit Requirements

The doctor of philosophy degree is not awarded solely on the basis of the accumulation of course credits and completion of a definite residence requirement. The amount and nature of the coursework undertaken by a doctoral student will be established for each individual student with the objective of ensuring a reasonable and coherent progression of academic development beyond the baccalaureate and/or master’s degree.
Faculty
Dean
• Eugene V. Cilento - Ph.D.

Associate Dean for Academic Affairs
• Warren R. Myers - Ph.D.

Associate Dean for Administration
• Royce J. Watts - M.S.

Associate Dean for Research
• Pradeep

Department of Chemical Engineering
E-mail: rakesh.gupta@mail.wvu.edu

Degrees Offered
• Master of Science in Chemical Engineering
• Master of Science in Engineering with a major in Chemical Engineering
• Doctor of Philosophy with a major in Chemical Engineering

The Department of Chemical Engineering, with 14 active tenure-track faculty members, approximately 130 undergraduates, and 30-40 graduate students, has one of the oldest doctoral-granting programs in the University. From the initial doctoral degree in 1932, the graduate course program has been based on advanced chemical engineering fundamentals, while the research program has reflected a balance of fundamental research areas and their application to relevant technological areas such as biomedical, bioengineering, catalysis, coal conversion, energy, fuels, materials, polymer processing, systems control, and dynamic simulation.

The outcomes of the graduate programs in chemical engineering are:
• Holders of graduate degrees will understand the advanced principles of chemical engineering, which include reaction engineering, transport phenomena, and thermodynamics.
• Holders of graduate degrees will have an expert-level understanding of the background and theory/principles of their research topics.
• Holders of Ph.D. degrees will be able to initiate research ideas in order to solve specific problems and to write research proposals on these ideas.
• Holders of Ph.D. degrees will have furthered a novel research idea.
• Holders of graduate degrees will be able to plan research projects, to perform the tasks, and to draw conclusions based on sound scientific and engineering principles.
• Holders of graduate degrees will be able to write technical articles for publication in refereed journals and to make oral and poster presentations at technical meetings.
• Holders of graduate degrees will demonstrate initiative in research planning and management, including safety and environmental issues.
• Holders of graduate degrees will be technically prepared for a lifetime of continuing education.
• Holders of graduate degrees will understand professional and ethical responsibilities.

Faculty Research Areas
Chemical engineering faculty are presently involved in a broad spectrum of research areas which include biomedical and biochemical engineering, systems biology, cancer, bionanotechnology, biomaterials, stem cell technology, dynamic simulation, control systems, molecular dynamics, polymers and biopolymers, catalysis, energy, hydrates, fuels, fuel cells, low dimensional and high temperature electronic materials, and reaction engineering. These research activities impact economic development, national security, the stability and sustainability of the energy supply, and many quality of life issues.

Faculty members possess a wide variety of industrial experience and are routinely in contact with their counterparts in industry. This contact with real engineering problems enables them to convey a practical experience to students while keeping in perspective many of the fundamental concepts involved in graduate study. The faculty is nationally and internationally recognized through the publication of text books, monograph series, and technical papers. They routinely participate in national and international conferences and advisory meetings. In addition, faculty members have taught short courses throughout the United States and abroad.
Degree Programs

The department is authorized to admit students to the following degree programs: master of science in chemical engineering (M.S. Ch.E.), master of science in engineering (M.S.E.), and College of Engineering and Mineral Resources interdisciplinary doctor of philosophy (Ph.D.). A problem report option is also available as an alternative to the traditional research based master’s degree. Students in these programs must comply with the rules and regulations as presented in the general requirements for graduate work in the College of Engineering and Mineral Resources and in the Department of Chemical Engineering. Students interested in pursuing work for a master’s or doctoral degree in chemical engineering should contact the department for copies of the required guidelines and application information.

Master’s Programs

Admission

Students holding baccalaureate degrees in Chemical Engineering, other engineering fields, mathematics, or basic sciences are eligible for admission to the Master of Science in Chemical Engineering (MSChE) program. Students not holding a BSChE will be required to take a series of six (6) junior-level courses. Alternatively, these students have the option of obtaining a Master of Science in Engineering (MSE). The MSE requires fewer junior-level courses and enables students to begin their research within the first semester. A maximum of twelve (12) semester hours from other institutions may be accepted at WVU for credit toward the Master’s degree. The Chemical Engineering Department may require Graduate Record Examination (GRE) scores or other evidence to assist in judging a student’s chances for success in a graduate program. To be eligible for admission as a regular student, an applicant must have a baccalaureate degree as specified above and a grade point average (GPA) of 3.0 (on a basis of A = 4.0) in all previous college work. Students entering the program without a BSChE will receive a letter specifying the additional course work which they must take in the first two semesters. To remain in good standing, a regular student must achieve and maintain a minimum overall 3.0 GPA in all graduate level courses as well as in all junior level courses. Applicants who cannot meet these conditions may be considered for admission in a conditional category. Students admitted with deficiencies in their undergraduate programs are required to take some chemical engineering courses as prerequisites for graduate courses. International students must demonstrate proficiency in communicating in English (a minimum TOFEL score of 550, or iBT score of 79, or IELTS score of 6.5). International students must also provide Graduate Record Examination (GRE) scores. These requirements are stated as a condition for admission.

Planned Programs

For students with a BSChE, 24 months are typically required to complete the MSChE degree work. For students without a BSChE, the time to complete the MSChE is typically 36 months, while the time to complete the MSE is typically 30 months. All M.S. degree candidates are required to perform research and will follow a planned program which conforms to either of the following outlines:

- A minimum of 30 semester credit hours, excluding seminar and any required junior level courses; not more than six of which are in research leading to an acceptable thesis.
- A minimum of 33 semester credit hours, excluding seminar and any required junior level courses; not more than three of which are in research leading to an acceptable problem report.

A coursework M.S. degree option is not presently offered by the Department of Chemical Engineering.

Required Courses

All students are required to take CHE 615, CHE 620, and CHE 625, and all full-time students are required to take one credit of journal club/seminar (CHE 796) for each semester enrolled. For students without a BSChE, the junior level courses may include CHE 310, CHE 311, CHE 312, CHE 315, CHE 320, and CHE 325 depending upon the degree option. The research advisor, in conjunction with an Advisory and Examining Committee (AEC) to be designated by each student, will be responsible for following Departmental guidelines to determine the plan of study appropriate to the student’s program.

Research Proposals

A written thesis research proposal and oral presentation of this proposal is required of all M.S. students. This oral defense is administered by the student’s AEC and must be completed by the end of the second semester after the student begins his/her research.

Final Examination

All students are required to pass a final oral examination, administered by their AEC, covering both the thesis or problem report (depending on the program selected) and related course material.

Doctor of Philosophy

A candidate for the degree of doctor of philosophy must comply with the rules and regulations as outlined in the general requirements for graduate work in engineering and the specific requirements stated in the departmental guidelines. Students who are interested in pursuing a Ph.D. degree in the Department of Chemical Engineering should contact the department for specific information. A program
with a major in chemical engineering, designed to meet the needs and objectives of each student, will be developed in consultation with the student’s research advisor and Advisory and Examining Committee (AEC). It should be emphasized that the Ph.D. degree is primarily a research degree, and therefore the research work for a doctoral dissertation should show a high order of originality on the part of the student and must offer an original contribution to the field of engineering science. Students in the Ph.D. program should expect to complete the requirements in three to four years.

**Admission**

Admission to the Ph.D. program is open to students who qualify as regular graduate students and who have obtained a B.S. or M.S. degree in science or engineering. Students admitted must have demonstrated an excellent academic record in previously completed college coursework with a minimum cumulative grade point average of 3.0 (on a 4.0 scale). Three letters of recommendation and GRE scores (international students only) are required by the department. International students must demonstrate proficiency in communicating in English (a minimum TOFEL Score of 550, or iBT Score of 79, or IELTS Score of 6.5).

**Required Courses**

All B.S. students entering the Ph.D. program are required to take CHE 615, CHE 620, and CHE 625, while M.S. students entering the program must demonstrate equivalent courses taken for graduate credit. In addition, all full-time students must take one credit of seminar/journal club (CHE 796) each semester. For a student admitted directly after the B.S. degree, the Ph.D. program consists of a minimum of 42 course credit hours, excluding research (CHE 797) and seminar/journal club (CHE 796). If the student has an M.S. in chemical engineering, the program consists of a minimum of 18 course credit hours (excluding CHE 797).

Students must complete a minor consisting of a minimum of nine semester hours of a coherent set of courses taken outside of the department. These courses may be related to the major research area. Non-technical courses are considered only under exceptional circumstances. Courses at the 400 level may be acceptable. All courses must be approved by the AEC and the academic advisor. Students must complete graduate courses with an overall coursework average of 3.0 or better (exclusive of research credits) and complete all CHE courses with an overall grade point average of 3.0 (exclusive of research credits). A minimum of 24 credit hours in dissertation research is required. Also, two semesters of full-time attendance at the Morgantown campus is required to complete the residency requirement.

**Examinations and Research Proposals**

All PhD students must pass a Ph.D. qualifying examination given in their first year at WVU. This examination is designed to assess the basic competency of students in the chemical engineering field to determine whether or not they have sufficient knowledge to undertake independent research.

Within a maximum of one semester after passing the PhD qualifying examination or entering the PhD program, whichever is later, a student must successfully defend his/her dissertation research proposal. This proposal is a written document which must be reviewed and accepted by their Advisory and Examining Committee (AEC) and subsequently defended in an oral presentation to the AEC. The research work for the doctoral dissertation should show a high order of originality on the part of the student and must offer an original contribution to the field of engineering science.

Within six (6) months of passing the qualifying examination or of entering the Ph.D. program, whichever is later, the student must successfully defend an original research proposition in an oral examination. The written proposition, developed by the student alone, remains the intellectual property of the student and must be on a topic unrelated to the student’s own research work for the dissertation.

A student who has successfully completed all coursework, passed the qualifying examination, and successfully defended the original research proposition and research proposal is defined as one who is a candidate for the Ph.D. degree.

In order to complete the Ph.D. requirements, a student must pass a final oral examination on the results embodied in the dissertation. This examination is open to the public and, in order to evaluate critically the student’s competency, may include testing on material in related fields, as deemed necessary by the AEC. In addition, since the Ph.D. degree is primarily a research degree that embodies the results of an original research proposal and represents a significant contribution to scientific literature, the student must submit a manuscript on this research to the AEC.

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**Faculty**

**Chair**

- Rakesh Gupta - Ph.D.

**Professors**

- Eugene V. Cilento - Ph.D. (U. Cinn.)
  Dean. Physiological transport phenomena, Biomedical engineering, Image analysis, Mathematical modeling.
  Status: Regular
- Dady B. Dadyburjor - Ph.D. (U. Del.)
  Catalysis, Reaction engineering, Micellization, Fuels and chemicals from synthesis gas, Synthesis gas from coal.
Status: Regular

- Rakesh K. Gupta - Ph.D. (U. Del.)
  Chairperson. Berry Chair. Polymer processing, Rheology, Non-newtonian fluid mechanics, Composite materials.
  Status: Regular

- Edwin L. Kugler - Ph.D. (Johns Hopkins U.)
  Catalysis, Partial oxidation, Fischer-tropsch processing, In-situ reaction studies.
  Status: Regular

- Richard Turton - Ph.D. (Ore. St. U.)
  P.E., Fluidization, Chemical process design, Particle processing, Powder processing.
  Status: Regular

  Bio-nanotechnology, Cellulose hydrolysis, Plant-cell technology, Neural-networks modeling.
  Status: Regular

- John W. Zondlo - Ph.D. (Carnegie Mellon U.)
  Coal enhancement and utilization, Carbon science, Fuel cells.
  Status: Regular

Associate Professor

- Joseph A. Shaeiwitz - Ph.D. (Carnegie Mellon U.)
  Engineering education, Design education, Outcomes assessment.
  Status: Regular

- Charter D. Stinespring - Ph.D. (WVU)
  Semiconductor growth and etching, Surface kinetics.
  Status: Regular

Research Associate Professor

- Debangsu Bhattacharyya - Ph.D. (Clarkson U.)
  Modeling, Optimization, Control and experimental characterization of fuel cells (PEMFC & SOFC); Coal gasification processes; Dynamic modeling and optimization of modern energy conversion processes.
  Status: Regular

Assistant Professor

- Brian J. Anderson - Ph.D. (MIT)
  Natural-gas hydrates, Sustainable-energy development, Molecular dynamics, Quantum-chemical calculations, Geothermal energy, Reservoir simulation.
  Status: Regular

- Cerasela Z. Dinu - Ph.D. (Dresden U of Tech.)
  Nanomaterials, Bionanotechnology, Biomimetics, Synthetic and molecular biology.
  Status: Regular

- Robin S. Hissam - Ph.D. (U. Del.)
  Biomaterials, Polypeptides, Drug delivery, Biomedical engineering, Materials science.
  Status: Regular

- David J. Klinke, II - Ph.D. (Northwestern U.)
  Systems biology, Kinetics, Cellular signal transduction pathways, Immunology, Mathematical modeling, Bioengineering.
  Status: Regular

- Yong Yang - PhD (Ohio State U.)
  Stem cell technology, polymer micro/nanotechnology, biomaterials

Research Assistant Professor

- Sushant Agarwal - Ph.D. (WVU)
  Polymer processing, Rheology, Nano-composites, Dispersions.
  Status: Regular

- Ruiqin (Ray) Liang - Ph.D. (Chinese Acad. Sci.)
  Polymer processing and modeling, Smart materials, Composites.
  Status: Regular

Adjunct professors

- Deepak Doraiswamy - Ph.D. (U of Del.)
- Joseph D. Henry - Ph.D. (U. Mich.)
Energy management, Science and technology policy.

- Charles M. Jaffe - Ph.D. (U. Colo.)
  Theoretical chemistry, Molecular and atomic physics, Nonlinear dynamics, Astrodynamics, Forensics.

- George E. Keller, II - Ph.D. (Penn. St. U.)
  Separations, Commercial practice.

- Mahesh Padmanabhan - Ph.D. (U. of Minn.)
  Foods, Polymer science and Rheology.

- David L. Walker - Ph.D. (WVU)
  Signal analysis, Neural nets, Forensics.

- Robert H. Wildi - B.Ch.E. (Cleveland St. U.)
  Polymer extrusion.

Professors emeriti

- Richard Bailie - PhD
- Eung H. Cho - PhD (U. Utah)
  Mineral processing, Leaching, Solvent extraction, Environmental science.
  Status: Regular

- Alfred H. Stiller - Ph.D. (U. Cinn.)
  Physical/inorganic/solution chemistry, Coal liquefaction, Carbon science.
  Status: Regular

Adjunct Assistant Professor

- Bingyun Li - Ph.D. (Chinese Academy of Sciences)
  Bioengineering and advanced biomedical devices, Nanotechnology sorbents, coatings, and capsules
  Status: Regular

Department of Civil and Environmental Engineering

E-mail: ceeinfo@mail.wvu.edu

Degrees Offered

- Master of Science in Civil Engineering
- Master of Science in Engineering with a major in Civil Engineering
- Doctor of Philosophy with a major in Civil Engineering

The Department of Civil and Environmental Engineering offers the master of science in civil engineering (M.S.C.E.). In conjunction with the Benjamin M. Statler College of Engineering and Mineral Resources, the master of science in engineering (M.S.E.), and the doctor of philosophy degrees are available with emphases in civil engineering.

The Department of Civil and Environmental Engineering has a full-time faculty of 23 who are active in teaching, research, and professional commitments.

Areas of Emphasis

There are four major areas of interest of the faculty and graduate studies:

- Environmental and hydro-technical engineering, which includes wetland and natural stream restoration; water, wastewater, and industrial waste treatment; air pollution and site remediation; groundwater hydraulics, hydrology, and fluid mechanics.

- Geotechnical engineering, which includes soil mechanics, foundations engineering, soil-structure interaction, geomechanics, geoenvironmental, groundwater and seepage, geosynthetics, contaminant transport, earthwork design, and waste by-product utilization.

- Transportation engineering, which includes planning, design, construction, operations, and maintenance of transportation facilities/systems (roadways, railroads, airports, and public transportation) as well as related areas of infrastructure management and expert systems.

- Structural engineering, which includes advanced structural mechanics, structural dynamics, bridge engineering, building design for static and dynamic loads, advanced materials for civil infrastructure, and nondestructive testing and evaluation.
Program Objectives

- Have the ability to work on multidisciplinary teams, have high technical competence, and have the ability to meet present and future challenges in a specialty area of civil and environmental engineering.
- Have the ability to effectively plan and execute scientific research or other high level investigations using the most current methods and techniques in the civil and environmental engineering fields.
- Have the ability to effectively communicate the results of their research or investigations through writing and oral presentations.
- Have the ability to contribute to the body of engineering knowledge and/or to economic growth by developing the science, the materials, and the technology necessary to deliver vital infrastructure services in the most cost effective manner while protecting the health, safety, and welfare of human society.

Program Outcomes

- Graduates will have an ability to function on teams involving multiple civil engineering specialties.
- Graduates will have an ability to apply advanced methodologies in their specialty area.
- Graduates will have an ability to effectively communicate technical information.
- Graduates will have an ability to design and conduct experiments, analyze and interpret data, and develop recommendations.
- Graduates will have an understanding of professional and ethical responsibility.
- Graduates will have an ability to understand the impact of engineering solutions in global and societal context.
- Graduates will have a recognition of the need to engage in life-long learning.
- Graduates will have an ability to use contemporary techniques, skills, and tools necessary for engineering practice in education, industry, and/or government.

Faculty

Many of the faculty members are licensed professional engineers registered in one or more states and are involved in state, regional, and national professional organizations, serving on numerous technical committees. They are successful researchers and have published extensively in technical journals. The civil and environmental engineering faculty produces graduates who can assume the problem solving, decision making, and technical leadership roles of a professional engineer and who have the sound educational background for the continuing professional development the field requires.

Students tailor their program of study to pursue individual topics of interests, with guidance from a faculty advisor. Opportunities abound within the master’s and doctoral tracks for a research experience in which the student tackles an engineering problem individually, with guidance from a faculty advisor. The graduate program in civil engineering was established with the aim of developing its students’ abilities to use today’s contemporary methods of engineering analysis and design to solve tomorrow’s engineering problems.

Application

The applicant must first submit to the WVU Office of Admissions a completed application, application fee, and transcripts of all college work completed (directly from the institution). Complete application information is also available on the web at: http://www.cee.cemr.wvu.edu/grad/admission.php.

Admission

To be eligible for admission into the M.S.C.E. degree program, a candidate must either

- Hold or expect to receive a B.S.C.E. degree from either an accredited ABET curriculum or an internationally recognized program, or
- Have a superior academic record and a baccalaureate degree in another engineering field, mathematics, or science.

Candidates with a baccalaureate degree in another field of engineering, mathematics, or science are also eligible for admission into the M.S.E. degree. Candidates are normally required to attain a baccalaureate level of proficiency in areas of emphasis of the department. An engineering technology (non-calculus based) degree is not sufficient qualification for admission into any of the graduate programs offered by the department.

To be eligible for admission into a doctorate of engineering program, a candidate is expected to hold or expect to receive a B.S. or an M.S. degree or equivalent in:

- Some discipline of engineering from an institution which has an ABET-accredited program in that discipline, or
- Which has an internationally recognized program in engineering, or mathematics and sciences (as specified by individual programs)

The other requirements for admission into the graduate programs of the department are summarized as follows.

- To be admitted as a regular graduate student, an applicant must have a grade point average of 3.0 or better (out of a possible 4.0) in all previous college work and must meet all other requirements below.
• Each applicant is required to have three reference letters (using standard forms available from the department) sent directly to the department; at least two of the three references should be from the institution the applicant last attended.
• International students must demonstrate proficiency in communicating in English (a minimum TOFEL score of 550, or iBT score of 79, or IELTS score of 6.5). (Students who have completed a recent four-year bachelor’s degree in the USA need not submit these scores.)
• All applicants who have not received their undergraduate degree in the United States are required to submit GRE General Test scores with the Engineering Subject Test score being optional.

Provisional Admission

An applicant who is not qualified for regular graduate student admission status, due either to insufficient grade-point average, incomplete credentials, or inadequate academic background, can be admitted as a provisional student. Requirements for attaining regular student status must be stated in the letter of admission. Provisional students must sign a contract, which lists these requirements in detail, no later than their first registration.

Masters of Science in Civil Engineering

Students must comply with rules and regulations as outlined in the general requirements for graduate work. Each candidate will, with the approval and at the discretion of the Graduate Committee, follow a planned program which must conform to one of the following outlines.

• A minimum of 30 semester credit hours, not more than six of which are in research leading to an acceptable thesis.
• A minimum of 33 semester credit hours, not more than three of which are in research leading to an acceptable problem report.
• A minimum of 36 semester credit hours, with no thesis or problem report required. Although rarely permitted, this option is open to students with practical engineering experience or those who have demonstrated an ability to organize and develop a project and write a technical report. Approval to pursue this option must be obtained from the student’s Advisory and Examining Committee (AEC), the graduate program coordinator, and the department chairperson.

No rigid curricula are prescribed for the degree of master of science in civil engineering. Graduate-level work in mathematics, mechanics, or other appropriate areas of science is customary; however, at least 15 semester hours of credit should normally be selected from graduate civil engineering courses.

Thesis and Problem Report

A thesis or problem report is normally required of all candidates. While required credit in research (CE 697) is devoted to the thesis or report preparation, the thesis or problem report is not automatically approved after the required number of semester hours of research work has been completed. The thesis or problem report must conform with the general WVU requirements for graduate study and to any additional requirements established by the department.

Examinations

A candidate shall be required to pass an examination which may be written or oral or both, to be administered by the student’s Advisory and Examining Committee. The examination shall cover course material and the thesis or problem report, depending upon the program followed.

Master of Science in Engineering

The master of science in engineering program is available to students approved for the graduate program who possess a baccalaureate degree in a technical area other than civil engineering. Students entering this graduate program must complete appropriate undergraduate work as specified by the Advisory and Examining Committee. In addition to fulfilling the required undergraduate work, the M.S.E. program must follow a planned program meeting one of the three options for the M.S.C.E. as specified above. No rigid curricula are prescribed for the degree of master of science in engineering. Graduate-level work in mathematics, mechanics, or other appropriate areas of science is customary; however, at least 15 semester hours of credit should normally be selected from graduate civil engineering courses. This degree program is administered by the Statler College of Engineering and Mineral Resources; the program may emphasize civil engineering.

Doctor of Philosophy

The doctor of philosophy degree is administered through the college’s interdisciplinary program; civil engineering may be the major. A candidate for the degree of doctor of philosophy must comply with the rules and regulations outlined in the general requirements of the Statler College of Engineering and Mineral Resources. The research work for the doctoral dissertation must show a high degree of originality on the part of the student and must constitute an original contribution to the art and science of civil engineering.
Faculty

Chair

- Radhey Sharma - Ph.D., University of Oxford, Oxford
  Sustainable infrastructure, geotechnical engineering & geoenvironmental, and energy engineering

Professors

- Hung-Liang (Roger) Chen - Ph.D. (Northwestern U.)
  Structural dynamics, Structural experimentation, Dynamic soil-structure interaction, Damage in reinforced concrete structures,
  Nondestructive evaluation, Concrete.
  Status: Regular

- Julio F. Davalos - Ph.D. (VPI & SU)
  Benedum Distinguished Teaching Professor. Finite element analysis and modeling of structures, Spatial stability investigation, Materials
  characterization of engineered timber products.
  Status: Regular

  Director, Constructed Facilities Center. Mathematical modeling of engineering systems, Bridge engineering, Composite material
  characterization and implementation.
  Status: Regular

- Donald D. Gray - Ph.D., P.E. (Purdue U.)
  Fluid mechanics, Groundwater hydraulics, Environmental flows.
  Status: Regular

- Udaya B. Halabe - Ph.D., P.E. (MIT)
  Nondestructive evaluation and in-situ condition assessment of structures and materials, Elastic and radar wave propagation, Structural
  analysis and design, Structural dynamics and wind/earthquake resistant design.
  Status: Regular

- David R. Martinelli - Ph.D. (U. Md.)
  Transportation engineering, Traffic operations, Systems analysis, Infrastructure management.
  Status: Regular

- Radhey Sharma - Ph.D. (Oxford)
  Chairperson. Sustainable infrastructure, geotechnical engineering & geoenvironmental, and energy engineering.
  Status: Regular

- Hema J. Siriwardane - Ph.D., P.E. (VPI & SU)
  Geomechanics/geotechnical engineering, Finite element method, Computer applications.
  Status: Regular

- John P. Zaniewski - Ph.D., (U. Tex.)
  Asphalt technology Professor. Pavement materials, Design, Construction, Maintenance, Infrastructure management.
  Status: Regular

Associate Professor

- Karl Barth - Ph.D. (Purdue U.)
  Jack H. Samples Distinguished Professor of Structures. Steel structures, Bridge design and rehabilitation, Connections, Stability analysis,
  Experimental mechanics.
  Status: Regular

- Lian-Shin Lin - Ph.D. (Perdue U.)
  Physiochemical and biological treatment, Water quality modeling, Emerging contaminants, Microbial fuel cells, Watershed pollution.
  Status: Regular

Assistant professors

- Leslie Clark Hopkinson - Ph.D.
  Surface hydrology, environmental hydraulics, ecological engineering, river mechanics.
  Status: Regular

- John D. Quaranta - Ph.D., P.E. (WVU)
  Geotechnical/Geo-environmental engineering, Soil testing and characterization, Soil and mine waste dewatering, Geo-synthetics, Soil
  and groundwater remediation.
  Status: Regular

- Avinash Unnikrishnan - Ph.D. (U. of Tex.-Austin)
  Transportation network analysis and planning, Freight network analysis and logistics, Intelligent transportation systems.
  Status: Regular
• Jennifer L. Weidhaas - Ph.D.
Biotechnology, bioenergy production, and remediation of emerging contaminants in soils and ground water.
Status: Regular

Research Associate Professor
• Indrajit Ray - Ph.D. (I.I.T.—India)
Status: Regular

Research Assistant Professor
• Mourad Riad - Ph.D. (WVU)
Infrastructure instrumentation, Bridge engineering, Advanced concrete technology, Finite element modeling, Structural mechanics.
Status: Regular
• Eduardo Sosa - Ph.D.
Structural stability, Finite element modeling, Computational applied mechanics, engineering materials, Mechanics of materials.
Status: Regular
• P. V. Vijay - Ph.D. (WVU)
Concrete structures, FRP composite structures for bridges, buildings, and paves- ments, Aging of structures and rehabilitation, Recycled polymers for infrastructure, Analytical modeling.
Status: Regular
• Gergis William - Ph.D., P.E. (WVU)
Civil infrastructure, Bridge design and diagnosis, Thermal stress analysis, Nonlinear finite element analysis, Advanced materials and structures.
Status: Regular

Professors Emeriti
• Ronald W. Eck - Ph.D.
• W. Joseph Head - Ph.D.
• Charles R. Jenkins - Ph.D.
• Larry D. Luttrell - Ph.D.
• William A. Sack - Ph.D.

Associate Professors Emeriti
• Robert N. Eli - Ph.D.
• Darrell R. Dean, Jr. - Ph.D.

Lane Department of Computer Science and Electrical Engineering

Degrees Offered
• Master of Science in Computer Science
• Master of Science in Electrical Engineering
• Master of Science in Engineering
• Master of Science in Software Engineering
• Doctor of Philosophy in Computer Engineering
• Doctor of Philosophy in Electrical Engineering
• Doctor of Philosophy in Computer and Information Sciences

Graduate Certificates Offered
• Graduate Certificate in Software Engineering
• Graduate Certificate in Computer Forensics
• Graduate Certificate in Biometrics & Information Assurance
• Graduate Certificate in Interactive Technologies & Serious Gaming
Overview of Programs

The Lane Department of Computer Science and Electrical Engineering offers master’s programs leading to a master of science in computer science (M.S.C.S.), a master of science in electrical engineering (M.S.E.E.), and a master of science in software engineering (M.S.S.E.). It also participates in the College of Engineering and Mineral Resources interdisciplinary program offering the master of science in engineering (M.S.E.). Master of science students must comply with the rules for master’s degrees as set forth by the college in the Guidelines for Master’s Degree Programs Offered in the College of Engineering and Mineral Resources and by the Department in the Master of Science Program Guidelines.

The department also offers programs leading to the doctor of philosophy (Ph.D.) in computer and information sciences, and the doctor of philosophy (Ph.D.) with specialization in electrical engineering or computer engineering. Ph.D. in electrical or computer engineering students must comply with the rules set forth by both the college in The College of Engineering and Mineral Resources Doctor of Philosophy Program Guidelines and by the Department in the Doctor of Philosophy Program Guidelines. Ph.D. students in computer and information sciences must comply with the rules set forth in the Handbook for Computer Science Graduate Students.

The department also offers four graduate certificates which may be completed as part of another degree program or as a certificate only.

Program Educational Objectives and Outcomes

The common educational objectives of all the graduate programs in the Lane Department is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study. The requirements and outcomes of specific degree and certificate programs are described in the catalog pages specific to those programs.

How to Apply

Students can apply for WVU admission online at http://www.wvu.edu (choose admissions), or by an e-mail request to the proper graduate coordinator for an application. Do not send applications to the Lane Department. Instead, mail to:

Office of Admissions
P.O. Box 6009
Morgantown, WV 26506-6009

Information on degree programs and course descriptions can be found at our CSEE website (http://www.csee.wvu.edu). Send other inquiries to the appropriate graduate coordinator of Computer Science, Electrical and Computer Engineering, or Software Engineering (whichever applies), P.O. Box 6109, Morgantown, WV 26506-6109.

Deadlines for Applications

Application deadlines are as follows:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Deadline Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall semester</td>
<td>March 1</td>
</tr>
<tr>
<td>Spring semester</td>
<td>October 1</td>
</tr>
<tr>
<td>Summer session</td>
<td>January 1</td>
</tr>
</tbody>
</table>

Applicants failing to meet these deadlines have no guarantee of consideration for timely entrance into the program for which they apply, and may not receive full consideration for financial aid.

Admission Requirements for All Programs

All master’s and Ph.D. programs require applicants to provide the items below to be considered for admission. Specific programs may have additional requirements. Exception: These requirements do not apply to nontraditional students in the Certificate of Software Engineering program and M.S.S.E. program (see certificate program and M.S.S.E. program for more information):

- A minimum cumulative grade point average of 3.0 or equivalent, based on a 4.0 system.
- Three letters of reference.
- International students must demonstrate proficiency in communicating in English (a minimum TOFEL Score of 550, or iBT Score of 79, or IELTS Score of 6.5). (Students who have completed a recent four-year bachelor’s degree in the USA need not submit these scores.)
- All graduate degree programs require the GRE general test, with a suggested score of either the 80th percentile on the quantitative part or 80th percentile total (verbal + quantitative + analytical).
- All graduate degree programs require an appropriate bachelors or master’s degree for entry. Students lacking some foundational courses appropriate to a particular degree program may be assigned some remedial coursework as a condition of admission.
- See: Certificate in Software Engineering; Master of Science in Software Engineering for alternative admission requirements to those programs for working professionals.
Regular, Provisional, and Non-Degree Admission

Students admitted into a program are designated as regular status or provisional. The department also admits students to non-degree status in the College of Engineering and Mineral Resources, but these students are not admitted to any specific program. Regular status is given to students who are qualified for unconditional admission to a specific program. Provisional status is given to students who have deficiencies to make up such as incomplete credentials or other reasons as identified by the graduate coordinator. In all cases, the student’s letter of admission will state what must be done to attain regular status.

Provisional students must complete the requirements for transfer to regular status by the end of the semester in which they complete 18 credit hours. Usually provisional students are not considered for graduate assistantships or tuition waivers.

Non-degree status is granted upon request to students meeting the minimum admission requirements. A non-degree student is one who wishes to take courses without seeking a formal degree. Non-degree students require permission of the instructor to take courses that are restricted to specific majors. There is no guarantee of eventual acceptance into a degree program, and in no case may more than 12 hours be transferred to a degree program.

Non-degree students may not be offered graduate assistantships or tuition waivers.

Facilities and Centers for All Programs

The Lane Department of CSEE has its main office, instructional lab, and research lab space on the Evansdale campus occupying four floors of the Engineering Sciences Building and one floor of the Engineering Research Building. The department has facilities also located in Armstrong Halls on the downtown campus.

The department is home to two university research centers: the Center for Identification Technology Research (CITeR), which is designated an Industry/University Cooperative Research Center by the National Science Foundation; and the Center for Advanced Power & Energy Research (APERC). The university is also designated as a Center of Excellent in Information Assurance Research by the National Security Agency and Department of Homeland Security. The department and college host a modern 4000 square foot clean room facility for device and sensor fabrication, under the management of the university’s Shared Research Facilities. The university is also home an outstanding set of faculty led laboratory facilities, in areas that include electronic and photonic materical, biometrics, communications, digital and analog signal processing, power electronics, robotics, high reliability software, computer security, computer forensics, articial intelligence, virtual environments, theoretical computer science, and electric vehicles.

Computing Facilities

All graduate students have access to a broad variety of computing platforms for both classwork and research. The department operates and maintains a variety of dedicated computer systems, clusters, and networks supporting both the instructional and research activities of the department. These systems include numerous Windows workstations and a cluster of Linux Servers. An additional laboratory by Hewlett-Packard supports large databases and medical informatics. Students have access to a rich set of software packages and tool suites available either on department systems or the College of Engineering and Mineral Resources systems. All department, college, and University computing resources are fully networked via Ethernet and FDDI with a campus-wide ATM backbone enabling interface to the statewide ATM network. All computing systems have Internet access enabling worldwide connectivity and access to several additional computing services via the Pittsburgh Supercomputing Center. The University is also a member of Internet2, of which faculty in the department are active participants.

Areas of Research: Overview

The department is enthusiastically and vigorously involved in research, technical publication, and graduate instruction at the forefront of the field. Academic and research activity is organized into 5 areas:

- Electronics and Photonics
- Systems and Signals
- Computer Systems
- Software and Knowledge Engineering
- Theory of Computation

Areas of Research: Specifics

Electronics and Photonics

The field of electronics and photonics—initially microelectronics and now pushing well into nano-electronics—is at a crossroads where further developments are forcing researchers to take a closer look at quantum mechanical processes to design and fabricate small dimensional devices. Students who chose to take the electronics area at WVU should obtain a deeper understanding of the physical basis for the design and fabrication of micro- and nano-electronic and photonic devices.

The suggested coursework draws upon the expertise of the WVU faculty in electrical engineering, physics, and chemical engineering—demonstrating the interdisciplinary characteristic of this field. The faculty has joined to form the Photonics and Microelectronics Working
Group. The research areas that the faculty are involved in cover aspects of materials science, physics, and semi-conductor electronics to design, grow, fabricate, and characterize novel electronic and photonic devices and small subsystems. Thus, the strength of the faculty is in experimental semiconductor physics and electronics. Present areas of research include wide band gap semiconductor growth and fabrication techniques, device design, and materials and device characterization; integration of photonics in microelectromechanical devices (MEMs) for active control and feedback; near-infrared and mid-infrared photonic materials and devices; nano-electronic materials growth and device design; and the small-scale integration of photonic and electronic devices for sensing applications. The Center for Identification Technology Research (CITeR), (http://www.citer.wvu.edu) was recently established to coordinate the research in this area at WVU and three other universities and several industrial and governmental partners. Thus, students are encouraged to take courses outside of the more standard electrical engineering coursework, in information technology and biotechnology, so that they can effectively participate in these multidisciplinary research programs. Much of the research in photonics and micro/nano-electronics is supported by the laboratory facilities of the Photonics and Microelectronics Working Group in the Lane Department. The facilities include a micro/nanofabrication laboratory, a photonics laboratory, a CAD/CAE facility with workstations/PCs and commercial/academic software tools, and an electronic and photonics test facility (device through small scale systems testing). Students also have access to a number of other facilities across the University to support specific research projects—in physics, chemistry, chemical engineering, and the Health Sciences Center as examples.

Signals and Systems

The Control Systems Area is an important part of the research program in electrical engineering. The topic has great breadth in applications ranging from electrical power systems and electrical machines to electrically energized transportation systems. As a research area, control systems may be characterized as both modeling and control of complex systems of both deterministic and stochastic types. The department offers courses that provide the required background to prepare students for the design and analysis of control systems, control theory, particularly as applied to large-scale systems. Current research is focused on the application of control to large dynamic systems, especially power systems, electrical machines and electric/hybrid vehicle systems.

Communications and signal processing are two closely interrelated fields that play an important role in today’s information-driven economy. Both fields involve the application of mathematics to the analysis and design of systems that convey and process analog and/or digital signals. Communications research in the Lane Department of Computer Science and Electrical Engineering focuses on techniques to improve the performance of a wide variety of communication systems. The Wireless Communications Research Laboratory (WCRL) develops and analyzes protocols, error control mechanisms, and signal processing algorithms that enable low energy and/or high data rate transmissions in a cellular or wireless networking environment. Such technologies play a prominent role in third- and fourth-generation cellular networks and in wireless local area and personal area networking standards. A wireless testbed, consisting of low-power wireless transceivers and digital signal processing boards, allows researchers to test prospective protocols and algorithms in an actual wireless environment. In addition to the department’s broadband and wireless activities, it conducts research involving the compression, storage, and retrieval of multimedia information, and the design and fabrication of RF transceivers.

Electrical power systems historically have been an area of emphasis in the electrical engineering curriculum, and the graduate program in power systems at WVU is quite mature. Four faculty members have interest in electric power, and the department has an endowed position for electric power systems. Graduate courses are offered regularly in power system stability and control, real-time control of power systems, computer applications in power system analysis, advanced electric machines, and HVDC systems. In addition, there are three senior elective/graduate courses on the subjects of distribution, power electronics, and power systems analysis. The power group works closely with the control area that offers graduate courses in linear and nonlinear control systems, optimal control, and digital control. Recent and current research activities include control of power systems in a deregulated environment, energy balancing in a restructured market environment, modeling, controlling, and dispatching distributed resources, electric transportation, modeling, stability analysis, optimal design, design of modulation controllers for multiterminal ac/dc power systems, electric drives, electric machines, advanced motion control systems, and power electronics. Externally funded projects include robust design of modulation controllers for flexible ac/dc transmission lines, optimal design of permanent magnet brushless machines, spacecraft power storage controllers, investigation of voltage/current characteristics of MOS-controlled thyristors with static and dynamic loads, and identification and decentralized control of critical modes. These projects provide excellent support for both graduate student and faculty research. Extensive interaction with industry provides ample opportunity for direct contact with practitioners in the field. The department has enjoyed continuous support from local utilities.

Computer Systems Engineering

Computer engineering is a very broad area, covering hardware, firmware, and software engineering of complex digital systems and system components. Software and hardware systems design is the most technically intensive components of the electrical and computer engineering curriculum. A broad spectrum of research topics of both applied and theoretical nature are undertaken in the department. Some examples are: software verification and validation, software process improvement, software development environments for signal processing applications, parallel processing of fingerprint image comparison systems, fast adaptive routing algorithms for processor arrays, communication switching systems, information systems, computational accelerator using digital signal processing arrays, an automated lumber processing system, neural network medical and industrial applications, autonomous robots, computer-controlled electric and hybrid vehicle instrumentation, a distributed microprocessor monitoring system, knowledge-based decision support system, and microprocessor-based instrumentation. A large collection of hardware and software graduate courses is offered in the department. These cover topics such as switching theory, digital communication systems, VLSI design and testing, fault-tolerant computing, computer architecture, neural networks, applied fuzzy logic, real-time software design and development, and C++ object-oriented programming. In addition, the electrical engineering and computer engineering faculty collaborate very closely with the computer science faculty. Graduate students in the computer
engineering area are encouraged to include courses from computer science in their program. The department offers dedicated laboratories equipped with personal computers and workstations to support classroom instruction and research. A number of computer engineering faculty have close cooperation with several interdisciplinary research centers at WVU such as the Concurrent Engineering Research Center, the Alternate Fuels Research Center, and the Constructed Facilities Research Center.

Software and Knowledge Engineering

A majority of the signal and image processing research in the department is centered in the bioengineering and biometrics areas. Bioengineering is the multidisciplinary application of engineering to medicine and biology. Biometrics uses biological signatures (fingerprint, voice, face, DNA) for identification or authentication in criminal justice, e-commerce, and medical applications. Specific departmental projects in these areas include multimodal biometric system design and performance measures, analysis of temporal fingerprint images for determination of vitality, neural network, and genetic algorithms for matching of fingerprint and dental images, multimedia information systems (images, video, and audio), distributed multimedia systems, and multimedia data storage and compression. Sponsors for this work include the Department of Defense, the National Science Foundation, and the Department of Homeland Security. Research entities in the department include the Center for Identification Technology. A NSF Industry/University Cooperative Research Center, the Biomedical Signal Analysis Laboratory, and the Software Architectures and High Performance Computer Research Lab.

Software engineering covers a well-defined and integrated set of activities to produce correct, consistent software products effectively and efficiently. Faculty perform research in many areas some of which include component-based development, validation and verification, software reuse, software portability, user interfaces, and graphic visualization. Research associations exist with the NASA Independent Verification and Validation Facility.

Theory of Computation

Research in the theory of computation covers a variety of areas ranging from foundations of computer science to algorithm design and analysis. A core of faculty performs research in areas such as discrete mathematics (including graph theory and combinatorics) and combinatorial optimization, partly in connection with the Combinatorial Computing and Discrete Mathematics Institute. Another key area of interest are analysis for parallel and distributed systems and problems in bioinformatics. The department offers core graduate courses in design and analysis of algorithms and computational complexity theory. Upper-division graduate courses cover topics such as graph algorithms, information dissemination, approximation and randomized algorithms, linear programming, and combinatorial optimization.

Graduate Cerificates

The Lane Department of Computer Science & Electrical Engineering offers four graduate certificates, which are typically completed as part of a graduate degree program, but be completed as a separate credential. Brief descriptions of the certificate programs are given here. More detailed information on procedures for the certificate programs may be found on the main department web page.

Graduate Certificate in Software Engineering

Details for the Graduate Certificate in Software Engineering are found on the graduate catalog section devoted to the Master of Science in Software Engineering degree program.

Graduate Certificate in Computer Forensics

The Lane Department of Computer Science and Electrical Engineering (LDCSEE) offers a Graduate Certificate in Computer Forensics (CF). By providing systematic graduate courses in this field, our graduates and others should be better prepared to assist business, industry, government, and academia in attaining a new level of protection from cyber-criminals.

The graduate certificate program consists of 15 credit hours of required courses. Admission to the graduate certificate program in Computer Forensics requires admission to the MS Computer Science or MS Electrical Engineering (with Computer Engineering major). One wishing to complete only the Certificate must still be admitted to the MSCS or MSEE programs.

The purpose of the certificate program is to:

1. Provide further education to computer professionals with technical undergraduate degrees to enable them to track and protect institutional computer and cyber crime. This knowledge in corporate settings should lead to better protection of company computer assets, company intellectual property, and company data and financial assets. These professionals should be able to support law enforcement in detection and prosecution cyber-crime when needed.

2. Provide further education for those technical individuals who work in law-enforcement. It is expected that these would be highly technical people with bachelor’s degrees in either computer science, computer engineering, or software engineering.

Many (if not most) of the students expected will be full time and pursuing a Master of Science degrees in Computer Science or Computer Engineering. Other students may come from industry and law enforcement. These students will achieve the Certificate as another resume item that will improve employability while supplying a demand for computer people with such backgrounds. Some students may choose to pursue the Certificate with no intent of completing a Masters degree but will have achieved significant competence in this field.
The certificate requires 15 credit hours through required core curriculum courses. In addition to the fifteen credit hours upon course completion, the student will be required to complete a capstone project.

The following are the 15 credits hours:

1. CpE 435: Computer Incident Response
2. CpE 536: Computer Data Forensics
3. CS 568: Computer Network Forensics
5. Cs 539: Computer Forensics and the Law

These five courses cover the major areas of study. The first is an overview of the entire area; the next two will be taught with an emphasis throughout on vulnerabilities and counter-measures. The fourth course emphasizes management practices and oversight required to maintain the best defense against attacks in organizations, and how to respond to them. The final course deals with the law and cases governing the area of computer crime, its detection and prosecution, keeping in mind the constraints placed on security by the rights of citizens.

Graduate Certificate in Biometrics & Information Assurance

The graduate level Information Assurance and Biometrics Certificate Program at West Virginia University (WVU) provides a student-centered learning environment to educate and train professionals to meet the changing needs of the industry, government, and academia in West Virginia and the nation. This program is offered to WVU students, government personnel (military and civilian), and contractor personnel who meet the program acceptance requirements. Potential career options for students completing this certificate program are in security related fields most likely in the military, banking industry, or within various law enforcement agencies.

The graduate level Information Assurance and Biometrics Certificate Program offered at WVU provides a broad overview of the information assurance and biometrics field and addresses relative and recent advances and current research issues. It is interdisciplinary in nature and covers many educational materials. Included are the elements of biometrics technology, system security engineering, and principles of trusted systems. The course content of this program emphasizes ethical, economic, social, and legal impacts of biometrics technologies and information assurance techniques.

The goal of the graduate level 15 Credit Hour Information Assurance and Biometrics Certificate Program is to provide students with the following:

• A solid understanding of biometrics technology, system security principles, and their scientific foundations, and
• An awareness of the social, psychological, ethical, and legal policies and requirements in the field of information assurance and biometrics (IAB), and
• The ability to communicate with professionals in the wide range of public services, including law enforcement, military, science and who employ the principles and techniques of IAB.

The coursework includes 15 credit hours of classes. As part of the certificate coursework, students will be expected to take four (4) required classes, and choose the fifth class between two approved electives. Titles of the required classes are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOM 426</td>
<td>Course BIOM 426 Not Found</td>
<td>3</td>
</tr>
<tr>
<td>CS 465</td>
<td>Course CS 465 Not Found</td>
<td>3</td>
</tr>
<tr>
<td>STAT 516</td>
<td>Forensic Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOM course</td>
<td>Advanced Biometrics</td>
<td>3</td>
</tr>
<tr>
<td>Select one</td>
<td>of the following:</td>
<td>3</td>
</tr>
<tr>
<td>CS 665</td>
<td>Computer System Security</td>
<td></td>
</tr>
<tr>
<td>EE 465</td>
<td>Course EE 465 Not Found</td>
<td></td>
</tr>
</tbody>
</table>

A capstone project will be required as part of the Advanced Biometrics course. Advanced Biometrics is a required capstone course taken after BIOM 426, CS 465, and STAT 516. This course includes a once-a-week advanced topics seminar series and a three-hour laboratory. The laboratory will have both formal laboratory exercises and time devoted to the project. The project will provide the students with an opportunity to integrate the knowledge gained from the core courses to the program.

Graduate Certificate in Interactive Technologies and Serious Gaming

A graduate certificate in Interactive Technologies and Serious Gaming recognizes that interactive computer software such as games are both a programmed artifact and a cultural object, and careers in computer gaming - whether in academia or in industry - require a broad range of skills. The purpose of this program is to:

1. Give graduate students the skills required to conduct advanced research in gaming and interactive technologies
2. Prepare students for careers in the gaming industry.
3. Foster a local gaming and interactive technologies program in West Virginia

Admissions requirements for this certificate program are the same as the admission requirements for the M.S.C.S. degree program.

The Interactive Technologies and Serious Gaming certificate program with normally be completed over two years. Requirements for completion of the degree are 18 credit hours of coursework and completion of a final project. The 18 credit hours of coursework will include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 572</td>
<td>Adv Artificial Intelligence Tech</td>
<td>3</td>
</tr>
<tr>
<td>CS 570</td>
<td>Interactive Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CS course -</td>
<td>Design of Immersive Media</td>
<td>3</td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Prior to completion of the certificate students will complete a significant project, suitable for inclusion in their portfolio. The aim of the project is to synthesize and combine the student's prior study into an innovative product.

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**Faculty**

**Chair**
- Brian Woerner - Ph.D.

**Associate Chairperson**
- James D. Mooney - Ph.D.

**Graduate Coordinator for ECE**
- Muhammad Choudhry - Ph.D.

**Graduate Coordinator for Computer Science**
- Donald Adjeroh

**Graduate Coordinator for Software Engineering**
- James Mooney

**Professors**
- Hany H. Ammar - Ph.D. (U. Notre Dame)
  Risk assessment, Software engineering, Biometrics, Performance and dependability analysis, Modeling and evaluation of parallel and distributed systems.
  Status: Regular
- Muhammad A. Choudhry - Ph.D. (Purdue U.)
  Graduate coordinator for CpE & EE. Power system control, DC transmission, Stability, Power electronics.
  Status: Regular
- Bojan Cukic - Ph.D. (U. Houston)
  Status: Regular
- Parviz Famouri - Ph.D. (U. Ky.)
  Analysis and control of electrical machines, Motor drives, Power electronics, Electric vehicles.
  Status: Regular
- Ali Feliachi - Ph.D. (Ga. Tech.)
  Power systems, Large-scale systems, Control.
  Status: Regular
- Lawrence Hornak - Ph.D. (Rutgers U.)
  Optics, Integrated optics, Micro/nano structures and devices, Biosensors, Biometrics.
  Status: Regular
- Powsiri Klinkhachorn - Ph.D. (WVU)
  Microprocessor applications, Computer architecture, Binary and non-binary logic.
  Status: Regular
- Afzel Noore - Ph.D. (WVU)
VLSI design and testing, Software engineering, Information assurance and biometrics.
Status: Regular
• Roy S. Nutter Jr. - Ph.D., P.E. (WVU)
  Neural networks, Microprocessor systems, Computer architecture, Computer forensics.
  Status: Regular
• Y. V. Ramana Reddy - Ph.D. (WVU)
  Artificial intelligence, Knowledge-based simulation, Computer graphics.
  Status: Regular
• George E. Trapp - Ph.D. (Carnegie Mellon U.)
  Network modeling, Numerical analysis, Mathematical programming. Emeritus.
• Brian Woerner - Ph.D. (U. of Mich.)
  Chair. Wireless communication.
  Status: Regular

Associate Professor
• Donald Adjeroh - Ph.D. (Chinese U. of Hong Kong)
  Multimedia information systems (images, video, and audio), Distributed multimedia systems.
  Status: Regular
• Elaine M. Eschen - Ph.D. (Vanderbilt U.)
  Graduate coordinator for CS Ph.D. CCDM program. Design and analysis of algorithms, Graph theory, Combinatorics.
  Status: Regular
• Katerina Goseva-Popstojanova - Ph.D. (U. Sv. Kiril I Metodij)
  Software reliability engineering, Distributed systems, Computer security, Dependability, Performance and performability assessment.
  Status: Regular
• Mark A. Jerabek - Ph.D., P.E. (Purdue U.)
  Solid state devices and sensors, Electromagnetics.
  Status: Regular
• Dimitris Korakakis - Ph.D. (Boston U.)
  Semiconductor growth, Nanotechnology, Photonic devices, Biosensors.
  Status: Regular
• Xin Li - Ph.D. (Princeton U.)
  Image Processing, Computer vision, Pattern recognition.
  Status: Regular
• Tim Menzies - Ph.D. (U. of New South Wales)
  Software engineering, Artificial intelligence.
  Status: Regular
• James D. Mooney - Ph.D. (Ohio St. U.)
  Associate chair. Operating systems, Computer architecture, Software portability and standards, Computer security and forensics.
  Status: Regular
• Daryl Reynolds - Ph.D. (Tex. A&M)
  Statistical signal processing for communications, Iterative (turbo) processing, Transmitter pre-coding, Space-time coding and processing.
  Status: Regular
• Arun Ross - Ph.D. (Mich. St. U.)
  Statistical pattern recognition, Biometric authentication, Image processing, Computer vision.
  Status: Regular
• Natalia Schmid - Ph.D. (Wash. U., St. Louis)
  Estimation and detection, Biometrics, Information theory, Statistical signal and image processing.
  Status: Regular
• K. Subramani - Ph.D. (U. Md.)
  Scheduling, Computational biology, Computational complexity, Polyhedral combinatorics.
  Status: Regular
• Matthew C. Valenti - Ph.D. (VPI & SU)
  Communication theory, Wireless systems, Error control coding.
  Status: Regular
• Frances L. VanScoy - Ph.D. (U. Va.)
  Programming languages and compilers, Multisensory computing, High performance computing.
  Status: Regular
Research Associate Professor
- Alan V. Barnes - Ph.D. (Cal Tech)
  Ion surface interactions, Materials growth and automated document analysis.
- Sumitra Reddy - Ph.D. (WVU)
  Healthcare informatics, Componentware, Intelligent systems, Information technology evolution.
Status: Regular

Assistant Professor
- Gyungsu Byun
- Xian-An Cao - Ph.D. (U. of Fla.)
  Nanofabrication, Optoelectronic device.
Status: Regular
- Yaser P. Fallah - Ph.D. (University of British Columbia)
  Cyber Physical Systems, Computer and Wireless Networks, Intelligent Transportation, and Embedded Systems
Status: Regular
- David Graham - Ph.D. (Ga. Tech.)
  Analog signal processing.
Status: Regular
- Guodong Guo - Ph.D. (U. of Wisc.-Madison)
  Computer vision, Biometrics, Human computer interaction.
- Vinodkrishnan Kulathumani - Ph.D. (Ohio St. U)
  Wireless sensor actuator networks, Scalable and fault tolerant distributed systems.
- Yuxin Liu - Ph.D., (La. Tech. U)
  Biotechnology/bioengineering, BioMEMS and microfluidics, Cellular senor, Tissue engineering.
- Sarika Khushalani Solanki - Ph.D. (Miss. St. U.)
  Power/energy conversion, Power systems, Controls, signals, and systems.

Research Assistant Professor
- Thirimachos Bourlai - Ph.D. (University of Surrey)
  Biometrics; medical image processing; pattern recognitions
Status: Regular
- Jeremy Dawson - Ph.D., (WVU)
  Nanotechnology.
Status: Regular
- Jignesh Solanki - Ph.D. (Penn. St. U.)
  Tissue engineering, Spinal cord injury repair, Stem cells, Molecular neurobiology.

Visiting And Adjunct Professor
- Nancy Lan Guo - Ph.D. (WVU)
  Medical information systems.
Status: Regular
- V. Jagannathan - Ph.D. (Vanderbilt U.)
  Distributed intelligent systems, Internet and security technologies.
Status: Regular
- Stephanie Schuckers - Ph.D. (U. of Mich.)
  Signal processing, Biometrics.

Lecturers
- Camille Hayhurst - M.S.C.S. (WVU)
  Programming languages.
  Biomedical systems, databases.
- Cynthia D. Tanner - M.S.C.S. (WVU)
  Graduate coordinator for software engineering.

Professors emeriti
- John Atkins
Computer and Information Sciences

Doctor of Philosophy in Computer and Information Sciences

General Description
The doctoral program in Computer & Information Science is intended for students who wish to pursue advanced study and research in the field of Computer Science. The doctor of philosophy is a research degree rather than a coursework degree. Doctoral students are required to complete a number of advanced courses, but more time is spent in original research in close association with an experienced researcher. The Ph.D. program in computer and information sciences (CIS) prepares a student for a teaching and research career in computer science or related information sciences, in industry, government, or advanced educational institutions.

An area of emphasis in combinatorial computing and discrete mathematics (CCDM) is offered within the CIS Ph.D. program. The CCDM Ph.D. program offers students the opportunity to pursue multidisciplinary studies across theoretical computer science, discrete mathematics, and statistics. Applicants are expected to satisfy the Admission Requirements for All Programs as given previously. In addition, for regular admission, applicants must satisfy certain CCDM specific prerequisites, and hold a master’s degree in computer science, statistics, mathematics, a closely related field, or have completed equivalent graduate coursework. An applicant that does not meet all of these requirements may be admitted provisionally. Note that a CCDM Ph.D. student is not required to have or obtain the equivalent of a bachelor’s or master’s degree in computer science. The CCDM Entrance Exam replaces the CIS Ph.D. Qualifying Exam. Coursework requirements differ from those of the CIS Ph.D. program, but are not in conflict with any CIS Ph.D. requirements. Details for the CCDM Ph.D. program can be found in the Handbook of CCDM Ph.D. Program for Computer Science Graduate Students.

The following sections describe the general procedures to be followed in completing the regular CIS Ph.D. degree. Note that the steps are intended to be carried out in a specific order. Further details can be found in the Handbook for Computer Science Graduate Students.

Program Educational Objectives and Outcomes
The educational objective of the Ph.D. program in Computer & Information Science is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study.

Specific outcomes of the program are:
1. Achieve a depth of knowledge in core computer science subjects, as demonstrated by completion of core Ph.D. courses and examination on those subjects through the Qualifying Examination Process.
2. Achieve a breadth of advanced knowledge to support research, as demonstrated by completion of doctoral level coursework and graduate seminar participation.
3. Achieve an ability to carry out independent research, as demonstrated by successful completion and defense of a dissertation.

Admission Requirements
Students who satisfy the Admission Requirements for All Programs as given previously, and who have at least a bachelor’s degree in computer science or a science, engineering, or mathematics discipline will be considered for admission. All applicants must submit three letters of reference and a statement of purpose, which briefly explains their objectives in seeking the degree.

Removing Deficiencies
Normally, students who do not have at least the equivalent of a bachelor’s degree in computer science will be admitted initially as provisional master’s students. Their first requirement will be to complete all necessary preparatory work by taking the courses as described for the M.S.C.S. degree. After meeting this requirement, these students may apply for the doctoral program.

In exceptional cases a student lacking some elements of the required background may be admitted directly as a provisional doctoral student. Students in this category must complete the needed preparatory work as described above during their first two semesters.

Preliminary Coursework
Doctoral students who do not have an M.S.C.S. degree must either earn this degree, or as a minimum, complete coursework as required for the M.S.C.S. with thesis option. It is not necessary to actually write a thesis. A minimum of 24 hours of coursework is required. Up to 12 hours may be transferred from work done at another institution.
Graduate Committee
During the second semester as a regular doctoral student, students must form their Graduate Committee and prepare a plan of study. Students planning to first complete an M.S.C.S. degree must be admitted as an M.S.C.S. student to form a Master’s Committee consisting of three or more members, and follow the requirements for the M.S.C.S. as discussed above. In all other cases, or when the M.S.C.S. degree has been completed, students should form a Doctoral Committee of at least five members in consultation with the graduate coordinator. This committee must conform to all University and college requirements set forth in other sections of this catalog.

Qualifying Examinations
Within three years of admission to the doctoral degree program, applicants must take and pass a set of departmental qualifying examinations, demonstrating a breadth of knowledge in computer science. Information on the content of these examinations is made available by the department. The content is not necessarily limited to specific courses the student has taken.

A student may receive one of two grades on each exam: pass or fail. Students are permitted three sittings to pass the exams, but need not retake exams on which they previously received a passing grade. The student must pass all three qualifying examinations in three consecutive semesters. A Ph.D. student who does not receive a pass on these examinations after three attempts may transfer all credits earned in the doctoral program toward acquiring a master’s degree.

Regular Coursework
Students who have successfully passed the qualifying examinations must then take, additionally, 18 hours of advanced graduate coursework at the doctoral level. Courses used to fulfill this requirement are selected in consultation with the Doctoral Committee. Up to six of these hours may be in directed study (CS 792). All other hours must be in regular courses.

Candidacy Examinations
After completing all regular coursework, a doctoral student will be permitted to stand for the comprehensive examinations. These examinations are prepared for each student by the student’s Doctoral Committee. The examinations are intended to assess the student’s knowledge in areas closely related to his or her intended research area. The committee will determine the content and format of these examinations and the manner in which they will be administered.

After completion of the comprehensive examinations, the doctoral student will present a research prospectus to his or her Graduate Committee, outlining the original research that the student proposes to perform. The prospectus will consist of a statement of the research problem, a review of the pertinent scientific literature in the area, and a description of the methods that will be employed in an attempt to solve the research problem. After the committee has questioned the student on the prospectus and approved it (with any required modifications) as the doctoral research topic, the student will be permitted to register for doctoral research.

Upon successful completion of the candidacy examinations, the student is formally admitted as a candidate for the Ph.D. degree in CIS.

Research and Dissertation
After approval of the research prospectus, the student carries out the dissertation research under the supervision of the Doctoral Committee. Each doctoral student must register for a total of 18 hours of dissertation research using course number CS 797. Preliminary research may be carried out before the research prospectus is approved, but not before the Doctoral Committee is formed. Normally the research requirement is fulfilled by registration for nine hours or more in two consecutive semesters of residence, which also meets University residency requirements.

Research for the CIS Ph.D. degree must represent an interesting and original contribution to the field of computer science. The results of the research must be of a quality suitable for publication in an archival journal. The student must demonstrate a good knowledge of the literature related to the research topic and the relation of his or her own work to other work that has been reported. The dissertation must provide satisfactory theoretical or experimental evidence to demonstrate the soundness of the results presented.

The results of the research are reported in a dissertation, which is presented to the Doctoral Committee and formally defended in a public meeting. When the committee determines that the candidate has successfully completed and presented the research as outlined in the prospectus, the student will be certified for graduation.

Program Requirements
Coursework
Students must complete at least 18 hours of formal coursework at the doctoral levels at WVU, beyond that required of the master’s degree. Students with the help of their AEC select courses that will develop expertise in the student’s area of interest, and that will strengthen knowledge of other areas supportive of research endeavors.
Examinations

Ph.D. students must pass a written qualifying examination, normally within one year of their first enrollment in the Ph.D. program. The student must also pass a written and oral candidacy examination given by the AEC, and must successfully defend in oral examination a written research proposal.

When all requirements are completed, the qualifying and candidacy examinations are passed, and the research proposal is successfully defended, the student is formally admitted to candidacy for the Ph.D. degree. For full-time students, admission to candidacy must occur within three years of entering the Ph.D. program.

After the student completes the research (at least 24 credit hours) and prepares a dissertation, the final examination consists of a public defense of the dissertation. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

Research

Research work for the doctoral dissertation must represent a significant contribution to engineering. It may entail a fundamental investigation into a specialized area or a broad and comprehensive system analysis or design. A minimum of 24 credit hours of research (CS 797) is required.

Program Length

A typical Ph.D. program requires four to five years beyond the baccalaureate degree, although scholarly achievements are more important than length of program

Faculty

Chair

- Brian D. Woerner - Ph.D. (University of Michigan)
  wireless communications; secure communications

Professors

- Hany H. Ammar - Ph.D. (Notre Dame)
  software specification, design and reliability
- Muhammad Choudhry - Ph.D. (Purdue University)
  power system analysis and simulation
  Status: Electrical Engineering/Computer Engineering Graduate Coordinator
- Bojan Cukic - Ph.D. (University of Houston)
  software engineering; information assurance; biometrics
  Status: Byrd Professor; Co-Director, Center for Identification Technology Research
- Parviz Famouri - Ph.D. (University of Kentucky)
  MEMS; power electronics; nano-biotechnology
  Status: Associate Dept. Chair for Research & Graduate Studies
- Ali Feliachi - Ph.D. (Georgia Institute of Technology)
  control and optimization of power systems
  Status: Power Professor; Director of Advanced Power & Energy Research Center
- Lawrence Hornak - Ph.D. (Rutgers University)
  photonics; MEMS; wide-bandgap semiconductors; biometric systems
  Status: Byrd Professor
- Powsiri Klinkhachorn - Ph.D. (West Virginia University)
  computer and embedded systems applications; robotics
- Afzel Noore - Ph.D. (West Virginia University)
  digital logic and VLSI design; digital watermarking
  Status: Associate Dept. Chair for Academic Affairs
- Roy Nutter - Ph.D. West Virginia University
  microprocessor applications; logic design; computer forensics
- Y. Ramana Reddy - Ph.D. (West Virginia University)
  distributed computing systems applications
- Matthew Valenti - Ph.D. (Virginia Tech)
  communications; wireless sensor networks; error correction
Associate professors

• Donald Adjeroh - Ph.D. (The Chinese University of Hong Kong)
  multimedia information systems; image processing
  Status: Computer Science Graduate Coordinator
• Elaine Eschen - Ph.D. (Vanderbilt University)
  combinatorial algorithms; graph theory
  Status: CCDM Program Coordinator
• Katerina Goseva-Popstojanova - Ph.D. (Ss. Cyril and Methodius University)
  software reliability; fault tolerance; computer security
  Status: Byrd Professor
• Mark Jerabek - Ph.D. (Purdue University)
  solid state devices; electromagnetics; biomedical sensing
• Dimitris Korakakis - Ph.D. (Boston University)
  semiconductor growth; nanotechnology; photonic devices
• Xin Li - Ph.D. (Princeton University)
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• Tim Menzies - Ph.D. (University of New South Wales)
  practical artificial intelligence for software engineering
• Jim Mooney - Ph.D. (The Ohio State University)
  software portability; operating systems
  Status: Software Engineering Program Coordinator
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• Arun Ross - Ph.D. (Michigan State University)
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  Status: Byrd Professor
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• David Graham - Ph.D. (Georgia Institute of Technology)
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  computer vision; biometrics; human computer interaction
• Sarika Khushalani-Solanki - Ph.D. (Mississippi State University)
  smart grids; intelligent applications for power systems; power control systems; power systems optimization
• Vinod Kulathumani - Ph.D. (The Ohio State University)
  networking; distributed systems; communication systems; wireless sensor networks
• Yuxin Liu - Ph.D. (Louisiana Tech University)
  bio-micro electro mechanical systems and fluids; cellular sensors; tissue engineering; biofuel cell

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• Sumitra Reddy - Ph.D. (West Virginia University)
  software engineering

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• Thirimahos Bourlai - Ph.D. (University of Surrey)
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• Jeremy Dawson - Ph.D. (West Virginia University)
  biometrics; nanotechnology; photonics; sensors
• Jignesh Solanki - Ph.D. (Mississippi State University)
  smart grids; decentralized control of power systems; control and automation of distribution and transmission systems

Computer Engineering
Doctor of Philosophy in Computer Engineering

Description
The doctor of philosophy program should be considered by those with superior academic achievement and who desire to pursue a career of research or teaching. Students interested in the Ph.D. program in computer engineering should see our web page at http://www.csee.wvu.edu for information. If additional information is needed, contact the graduate coordinator of electrical and computer engineering.

Program Educational Objectives and Outcomes
The educational objective of the Ph.D. program in Computer Engineering is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study.

Specific outcomes of the program are:
1. Achieve a depth of knowledge in core computer engineering subjects, as demonstrated by completion of core Ph.D. courses and examination on those subjects through the Qualifying Examination process.
2. Achieve a breadth of advanced knowledge to support research, as demonstrated by completion of doctoral level coursework and graduate seminar participation.
3. Achieve an ability to carry out independent research, as demonstrated by successful completion and defense of a dissertation.

Admission
As a first step, students must satisfy provisions under the “Admission Requirements for All Programs” of the main catalog entry for the Lane Department of and must submit a statement of purpose.

Students who hold an M.S. degree in Electrical Engineering or Computer Engineering (or equivalent degree) will be considered for admission with regular status into the Ph.D. program. Students, who hold a master’s degree in the sciences or engineering, excluding M.S.E.E. or M.S.E., will be considered for admission with provisional status and will likely have coursework deficiencies to remove. All other students must apply for admission into a master’s program as the first stage in attaining the Ph.D.

Removing Deficiencies for Ph.D. in CPE or EE
Prior to the first week of classes, new Ph.D. students must meet with the graduate coordinator to select classes. This interview determines if the student needs remedial work in order to pursue a graduate degree.

Students with deficiencies may be required to take courses as prerequisites for graduate courses. Deficiencies are usually noted as a condition for admission. However, they may also be specified during the interview or later.

During the second semester, students must form their Advisory and Examining Committee (AEC) and write a plan of study. The AEC may also identify additional deficiencies to be removed, but this is rare since deficiencies should have been identified earlier in the student’s career.
Program Requirements

Coursework
Students must complete at least 18 hours of formal coursework at the doctoral level at WVU, beyond that required of the master’s degree. Students with the help of their AEC select courses that will develop expertise in the student’s area of interest, and that will strengthen knowledge of other areas supportive of research endeavors.

Examinations
Ph.D. students must pass a written qualifying examination, normally within one year of their first enrollment in the Ph.D. program. The student must also pass a written and oral candidacy examination given by the AEC, and must successfully defend in oral examination a written research proposal.

When all requirements are completed, the qualifying and candidacy examinations are passed, and the research proposal is successfully defended, the student is formally admitted to candidacy for the Ph.D. degree. For full-time students, admission to candidacy must occur within three years of entering the Ph.D. program.

After the student completes the research (at least 24 credit hours) and prepares a dissertation, the final examination consists of a public defense of the dissertation. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

Research
Research work for the doctoral dissertation must represent a significant contribution to engineering. It may entail a fundamental investigation into a specialized area or a broad and comprehensive system analysis or design. A minimum of 24 credit hours of research (CPE 797 or EE 797) is required.

Program Length
A typical Ph.D. program requires four to five years beyond the baccalaureate degree, although scholarly achievements are more important than length of program.

Faculty

Chair
• Brian Woerner - Ph.D. (University of Michigan)
  wireless communications; secure communications

Professors
• Ali Feliachi - Ph.D. (Georgia Institute of Technology)
  control and optimization of power systems
  Status: Power Professor; Director of Advanced Power & Energy Research Center
• Hany H. Ammar - Ph.D. (Notre Dame)
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• Jignesh Solanki - Ph.D. (Mississippi State University)
  smart grids; decentralized control of power systems; control and automation of distribution and transmission systems

Computer Science

Degree Offered
• Master of Science in Computer Science

General Description
The Master of Science in Computer Science (M.S.C.S.) degree program qualifies a student to assume a professional role in industry or government, teach in a junior or senior college, or undertake advanced training toward a doctorate in computer science.

The following sections describe the general procedures to be followed in completing the M.S.C.S. degree. Note that steps are intended to be carried out in a specific order.

Program Educational Objectives & Outcomes
The objective of the Master of Science in Computer Science (M.S.C.S.) degree program is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study.

Specific outcomes that will be achieved by graduates of the program are:
1. Achieve a depth of proficiency in a specific field of Computer Science by completing major courses one of three areas: computer systems; software and knowledge engineering; or the theory of computation
2. Achieve a breadth of understanding of Computer Science by completing minor coursework requirements in other areas, and by participation in graduate seminar requirements.
3. Demonstrate professionalism and communication skills through completion of a coursework, project or thesis defense.

Admission Requirements
Students who satisfy the departmental graduate admission requirements given on the main departmental section will be considered for admission. Additional criteria may be considered in making a final decision. All applicants must submit three letters of reference and complete an Applicant Information Form.

Removing Deficiencies
The minimum background expected of any student entering the M.S.C.S. program is coursework equivalent to the following:
• One year of calculus (MATH 155 and MATH 156).
• One course in probability and statistics (STAT 215).
• Knowledge of introductory programming in a high-level programming language (STAT 215).

Students not meeting these minimum requirements will be required to take the equivalent coursework before applying to the M.S.C.S. program.
Students entering without a four-year bachelor’s degree in computer science may have additional deficiencies in their coursework which must be addressed before beginning the regular M.S.C.S. program. These students will be initially admitted with provisional status, and required to remove these deficiencies during their first 18 hours of coursework.

Possible deficiency areas for students having a bachelor’s degree in other disciplines represent the following core areas required of all undergraduate CS students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 111</td>
<td>Course CS 111 Not Found</td>
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<tr>
<td>CS 220</td>
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<tr>
<td>CS 221</td>
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<td>CS 230</td>
<td>Course CS 230 Not Found</td>
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<tr>
<td>CS 310</td>
<td>Course CS 310 Not Found</td>
</tr>
<tr>
<td>CS 350</td>
<td>Course CS 350 Not Found</td>
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</tbody>
</table>

As demand justifies and resources permit, the department will offer accelerated courses to assist graduate students in satisfying deficiencies.

**Program Requirements**

Students may choose the thesis option or the problem report option. The thesis option requires 30 credit hours: 24 hours of formal coursework and six hours of research. At most nine hours of 400-level undergraduate coursework may be included. This option requires writing a thesis that represents research suitable for publication in a refereed journal. All theses are submitted to the University’s Electronic Thesis and Dissertation program.

The problem report option requires 33 credit hours: 30 hours of formal coursework and three hours of research. Again, at most nine hours of 400-level undergraduate coursework may be included. The problem report option requires writing an acceptable report describing a research project carried out by the student.

The department or the student’s Graduate Committee may designate additional courses, including doctoral-level courses that may meet these requirements.

**Graduate Committee**

*Before the end of the second semester as a regular master’s student, each student must form a Graduate Committee of at least three members. The chair of this committee must have regular graduate faculty status. For a committee overseeing a thesis, the majority of the members must also have regular graduate faculty status.*

The role of this committee is to guide the student both in selection of courses and in research. At the time the committee is formed, the student submits for approval a preliminary plan of study listing the courses that have been taken or will be taken. The choice of thesis or problem report option should also be indicated on the plan of study, along with a tentative title for the thesis or problem report.

**Research and Final Defense**

After formation of the Graduate Committee and approval of the preliminary plan of study, the student may register for research using course number CS 697. Research may begin at the same time that the coursework is being completed. However, students should normally plan on the equivalent of one semester of full-time effort to complete a problem report, or two semesters to complete a thesis.

All master’s students must defend their thesis or problem report at an oral exam, attended by all members of the committee. The exam consists of two parts. The first part is a period of oral questioning on the student’s coursework. This questioning is intended to ensure that the student has learned the general concepts of the courses he or she has taken. The coursework part must be completed satisfactorily before the research defense can take place. A student who fails the coursework part may have one additional attempt during the same semester.

The second part is presentation of the research and a defense of this research by answering questions from the committee. This defense may occur directly after the coursework questions or at a later time. It cannot be held until the coursework questions are answered satisfactorily.

A student who fails the research defense may repeat the defense at most once, at a time determined by the Graduate Committee but not necessarily during the same semester.

**Program Length**

Normally a student who has attained regular master’s status should expect to spend two to three semesters plus an additional semester or summer session to complete the M.S.C.S. degree.
Faculty

Chair

- Brian Woerner - Ph.D. (University of Michigan)
  wireless communications; secure communications

Professors

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  smart grids; decentralized control of power systems; control and automation of distribution and transmission systems

Electrical Engineering

Degrees Offered
• Master of Science in Electrical Engineering (M.S.E.E.)
• Doctor of Philosophy in Electrical Engineering

MSEE Program Description
The Master of Science in Electrical Engineering (M.S.E.E.) degree program is intended for students who have an undergraduate degree in Electrical Engineering, Computer Engineering or a closely related discipline, and wish to broaden their depth of understanding in one or more areas of the field. Program graduates will be qualified to pursue careers in industry, government or further academic study.
**PHD Description**

The doctor of philosophy program should be considered by those with superior academic achievement and who desire to pursue a career of research or teaching. Students interested in the Ph.D. program in electrical engineering or computer engineering should see our web page at http://www.csee.wvu.edu for information. If additional information is needed, contact the graduate coordinator of electrical and computer engineering.

**Program Educational Objectives & Outcomes**

The objective of the Master of Science in Electrical Engineering (M.S.E.E.) degree program is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study.

Specific outcomes that will be achieved by graduates of the program are:

1. Achieve a depth of proficiency in a specific field of Electrical Engineering by completing major courses one of four areas: electronics & photonics; systems & signals; computer systems; or software and knowledge engineering.
2. Achieve a breadth of understanding of Electrical Engineering by completing minor coursework requirements in another area, and by participation in graduate seminar requirements.
3. Demonstrate professionalism and communication skills through completion of a coursework, project or thesis defense.

**Program Requirements for M.S.E.E.**

There are three options available for students to gain a master’s degree: coursework only thesis option, or problem report option.

- Students following the coursework option must take 33 credit hours of formal course-work plus two hours of graduate seminar. This option is open only to professionals employed full-time in local industry. At most nine hours of 400-level coursework may count.

- Students following the problem report option must take 35 credit hours: 30 hours of formal coursework, three hours of research, and two hours of graduate seminar. At most nine hours of 400-level undergraduate coursework may count.

- Students following the thesis option must take 32 credit hours: 24 hours of formal coursework, six hours of research, and two hours of graduate seminar. Students supported by research assistantships are expected to pursue this option.

Students pursuing either the thesis or problem report option leading to the M.S. degree must have the thesis or problem report approved by the student’s advisory and examining committee (AEC) before it can be accepted. The student must also pass a final oral examination and defense of the thesis or problem report administered by the AEC.

Those students who lack course prerequisites may require more than three semesters of full-time study to complete the degree. Students with research assistantships may also require more than three semesters to complete the degree.

**Regular, Provisional, and Non-Degree Admission**

Students admitted into a program are designated as regular, provisional, or non-degree status. Regular status is given to students who are granted unconditional admissions. Provisional status is given to students who have deficiencies to make up such as incomplete credentials or other reasons as identified by the graduate coordinator. In all cases, the student’s letter of admission will state what must be done to attain regular status, and students must sign and date this letter no later than the first registration. Non-degree status is granted case-by-case by the graduate coordinator. Basically, a non-degree student is one who may take courses, but sometimes with no plan of study or any guarantee for attaining provisional status.

**Master Options**

Three options are available to EE master’s students for degree completion:

**Thesis Option:** Total hours: 32. Eight three-credit courses, at least two hours of graduate seminar, plus six credits of research leading to successful thesis defense.

**Problem Report:** Total hours: 35. Ten three-credit courses, at least two hours of graduate seminar, plus three credits of research/independent study leading to successful problem report completion.

**Coursework Option:** Total hours: 35. Eleven three-credit courses and at least two hours of graduate seminar.
Program Educational Objectives & Outcomes

The objective of the Ph.D. Program in Electrical Engineering degree program is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, government service, or in further graduate or professional study.

Specific outcomes that will be achieved by graduates of the program are:

1. Achieve a depth of understanding in Electrical Engineering, as demonstrated by completion of core Ph.D. courses, and examination on that material through the Qualifying Examination process.
2. Achieve a breadth of understanding of the Electrical Engineering discipline, as demonstrated by completion of remaining doctoral coursework, and participation in graduate seminar.
3. Demonstrate the ability to conduct independent research by completion and defense of a dissertation.

Admission

As a first step, students must satisfy provisions under the “Admission Requirements for All Programs” and must submit a statement of purpose.

Students who hold an M.S.E.E. or M.S.E. (or equivalent) degree will be considered for admission with regular status into the Ph.D. program. Students, who hold a master’s degree in the sciences or engineering, excluding M.S.E.E. or M.S.E., will be considered for admission with provisional status and will likely have coursework deficiencies to remove. All other students must apply for admission into a master’s program as the first stage in attaining the Ph.D.

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Students must complete at least 18 hours of formal coursework at the doctoral level at WVU, beyond that required of the master’s degree. Students with the help of their AEC select courses that will develop expertise in the student’s area of interest, and that will strengthen knowledge of other areas supportive of research endeavors.

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Ph.D. students must pass a written qualifying examination, normally within one year of their first enrollment in the Ph.D. program. The student must also pass a written and oral candidacy examination given by the AEC, and must successfully defend in oral examination a written research proposal.

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After the student completes the research (at least 24 credit hours) and prepares a dissertation, the final examination consists of a public defense of the dissertation. All requirements for the degree must be completed within five years after the student has been admitted to candidacy.

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Research work for the doctoral dissertation must represent a significant contribution to engineering. It may entail a fundamental investigation into a specialized area or a broad and comprehensive system analysis or design. A minimum of 24 credit hours of research (CPE 797 or EE 797) is required.

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  multimedia information systems; image processing
  Status: Computer Science Graduate Coordinator
• Elaine Eschen - Ph.D. (Vanderbilt University)
  combinatorial algorithms; graph theory
  Status: C EDM Program Coordinator
• Katerina Goseva-Popstojanova - Ph.D. (Ss. Cyril and Methodius University)
  software reliability; fault tolerance; computer security
  Status: Byrd Professor
• Mark Jerabek - Ph.D. (Purdue University)
  solid state devices; electromagnetics; biomedical engineering
• Dimitris Korakakis - Ph.D. (Boston University)
  semiconductor growth; nanotechnology; photonic devices
• Xin Li - Ph.D. (Princeton University)
  image processing; computer vision; multimedia systems
• Tim Menzies - Ph.D. (University of New South Wales)
  practical artificial intelligence for software engineering
• Jim Mooney - Ph.D. (The Ohio State University)
  software portability; operating systems
  Status: Software Engineering Program Coordinator
• Daryl Reynolds - Ph.D. (Texas A&M University)
communication and statistical signal processing

- Arun Ross - Ph.D. (Michigan State University)
  multimodal biometrics; statistical pattern recognition
  Status: Byrd Professor
- Natalia Schmid - Ph.D. (Washington University - St. Louis)
  signal processing; wireless networks; information theory; pattern recognition & biometrics
- K. Subramani - Ph.D. (University of Maryland)
  design, analysis and complexity of algorithms
- Frances Van Scoy - Ph.D. (University of Virginia)
  computer languages; graphics; virtual environments

**Assistant professors**

- Gyungsu Byun - Ph.D. (UCLA)
  digital electronic systems
- Xian-An Cao - Ph.D. (University of Florida)
  micro and nano fabrication; semiconductor devices
- Gianfranco Doretto - Ph.D. (UCLA)
  computer vision; biometric systems
- Yaser P. Fallah - Ph.D. (University of British Columbia)
  cyber-physical systems
- David Graham - Ph.D. (Georgia Institute of Technology)
  analog signal processing; embedded systems
- Guodogn Guo - Ph.D. (University of Wisconsin)
  computer vision; biometrics; human computer interaction
- Sarika Khushalani-Solanki - Ph.D. (Mississippi State University)
  smart grids; intelligent applications for power systems; power control systems; power systems optimization
- Vinod Kulathumani - Ph.D. (The Ohio State University)
  networking; distributed systems; communication systems; wireless sensor networks
- Yuxin Liu - Ph.D. (Louisiana Tech University)
  bio-micro electro mechanical systems and fluids; cellular sensors; tissue engineering; biofuel cells

**Research Associate Professor**

- Alan Barnes - Ph.D. (California Institute of Technology)
  information networks
- Sumitra Reddy - Ph.D. (West Virginia University)
  software engineering

**Research Assistant Professor**

- Thirimacho Bourlai - Ph.D. (University of Surrey)
  biometrics; pattern recognition; image processing; computational physiology
- Jeremy Dawson - Ph.D. (West Virginia University)
  biometrics; nanotechnology; photonics; sensors
- Jignesh Solanki - Ph.D. (Mississippi State University)
  smart grids; decentralized control of power systems; controls and automation of distribution and transmission systems

**Software Engineering**

The Lane Department of Computer Science & Electrical Engineering offers professionally oriented Master of Science in Software Engineering (M.S.S.E) degree program, as well as a graduate Certificate in Software Engineering. The M.S.S.E. provides graduate educational opportunities to working professionals. The M.S.S.E. degree is a unique extended learning program which provides graduate level software engineering expertise to individuals who are currently working in the computer and information technology industry. The program aspires to serve both adult learners from the local computer and information technology industry, and extended learning students taking the course from remote locations. The typical M.S.S.E. student is a full time information technology professional who wishes to augment his work experience with additional academic background.
Program Objectives and Outcomes

The objective of the program is to produce graduates who have the knowledge, skills, and attitudes that will ensure success in professional positions in business, industry, research, governmental service or in graduate study as well as professionals school.

More specifically, after completing five core courses, students will achieve the following outcomes:

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

Students will complete their degree requirements with five elective courses which will deepen their understanding of aspects of software engineering relevant to their careers.

Master of Science in Software Engineering (M.S.S.E.)

The M.S.S.E. degree provides graduate-level software engineering expertise to individuals who are either currently working in the computer and information technology industry or have academic credentials that provide a foundation to begin graduate work in software engineering. The M.S.S.E. program aspires to serve both adult learners from the local computer and information technology industry, and traditional, resident full-time graduate students. This program is offered online at evening times and convenient for the working professional.

Admission Requirements

Students seeking admission to the M.S.S.E. program must fall into one of two categories to be considered for admission. The categories are:

**CS, CPE, or Software Engineering Students**

Students who have recently completed a bachelor’s degree in computer science, computer engineering, or software engineering will be considered for admission with regular status if they satisfy the following requirements:

- Cumulative GPA of 3.0 (on a 4-point scale) or better for all undergraduate work.
- Submission of satisfactory scores for the GRE General Test or Revised General Test, including a score in the 70th percentile or better for quantitative reasoning.

**Nontraditional Students**

Students who do not meet the above requirements but have work experience related to software development will be considered for admission if they meet the following requirements:

- Hold a four-year bachelor’s degree in any field from an accredited University, with a GPA of at least 2.75.
- Submit a resume documenting at least one year of software development experience.

The GRE is not required.

Nontraditional students are initially admitted as non-degree students. They may enroll in core courses in the M.S.S.E. program, and must earn a grade of at least B in each of the first four courses. Upon meeting this requirement, these students may apply for transfer to the regular M.S.S.E. program. At the time of transfer, they must meet the following additional requirements:

- Submit a resume documenting at least three years of software development experience.
- Submit three letters of reference from persons familiar with the student’s professional work.

Program Requirements

Students pursuing an M.S.S.E. degree may elect a coursework only option, a problem report option, or a thesis option. The coursework option and the problem report option require completion of a total of 33 graduate credit hours: 33 hours of formal coursework, or 30 hours of formal coursework and three hours of research (SENG 697). The thesis option requires a total of 30 credit hours: 24 hours of formal coursework and six hours of research.

Certificate in Software Engineering

The certificate in software engineering program provides further education to individuals who are currently working in the computer and information technology industry. This program is offered online at evening times convenient for the working professional. Students may either complete
Students may apply for admission as non-degree students to complete the certificate requirements. These students may then optionally apply for transfer to the M.S.S.E. program. In addition, students already admitted to the M.S.S.E. may elect to receive the certificate after completing the necessary requirements.

Admission Requirements

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

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

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

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

Program Requirements

The certificate program consists of completing five approved courses and a certificate term paper. Students who achieve a B or higher in each of the first four courses of the certificate program may qualify to enter the M.S.S.E. program, as described below. Courses taken for the certificate program earn credit towards the master’s degree.

Faculty

Chair

- Brian Woerner - Ph.D. University of Michigan
  - wireless communications; secure communications

Software Engineering Program Coordinator

- Jim Mooney - Ph.D. (The Ohio State University)
  - software portability; operating systems

Professors

- Hany H. Ammar - Ph.D. (Notre Dame)
  - software specification, design and reliability
- Bojan Cukic - Ph.D. (University of Houston)
  - software engineering; information assurance; biometrics
  - Status: Byrd Professor; Co-Director, Center for Information Technology Research
- Parviz Famouri - Ph.D. (University of Kentucky)
  - Associate Dept. Chair for Research & Graduate Studies
- Alzel Noore - Ph.D. (West Virginia University)
  - Associate Dept. Chair for Academic Affairs
- Y. Ramana Reddy - Ph.D. (West Virginia University)
  - distributed computing systems applications

Associate professors

- Katerina Goseva-Popstojanova - Ph.D. (Ss. Cyril and Methodius University)
  - software reliability; fault tolerance; computer security
  - Status: Byrd Professor
- Tim Menzies - Ph.D. (University of New South Wales)
  - practical artificial intelligence for software engineering

Lecturers

- Ken Costello - MS (West Virginia University)
  - software analysis and design; software evolution
- Dan Dzielski - MBA (Regent University)
software architecture framework; process quality control
- Jeff Edgell - MS (Stephens Institute of Technology)
optimization program design; requirements engineering; data warehousing; artificial intelligence
- Michael Evanoff - MS (West Virginia University), MBA (West Virginia University)
systems integration; e-commerce
- Marcus Fisher - MS (West Virginia University)
software validation & verification
- Larry Jakowitz - Ph.D. (The Ohio State University)
software project management; software systems development
- Ray Morehead - MS (West Virginia University)
database systems
- Cindy Tanner - MS (West Virginia University)
software engineering; information assurance

Department of Industrial and Management Systems Engineering

e-mail: Wafik.Iskander@mail.wvu.edu

Degrees Offered

- Master of Science in Industrial Engineering
- Master of Science in Engineering with a major in Industrial Engineering
- Master of Science in Industrial Hygiene
- Master of Science in Safety Management
- Doctor of Philosophy with a major in Industrial Engineering
- Doctor of Philosophy with a major in Occupational Safety and Health

One of the defining attributes in the success of the department is the dedication and talent of its 16 faculty and three staff members. The aggregate careers of our faculty and staff represent nearly 300 years of service to students at WVU. In these 300 years of service is embodied the wisdom and experience to successfully prepare industrial engineers and occupational health and safety professionals for the 21st century. The faculty and staff typically educate 270 to 300 undergraduate, 100 to 120 M.S., and 15 to 20 Ph.D. students. The department is in the unique position in the United States of having two complimentary graduate programs in industrial hygiene and safety accredited by the Applied Science Accreditation Commission (ASAC) of the Accreditation Board for Engineering and Technology (ABET). The combined resources and faculty talents of these two programs create synergies that provide our students with outstanding academic and research experiences in the field of occupational safety and health. Excellent academic and research opportunities are also available for students in the areas of operations research, decision sciences, and manufacturing, and ergonomics.

Program Objectives

**Master of Science in Industrial Engineering and Master of Science in Engineering with a Major in Industrial Engineering**

A graduate of these Master's programs will be prepared to:

1. Practice Industrial Engineering and to initiate and develop leadership roles in business, industry and/or government.
2. Continue professional development and life-long learning.
3. Interact in society and business in a professional and ethical manner.
4. Be proficient in written and oral communication and to utilize people-oriented skills in individual and team environments.
5. Apply the skills from Industrial Engineering to be proficient in his/her chosen field or further advanced studies.

**Master of Science in Industrial Hygiene**

A graduate of the Industrial Hygiene Master's program will be prepared to:

1. Practice Industrial Hygiene and to initiate and develop leadership roles in business, industry and/or government.
2. Continue professional development and life-long learning.
3. Interact in society and business in a professional, ethical manner to promote occupational and environmental health.
4. Be proficient in written and oral communication and to utilize people-oriented skills in individual and team environments.
5. Apply the skills from Industrial Hygiene to be proficient in his or her chosen field or doctoral studies.
Master of Science in Safety Management
A graduate of the Safety Management Master’s program will be able to:
1. Communicate effectively, orally and in writing, including the transmission of safety data to management and employees.
2. Demonstrate knowledge and skills in the area of safety management.
3. Demonstrate knowledge of ethical and professional responsibilities and knowledge of applicable legislation and regulations.
4. Demonstrate the ability to apply various research activities through the decision-making process used in safety management.

Doctor of philosophy with a major in Industrial Engineering
A graduate of the Industrial Engineering doctoral program will be prepared to:
1. Practice/teach Industrial Engineering and to initiate and develop leadership roles in education, business, industry and/or government.
2. Continue professional development and life-long learning.
3. Interact in society and business in a professional and ethical manner.
4. Be proficient in written and oral communication and to utilize people-oriented skills in individual and team environments.
5. Apply the skills from Industrial Engineering to be proficient in his/her chosen field.

Doctor of philosophy with a major in occupational safety and health
A graduate of the Occupational Safety and Health doctoral program will be prepared to:
1. Anticipate and recognize hazards and environmental cases requiring the application of safety and health methods in occupational settings.
2. Identify social and epidemiological trends in occupational safety and health issues at the national and international levels.
3. Identify methods of management in application of effective control techniques.
4. To demonstrate understanding of federal, state and local regulatory agencies as they impact the practice of occupational safety and health.
5. Conduct, disseminate, and publish original research in occupational safety and health.
6. Be qualified to enter the profession as a professor, practitioner or researcher in occupational safety and health.

Educational Outcomes
Master of Science in Industrial Engineering and Master of Science in Engineering with a Major in Industrial Engineering
In order to meet the educational objectives, students of these Master’s programs must be able to meet the following educational outcomes at the time of their graduation.

Students will have acquired:
1. the ability to use and master modern and classical Industrial Engineering methodologies in their area of concentration.
2. the ability to apply knowledge of math, science, and engineering.
3. the ability to do research, and to design and conduct experiments, analyze and interpret data, develop implementation strategies, shape recommendations so that results will be achieved and findings will be communicated effectively.
4. the ability to work individually, on teams, and/or on multi-disciplinary teams to identify, formulate and solve problems using industrial engineering knowledge, skills and tools.
5. the ability to design and implement or improve integrated systems that include people, materials, information, equipment and energy using appropriate analytical, computational, and experimental practices.
6. an understanding of professional and ethical responsibility and the broad education and knowledge of contemporary issues necessary to understand the impact of solutions in a global and societal context.
7. a recognition of the need for and an ability to engage in life-long learning.
8. the professional characteristics expected of a successful Industrial Engineer.

Master of Science in Industrial Hygiene
In order to meet the educational objectives of the Industrial Hygiene program, students must be able to meet the following educational outcomes at the time of their graduation:
1. An ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice such as:
   a. Principles and methods of industrial hygiene
   b. Principles and methods of ergonomics
   c. Principles and methods of safety
   d. Principles of environmental sciences (Environmental elective)
   e. Principles of epidemiology and biostatistics
   f. Principles and methods of control of physical and chemical hazards
2. The ability to apply knowledge of math, science, and Industrial Hygiene
3. The ability to design and conduct experiments, analyze and interpret data, develop implementation strategies, shape recommendations
   so that results will be achieved and findings will be communicated effectively;
4. The ability to work individually, in teams, and/or in multi-disciplinary teams to identify, formulate and solve problems using Industrial Hygiene, safety, and ergonomics knowledge, skills and tools;
5. An ability to formulate or design a system, process or program to meet desired needs;
6. An understanding of professional and ethical responsibility and the broad education and a knowledge of contemporary issues necessary
   to understand the impact of solutions in a global and societal context;
7. A recognition of the need for and an ability to engage in life-long learning; and
8. The professional characteristics expected of a successful Industrial Hygienist.

Master of Science in Safety Management
In order to meet the educational objectives of the Safety Management program, students must be able to meet the following educational
outcomes at the time of their graduation:
1. Demonstrate knowledge and skills to build a comprehensive Safety and Health Program based on loss control and regulations.
2. Demonstrate knowledge and skills to use analytical techniques in the Safety and Health function.
3. Demonstrate knowledge and skills with federal, state, and non-governmental Safety and Health Program standards and best practices.
4. Demonstrate skills in communications, written and oral, at the level of professionals in safety and health positions.
5. Demonstrate knowledge and skills in writing and evaluating safety and health research proposals.
6. Demonstrate knowledge and skills in using management tools to implement and evaluate safety, hygiene and environmental programs.

Doctor of philosophy with a major in industrial Engineering
In order to meet the educational objectives, students of the Industrial Engineering doctoral program must be able to meet the following
educational outcomes at the time of their graduation.
Students will have acquired:
1. the ability to use, master, and teach modern and classical Industrial Engineering methodologies in their area of concentration.
2. the ability to apply knowledge of math, science, and engineering.
3. the ability to do research, and to design and conduct experiments, analyze and interpret data, develop implementation strategies, shape
   recommendations so that results will be achieved and findings will be communicated effectively.
4. the ability to work individually, on teams, and/or on multi-disciplinary teams to identify, formulate and solve problems using industrial
   engineering knowledge, skills and tools.
5. the ability to design and implement or improve integrated systems that include people, materials, information, equipment and energy
   using appropriate analytical, computational, and experimental practices.
6. a thorough understanding of professional and ethical responsibility and the broad education and knowledge of contemporary issues
   necessary to fully evaluate the impact of solutions in a global and societal context.
7. a recognition of the need for and an ability to engage in life-long learning.
8. the professional characteristics expected of a successful Industrial Engineer.
Doctor of philosophy with a major in occupational safety and health

In order to meet the educational objectives, students of the Occupational Safety and Health doctoral program must be able to meet the following educational outcomes at the time of their graduation.

Students will have acquired the ability:

1. To construct, manage and evaluate a comprehensive safety and health program for large industry or government agencies.
2. To participate in the safety and health regulatory process as an individual or part of a corporation or university.
3. To critically evaluate research conducted by other individuals or corporations in occupational safety and health.
4. To provide excellent teaching at the University or corporate levels.
5. To participate in activities such as conferences or seminars for continued professional improvement.
6. To actively participate as a leader in the professional organizations that serve the occupational safety and health fields.
7. To demonstrate the highest possible ethical standards in the field of occupational safety and health.

Faculty Research

The department has quality research laboratories in manufacturing, robotics and vision systems, CAD/CAM, operations research, production planning and control, decision sciences, ergonomics, industrial hygiene, and safety. Graduate students are encouraged to utilize these resources to explore and develop their capabilities. Research initiatives and on-going funding opportunities are available to students in the areas of: ergonomics; operations research; manufacturing; occupational safety and health; artificial intelligence; and respirator research.

Admission

To qualify as a regular graduate student, applicants must have as a minimum, the equivalent of a 3.0 GPA. Applicants with a minimum 2.75 GPA (or the equivalent) may be admitted on a provisional basis. Applicants with GPA below 2.75 would need approval of the dean or his designee. International students must demonstrate proficiency in communicating in English (a minimum TOFEL Score of 550, or IBT Score of 79, or IELTS Score of 6.5). Students must comply with the rules and regulations as outlined in this catalog for graduate work in the College of Engineering and Mineral Resources.

• For admission into the M.S.I.E. and M.S.E. programs, applicants must have a bachelor of science degree from an engineering department, or from physics, chemistry, computer sciences, mathematics, or similar technical or science program. In general a degree in one of the “hard” science programs is required with at least two years of calculus or equivalent mathematics.
• For admission into the M.S. industrial hygiene program, applicants must meet ABET/ASAC prerequisite course requirements which are currently a minimum of 63 credit hours of approved science, mathematics, and other technical courses. Of these, at least 15 credit hours must be junior or senior level. Specific pre/co-requisite course requirements include two semesters of general/inorganic chemistry, and two semesters of physics. On an individual basis, the faculty may identify additional pre/co-requisite coursework, often including organic chemistry and biology. Applicants will be advised about their specific requirements at the time of admission. Applicants not meeting all of the listed requirements may be considered for admission as provisional students.
• For admission into the M.S. safety management program, applicants must meet ABET/ASAC prerequisite course requirements, which are currently a minimum of 63 credit hours of approved science, mathematics, and other technical courses. Of these, at least 15 credit hours must be junior or senior level. In addition, students must have a minimum of 21 hours of social sciences, humanities, and/or communications. On an individual basis, the faculty may identify additional prerequisite coursework. Applicants will be advised about their specific requirements at the time of admission. Applicants not meeting all of the listed requirements may be considered for admission as provisional students.

Required Courses

Required courses are determined by the student’s degree program and area of emphasis. Specific course information by program area is available at the following website: http://www.imse.cemr.wvu.edu/courses/.

Thesis

When a student elects the thesis or problem report option, the thesis or problem must conform to the general requirements of the University and to the written requirements of the Department of Industrial and Management Systems Engineering.

Graduation Requirements

The M.S.I.E. or M.S.E. degree requirements for the thesis option include completion of a minimum of 24 credit hours, plus a six-hour thesis; or candidates may take 33 credit hours and complete a three-hour problem report. The M.S.I.H. degree requires a total of a minimum 36 hours, including credits for a thesis or a problem report. A candidate for the M.S.I.E., M.S.E., or M.S.I.H. degrees must pass an oral examination on coursework and the thesis or problem report. M.S. in safety management degree candidates may opt to complete a
minimum of 31 credit hours, plus a six-hour thesis, or they may opt to complete a minimum of 34 credit hours and a problem report, or a 37-
credit-hour all coursework program. Candidates who take the 34- or 37-hour options are also required to pass a final comprehensive written
examination. All graduate students must have a final grade point average of at least 3.0.

Master’s Degree Programs

Industrial and Management Systems Engineering

Graduate programs in industrial and management systems engineering are designed to give students experience in developing innovative
solutions to real problems by implementing creative ideas. Students can expect to develop their creative abilities in order to be effective in
innovative environments while improving their abilities to communicate and implement new ideas.

Four degrees are offered at the master’s level: M.S.I.E., M.S.E., M.S. in industrial hygiene, and M.S. in safety management. See our

• The M.S. industrial engineering degree program is appropriate for students with a B.S. in industrial engineering or other engineering
discipline.

• The M.S. engineering degree program is designed for students having a baccalaureate degree in a technical field other than industrial
engineering who wish to pursue a broader, more interdisciplinary program of graduate studies. An undergraduate degree in either
another engineering field or the basic sciences is required for admission to the M.S.E.

• The M.S. in industrial hygiene is accredited by the Applied Science Accreditation Committee (ASAC) of the Accreditation Board of
Engineering and Technology (ABET). Suitable undergraduate degrees include engineering, chemistry, biology, medical sciences, animal
sciences, and the physical sciences. The three disciplines that form the basis of hygiene are industrial hygiene, industrial safety, and
ergonomics.

• The M.S. in safety management degree program is accredited by the Applied Science Accreditation Committee (ASAC) of the
Accreditation Board of Engineering and Technology (ABET). It is designed for students trained in the areas of business and economic
sciences, animal sciences, chemical and biological sciences, engineering and technology sciences, medical sciences, and the physical
sciences who have an interest in safety management.

Doctor of Philosophy

A candidate for the degree of doctor of philosophy (Ph.D.) must comply with the rules and regulations of the College of Engineering and
Mineral Resources and the University. To be accepted in the Ph.D. program, applicants should have at a minimum (or equivalent) of a 3.4
GPA in their graduate work. They must also meet all the entrance requirements stated earlier for the master’s programs. Each student will
develop a program with a major in industrial engineering or occupational safety and health designed to meet his/her needs and objectives in
consultation with an advisor and the Advisory and Examining Committee. Required core courses for the Ph.D. program are determined by
the student’s area of emphasis. In general, Ph.D. students take approximately 54 hours of coursework beyond their baccalaureate degree,
with a minimum of 30 hours in industrial engineering or occupational safety and health. The research work for the doctoral dissertation may
entail a fundamental investigation or a broad and comprehensive investigation into an area of specialization.

Early in the doctoral program, the student must pass an examination to demonstrate master’s-level proficiency in industrial engineering or
occupational safety and health subject matter. Upon completion of the coursework, the student must pass a written examination in order to
be admitted to candidacy. An acceptable dissertation must be written and defended.

Faculty

Chair

• Wafik Iskander - Ph.D., P.E. (Texas Tech U.)
  Operations research and optimization, Simulation modeling and analysis, Production planning and control, Applied statistics, and
  Transportation planning.
  Status: Regular

Professors

• Rashpal S. Ahluwalia - Ph.D., P.E. (Western Ontario U.)
  Manufacturing systems, Quality and reliability engineering, Robotics and automation.
  Status: Regular

• Jack Byrd Jr. - Ph.D., P.E. (WVU)
  Operations research, Workforce development, Work design, Integrated product development.
  Status: Regular

• Robert C. Creese - Ph.D., P.E. (Penn. St. U.)
  Manufacturing processes/systems, Foundry engineering, Cost engineering.
Status: Regular
• Daniel E. Della-Giustina - Ph.D. (Mich. St. U.)
  Playground and recreation safety, Sport safety, Highway and traffic management, Safety, fire, and emergency response.
  Status: Regular
• B. Gopalakrishnan - Ph.D., P.E., CEM. (Va. Tech.)
  Manufacturing processes and production systems, Artificial intelligence applications, Expert systems development, Industrial energy efficiency, Building’s energy efficiency, Industrial energy and waste minimization, and Productivity improvement.
  Status: Regular
• Steven Guffey - Ph.D., C.I.H. (N.C.S.U.)
  Ventilation systems theory and design, Noise measurement and control, Exposure assessment.
  Status: Regular
• Majid Jaridi - Ph.D. (U. Mich.)
  Statistics, Quality control, Forecasting and transportation research.
  Status: Regular
• Warren R. Myers - Ph.D., C.I.H. (WVU)
  Associate Dean for Academic Affairs. Industrial hygiene and safety, Worker exposure assessment and modeling, Aerosol filtration, Occupational respiratory protection design and testing.
  Status: Regular
• Gary Winn - Ph.D. (Ohio St. U.)
  Construction safety, Transportation safety and program evaluation, Total quality management, Theory of paradigm shifts.
  Status: Regular

Associate Professor
• Alan McKendall, Jr. - Ph.D. (U. of Mo.—Columbia)
  Operations research, Meta-heuristics, Facilities layout and materials handling, Project scheduling, Integrated production systems.
  Status: Regular

Assistant Professor
• Michael J. Klishis - Ph.D. (WVU)
  Safe behaviors and loss control, Training, Instructional development, Mine safety and health.
  Status: Regular
• Ashish Nimbarte - Ph.D. (La. St. U.)
  Work related musculoskeletal disorders, Occupational biomechanics and biomechanical modeling.
  Status: Regular
• Xiaopeng Ning - Ph.D. (Iowa St. U.)
  Safety engineering, Biomechanics, Ergonomics, Human factors engineering.
  Status: Regular
• Feng Yang - Ph.D. (Northwestern U.)
  Status: Regular
• Qipeng Zheng - Ph.D. (U. of Florida)
  Operations Research, Optimization, Energy systems.
  Status: Regular

Professor emeritus
• Ralph W. Plummer - Ph.D., P.E. (WVU)
  Status: Emeritus

Associate professors emeriti
• Andrew J. Sorine - Ed.D. (WVU)
  Benchmarking, Safety and health programs, Safety management information systems.
  Status: Emeritus

Visiting and Adjunct Professor
• Ali Afshari - Ph.D. (WVU)
  Manufacturing, Materials, Engineering design.
• Christopher Coffey - Ph.D. (WVU)
  Occupational safety and health, Assessment, Evaluation of respiratory protective equipment.
• Ren Dong - Ph.D. (Concordia U.)
  Human factors engineering, Ergonomics, Safety engineering
• John R. Etherton - Ph.D. (WVU)
  Safety engineering, Human factors.
• Martin Harper - Ph.D. (London Schl. of Hygiene and Tropical Med.)
  Industrial hygiene, Exposure assessment.
• James R. Harris - Ph.D. (WVU)
  P.E., Safety research, Human factors.
• Hongwei Hsiao - Ph.D. (U. of Mich.)
  Safety engineering, Human factors.
• Kevin Michael - Ph.D. (Penn. St. U.)
  Acoustics, Hearing protection, Industrial hygiene.
• Christopher Pan - Ph.D. (U. of Cincinnati)
  Industrial hygiene, Exposure assessment.
  Industrial hygiene, Exposure assessment.
• M. Abbas Virgi - Sc.D., C.I.H. (U. of Mass.)
  Exposure assessment, Epidemiology, Biostatistics.
• Ziqing Zhuang - Ph.D. (WVU)
  Exposure assessment, Assessment and evaluation of respiratory protective equipment.

Department of Mechanical and Aerospace Engineering

E-mail: Jacky.Pruz@mail.wvu.edu

Degrees Offered

• Master of Science in Mechanical Engineering
• Master of Science in Aerospace Engineering
• Master of Science in Engineering with a major in Mechanical or Aerospace Engineering
• Doctor of Philosophy in Engineering with a major in Mechanical or Aerospace Engineering

The outcomes of the graduate programs in mechanical engineering are:
• Holders of graduate degrees will have an expert-level understanding of the advanced principles of mechanical engineering, which include mechanical systems design, system dynamics, solid mechanics, energy systems, engineering materials, automatic controls, mechatronics and computational mechanics.
• Holders of graduate degrees will hold paramount the highest standards of ethical and professional responsibility in the practice of their profession to contribute to the well being of society and to the advancement of the mechanical engineering profession.
• Holders of Ph.D. degrees will have furthered original research contributions to the state of the art in their specific areas of expertise and will be able to develop innovative research in order to advance the frontiers of knowledge, secure sponsored research and disseminate its findings through scholarly publications.

The outcomes of the graduate programs in aerospace engineering are:
• Holders of graduate degrees will have an expert-level understanding of the advanced principles of aerospace engineering, which include aerospace systems design, aircraft or spacecraft dynamics, stability and control, flight mechanics and simulation, advanced materials, vehicle propulsion, aerodynamics, aeroelasticity and computational mechanics.
• Holders of graduate degrees will hold paramount the highest standards of ethical and professional responsibility in the practice of their profession to contribute to the well being of society and to the advancement of the aerospace engineering profession.
• Holders of Ph.D. degrees will have furthered original research contributions to the state of the art in their specific areas of expertise and will be able to develop innovative research in order to advance the frontiers of knowledge, secure sponsored research and disseminate its findings through scholarly publications.

Faculty

Faculty members in the department have extensive research, industrial, and teaching experience and have published widely. Their combined experience helps them assist students in selecting relevant courses and research topics to meet their educational goals. The department has excellent laboratory facilities in the Engineering Sciences Building, the Engineering Research Building, and the new
Graduate Programs

The objectives of the departmental graduate-level programs are: 1.) to provide master-level education for students in or entering the engineering profession and/or 2.) To provide an advanced graduate educational experience for students pursuing the doctoral degree. Three master degrees are offered in the department: the master of science in aerospace engineering (M.S.A.E.), the master of science in mechanical engineering (M.S.M.E.), and the master of science in engineering (M.S.E.) with a major in mechanical engineering or aerospace engineering. The department also offers the doctor of philosophy (Ph.D.) degree with majors in mechanical engineering or aerospace engineering.

An application package can be obtained from the Graduate Program Director, Department of Mechanical and Aerospace Engineering, West Virginia University, P.O. Box 6106, Morgantown, WV 26506-6106. Application material and information are also accessible on-line at http://www.mae.cemr.wvu.edu

- The applicant must first submit a completed application, application fee, and transcripts of all college work (directly from the institution) to the WVU Office of Admissions.
- Each applicant is required to complete an applicant information form and have three recent reference letters (using standard forms available from the department) sent directly to the department; at least two of the three references should be from the institution last attended.

Regular Admission Requirements

Minimum requirements for admission as a regular student into the graduate programs of the department are summarized as follows:

- An applicant for admission into the M.S. or the Ph.D. degree program must have earned a grade point average (GPA) of 3.0 or better (out of a possible 4.0) in all previous college work if he/she holds a B.S. or M.S. degree, respectively, from an accredited or internationally recognized program, as stated above.
- Applicants for admission into the B.S.M.S. degree track must have a grade point average of 3.5 or higher at the end of the first semester in the junior year of the curriculum. Applicants for admission into the direct-track from B.S. to Ph.D. degree option must have a grade point average of 3.5 or higher if they commence their graduate studies in the department.
- International students must demonstrate proficiency in communicating in English (a minimum TOFEL Score of 550, or IBT Score of 79, or IELTS Score of 6.5). (This requirement will be waived for applicants who have completed a recent four-year bachelor’s degree in the USA.)
- All international applicants who have not received their undergraduate degree in the USA are required to submit GRE general test scores with the engineering subject test score being optional. The GRE scores required for admission as a regular graduate student in the department need to be 75th percentile or higher in the Quantitative section (strictly enforced). The GRE scores for the verbal and analytical sections will be taken into consideration in the admission process.

Provisional Admission

An applicant not qualifying for the admission status of regular graduate student, either due to marginally insufficient grade point average or GRE performance, incomplete credentials, or inadequate academic background, may be admitted as a provisional student at the discretion of the Admissions Committee of the Department. Requirements for attaining regular student status must be stated in a letter of admission. Provisional students must sign a contract, which lists in detail all requirements that have to be met for attaining regular student status, typically no later than the end of the first semester at WVU.

All of the graduate degree programs offered by the department require the student to attain an overall grade point average of 3.0 or higher both in all the courses required for the degree program and in all the courses taken at WVU, in order to meet graduation requirements. The cumulative grade point average (GPA) is calculated on the basis of courses only, and excludes credit for research, for which the received grade can be either S (satisfactory), or U (unsatisfactory). Note, however, that a grade of U in research is equivalent to a grade of F in a regular course and it can decrease drastically the GPA of a graduate student.

Courses

Only courses with grades of C or higher are acceptable for graduate credit, although all coursework taken will be counted in establishing the student’s grade point average. No more than nine hours of 400-level credit can be counted toward meeting the coursework requirements for the M.S. degree. Only 400-level courses that are approved for math credit (see the following section) and only 400-level courses approved as technical electives for the B.S. degree in an engineering discipline are acceptable for course credit towards the M.S. degree. The technical elective(s) must not have been used to satisfy the B.S. degree. The absolute minimum requirement set by the department for
coursework credit towards a Ph.D. degree is 18 hours beyond the master’s degree at the 500-level or higher taken at WVU. However, the actual minimum number of coursework credits is set by the student’s Advisory and Examining Committee and is based on the student’s background and the area of his/her Ph.D. dissertation. No more than 20 percent of the coursework beyond the minimum of 18 credit hours required by the college for a doctoral degree can be at the 400 level. A minimum of 24 semester hours of research credit at the Ph.D. level is required to meet dissertation requirements. Two consecutive semesters of full-time attendance at the WVU campus in Morgantown are necessary to meet the residency requirements of the Ph.D. program.

Math Requirements
The Department of Mechanical and Aerospace Engineering requires that the graduate coursework include six hours of advanced mathematics for the M.S. programs of study and a minimum of six additional hours of mathematics for the Ph.D. programs. A list of mathematics courses approved for graduate credit can be obtained from the graduate program director of the department.

Time Limitations
All requirements for a master’s degree must be completed within eight years preceding the student’s graduation. All students pursuing an M.S. degree in the MAE department are required to engage in research, and complete and defend successfully an M.S. thesis. They should identify a subject for their M.S. thesis research, form a three-member Advisory and Examining Committee, and file a plan of study by the end of their second semester of enrollment in the graduate program. A minimum of 24 credit hours of coursework and six credit hours of M.S. thesis research is required for the M.S. degree. Students must pass a final examination administered by their Advisory and Examining Committee before being certified for the degree.

Academic Areas
Graduate courses in the MAE department are organized under six academic areas: fluids and aerodynamics; solid mechanics and structures; design and controls; thermal sciences; bioengineering; and materials science. Students who are pursuing an advanced degree in either mechanical or aerospace engineering may perform their thesis or dissertation research and specialize in any one of these areas.

Fluids and Aerodynamics
A variety of courses and facilities support graduate research in aerodynamics and fluid mechanics. Laboratories are located in college buildings and remote sites. Flow facilities include instrumented subsonic and supersonic wind tunnels, shock tubes, and several flow loops mainly used for research in gas-solid and density stratified flows. Available instrumentation includes eight channels of hot wire/film anemometry, two single-component and one three-component, laser Doppler velocimeter (LDV) systems. The department owns two flight simulation facilities, one that simulates translational and rotational motion in six degrees of freedom, and the other that relies on D-six software to provide “joystick only” flight simulation. Furthermore, the department built and operated different types of Unmanned Airborne Vehicles (UAV’s), as well as experimental aircraft and airborne systems that are housed in a hangar owned by the department at the Hart Field municipal airport in Morgantown. A significant portion of the current activity involves numerical solutions to flow problems and is supported by a computing facility dedicated to graduate research.

Although the faculty background and interests in the areas of aerodynamics and fluid mechanics are broad, recent research has been concentrated on applications of computational fluid dynamics (CFD) to investigate a wide variety of problems in fuel cell technology, fixed wing and rotorcraft aerodynamics, bioengineering, and combustion. The department’s faculty have accumulated extensive research experience in multiphase and density-stratified flows, low-speed aerodynamics, shock phenomena in two-phase systems, flow in microgravity, boundary layer control, and high-speed aerodynamics. Previous and current research areas include topics such as fluidized bed combustion, aerosol sampling, flow metering, flow distribution systems, numerical solutions to gas-solid flows, and fluid-particle turbulence interactions, including deposition on solid surfaces. The low-speed aerodynamics work is related to the design of vertical axis wind turbines and STOL airfoils. The research in high-speed aerodynamics deals with viscous-inviscid interactions in transonic, supersonic, and hypersonic flow.

Solid Mechanics and Structures
The solid mechanics and structures area encompasses the theoretical, numerical, and experimental study of solid bodies, from concentration on local behavior of deformable bodies to the global response of structural elements. Hence, students may explore the mechanical behavior of materials in the neighborhood of micro-scale defects such as cracks, or investigate the behavior of large-scale bodies such as aerospace structures.

The faculty members specialized in this area carries out basic and applied research using state-of-the-art computational and experimental techniques. The areas of research include advanced metal alloys and composite materials, lightweight structures, safety and durability enhancements, real time monitoring and diagnosis of structural systems, aero elasticity, fracture mechanics, nonlinear dynamics and vibrations, biomechanics, computational methods and experimental techniques, including optical and ultrasound methods. Furthermore, in cooperation with the Department of Civil and Environmental Engineering, MAE graduate students may pursue studies related to civil engineering. A large array of research facilities includes laboratories (materials, structures, vibrations, photo mechanics, biomechanics, fracture mechanics), computers (work stations, personal computers, computer-aided engineering), mechanical and electronic shops.
Design and Controls
The system control and design area offers instructional and research opportunities for students who seek to attain the expertise required to design or control the behavior of an engineering system in a dynamic environment. Instructional offerings equip the students with a foundation for developing prototype systems and for improving the performance of existing systems. Selected examples of research areas include flight simulation and controls, automatic controls, advanced instrumentation, microprocessor applications and non-destructive testing, parametric, stochastic and integrated design methods, elastodynamic analysis, computer aided design (CAD), modeling, design and analysis of energy management systems. The research endeavors of the faculty reflect a close association with current industrial-type, real life situations.

Thermal Sciences
The thermal sciences and engineering area encompasses the fields of thermodynamics, combustion, heat transfer, and power and energy systems. Graduate course offerings cover a wide range of topics in this area with applications to both aerospace and mechanical engineering problems. Recent research efforts include topics such as alternative fuels testing, internal combustion engine performance and emissions, fuel cell technology, heat transfer, numerical analysis of thermal systems, the analysis of fluidized bed combustion, energy analysis of buildings, oscillating jet combustion, deposition on turbine blades, and reactor design.

Research facilities include a state-of-the-art engine research laboratory, three transportable emissions research laboratories, thermal analyzers, recording thermocouple data-acquisition systems, high-altitude simulation chamber for ablation and wear studies, a fluidized bed combustion laboratory, an electrically-heated, natural convection water facility, Schlieren systems for flows with varying density, a water reservoir for thermal stratification studies.

Bioengineering
Areas of research specialization related to bioengineering include ultrasound technology for imaging of body tissues and organs, respiratory and diseased tissue mechanics, orthopedic mechanics, bone growth and fracture, and the application to rehabilitation of computer-aided design and microprocessor-based instrumentation. Research facilities include a state-of-the-art ultrasound imaging laboratory, an aerosol inhalation exposure system, laser-based holographic and moire interferometric equipment, a lung acoustic impedance measurement system, and modern orthopedic, rehabilitation, and computer research laboratories.

Materials Science and Engineering
The materials science and engineering area allows for the study of processing, structure, and properties of materials for structural, functional, and device applications. Areas of research emphasized within this area include: advanced microscopy; composite materials; materials for fuel cells; smart materials; super alloys; facilities incorporating electron microscopy, scanning probe microscopy, electro-chemical characterization, thermal analysis, and mechanical testing facilities.

Master of Science in Aerospace Engineering
Students wishing to pursue a program leading to an M.S.A.E. degree are required to have a B.S.A.E. or B.S.M.E. from an accredited ABET curriculum or the equivalent. Students with an engineering background other than aerospace or mechanical engineering normally will be required to strengthen their background. Programs of study must comply with the rules and regulations as outlined in the general requirements for graduate work in the College of Engineering and Mineral Resources. The student’s program of study is formulated jointly by the student and his/her committee. Normally, a thesis is required of all candidates for the degree of Master of Science in aerospace engineering.

The plans of study for the M.S.A.E. degree must include six semester hours of advanced mathematics beyond a first course in differential equations and at least 12 semester hours of courses taken from any two areas of the department. The remainder of the course work may consist of other courses from mechanical and aerospace engineering, other departments in the College of Engineering and Mineral Resources, or advanced course work in mathematics, chemistry, and physics. A maximum of six hours of research credit is counted toward degree requirements for thesis work. Students not completing a thesis will be required to include six hours of methods courses in their plans of study.

Master of Science in Mechanical Engineering
Students wishing to pursue a program leading to an M.S.M.E. degree are required to have a B.S.M.E. or B.S.A.E. from an accredited ABET curriculum or its equivalent. Students with an engineering background other than mechanical or aerospace engineering normally will be required to strengthen their background.

The plan of study must include at least six hours of advanced mathematics beyond a first course in differential equations, and 12 total hours of courses from at least two areas of study in mechanical engineering. Students are normally required to write a thesis. On occasion, part-time off-campus students may be given permission to substitute a problem report for a thesis when they can present compelling evidence of equivalent experience. A maximum of six hours of research credit is counted toward meeting degree requirements for the thesis option; a maximum of three hours of research credit is counted for the problem report option. The student’s plan of study is formulated jointly with his/her advisory committee based upon the interests and educational goals of the student. Students not completing a thesis will be required to include six hours of methods courses in their programs of study.
Graduation Requirements
The MSAE and MSME degrees require completion of 24 hours of coursework (with a minimum cumulative grade point average of 3.0/4.0) plus 6 hours of research leading to a thesis. The coursework must include 6 hours of mathematics from an approved list and 12 hours of courses from Mechanical and Aerospace Engineering, of which 6 hours must be selected in sets of two courses from any of the five following areas:
1. Solid mechanics and structures
2. Design dynamics and controls
3. Fluids and aerodynamic
4. Thermal sciences and systems
5. Material science and engineering

Admission to Doctor of Philosophy Program
To be eligible for admission into the doctor of philosophy degree program with a major in aerospace or mechanical engineering, a candidate must hold or expect to receive (by the enrollment date) an M.S. degree in an engineering discipline from an institution which has an ABET accredited undergraduate program in engineering or an internationally recognized program in engineering (except for students qualified for the direct track to Ph.D. degree option, described below). Qualified candidates holding an M.S. degree in applied sciences can also be considered for admission into the Ph.D. program.

Admission to the Direct-Track to Ph.D. Degree Option
The department of Mechanical and Aerospace Engineering (MAE) offers a direct track option from the bachelor of science (BS) to the doctor of philosophy (Ph.D.) degree for prospective qualified students holding a B.S. degree in an engineering discipline, materials science, mathematics or applied sciences from an accredited undergraduate program or an internationally recognized program. This is an accelerated track that provides outstanding candidates the option of earning a Ph.D. degree in less than five years after graduating from an undergraduate program by engaging early in their Ph.D. dissertation research without having to complete first a thesis research for a master of science (M.S.) degree. To qualify for the direct track degree option, a candidate must have earned a cumulative grade point average (GPA) of 3.5 or higher in his/her undergraduate studies and attain 75th percentile in the quantitative section of the standardized Graduate Record Examination (GRE). Students who are pursuing an M.S. degree in the MAE department have also the possibility of transferring into the direct track option provided that they earn a GPA of 4.0 and attain 75th percentile in the quantitative section of the GRE by the end of their first two semesters of graduate studies at WVU. Students admitted into the direct track option are considered to be Ph.D. students in the MAE department.

Doctor of Philosophy
The doctorate is a research degree which requires the accumulation of 18 credit hours of coursework taken at WVU at the 500 level or higher and 24 credit hours of research, also taken at WVU. The remaining requirements for the degree are: passing successfully the qualifying examination, admission to candidacy, one-year residency on campus, completion of dissertation research, and defense of a research dissertation. All students pursuing a Ph.D. degree in the MAE department are expected to engage in research, and complete and defend successfully a Ph.D. dissertation. They should identify a subject for their Ph.D. dissertation, form a five-member Advisory and Examining Committee, and file a plan of study by the end of their second semester of enrollment in the graduate program At least one member of the graduate faculty from outside the department is required to serve on the Advisory and Examining Committee.

The Ph.D. degree signifies that the holder has the competence to function independently at the highest level in the chosen field. Hence, the number of years involved in attaining or retaining competency cannot be readily specified, nor can an exact program of study be defined. However, one has a maximum of five years to complete all the requirements for Ph.D. from the date of admission to candidacy.

Ph.D. Qualifying Exam
The Ph.D. qualifying examination is the method of assessing whether the student has attained sufficient knowledge of the discipline and supporting fields in order to undertake independent research or practice. Students are required to pass a qualifying examination administered by the Department which tests for a minimum level of proficiency expected of all students in a given area. It is expected that students will take the qualifying exam during their first or second semester of enrollment in the Ph.D. program; however it is required that full-time students pass the qualifying examination no later than the end of the third semester of enrollment in their Ph.D. program. Students admitted in the direct track from B.S. to Ph.D. degree option are expected to take the qualifying exam by the end of their fourth semester of enrollment in the MAE graduate program. As the student progresses, his or her Advisory and Examining Committee is charged with evaluating the student’s competency in the specific area of study through the assessment of a dissertation proposal for the research to be completed and the evaluation of the student’s plan of study and associated coursework. After these requirements are completed, the student is formally admitted to candidacy for the Ph.D. degree. Only at this point can a student be called a doctoral candidate; admission to the graduate program for the purpose of pursuing the Ph.D. degree is not equivalent to becoming a Ph.D. candidate. Doctoral candidates are
allowed no more than five years to complete the remaining degree requirements after admission to candidacy. An extension of time can be obtained only by repeating the qualifying and candidacy examinations and meeting any other requirements specified by the student’s Advisory and Examining Committee.

**Ph.D. Degree**

Students intending to pursue a doctoral program in the College of Engineering and Mineral Resources with an emphasis in mechanical or aerospace engineering should have earned an M.S. degree in some engineering discipline. Qualified candidates holding an M.S. degree in applied sciences can also be considered for admission into the Ph.D. program. Eligible students holding a B.S. degree are permitted to enroll directly in the Ph.D. program through the direct track from B.S. to Ph.D. degree option. The doctoral courses of study are selected to fit the particular interests and objectives of the student, with proper attention given to broadening related areas of study. The research work for the doctoral dissertation may entail a fundamental investigation into a specialized area or a broad and comprehensive study in a related subject.

**Faculty**

**Chair**
- Jacky C. Prucz - Ph.D. (Ga. Tech.)
  Structural design, Composite materials, Solid mechanics.

**Professors**
- Christopher M. Atkinson - Sc.D. (MIT)
  Fluid mechanics, Instrumentation, Engine emissions.
- Richard A. Bajura - Ph.D. (University or Notre Dame)
  Director NRCCE, Energy sciences
- Larry E. Banta - Ph.D. (Ga. Tech.)
  Automation, Controls, Energy management.
- Ever J. Barbero - Ph.D. (VPI & SU)
  Materials, Experimental and computational mechanics.
- Ismail Celik - Ph.D. (U. Iowa)
  Fluids engineering, Fuel cell technology.
- Nigel N. Clark - Ph.D. (U. Natal, So. Africa)
  Associate VP for Academic Strategic Planning, Multiphase flows, I.C. engines and emissions.
- Russel K. Dean - Ph.D. (WVU)
  Senior Associate Provost, Engineering Education
- Mridul Gautam - Ph.D. (WVU)
  Associate VP for Research and Economic Development. Fluid mechanics, IC engines and emissions.
- Bruce S. Kang - Ph.D. (U. Wash.)
  Experimental mechanics, Advanced materials.
- John M. Kuhlman - Ph.D. (Case West. Res. U.)
  Fluid mechanics.
- John L. Loth - Ph.D., P.E. (U. Toronto)
  Aerospace systems, Combustion.
- Kenneth H. Means - Ph.D., P.E. (WVU)
  Kinematics, Dynamics and stability, Friction and wear.
- Gary J. Morris - Ph.D. (WVU)
  Fluid mechanics, Combustion, Aerodynamics.
- Victor H. Mucino - Dr. Eng., P.E. (U. Wisc.-Mil.)
  Mechanical engineering design, CAD, Finite element applications.
- Marcello R. Napolitano - Ph.D. (Okla. St. U.)
  Aircraft stability and control, Feedback control, Dynamics, Unmanned airborne vehicles (UAV's).
- Jacky C. Prucz - Ph.D. (Ga. Tech.)
  Chair, Structural design, Composite materials, Solid mechanics.
- Samir Shoukry - Ph.D. (Aston U. in Birmingham UK)
  Pavement modeling, Non-destructive evaluation, Structural dynamics, Neural nets, Instrumentation.
- Nithi T. Sivaneri - Ph.D. (Stanford U.)
  Structural mechanics, Composite Materials, FEM, Numerical methods.
• James E. Smith - Ph.D. (WVU)
  Mechanical and aeronautical design.

Associate Professor
• Darran R. Cairns - Ph.D. (U. of Birmingham, UK)
  Materials science
• Wade W. Huebsch - Ph.D. (Iowa St. U.)
  Fluid mechanics, CFD, Numerical methods.
• Xingbo Liu - Ph.D. (U. of Sci. & Tech., Beijing, China)
  Materials science
• Mario Perhinschi - Ph.D. (Poly Inst. Bucharest)
  Aircraft stability and control, Flight simulation.
• Gregory J. Thompson - Ph.D. (WVU)
  Thermodynamics, Machine design.
• Nianqiang Wu - Ph.D. (Zhejiang U., China)
  Materials science and engineering

Assistant Professor
• Marvin H. Cheng - Ph.D. (Purdue University)
  Mechatronics, Dynamic systems and control
• Hailin Li - Ph.D. (U. of Calgary, Canada)
• Daneesh O McIntosh-Simien - Ph.D. (Rice U., Houston, Tx.)
  Nano devices and materials. Materials that respond to stimuli: Smart materials and multifunctional nano-composites.
• Osama Mukdadi - Ph.D. (U. of Co.)
  Bioengineering, Acoustics, Solid mechanics and materials.
• Edward M. Sabolsky - Ph.D. (Penn. St. U.)
  Materials and ceramic science.
• Xueyan Song - Ph.D. (Zhejiang U., China)
  Materials science, Electron microscopy.
• W. Scott Wayne - Ph.D. (WVU)
  Machine design, Alternative fuels.

Research Professor
• Eric Johnson - Ph.D. (U. of Wisc.-Madison)
  Multiphase flow, Combustion-gasification, and Coal cleaning.
• Steve Lewellen - Ph.D. (UCLA)
  Fluid dynamics.
• Donald W. Lyons - Ph.D., P.E. (Ga. Tech.)
  Manufacturing systems engineering, Instrumentation, Engines and emissions.
• John E Sneckenberger - Ph.D. (WVU)
  System design and controls, Distributed power generation and Smart electric grids.

Research Associate Professor
• David Lewellen - Ph.D. (Cornell U.)
  Fluid dynamics, Turbulence.

Research Assistant Professor
• Patrick Browning - Ph.D. (WVU)
  Aerodynamics, Aircraft design
• Thomas Evans - Ph.D. (WVU)
  Solid mechanics, Structures
• Yu Gu - Ph.D. (WVU)
  Flight control systems
• Andrew Nix - Ph.D. (Va. Polytechnic Inst.)
  Turbines, engines and emissions.
• Brad Seanor - Ph.D. (WVU)
Flight controls, Parameter estimation, Flight testing, UAV technology.

- Konstantinos A. Sierros - Ph.D. (U. of Birmingham, UK)
  Flexible optoelectronic devices, Tribology, Materials for renewable energy.
- Nathan T. Weiland - Ph.D. (Ga. Tech.)
  Fuel-flexible combustion, Coal/biomass co-gasification, Biomass pyrolysis.
- Gergis William - Ph.D. (WVU)
  Structures, system dynamics

**Visiting And Adjunct Professor**

- Alberto Ayala - Ph.D. (U. of Calif., Davis)
  Energy, Engine emissions.
  Status: Adjunct Prof.
- Mark Bright - Ph.D.
  Materials engineering, Pyrotech Inc.
  Status: Adjunct Asst. Prof.
- Renguang Dong - Ph.D. (Concordia U., Canada)
  Biomechanics, human vibrations, NIOSH
  Status: Adjunct Asst. Prof.
- Luis A. Godoy - Ph.D. (U. of London U.K.)
  Structural stability.
  Status: Adjunct Prof.
- Frank E. Goodwin - Sc.D. (MIT)
  Materials engineering, ILZRO
  Status: Adjunct Prof.
- Nabil S. Hakim - Ph.D. (Wayne State U.)
  Alt. fuels engines and emissions
  Status: Adjunct Prof.
- Paul E. King - Ph.D.
  Materials engineering NETL
  Status: Adjunct Prof.
- Stephen Kukureka - Ph.D.
  Univ. of Birmingham
  Status: Adjunct Asst. Prof.
- Alejandro A. Lozano-Guzman - Ph.D. (Newcastle Upon Tyne)
  Dynamic Systems (CICATA-IPN Mexico)
  Status: Adjunct Prof.
- Eugene A. McKenzie - Ph.D. (WVU)
  Mechanical engineering design, NIOSH
  Status: Adjunct Asst. Prof.
- Koorosh Mirfakraie - Ph.D.
  Augusta
  Status: Adjunct Asst. Prof.
- Vincenzo Mulone - Ph.D. (U. Rome Tor Vergata)
  Engine emissions
  Status: Adjunct Asst. Prof.
- John Nuzkowski - Ph.D. (WVU)
  Alt. fuels and engine emissions, UNF
  Status: Adjunct Asst. Prof.
- Ming Pei - Ph.D.
  Tissue engineering HSC-WVU
  Status: Adjunct Asst. Prof.
- Benjamin Shade - Ph.D. (WVU)
  Engine Emissions, IAV Automotive
  Status: Adjunct Asst. Prof.
- Alberto Traverso - Ph.D.
  DIMSET - Italy
  Status: Adjunct Asst. Prof.
- Kirk Yerkes - Ph.D.
Department of Mining Engineering

Degrees Offered

- Master of Science in Mining Engineering
- Doctor of Philosophy in Mining Engineering

Program Objectives, Educational Outcomes, and Admission Requirements

The objective of the Master of Science in Mining Engineering (MS MinE) program is that, upon graduation, a student will have learned the procedures relative to investigating and developing solutions to advanced mining engineering problems. The graduate will also have accumulated sufficient knowledge in a chosen area of interest in an effort to easily become an expert in that field using the methods acquired through the course of thesis research. The Master of Science in the Mining Engineering program admits students who have a GPA of 3.0/4.0 or above from an ABET-accredited BS MinE program or its equivalent. Transfer students must have at least a GPA of 3.0/4.0 for the graduate programs at similar institutions. The program is rather flexible and caters to the interests of the individual student. This flexibility is important, since mining engineering involves tasks from numerous engineering disciplines, and the program must accommodate the diverse interests of mining engineering students.

The objective of the PhD program in Mining Engineering is the education and training of individuals so that they are capable of attaining the highest level of technical and research performance in the mineral engineering profession and performing the professional roles of developing or improving the efficient extraction of solid mineral resources. The three principal areas of specialization are mine systems, rock mechanics and ground control, and mineral processing. All applicants must have earned an MS degree in Mining Engineering with a grade-point average (GPA) of 3.0 or higher.

For all MS and PhD international applicants, submitting a GRE score is required. Also, for all MS and PhD international applicants whose native language is not English, a TOEFL-pBT test score of 550 or better, or iBT score of 79, or IELTS score of 6.5, is required. Each applicant is required to submit at least three letters of recommendation, one of which must be from the applicant’s previous thesis advisor or an academic equivalent. All letters of recommendation should evaluate the student’s potential for performing independent, masters- or doctoral-level research.

There are no differences between the MS and PhD application review processes. In both cases, the completed application packets are circulated to the graduate faculty. Initial evaluations are:

1. the applicant should or should not be accepted, and
2. the reviewing faculty member is or is not willing to provide support. If multiple positive responses are produced, then assignment of the potential graduate student is resolved at a meeting of the faculty according to specific needs and interests.

Master of Science in Mining Engineering (MS MinE.)

Students desiring to take courses for graduate credit at the master’s level in the Statler College of Engineering and Mineral Resources must first apply for admission and state a major field.

Applicants with a baccalaureate degree from institutions other than WVU in mining engineering will be admitted on the same basis as graduates of WVU. Lacking these qualifications, the applicant must first fulfill the requirements of the Department of Mining Engineering.

Doctor of Philosophy in Mining Engineering (PhD MinE)

The principal objective of the doctor of philosophy program in mining engineering is the education and training of graduates so that they are capable of attaining the highest levels in the mineral engineering profession and performing the professional roles of developing and improving the efficient extraction of solid mineral resources. The three areas of specialization are mine systems, rock mechanics and ground control, and mineral/coal processing.

All applicants must have earned an M.S. degree in mining engineering or mineral processing with a GPA of 3.0 or higher. For all international applicants whose native language is not English, a TOEFL-pBT test score of 550 or better, a TOEFL-iBT test score of 79 or better, or a LELTS test score of 6.5 or higher, is required. In addition, each applicant is required to submit at least three letters of recommendation, one of which must be from the applicant’s previous thesis advisor or an academic equivalent. All letters of recommendation should evaluate the student’s potential for performing independent doctoral-level research.
The Ph.D. program in mining engineering consists of a minimum of 18 hours of coursework and 24 hours of independent research beyond a master’s degree in mining engineering or mineral processing. The successful completion of a written qualifying examination, dissertation-proposal defense, and an approved dissertation are also required.

Faculty

Chair

• Christopher John Bise - Ph.D. (Penn State)
  Robert E. Murray Chairman

Professors

• Christopher John Bise - Ph.D. (Penn State)
  Mine design, Mine health and safety.
  Status: Regular

• Keith Heasley - Ph.D. (Colo. Schl. of Mines)
  Numerical modeling, Rock mechanics.
  Status: Regular

• Syd S. Peng - Ph.D. (Stanford U.)
  Charles E. Lawall Chair in Mining Engineering, Longwall mining, Ground control.
  Status: Regular

Associate Professor

• Vladislav J Kecojevic - Ph.D. (U. of Belgrade)
  Surface mining, Aggregates production, Mine materials handling systems.

• Yi Luo - Ph.D. (WVU)
  Surface subsidence, Ventilation.
  Status: Regular

• Felicia F. Peng - Ph.D. (WVU)
  Coal preparation, Coal utilization, Process control, Plant design.
  Status: Regular

Assistant Professor

• Brijes Mishra - Ph.D. (WVU)
  Theoretical and experimental rock mechanics, Time dependent deformation of rock and salt, Mathematical modeling in rock mechanics
  Status: Regular

Mining and Industrial Extension

Mining and Industrial Extension is a unit within the Benjamin M. Statler College of Engineering and Mineral Resources that is composed of two programs: Mining Extension and Industrial Extension.

Faculty

Director

• James M. Dean - MSEM (WVU)
  Mine management, Mine safety and health, Initial miner training

Associate Director

• Thomas C. Mahoney - MA (Johns Hopkins U.)
  Manufacturing technology, Management, Product development, Industrial prolic, Trade, Industrial and international economics, Industrial R & D network

Professor

• Joseph C. Dorton - BS (Concord College)
  Mine forman training, Electrical training, Manadatory miner training courses
Industrial Extension Specialists

- Thomas A. Bailey - BSE, PE (Ohio St. U.)
  Quality assurance, Environmental planning/waste reduction, Plant layout, Continuous improvement
- Robert J. Bailey - MBA (WV College)
  Technical assistance, Production, Financial improvement, Human resources
- Jeffrey Thomas Bopp - BS
  Metallurgical engineering, Aluminum and steel recycling, Welding

Mining Extension Agents

- Mark A. Adkins - BS (WVUIT)
  Mine foreman training, Surface and underground apprentice training, Electrical training
- Warren F. Beam - MS (WV College of Graduate Studies)
  PC Specialist, Mine foreman training, Surface and underground apprentice, Electrical training
- Joshua Caldwell - BA (California University of PA)
  Interim Director Mine Academy, Mandatory miner training, Mine rescue, Fire brigade, First responder, SCSR training
- Thomas W. Hall - BS (Fairmont St. College)
  Mine foreman training, Mandatory minor training, Mining methods
- John D. Martin - BS (Bera College)
  Fire safety training, Protective clothing and equipment
- Steven M. Perkins - BS Business (West Liberty University)
  Fire safety training, Mandatory mine training
- George E. Rannenberg - AS Occupational Safety and Health (West Liberty State College)
  Fire safety training, Mandatory miner training
- Joseph E. Spiker - MBA (Waynesburg College)
  Safety and health management, Education administration, Fire safety training
- John A. Tuba - BA (Wheeling Jesuit University)
  Fire safety training, Mandatory miner training

Department of Petroleum and Natural Gas Engineering

Samuel Ameri, P.E, M.S. in Petroleum Engineering, Chair
347A Mineral Resources Building
E-mail: samuel.ameri@mail.wvu.edu

Degrees Offered

- Master of Science in Petroleum and Natural Gas Engineering
- Doctor of Philosophy in Engineering with a major in Petroleum and Natural Gas Engineering

The Petroleum and Natural Gas Engineering (PNGE) graduate programs provide students with the advanced technical and engineering skills needed by the oil and natural gas industry in the state, the nation, and the world and are designed for students who have already completed a basic petroleum engineering curriculum. The objective of the program is the education and training of men and women capable of performing at the highest levels of the petroleum and natural gas engineering profession. Moreover, this course of study will make students competent to perform independent research and will prepare them to be the future providers of high quality education in petroleum and natural gas engineering. Graduates have the opportunity to enter all phases of the oil and natural gas industry, government agencies, and academia in meaningful and important jobs.

The Department of Petroleum and Natural Gas Engineering admits students to the following degree programs: master of science in petroleum and natural gas engineering (M.S. PNGE) and petroleum and natural gas engineering major under the College of Engineering and Mineral Resources interdisciplinary doctor of philosophy (Ph.D.). Students in these programs must comply with the rules and regulations as presented in the general requirements for graduate work in the College of Engineering and Mineral Resources.

Master of Science in Petroleum and Natural Gas Engineering

A candidate for the M.S. degree in Petroleum and Natural Gas Engineering (PNGE) must comply with the rules and regulations as outlined in the general requirements for graduate work in engineering and the specific requirements stated in the departmental guidelines.
Admission

A candidate for the M.S. PNGE program must meet the following requirements:

- B.S. degree in engineering from an ABET accredited, or an internationally recognized engineering program or equivalent; with a grade point average (GPA) equal to, or greater than 3.0 (on a 4.0 scale). Applicants who cannot meet this condition may be considered for provisional admission.
- International students must demonstrate proficiency in communicating in English (a minimum TOEFL score of 550 or IBT score of 79, or IELTS score of 6.5).
- At least three recommendation letters; one of which must be from the applicant’s academic advisor or equivalent.

Study Programs

All M.S. degree candidates are required to perform research and follow a planned program of study. The research advisor, in conjunction with the Advising and Examining Committee (AEC) — appointed with the consent of the student — will be responsible to determine the plan of study appropriate to the student’s needs. The underlying principle of the planned program is to provide the student with the necessary tools to carry out his/her thesis research and prepare them for their career. The program must contain a minimum of 24 hours of coursework and 6 hours of research (PNGE 697) leading to a master’s thesis or 30 hours of coursework and M.S. students following the thesis option must prepare a written research proposal. The proposal must be approved by the student’s AEC at least one semester prior to the final oral examination.

Examination

All students are required to pass a final oral examination, administered by their AEC, covering both the thesis or problem report (depending on the program selected) and related course material.

3 hours of research (PNGE 697) leading to a comprehensive problem report. At least 60 percent of the course credits must be from 500 - through 700-level courses while the remainder can be made up of 400-level courses. All students are required to take PNGE 796 for each semester enrolled. A maximum of 3 credit hours each of Graduate Seminar (PNGE 796) and Independent Study (PNGE 695) can be counted towards meeting the coursework requirements. Students who do not hold a baccalaureate degree in petroleum and natural gas engineering are required to take a set of undergraduate petroleum and natural gas engineering courses above and beyond the minimum coursework requirements.

Doctor of Philosophy in Petroleum and Natural Gas Engineering

Admission

A candidate for the M.S. degree in Petroleum and Natural Gas Engineering (PNGE) must comply with the rules and regulations as outlined in the general requirements for graduate work in engineering and the specific requirements stated in the departmental guidelines.

A candidate for the degree of doctor of philosophy (Ph.D.) must meet the following requirements:

- B.S. or M.S. degree in petroleum engineering from an ABET accredited, or an internationally recognized petroleum engineering program or equivalent; with a grade point average (GPA) equal to, or greater than 3.0 and 3.2, respectively.
- A score of at least 75 percentile for Graduate Record Examination (GRE) quantitative analysis.
- International students must demonstrate proficiency in communicating in English (a minimum TOFEL Score of 550, or IBT Score of 79, or IELTS Score of 6.5).
- At least three recommendation letters; one of which must be from the applicant’s previous thesis advisor or an academic equivalent.

Study Program

Each student must conduct research and follow a planned program of study prepared by the research advisor, in consultation with the student, and approved by the student’s Advisory and Examining Committee (AEC) - appointed with the consent of the student. The underlying principle of the planned program is to accommodate and facilitate the students such that they are well prepared for their dissertation research and their career. A minimum of 54 hours of coursework and 30 hours of independent research beyond a bachelor’s degree, or 30 hours of coursework and 24 hours of independent research beyond a M.S. degree are required. All students are required to take PNGE 796 Graduate Seminar for each semester enrolled. A maximum of 3 credit hours each of Graduate Seminar (PNGE 796) and Independent Study (PNGE 795) can be counted towards meeting the coursework requirements.

Examinations

All students must take and pass a written qualifying examination no later than one semester after completion of 18 credit hours toward doctoral degree. In order to be admitted to candidacy, the student must pass the candidacy exam, which is designed to evaluate the student’s overall ability to engage in high-level research. At the completion of the dissertation research, the candidate must prepare a dissertation and pass the final oral examination (defense), administered by their AEC.
Faculty

P.E.

- Samuel Ameri
  M.S. in Petroleum Engineering, Chair

Professor

- Samuel Ameri - M.S.Pet.E., P.E. (WVU)
  Chair. Formation evaluation.
  Status: Regular
- Khashayar Aminian - Ph.D. (U. Mich.)
  Natural gas engineering, Reservoir engineering.
  Status: Regular
- Shahab Mohaghegh - Ph.D. (Penn. St. U.)
  Intelligent systems professor.
  Status: Regular

Associate Professor

- H. Ilkin Bilgesu - Ph.D., P.E. (Penn. St. U.)
  Drilling engineering.
  Status: Regular

Assistant Professor

- Yueming Cheng - Ph.D. (Tex. A&M)
  Unconventional gas recovery.
College of Human Resources and Education

Degrees Offered

- Doctor of Audiology
- Doctor of Philosophy
  - in Counseling Psychology
  - in Education
- Doctor of Education
  - in Curriculum and Instruction
  - in Educational Leadership Studies
  - in Instructional Design and Technology
  - in Special Education
- Master of Arts in Counseling
- Master of Arts in Educational Leadership Studies
- Master of Arts in Educational Psychology (Areas of Emphasis: CDFS, Program Evaluation and Research and Educational Psychology)
- Master of Arts in Elementary Education
- Master of Arts in Instructional Design and Technology
- Master of Arts in Reading
- Master of Arts in Secondary Education
- Master of Arts in Special Education
- Master of Science in Rehabilitation Counseling
- Master of Science in Speech Pathology

The College of Human Resources and Education, located in Allen Hall on the Evansdale campus, offers graduate-level programs of study in counseling, counseling psychology, curriculum and instruction, educational leadership, educational psychology, elementary education, reading, instructional design and technology, rehabilitation counseling, secondary education, special education, and speech pathology and audiology. Thesis programs are devoted to the study and development of human talent and resources in the school, family, and community. Instruction, research, and extended service are carried out in close cooperation with related departments and units of the University.

Most graduate programs require the successful completion of clinical experiences in approved sites. Clinical placements are arranged by the faculty and the professional judgments of faculty are used to determine continuation of students in these placements.

Doctoral Programs

If you would like additional information about the graduate programs in the College of Human Resources and Education, contact the chairperson of the department most relevant to your program interests. Students in the doctor of education (Ed.D.) program may elect an area of emphasis in curriculum and instruction, educational leadership studies, instructional design and technology, or special education. Specific information about doctoral studies in these emphasis areas is listed in the program description area of the catalog. Students interested in the doctor of audiology (Au.D.) and the doctor of philosophy (Ph.D.) in counseling psychology and in education will find information about those programs in separate areas of this catalog. Students in the interdisciplinary (Ph.D.) program select a focus area from one of the following major areas of study: Educational leadership and policy studies; learning, instructional design, and technology, or curriculum, literacy and cultural studies.

Admission

Admission, curriculum, and specific requirements of the various degree programs of the College of Human Resources and Education are provided in each program section in this catalog. It is the responsibility of the student to take steps to insure that he or she is properly informed of the degree requirements and/or the certification standards being sought. Graduates of our state-approved preparation programs are eligible for recommendations for certification / licensure issued by appropriate state agencies. Since certification requirements are changed periodically by the state, the fulfillment of certification requirements as presented in this catalog cannot guarantee compliance with the most recent requirements. The West Virginia State Department of Education requires that a degree be from an accredited institution of higher education for licensure and salary purposes. Students are therefore encouraged to seek the counsel of members of the faculty, their advisers, and the college certification officer on matters pertaining to degree and certification requirements.

All applicants for admission to the doctoral program in the College of Human Resources and Education must submit their scores on the Graduate Record Examination and/or the Miller Analogies Test, three letters of recommendation, a current vita, and a statement of long-range and short-range goals. Applicants to the college must comply with the general University graduate study regulations. Personal
Committee Formation

After admission to a specific program, the student, in consultation with the adviser, selects a chairperson and four committee members to serve as his or her Doctoral Committee. This committee must be approved by the department chair and the dean of the college. The Doctoral Committee must meet the following minimum standards:

- The Doctoral Committee must be composed of a minimum of five members, the majority of who must be regular members of the graduate faculty.
- At least three members of the Doctoral Committee must be members of the graduate faculty of the College of Human Resources and Education.
- The student’s major adviser must be from the student’s major program and must be a regular member of the graduate faculty. No more than two other members of the Doctoral Committee may be from the student’s major program area of study.
- At least two members of the Doctoral Committee must be from the student’s major program area of study.
- At least one member of the Doctoral Committee must be from the student’s minor program area of study.
- The Doctoral Committee must include at least one member from outside the student’s program area, and that individual must have knowledge and insights relevant to the student’s program of study.
- No more than one member of the Doctoral Committee may be a nonmember of the graduate faculty.

Program Plan

The final determination of the program of coursework and research is the responsibility of the student’s Doctoral Committee. The doctor of education degree is not awarded on the basis of the completion of any set number of credits, but is awarded on the basis of demonstrated academic achievement and scholarly competence. Seventy-two semester hours of relevant graduate work, excluding dissertation credit, but including credits of relevant graduate work completed at the master’s degree level, constitute the minimum coursework acceptable. The doctoral program must include coursework in three areas: major, minor, and foundations, and the program requirements in each area must be met.

Candidacy

The student and the committee at the time of program planning will identify competencies to be developed and how they will be assessed. These will be stated in the student’s individual program. The doctoral student and his or her Doctoral Committee will determine when the student is ready for assessment of competencies. The examination will be prepared and assessed by the student’s Doctoral Committee and will address all work in the doctoral program plan of the student. The student must be enrolled in the semester in which candidacy examination occurs. The chairperson will notify the student and the student records office. Personnel in the student records office will notify all appropriate University and college offices of the outcome. Upon successful completion of the examination, the student will formally propose the dissertation prospectus to the committee.

Prospectus

The candidate must submit and justify a prospectus for a doctoral dissertation. The Doctoral Committee must review and approve, approve with change, or reject the outline or prospectus. The student must consult with all members of the committee and with other appropriate members of the University faculty during the dissertation phase of the program.

Final Oral Examinations

The student will be admitted to the final oral examination upon completion of the dissertation and after fulfilling all other requirements set by the committee. The examination will be conducted by the student’s Doctoral Committee and the publicized meeting will be open to all members of the University faculty. If the student receives more than one unfavorable vote from the committee, the candidate will not be recommended for the doctoral degree.

Time Limit

Because the qualifying examination attests to the academic competence of the student who is about to become an independent researcher or practitioner, the length of time between the examination and degree must be limited. Consequently, doctoral candidates are allowed no more than five years after the qualifying examination in which to complete remaining degree requirements. If the student should fail to complete an approved dissertation within five years, he or she must repeat the admission to candidacy examination and any other requirements specified by the student’s Doctoral Committee.

Residency

A student must satisfactorily complete a minimum of nine semester hours of approved graduate credit in each of two consecutive terms in residence.
Master’s Degree Programs

Master’s degree programs are offered in counseling, rehabilitation counseling, speech pathology, educational leadership studies, educational psychology, elementary education, instructional design and technology, reading, secondary education, and special education.

Three options are generally available in the college’s master’s programs; the student should refer to the specific program to determine the option that applies.

1. At least 30 semester hours of coursework, including six semester hours of research.
2. At least 30 semester hours of coursework, including three semester hours of research, selected in conference with the candidate’s committee, directed by the adviser, with final approval of the committee.
3. At least 36 semester hours of approved coursework.

- The student must comply with specific graduate requirements of the University, the College of Human Resources and Education, and the program.
- All students will be assigned an adviser. For options A and B two additional faculty members will be assigned to serve as the remainder of the three-member Master’s Committee. For option C, only the adviser is required.
- No student may be awarded a master’s degree unless the student has a minimum grade point average of 3.0 on all work taken for the graduate degree. (A grade of less than C does not carry credit toward a graduate degree, but counts in determining the grade point average)
- No student will be permitted to repeat a required graduate course more than once.

Some programs may require the comprehensive examination in options A, B, and C above. The candidate’s committee (options A and B) or adviser (option C) will determine whether the examination will be oral or written or both. Within the first two weeks of the semester in which the student intends to take the final master’s degree examination, he or she must submit to the appropriate department chair an application to take the examination. A student must have completed a minimum of 27 semester hours of approved coursework before taking the comprehensive examination. In addition, a student must have achieved a 3.0 grade point average on all work taken for graduate credit before applying to take the comprehensive examination.

Time Limit

All requirements must be completed within eight years immediately preceding the awarding of the degree.

Non-Degree Status

Students who fail to meet the specific requirements of the sections dealing with admission, grade point average, course repeats, transfer credits, comprehensive examinations, or special written requirements specified by the program will not be admitted to or will be terminated from the degree program. Students not admitted to or terminated from a degree program may apply in writing for classification as a non-degree graduate student to the appropriate department chair or the Office of Student Advising and Records of the College of Human Resources and Education, (P.O. Box 6122, Morgantown, WV 26506-6122). Non-degree classification would allow the student to take coursework for certificate renewal, certification, or personal interest. A non-degree graduate student may accumulate unlimited graduate credit hours, but if the student is later admitted to a degree program, the faculty of that program will decide whether or not any credit earned as a non-degree student may be applied to the degree. Under no circumstances may a non-degree student apply more than 12 hours of previously earned credit toward a degree.

Students may obtain additional information about a particular graduate program by writing to the coordinator of that program or by writing:

the Dean
College of Human Resources and Education
West Virginia University
P.O. Box 6122
Morgantown, WV 26506-6122

Faculty

Interim Dean
- Elizabeth A. Dooley - Doctor of Education
  Interim Dean
  Status: Regular Graduate Faculty

Interim Associate Dean
- Paul Chapman - Ph.D.
Department of Counseling, Rehabilitation Counseling, and Counseling Psychology

Degrees Offered

- Master of Arts in Counseling
- Master of Science in Rehabilitation Counseling
- Doctor of Philosophy in Counseling Psychology

Department of Counseling, Rehabilitation Counseling, and Counseling Psychology offers three graduate programs. These are the Master of Arts program in counseling, with specializations in community and school counseling; the Master of Science program in rehabilitation counseling, including vocational-evaluation coursework and an e-campus program; and the Ph.D program in counseling psychology.

The key unifying component in all of our programs is “counseling.” The American Counseling Association (ACA) defines professional counseling as “the application of mental health, psychological, or human development principles, through cognitive, affective, behavioral or systematic intervention strategies, that address wellness, personal growth, or career development, as well as pathology.”

These interrelated fields all hold great promise in the job market and for your life. Professionals who make their careers in these fields are dedicated to making a difference in the lives of others. We support their learning in many ways—through classroom activities, research, and service learning.

Certification

Certification requirements in school counseling are the same as for the master’s of arts in counseling, except as noted below.

- A minimum grade point average of 3.0.
- Recommendation of the faculty.
- A valid professional teaching certificate at the level for which counseling and guidance endorsement is desired, or the completion of a six-hour block of professional education coursework (see department for list) and competency assessment in addition to the 60-hour master’s degree program.
- Specialization area examination. Satisfactory performance is required for certification eligibility. This examination is administered under the auspices of the State Department of Education.

Faculty

Chair
- Margaret K. Glenn

Professor
- Roy H. Tunick - Ed.D. (U. N. Colo.)
  Rehabilitation psychology, Counseling psychology, Personality Assessment, Vocational psychology, Veterans’ issues, PTSD, Adolescents in crisis.
  Status: Regular

Associate Professor
- Jeffrey Daniels - Ph.D. (U. of Neb.)
  Counseling Psychology. Global hostage-taking, Averting lethal school violence, Spiritual and religious issues in counseling.
  Status: Regular
- Margaret K. Glenn - Ed.D. (George Wash. U.)
  Department chair. Rehabilitation counseling and leadership, Substance abuse treatment and vocational rehabilitation, Complementary and alternative approaches in rehabilitation, Use of indigenous practices in rehabilitation.
  Status: Regular
- Ed Jacobs - Ph.D. (Fla. St. U.)
  Coordinator, master’s degree program in counseling. Creative counseling, Group counseling, Marriage and family, Impact therapy.
  Status: Regular
Assistant Professor

- Katherine Byers - Ph.D., CRC, CVE (University of Florida)
  Program Coordinator. Applying Computer Adaptive Testing (CAT) to the field of rehabilitation counseling and specifically, vocational evaluations; International aspects of rehabilitation; and Outcomes and assessments in rehabilitation counseling.
  Status: Regular

- Monica Leppma - Ph.D. (U. Central Florida)
  Practicum & Internship Coordinator. Mental health counseling, counseling in the school system, counselor development, positive emotions, mediation and spirituality.
  Status: Regular

  Coordinator, Counseling master’s program. School counselor role. Creative counseling, Group counseling in schools.
  Status: Regular

Visiting Assistant Professor

- James W. Bartee - Ph.D. (U. of Wash.)
  Director of training, Counseling psychology Ph.D. program. Counseling psychology in multinational settings, Psychology, Neuroscience and spirituality, Professional training and development.
  Status: Regular

Teaching Instructor

- Regina Burgess Carrick - M.S. (WVU)
  Vocational assessment, Rehabilitation counseling.

Professors emeriti

- L. Sherilyn Cormier - Ph.D. (Purdue U)
  Status: Emeritus

- James DeLo - Ph.D. (U. Pitt)
  Status: Emeritus

- Ranjit K. Majumder - Ph.D. (U. Okla)
  Status: Emeritus

- Robert L. Masson - Ed.D. (SUNY)
  Status: Emeritus

- Jeffrey K. Messing - Ed.D. (Syracuse)
  Status: Emeritus

- David J. Srebalus - Ed.D. (Ind. U.)
  Status: Emeritus

Associate professors emeriti

- Kathryn B. Greever - Ed.D. (WVU)
  Status: Emeritus

Counseling

Edward E. Jacobs, Program Coordinator
Allen Hall, P.O. Box 6122
http://counseling.wvu.edu

Degree Offered

- Master of Arts in Counseling

The Department of Counseling, Rehabilitation Counseling, and Counseling Psychology of the College of Human Resources and Education offers a master's program in counseling. The counseling M.A. program is fully accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and is a WVU program of excellence. Variations of the curriculum allow emphasis in school counseling and community counseling. All applicants must comply with University, the College of Human Resources and Education, and departmental requirements.

A degree in counseling provides a broad opportunity to work with children at the elementary-school level, adolescents at the secondary-school level, and all ages at the community level. The school counselor is involved in personal counseling, career guidance, vocational and
educational counseling, family counseling and consultation on classroom problems with teachers and administrators. Community counselors work with all ages and populations in various community settings such as correctional facilities, treatment centers, mental health agencies, etc. Counselors must be equipped to work with both individuals and groups.

Students are encouraged to pursue their studies on a full-time basis; however, part-time students are accepted. Part-time admission is meant only for those who plan to take one or two courses a semester. If admitted with part-time status, students will NOT automatically be able to move into the full-time program. There are no summer practicum or internship placements.

All students who are candidates for a master’s in counseling are required to take the following core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 501</td>
<td>Counseling Theory/Techniques 1</td>
<td>3</td>
</tr>
<tr>
<td>COUN 505</td>
<td>Theory &amp; Pract Human Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>COUN 536</td>
<td>Theories of Human Development</td>
<td>3</td>
</tr>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>COUN 606</td>
<td>Counseling Theory/Techniques 2</td>
<td>3</td>
</tr>
<tr>
<td>COUN 608</td>
<td>School Counseling Services *</td>
<td>3</td>
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<tr>
<td>COUN 622</td>
<td>Community Counseling **</td>
<td>3</td>
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<tr>
<td>COUN 609</td>
<td>Group Counsel Theory/Technique</td>
<td>3</td>
</tr>
<tr>
<td>COUN 620</td>
<td>Lifespan Career Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 630</td>
<td>Children/Adolescents/Parents</td>
<td>3</td>
</tr>
<tr>
<td>COUN 634</td>
<td>Cultural Issues</td>
<td>3</td>
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<tr>
<td>COUN 640</td>
<td>Addictions Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 645</td>
<td>Couple/Family Counseling</td>
<td>3</td>
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<tr>
<td>COUN 660</td>
<td>Ethical Issues in Counseling</td>
<td>3</td>
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<tr>
<td>COUN 665</td>
<td>Abnormal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>COUN 668</td>
<td>Crisis Trauma Grief Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 684</td>
<td>Supervision Models/Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 685</td>
<td>Practicum</td>
<td>3</td>
</tr>
<tr>
<td>COUN 686</td>
<td>Counseling Internship</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Hours 60

* Required for school counselor certification only. A special school counselor certificate is available for individuals without a teaching background. The program includes an additional six hours of coursework.
** Required for community counseling students only. Note: doctoral-level courses in counseling have the prefix CPSY.

**Non Education Degree Students**

Students seeking a degree in school counseling who do not have an education degree must take COUN 660 and a C&I elective.

**Application**

Applications for admission to the counseling program should be made to WVU's Office of Admissions. In addition to the admission requirements of the University and the College of Human Resources and Education, the Department of Counseling, Rehabilitation Counseling, and Counseling Psychology has the following admission requirement.

- A baccalaureate degree with coursework in appropriate areas.
- A minimum undergraduate grade point average of 2.8, based on a 4.0 system.
- GRE scores (900 preferred; minimum of 800 on old system; 290 preferred on new system).
- Three letters of reference.
- Completion of the departmental application to the counseling program. (For department application, go to counseling program website (http://counseling.wvu.edu/counseling).

**Admission**

The West Virginia University counseling department’s admission process is a two-step procedure:

Step 1 is a review of paper credentials including references, department application (relevant major, general quality of application), work experience, GRE scores, and GPA. The initial screening decision is based upon this information. Successful applicants are then interviewed by program faculty.
Step 2 is the department interview, which considers interpersonal style relevant to working as a counselor, communication skills, capacity for empathic understanding and communication, ability to articulate professional goals, goals congruent with department focus, knowledge, and understanding of counseling, and assessment of applicants’ capacity to complete the counseling curriculum successfully.

Application deadline for fall admission is March 1 with review of completed applications beginning February 15. We only accept students once a year.

Degree Requirements

Degree requirements include completion of the required counseling coursework, including practicum and internship. A minimum of 60 hours of coursework with a 3.0 grade point average is required.

In addition to completing all coursework and the practicum and internship satisfactorily, the candidate must demonstrate the ability to assume the responsibility required of a professional counselor and the personal characteristics and ethical standards essential to effective working relationships with others.

These personal characteristics are assessed throughout the entire program with special emphasis during the clinical coursework components of the program and during the field experience. Students who do not meet professional and clinical standards in these areas are provided feedback, and resources for remediation are recommended. In these cases, successful remediation is required as a prerequisite for successful program completion. Students who violate ACA ethical standards will be evaluated for possible dismissal from the program.

In reviewing the curriculum available in counseling, the applicant will note that much of the coursework provides the background applicable for employment in general community agency work. Graduates seek employment in school settings and in community settings such as mental health centers, drug and alcohol agencies, corrections, and private practice.

Counseling Psychology

Counseling Psychology

James W. Bartee, Director of Training

Allen Hall, P.O. Box 6122

Degree Offered:

• Doctor of Philosophy in Counseling Psychology

Overview

All applicants must comply with the graduate requirements of the College of Human Resources and Education and the Counseling Psychology program of study. The program includes coursework hours and training experiences in addition to the College of Human Resources and Education requirements for the PhD degree.

Admitted students are expected to understand and comply with the current revision of the Ethical Principles of Psychologists and Code of Conduct published by the American Psychological Association.

The area of specialization for the doctoral degree is oriented primarily toward training practitioner-scholars who have a substantial background in the philosophy and methods of psychology as a comprehensive science. Students are expected to work closely with faculty in doing research and in supervised professional practice. Successful completion of the program requires core coursework in Counseling Psychology, as well as in the foundations of psychology, statistics and research; and clinical training.

The counseling psychology program at West Virginia University is fully accredited by the American Psychological Association to offer the doctor of philosophy in this specialty area of professional training in psychology. Our next program review is scheduled for 2017.

Accreditation is a process that reflects the commitment of the institution to self-study, external-review by one’s peers in seeking not only to meet professional standards but also to continuously seek ways in which to enhance the quality of education and training provided by the program.

For more information please refer to: The Office of Program Consultation and Accreditation, American Psychological Association, 750 First Street, NE, Washington, DC 20002-4242, phone: (202) 336-5979, fax: (202) 336-5978, E-mail: apaaccred@apa.org.

Admissions

• The admission process consists of two stages and the pertinent materials are evaluated on several facets.
• In Stage I, applications received after December first are not guaranteed a review for the coming year, unless openings remain after the initial reviews are completed.
Applications are screened based on the Departmental Application, Application to the Graduate School, and academic credentials provided to the Admissions Committee, including the following:

- Completion of a master’s degree in an area related to counseling psychology.
- Graduate grade point average of 3.5 or higher, verified by the official transcripts of graduate course work.
- Three letters of recommendation are required that support the applicant’s competency in counseling, assessment, research, and personal qualities that indicate readiness for advanced study in professional psychology.
- GRE Scores: The Educational Testing Service has provided a new set of norms for those persons taking the Graduate Records exams on or after August 1, 2011. We have revised our recommended score levels to reflect these changes. For the Verbal Reasoning section, the faculty recommends a minimum score of 153, for the Quantitative Reasoning section, a minimum score of 144 is recommended.

If you are reporting scores on the GRE taken prior to August 1, 2011 a combined Verbal and Quantitative score of 1,000 points is recommended. Applicants reporting GRE scores less than these recommended minima may still apply, but their applications may not be competitive with others whose scores achieve the recommended levels.

The scoring norms for Analytic Writing section of the GRE have not been changed. A score of 3.0 (out of 6.0) or better on the Analytic Writing section is taken into account in evaluating the application and due credit accorded.

- Two years of relevant work experience is desirable.
- Stage II: Those persons whose basic preparation, references and relevant application materials recommend them for graduate study in professional psychology are invited to campus for a personal interview with the program faculty.

The personal interview is required for a final admission decision. The interview helps to determine the applicant’s interpersonal and clinical skills, which are predictive of success in graduate study, internship, and post-degree placement. Based on a review of all written materials and the interview, the faculty determines to whom admission will be offered. A waiting list of qualified applicants is usually prepared as well.

- Announcements regarding admission are made by April 15.

Candidacy

Students are accepted for the preliminary study toward the PhD degree upon admission into the program. Candidacy for the degree is the next stage in the program of study, and requires the following:

- Students must complete the prerequisite doctoral coursework with a 3.25 or better grade point average. The “Readiness for Practicum” benchmarks competencies must be achieved.
- Passing scores on the written, comprehensive doctoral qualifying examination covering major areas in counseling psychology and research. Once advanced to candidacy for the degree, students are afforded an additional five years to complete all remaining elements of the program of study leading to the PhD in Counseling Psychology.

The Doctoral Dissertation

- By the end of the second year of study, the candidate must define and refine a research topic and select a doctoral dissertation chair. At the time students must also secure an additional four members to serve on the doctoral committee whose credentials must meet specific criteria as determined by the College of Human Resources and Education.
- The candidate prepares and orally presents a research prospectus that elucidates the relevant theory and scientific literature; the research design and the statistical methods to be used in the study. The written prospectus must be approved by the committee.
- Approval must be granted by the Institutional Review Board at West Virginia University to proceed with the proposed study.
- Upon completion of the research as determined by the Dissertation Chair, the student will present an oral defense of his or her study to the full committee and scholarly community. The committee must agree the defense is successful; and the document is ready to be submitted to the Electronic Thesis and Dissertation (ETD) office at West Virginia University. The dissertation is considered complete when the ETD office accepts the final draft approved by the committee.

Predoctoral Internship

- The “Readiness for Internship” benchmarks competencies must be achieved.
- After admission to candidacy, students are required to enter the national psychology predoctoral internship matching program (APPIC). APPIC comprises the national data base of APA-accredited and APPIC-listed internship programs and positions in the United States. The application process is lengthy and demanding both of time and resources.
- The “Readiness for Internship” benchmarks competencies must be achieved.
- Only if a student is unsuccessful in matches across two years, or there are significant extenuating circumstances, will permission to seek an internship outside the match be granted at the faculty’s discretion.
• APA-accredited/APPIC-listed internships are typically off-campus, and likely to be out of state. They are full-time, 12-month, paid positions usually beginning and ending in August. A successful final evaluation from the internship supervisor is required to complete this element of doctoral study in professional psychology.

All relevant details and additional specifics are available on the program website at: http://counseling.wvu.edu/counseling_psychology.

Rehabilitation Counseling

Degree Offered

• Master of Science

Master of Science in Rehabilitation Counseling

The rehabilitation counselor education program in the College of Human Resources and Education offers a curriculum at the master’s degree level. All students complete coursework related to rehabilitation and disability issues as well as coursework in counseling.

This professional counseling specialty assists individuals with physical, mental, developmental, cognitive, and emotional disabilities to achieve their personal, career, and independent living goals in the most integrated setting possible through the application of the counseling process. The counseling process involves communication, goal setting, and beneficial growth or change through self-advocacy, psychological, vocational, social, and behavioral interventions. The objectives of our program are linked to provide: Educational experiences for every student that facilitates the development of knowledge, skills, and beliefs necessary to practice as a qualified rehabilitation counselor; learning opportunities to support students’ ability to implement culturally responsive and ethically sound rehabilitation counseling practices; and clinical training environments that are focused on real world expectations. Graduates also work in mental health and substance abuse service agencies. The program is fully accredited by the Council on Rehabilitation Education and is a WVU Program of Excellence.

The program of study includes 51 credit hours or coursework including 14 didactic courses, a practicum (150 hours), then a faculty-supervised internship (600 hours) in the final semester. Graduation is contingent upon completion of these 51 credit hours with a 3.0 grade point average. In addition to completing coursework satisfactorily, a candidate must demonstrate the ability to assume the responsibilities required of a professional rehabilitation counselor and the personal characteristics essential to effective working relationships with others.

The rehabilitation counseling program is available for both full–and part-time students. An e-campus version of the program is offered through Extended Learning. On-campus and e-campus programs start in the fall. The on-campus option requires that students participate in e-campus courses in the plan of study.

Students may take the professional examination to obtain national certification as a rehabilitation counselor during their internship semester. Graduates who take additional coursework (leading to 60 hours) and undertake the appropriate level of supervised experience after completion of their degree are typically eligible for licensure as a counselor in West Virginia and many other states.

Required Courses

All students are required to take the following core courses:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COUN 501</td>
<td>Counseling Theory/Techniques 1</td>
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<tr>
<td>COUN 505</td>
<td>Theory &amp; Pract Human Appraisal</td>
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<td>COUN 606</td>
<td>Counseling Theory/Techniques 2</td>
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<td>COUN 609</td>
<td>Group Counsel Theory/Technique</td>
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<td>Intro-Rehabilitation Services</td>
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<td>REHB 610</td>
<td>Medical Aspects-Rehabilitation</td>
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<td>Disability Across the Lifespan</td>
<td>3</td>
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<td>REHB 620</td>
<td>Career Developmnt/Job Placemnt</td>
<td>3</td>
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<td>REHB 624</td>
<td>Rehabilitation Client Services</td>
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<td>COUN 664</td>
<td>Ethical Issues in Counseling</td>
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<td>REHB 672</td>
<td>Counseling Practicum</td>
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<td>REHB 675</td>
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<tr>
<td>REHB 680</td>
<td>Research Seminar</td>
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Elective

The following plan of study is an example of how the program can be completed through the eCampus program and include 60 credit hours of study for licensure application. Three additional electives are offered to allow graduates to meet the requirements of licensing but
each state have different expectations for coursework. It is the responsibility of the student to investigate those expectations with the state licensing body.

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<td>7-10</td>
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<td>4-18</td>
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</table>

Total credit hours: 45-67

Application

Applications for admission to the rehabilitation counseling program should be made to the WVU Office of Admissions. In addition to the admission requirements of the University and the College of Human Resources and Education, the rehabilitation counseling program has the following admission requirements.

- A baccalaureate degree with coursework in appropriate areas.
- A minimum undergraduate grade point average of 2.8 based on a 4.0 system (students with a lower grade point average and otherwise exceptional credentials may be admitted provisionally); under 2.5 GPA cannot be admitted.
- GRE or MAT scores.
- Three letters of reference.
- Completion of the application to the rehabilitation counseling program. Note this is on the program’s website.

The initial screening decision is based upon this information as well as considering the applicant’s previous work or related experiences related to persons with disabilities. Successful applications are then interviewed by program faculty. Final decisions about admission are based on both the requirements and the interview process.

Admission

Admission to the program is a two-step procedure. Step one involves a review of credentials presented in the application materials including references, department application (relevant major; general quality of application), GPA, and GRE scores (verbal, quantitative, and analytical writing). The Miller's Analogy Test (MAT) may be taken in place of the GRE. Step 2 is the department interview which considers personal style relevant to working as a counselor, communication skills, capacity for empathic understanding and communication, ability to articulate professional goals, goals congruent with department focus, knowledge and understanding of rehabilitation counseling as well as an assessment of applicants’ capacity to complete the rehabilitation counseling curriculum successfully.

The preferred application deadline for receiving completed materials is March 15. However, applications are accepted until April 15.

Faculty

Program Coordinator
- Katherine Byers - Ph.D., CRC, CVE (University of Florida)

Associate professor
- Margaret K. Glenn - EdD (The George Washington University)

Teaching Instructor
- Regina B. Carrick - MS (West Virginia University)

Curriculum and Instruction/Literacy Studies

The Department of Curriculum & Instruction/Literacy Studies, Social & Cultural Foundations, Educational Leadership Studies offers opportunities for graduate study and research, leading to degrees in each related specialty area for the Master of Arts. Our programs
are designed for educators and other professionals with educational leadership responsibilities. The primary purposes of the graduate programs in our department are to provide increased knowledge, skills, research, and professional competencies for licenses related to each specialty area in the department. Our program area faculty work with national accreditation standards for each of their programs. Our faculty contribute to the profession at university, state, and national levels of professional involvement. The experiences available through our graduate programs involve cutting edge technology, diversity, global initiatives, culturally responsive teaching, and effective faculty who are leaders in research, teaching and service in their scholarly work.

For more information, please visit our website: http://cils.wvu.edu/

Degrees Offered

- Master of Arts
- Area of Emphasis for Doctor of Education

Graduation

All students must apply for graduation. Please contact:

the Center for Student Advising and Records
Room 710 Allen Hall
PO Box 6122
Morgantown, WV 26506-6122

Program Policies and Matriculation Benchmarks—Elementary Teaching Certification Programs

All students enrolled in post B.A. initial certification programs in the Department of Curriculum and Instruction/Literacy Studies must adhere to the following policy. Please consult with your advisor to discuss your program plan.

Matriculation Benchmarks

Phase One

Admission to the M.A. program in elementary/secondary education Criteria

- Bachelor’s degree
- GPA 2.75
- TOEFL (international students)

TOEFL score must be at least 550 (paper) or 213 (computer) for international students. (76 after July 2006)

Phase Two

Admission to certification teacher education Criteria

- 3.0 GPA in graduate coursework
- Successful completion of C&I 602 (Must complete class with a grade of B or above.)

Successful completion of: PPST (Pre Professional Skills Test -PRAXIS I) unless the student has an M.A. or 26 on ACT or 1125 on the SAT (see State Policy 5100). This policy can be found on the WV department website, under State Board (policies – 5100): http://wvde.state.wv.us.

Test scores must be submitted to department.

- Begin collection of artifacts for an exit portfolio

Phase Three

Student teaching placement (pre-requisites) Criteria

- Completion of all professional education and subject content coursework.
- Completion and submission of Student Teaching Application.
- Successful passing the PRAXIS II. Test scores must be submitted to the Center for Student Advising and Records.
- Completion of a minimum 125 hours of field-based experience.
State Policy # 5100

6.2.3. PPST Waivers. In lieu of taking the WVBE-approved PPST, prospective educators completing WVBE-approved programs may provide evidence of:

1. A master’s degree from an accredited institution of higher education; or
2. Currently holding or having held a West Virginia professional teaching, administrative, or student support service license; or
3. Attainment of WVBE-approved composite scores from a single administration of the American College Testing (ACT) Program or the Scholastic Achievement Test (SAT).

See Appendix E of this policy for currently approved ACT and SAT scores. Waivers A and C do not apply to the institution’s required assessments of speaking, listening, and educational technology knowledge and skills. Individuals who currently hold or have held a West Virginia professional teaching, administrative, or student support services license are not required to complete any of the pre-professional skills assessments (WVDOE Policy 5100).

Additional Notes

1. C&I 602 must be taken in the first or second semester after admission into the program.
2. No more than 14 hours at a 400 level plus student teaching may count toward a 36-hour master’s degree.
3. Application for transient credit for graduate courses taken at other institutions must be approved by the advisor and the associate dean for academic affairs.
4. Elective courses must be approved by the advisor prior to enrollment.
5. Prior to enrollment in C&I 584:
   • All coursework must be completed.
   • All students must complete 125 hours of approved fieldwork.
   • All students must submit passing scores (as determined by the West Virginia Department of Education) and copies of the subtest scores for the appropriate PRAXIS II (content area) to the Center for Student Advising and Records test prior to student teaching.
6. All students must successfully complete a professional portfolio that demonstrates mastery of WV Professional Teaching standards and specialization content. Students submit the portfolio in
7. C&I 680

Capstone Experience

1. All students must submit passing scores for the PLT to the Center for Student Advising and Records prior to certification.
2. As state certification requirement change, additional coursework may be required.

Faculty

Chair

• Joy Faini Saab

Professors

• Elizabeth A. Dooley - Ed.D. (WVU)
  Elementary education, Learning disabilities, Mental retardation, Multi-cultural education.
• Stacy A. Gartin - Ph.D. (Ohio St. U.)
  Adult agricultural education, Communications, Leadership development.
• Mary E. Haas - Ed.D. (Ind. U.)
  Social studies education, Geographic education, Global education, Holocaust education.
  Status: Regular
• Dee Hopkins - Ed.D. (Indiana U.)
• Patricia A. Obenauf - Ed.D. (U. Va.)
  Curriculum development, Science education, Conceptual models.
  Status: Regular
• Steven D. Rinehart - Ed.D. (WVU)
  Reading education, Language arts, Clinical reading.
  Status: Regular
• James Rye - Ph.D. (Penn. St. U.)
  Science concept learning: Science/technology/society education, Human nutrition and health education.
  Status: Regular
• Randall L. Wiesenmayer - Ph.D. (Penn. St. U.)
  Science education, Science/technology/society (STS) education, Environmental education.

**Associate Professor**

• Charline J. Barnes Rowland - Ed.D. (Va. Polytechnic Inst.)
  Literacy education, Teacher education.
  Status: Regular

• Donna Breault - Ph.D. (Georgia State University)
  Curriculum Studies, Early Childhood, Leadership Studies

• Allison Swan Dagen - Ph.D. (U. of Pitt.)
  Instructional and learning reading.
  Status: Regular

• Joy Faini Saab - Ed.D. (WVU)
  Status: Regular

**Assistant Professor**

• Malaya Bernstein - Ph.D. (Northwestern U.)
  English Education

• Johnna J. Bolyard - Ph.D. (George Mason U.)
  Mathematics education, Mathematics teacher development, Use of representation in mathematics teaching.
  Status: Regular

• Jeffrey Carver - Ed.D. (Ill. St. U)
  Science education, Organic chemistry, Physics.
  Status: Associate

• Meadow S. Graham - Ph.D. (Ga. St. U.)
  Language and Literacy.

• Sharon Hayes - Ph.D. (U. of Fla.)
  Elementary education, Action research, Professional development and literacy.
  Status: Regular

• Aimee L. Morewood - Ph.D. (U. of Pitt.)
  Reading education, Professional development, Effective teaching strategies.
  Status: Regular

• Kerry S. Odell - Ph.D. (Ohio St. U.)
  Adjunct. Research methodology, Microcomputer applications, Teaching methods.

• Sarah Selmer - Ed.D. (WVU)
  Mathematics Education

• Melissa Sherfinski - Ph.D. (University of Wisconsin-Madison)
  Curriculum Theory & Research, research methodology

• Ye Sun - Ph.D. (Tex. A&M U.)
  Mathematics education.
  Status: Regular

• Eva Erdoesne Toth - Ph.D. (U. of Ill.)
  Science education, Biology, Chemistry
  Status: Regular

• Robert A. Waterson - Ph.D. (Purdue U.)
  Social studies history, Democracy and citizenship education, Multicultural education.
  Status: Associate

**Visiting Assistant Professor**

• Jane S. Cardi - Ed.D. (WVU)
  French, Gifted education.

**Teaching Assistant Professor**

• Ashley Dawn Atkins Martucci - Ed.D. (WVU)
  Early childhood education, Child development.
Teaching Instructor

- Beth B. Satterfield - M.S. (WVU)
  Early Childhood education, Child development.

Clinical instructor

- Matthew Anderson - M.A. (Columbia University)
  Educational/Dev. Psychology

Professors emeriti

- John L. Carline - Ph.D. (Syracuse U.)
  Emeritus
- Boyd D. Holtan - Ed.D (U. Ill.)
  Emeritus
- Ronald V. Iannone - Ed.D. (Syracuse U.)
  Emeritus
- Roy A. Moxley - Ph.D. (U. Mich.)
  Emeritus
- C. Kenneth Murray - Ph.D. (Ohio St. U.)
  Emeritus
- Patricia K. Smith - Ed.D. (WVU)
  Emerita

Associate professors emeriti

- Ardeth M. Deay - Ph.D. (Cornell U.)
  Emerita
  Status: Regular
- Perry D. Phillips - Ed.D. (WVU)
  Social Studies Education, Emeritus
  Status: Regular

Assistant professors emeritae

- Michael A. Caruso - M.A. (WVU)
  Emeritus
- Barbara Mertins - M.S.L.S. (Syracuse U.)
  Emerita

Curriculum and Instruction

The Department of Curriculum & Instruction/Literacy Studies, Social & Cultural Foundations, Educational Leadership Studies offers opportunities for graduate study and research, leading to degrees in each related specialty area for the Master of Arts. Our programs are designed for educators and other professionals with educational leadership responsibilities. The primary purposes of the graduate programs in our department are to provide increased knowledge, skills, research, and professional competencies for licenses related to each specialty area in the department. Our program area faculty work with national accreditation standards for each of their programs. Our faculty contribute to the profession at university, state, and national levels of professional involvement. The experiences available through our graduate programs involve cutting edge technology, diversity, global initiatives, culturally responsive teaching, and effective faculty who are leaders in research, teaching and service in their scholarly work.

For more information, please visit our website: http://cils.wvu.edu/

Department of Curriculum & Instruction/Literacy Studies, Social & Cultural, Educational Leadership Studies
Joy Faini Saab, Ed.D., Chair
602 Allen Hall
Master of Arts Elementary Education (Advanced Program of Study)

This program is designed for individuals who already hold a bachelor's degree in elementary education in addition to teaching certification in elementary education and for educators or other professionals who have curriculum and instructional responsibilities. Students have the opportunity to advance their knowledge and skills applicable to student learning.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>C&amp;I 605</td>
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<td>SCFD 640</td>
<td>History Of American Education</td>
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<td>C&amp;I 631</td>
<td>Mathematics-Elementary School</td>
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<tr>
<td>C&amp;I 648</td>
<td>Science/Tech:Soc Perspectives</td>
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<td>Social Studies Curr Devlp K-12</td>
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<td>Electives (Must be approved by advisor)</td>
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<td>Total Hours</td>
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Master of Arts Elementary Education with Initial Teaching Certification

This program is available to those students who hold a bachelor’s degree in non-education fields or other education fields, and choose to pursue a degree and certification in teacher education. This program is also designed for career changers; those individuals who choose to change careers after several years on the job.

Required Professional Graduate Education Courses:

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<td>C&amp;I 602</td>
<td>Curriculum/Teaching Principles</td>
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<td>C&amp;I 640</td>
<td>Science In Elementary School</td>
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<td>C&amp;I 594</td>
<td>Seminar</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;I 680</td>
<td>Tech Ingrtn-Capstone Exper</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
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<td>48</td>
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</table>

Please note: Students must also complete required content coursework for teaching certification. Contact the department for the additional certification coursework required.

Due to frequent ongoing changes in teacher certification requirements, program requirements may change. Because of this, it is imperative that our students consult with a program advisor prior to the beginning of your program of study.

For further information on admission and program requirements, visit our website: http://cils.wvu.edu or write to the Chairperson of Curriculum and Instruction/Literacy Studies, College of Human Resources and Education, 602 Allen Hall, P.O. Box 6122, Morgantown, WV 26506-6122.
Master of Arts Elementary Education Early Childhood Education (Pre K-4)

This program is designed for those individuals who choose to become experts in early childhood education. Students gain practical experience by working with young children throughout their educational experience.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 612</td>
<td>Early Childhood Curriculum 1</td>
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</tr>
<tr>
<td>C&amp;I 614</td>
<td>Early Childhood Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 414</td>
<td>Course C&amp;I 414 Not Found</td>
<td>3</td>
</tr>
<tr>
<td>THET 461</td>
<td>Course THET 461 Not Found</td>
<td>3</td>
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</table>

Select one of the following:

PET course - Inst Reg & Implement PE 3
PET 688 Applied Motor Learning 3

Select one of the following:

SPA 278 Course SPA 278 Not Found 3
SPA 608 Hearing-Impaired School Child 3
SPED 500 Legal/Eductl Founds:Spec Ed 3
SPED 601 Acadmc Intervntns:Spec Needs 3
SPED 610 Typical/Atypical Dvl:Erly Inte 3
CDFS 211 Course CDFS 211 Not Found 3

Select one of the following:

CDFS 316 Course CDFS 316 Not Found 3
C&I 587 Advanced Clinical Experience 3

Approved Restricted Electives 12

Total Hours 30

An additional birth to pre k option adds the following requirement:

CDFS 211 Course CDFS 211 Not Found 0

* The following courses meet the performance assessment requirement for field experience: C&I 410, C&I 411, C&I 587, or CDFS 316.

Other Requirements:

Graduate students applying for a birth-K certification are required to complete three hours of performance assessment credits in a pre-K classroom or approved equivalent experience. They must also pass the Early Childhood Education Exam #0530. (All elective courses must be approved by the advisor before enrollment.)

Master of Arts Elementary Education (Thesis Option)

This thesis option is available to those who choose to advance their career through the intensive study of their area of interest while creating an individualized research agenda. Students interested in pursuing this option should contact the chair of the department for program options.

Requirements: All applicants must comply with the general requirements of the University and the College of Human Resources and Education.

Graduation

All students must apply for graduation. Please contact the Center for Student Advising and Records, Room 710 Allen Hall, PO Box 6122, Morgantown, WV 26506-6122.

Program Policies and Matriculation Benchmarks—Elementary Teaching Certification Programs

All students enrolled in post B.A. initial certification programs in the Department of Curriculum and Instruction/Literacy Studies must adhere to the following policy. Please consult with your advisor to discuss your program plan.

Matriculation Benchmarks

Phase One - Admission to the M.A. program in elementary/secondary education

Criteria
• Bachelor’s degree
• GPA 2.75
• TOEFL (international students) - TOEFL score must be at least 550 (paper) or 213 (computer) for international students. (76 after July 2006)

Phase Two - Admission to certification teacher education

Criteria
• 3.0 GPA in graduate coursework
• Successful completion of C&I 602 (Must complete class with a grade of B or above.)
• Successful completion of: PPST (Pre Professional Skills Test - PRAXIS I) unless the student has an M.A. or 26 on ACT or 1125 on the SAT (see State Policy 5100). This policy can be found on the WV department website, under State Board (policies – 5100): http://wvde.state.wv.us. Test scores must be submitted to department.
• Begin collection of artifacts for an exit portfolio

Phase Three - Student teaching placement (pre-requisites)

Criteria
• Completion of all professional education and subject content coursework.
• Completion and submission of Student Teaching Application.
• Successful passing the PRAXIS II. Test scores must be submitted to the Center for Student Advising and Records.
• Completion of a minimum 125 hours of field-based experience.

State Policy # 5100

6.2.3. PPST Waivers. In lieu of taking the WVBE-approved PPST, prospective educators completing WVBE-approved programs may provide evidence of:

1. A master’s degree from an accredited institution of higher education; or
2. Currently holding or having held a West Virginia professional teaching, administrative, or student support service license; or
3. Attainment of WVBE-approved composite scores from a single administration of the American College Testing (ACT) Program or the Scholastic Achievement Test (SAT).

See Appendix E of this policy for currently approved ACT and SAT scores. Waivers A and C do not apply to the institution’s required assessments of speaking, listening, and educational technology knowledge and skills. Individuals who currently hold or have held a West Virginia professional teaching, administrative, or student support services license are not required to complete any of the pre-professional skills assessments (WVDOE Policy 5100).

Additional Notes

1. C&I 602 must be taken in the first or second semester after admission into the program.
2. No more than 14 hours at a 400 level plus student teaching may count toward a 36-hour master’s degree.
3. Application for transient credit for graduate courses taken at other institutions must be approved by the advisor and the associate dean for academic affairs.
4. Elective courses must be approved by the advisor prior to enrollment.
5. All students must successfully complete a professional portfolio that demonstrates mastery of WV Professional Teaching standards and specialization content. Students submit the portfolio in C&I 680
6. Prior to enrollment in C&I 584 Student Teaching:

• All coursework must be completed.
• All students must complete 125 hours of approved fieldwork.
• All students must submit passing scores (as determined by the West Virginia Department of Education) and copies of the subtest scores for the appropriate PRAXIS II (content area) to the Center for Student Advising and Records test prior to student teaching.

Capstone Experience

1. All students must submit passing scores for the PLT to the Center for Student Advising and Records prior to certification.
2. As state certification requirement change, additional coursework may be required.
Doctor of Education

The curriculum and instruction area of emphasis for the doctoral degree is designed to prepare candidates to teach at college or university levels, work with school districts, or other agencies in curriculum areas, or to hold leadership positions in organizations that emphasize teaching and learning. Program flexibility allows candidates to design programs that meet their career goals. All programs are approved by an advisor and Faculty Committee.

The program requires a minimum of 72 hours beyond the baccalaureate degree, including 42 hours beyond a master’s degree; 33 of the 42 hours must be taken at WVU. In addition to the major area coursework in curriculum and instruction, students must:

1. have coursework in an area of specialization
2. must complete a core of foundations and research courses
3. successfully complete a comprehensive examination
4. seek approval of a dissertation topic
5. successfully defend dissertation research

Admission

All applicants must comply with the requirements of West Virginia University, the College of Human Resources and Education, and the curriculum and instruction program area. Requirements for the curriculum and instruction area for the Ed.D. are as follows:

• Completion of a master’s degree from an accredited school.
• Graduate grade point average of a 3.25 or higher.
• A goals statement that describes the extent to which the applicant’s goals may be accomplished through the program.
• Three letters of references.
• Graduate Records Examination (GRE) or Millers Analogy Test (MAT) are required for admission (score cannot be more than 5ve years old). Please contact department for minimum score requirements and/or program changes.
• International students from a country in which English is not the native language must have a TOEFL score of at least 550.
• Related teaching and/or other appropriate professional experience.

Applications are reviewed and admission recommendations are made by the program’s Doctoral Admissions Committee. The number of students accepted into the program in each admission period is determined by available resources. For additional information or requirements visit http://cils.wvu.edu.

Submission and completion of all of the above does not guarantee admission into the program.

Candidacy

Students are accepted for study toward the Ed.D. with an emphasis in curriculum and instruction upon admission into the program. To advance to candidacy for the doctorate, the student must:

• Complete prerequisite doctoral program coursework with at least a 3.0 grade point average.
• Pass a written comprehensive and oral examination.
• Have a research prospectus approved by the Dissertation Committee.

For additional information concerning admission criteria, program requirements, deadlines, and timelines, please direct inquiries to:

Department Chair
Department of Curriculum and Instruction/Literacy Studies
602 Allen Hall
College of Human Resources and Education
West Virginia University
P.O. Box 6122
Morgantown, WV 26506-6122
or phone (304) 293-3441

Secondary Education

The Department of Curriculum & Instruction/Literacy Studies, Social & Cultural Foundations, Educational Leadership Studies offers opportunities for graduate study and research, leading to degrees in each related specialty area for the Master of Arts. Our programs are designed for educators and other professionals with educational leadership responsibilities. The primary purposes of the graduate programs in our department are to provide increased knowledge, skills, research, and professional competencies for licenses related to each specialty area in the department. Our program area faculty work with national accreditation standards for each of their programs. Our
faculty contribute to the profession at university, state, and national levels of professional involvement. The experiences available through our graduate programs involve cutting edge technology, diversity, global initiatives, culturally responsive teaching, and effective faculty who are leaders in research, teaching and service in their scholarly work.

For more information, please visit our website: http://cils.wvu.edu/

Curriculum and Instruction/Literacy Studies, Social & Cultural Foundations, Educational Leadership Studies

Joy Faini Saab, Ed.D. Chair
602 Allen Hall

Degree Offered

- Master of Arts

Program

The purpose of the secondary program is to provide academic experiences to increase skills in teaching and curriculum development and knowledge of a teaching specialization. Students pursuing a master of arts in secondary education may choose one of five content specialization areas (English, foreign language, math, science, social studies). In addition students may elect to enroll in the advanced secondary education option. Teacher certification requirements are based on the West Virginia Department of Education’s Policy 5100 Approval of Educational Personnel Preparation Programs and Policy 5202 Licensure of Professional/Paraprofessional Personnel. Student may choose a thesis option with this degree. The Master of Arts in Secondary Education has three areas of emphasis: secondary education for initial certification; secondary education with an emphasis on higher education, and advanced study in secondary education.

Masters of Arts - Secondary Education (Advanced Program of Study)

This program is designed for individuals who already hold a bachelor’s degree in secondary education in addition to teaching certification in one of the five specialization areas. Additionally, it is also designed for those educators and or other professionals who are responsible for curriculum and instruction within their discipline and or expertise areas.

Students who choose this option will complete 36 hours of coursework that is designed to broaden their professional knowledge and technical skill set.

Required Professional Graduate Education Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>C&amp;I 604</td>
<td>School Curriculum</td>
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<tr>
<td>C&amp;I 605</td>
<td>21st Century Teaching/Learning</td>
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<td>Select one of the following:</td>
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<tr>
<td>SCFD 620</td>
<td>Philosophy of Education</td>
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<tr>
<td>SCFD 640</td>
<td>History Of American Education</td>
<td></td>
</tr>
<tr>
<td>C&amp;I 680</td>
<td>Tech Intgrtn-Capstone Exper</td>
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</table>

Required graduate hours 12
Electives 24
Total Hours 45

Master’s of Arts - Secondary Education Secondary Education Program with Initial Teaching Certification

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<th>Hours</th>
</tr>
</thead>
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<tr>
<td>C&amp;I 602</td>
<td>Curriculum/Teaching Principles</td>
<td>3</td>
</tr>
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<td>C&amp;I 605</td>
<td>21st Century Teaching/Learning</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>SCFD 620</td>
<td>Philosophy of Education</td>
<td></td>
</tr>
<tr>
<td>SCFD 640</td>
<td>History Of American Education</td>
<td></td>
</tr>
<tr>
<td>C&amp;I 680</td>
<td>Tech Intgrtn-Capstone Exper</td>
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</table>

Required Graduate Hours 12
Electives 24
Total Hours 45

Education Core Coursework

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>C&amp;I 602</td>
<td>Curriculum/Teaching Principles</td>
<td>3</td>
</tr>
</tbody>
</table>
EDP 600    Educational Psychology    3
RDNG 622    Content Area Literacy Inst    3
SPED 500    Legal/Eductnl Foundtns:Spec Ed    3
SPED 601    Acadmic Intervntns:Spec Needs    3
Select one of the following:    3
    C&I 697    Research
    C&I 688    Classroom Organization & Mang
    C&I 689    Cultural Diversity -Classroom    3
Select one of the following:    3
    SCFD 620    Philosophy of Education 
    SCFD 640    History Of American Education

Total Hours    24

* Students who chose science as a specialization area do not take this course.

Contact the department for specialization requirements. Students may seek initial certification in the following areas: English education, foreign language education, math education, science education, and social studies education. Contact the department for specific program information and program requirements.

C&I 585    Student Teaching Secondary Ed    2-12
C&I 588    Professional Field Experience    2
C&I 680    Tech Intgrtn-Capstone Exper    3

Total Hours    7-17

Program Policies and Matriculation Benchmarks—Secondary Teaching Certification Programs

Phase One - Admission to the M.A. program in elementary/secondary education

Criteria

• Bachelor’s degree
• GPA 2.75
• TOEFL (international students) - TOEFL score must be at least 550 (paper) or 213 (computer) for international students. (76 after July 2006).

Phase Two - Admission to certification teacher education

Criteria

• 3.0 GPA in graduate coursework
• Successful completion of C&I 602 (Must complete class with a grade of B or above.)
• Successful completion of: PPST (Pre Professional Skills Test - PRAXIS I) unless the student has an M.A. or 26 on ACT / 1125 on the – SAT (see State Policy 5100). This policy can be found on the WV department website, under State Board (policies – 5100): http://wvde.state.wv.us. Test scores must be submitted to department.
• Begin collection of artifacts for exit portfolio.

Phase Three - Student teaching placement (pre-requisites)

Criteria

• Completion of all professional education and subject content coursework.
• Completion and submission of Student Teaching Application.
• Successful passing the PRAXIS II. Test scores must be submitted to the Center for Student Advising and Records.
• Completion of a minimum 125 hours of field based experience.

State Policy # 5100

6.2.3. PPST Waivers. In lieu of taking the WVBE-approved PPST, prospective educators completing WVBE-approved programs may provide evidence of:

1. A master’s degree from an accredited institution of higher education; or
2. Currently holding or having held a West Virginia professional teaching, administrative, or student support service license; or
3. Attainment of WVBE-approved composite scores from a single administration of the American College Testing (ACT) Program or the Scholastic Achievement Test (SAT).

See Appendix E of this policy for currently approved ACT and SAT scores. Waivers A and C do not apply to the institution’s required assessments of speaking, listening, and educational technology knowledge and skills. Individuals who currently hold or have held a West Virginia professional teaching, administrative, or student support services license are not required to complete any of the pre-professional skills assessments (WVDOE Policy 5100). Due to periodic changes in state certification requirements, program content may change.

Additional Notes

1. C&I 602 must be taken in the first or second semester after admission into the program.
2. No more than 14 hours at a 400 level plus student teaching may count toward a 36 hour master’s degree.
3. Application for transient credit for graduate courses taken at other institutions must be approved by the advisor and the associate dean for academic affairs.
4. Elective courses must be approved by the advisor prior to enrollment.
5. Prior to enrollment in C&I 585

• All coursework must be completed.
• All students must complete 125 hours of approved fieldwork.
• All students must submit passing scores (as determined by the West Virginia Department of Education) and copies of the subtest scores for the appropriate PRAXIS.
• Student Teaching:

II. (Content area specialization) to the Center for Student Advising and Records prior to beginning the student teaching semester.

1. All students must successfully complete a professional portfolio that demonstrates mastery of WV Teaching Standards and specialization content. Students submit the portfolio in C&I 680.
2. All students must submit passing scores for the PLT to the Center for Student Advising and Records prior to certification. As state certification requirement change, additional coursework may be required.

Higher Education Curriculum and Teaching

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<th>Graduate Courses in Education</th>
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<td>SCFD 620 Philosophy of Education</td>
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<td>SCFD 640 History Of American Education</td>
<td></td>
</tr>
<tr>
<td>C&amp;I 701 Curriculum Development</td>
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<tr>
<td>C&amp;I 687 Advanced Teaching Strategies</td>
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<tr>
<td>C&amp;I 789 Teaching In Higher Education</td>
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</tr>
<tr>
<td>EDP 600 Educational Psychology</td>
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<td>Approved Education Electives</td>
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<tr>
<td>Graduate Courses in Academic Area</td>
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<tr>
<td>Total Hours</td>
<td>53-71</td>
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</table>

Master of Arts Secondary Education (Thesis Option)

This option is available to those who choose to advance their career through the intensive study of their area interest while creating an individualized research agenda. Students interested in pursuing this option should contact the chair of the department for program options.

Graduation

All students must apply for graduation. Please contact the Center for Student Advising and Records, 710 Allen Hall, P.O. Box 6122, Morgantown, WV 26506-6122.
Elementary Education

The Department of Curriculum & Instruction/Literacy Studies, Social & Cultural Foundations, Educational Leadership Studies offers opportunities for graduate study and research, leading to degrees in each related specialty area for the Master of Arts. Our programs are designed for educators and other professionals with educational leadership responsibilities. The primary purposes of the graduate programs in our department are to provide increased knowledge, skills, research, and professional competencies for licenses related to each specialty area in the department. Our program area faculty work with national accreditation standards for each of their programs. Our faculty contribute to the profession at university, state, and national levels of professional involvement. The experiences available through our graduate programs involve cutting edge technology, diversity, global initiatives, culturally responsive teaching, and effective faculty who are leaders in research, teaching and service in their scholarly work.

For more information, please visit our website: http://cils.wvu.edu/

Joy Faini Saab, Ed.D., Chair
602 Allen Hall

Elementary Education

Master of Arts

The Department of Curriculum and Instruction/Literacy Studies provides opportunities for graduate study and research leading to the degree of master of arts (M.A.) for educators and other professionals with educational responsibilities. Teacher certification requirements are based on the West Virginia Department of Education’s Policy 5100 Approval of Educational Personnel Preparation Programs and Policy 5202 Licensure of Professional/Paraprofessional Personal. The master of arts in elementary education has three areas of emphasis: elementary education for initial certification, elementary education with an emphasis on early childhood education; and advanced study in elementary education.

Students pursuing a master of arts degree in elementary education may choose one of three program areas of emphasis. Each program area is designed to meet the educational and career goals of students who pursue this degree area. Student may choose a thesis option with this degree.

I. Master of Arts Elementary Education (Advanced Program of Study)

This program is designed for individuals who already hold a bachelor’s degree in elementary education in addition to teaching certification in elementary education and for educators or other professionals who have curriculum and instructional responsibilities. Students have the opportunity to advance their knowledge and skills applicable to student learning.

II. Master of Arts Elementary Education with Initial Teaching Certification

This program is available to those students who hold a bachelor’s degree in non-education fields or other education fields, and choose to pursue a degree and certification in teacher education. This program is also designed for career changers; those individuals who choose to change careers after several years on the job.

Required Professional Graduate Education Courses Hrs.

Total hours in the elementary master’s program Total graduate hours in education [including internship]. Please note: Students must also complete required content coursework for teaching certification. Contact the department for the additional certification coursework required.

Due to frequent ongoing changes in teacher certification requirements, program requirements may change. Because of this, it is imperative that our students consult with a program advisor prior to the beginning of your program of study.

For further information on admission and program requirements, visit our website: http://cils.wvu.edu or write to:

The Chairperson of Curriculum and Instruction/Literacy Studies
College of Human Resources and Education
602 Allen Hall
P.O. Box 6122
Morgantown, WV 26506-6122

III. Master of Arts Elementary Education Early Childhood Education (Pre K-4)

This program is designed for individuals who choose to become experts in early childhood education. Students gain practical experience by working with young children throughout their educational experience.
Other Requirements:
Graduate students applying for a birth-K certification are required to complete three hours of performance assessment credits in a pre-K classroom or approved equivalent experience. They must also pass the Early Childhood Education Exam #0530. (All elective courses must be approved by the advisor before enrollment.)

IV. Master of Arts Elementary Education (Thesis Option)
This thesis option is available to those who choose to advance their career through the intensive study of their area of interest while creating an individualized research agenda. Students interested in pursuing this option should contact the chair of the department for program options.

Requirements
All applicants must comply with the general requirements of the University and the College of Human Resources and Education.

Master of Arts Elementary Education (Advanced Program of Study)
This program is designed for individuals who already hold a bachelor's degree in elementary education in addition to teaching certification in elementary education and for educators or other professionals who have curriculum and instructional responsibilities. Students have the opportunity to advance their knowledge and skills applicable to student learning.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>C&amp;I 604</td>
<td>School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 605</td>
<td>21st Century Teaching/Learning</td>
<td>3</td>
</tr>
<tr>
<td>SCFD 620</td>
<td>Philosophy of Education</td>
<td></td>
</tr>
<tr>
<td>SCFD 640</td>
<td>History Of American Education</td>
<td></td>
</tr>
<tr>
<td>C&amp;I 631</td>
<td>Mathematics-Elementary School</td>
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</tr>
<tr>
<td>C&amp;I 648</td>
<td>Science/Tech:Soc Perspectives</td>
<td>3</td>
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<tr>
<td>C&amp;I 757</td>
<td>Social Studies Curr Devlp K-12</td>
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<tr>
<td>C&amp;I 688</td>
<td>Classroom Organization &amp; Mang</td>
<td>3</td>
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<tr>
<td>RDNG 621</td>
<td>Rdng &amp; Wrtng Inst-Elem Schools</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 680</td>
<td>Tech Intgrtn-Capstone Exper</td>
<td>3</td>
</tr>
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<td>Electives (Approved by Advisor)</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>36</td>
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</tbody>
</table>

Master of Arts Elementary Education with Initial Teaching Certification
This program is available to those students who hold a bachelor’s degree in non-education fields or other education fields, and choose to pursue a degree and certification in teacher education. This program is also designed for career changers; those individuals who choose to change careers after several years on the job.

Required Professional Graduate Education Courses

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 631</td>
<td>Mathematics-Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 602</td>
<td>Curriculum/Teaching Principles</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;I 640</td>
<td>Science In Elementary School</td>
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<tr>
<td>C&amp;I 650</td>
<td>Social Studies-Elementary Schl</td>
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<tr>
<td>C&amp;I 689</td>
<td>Cultural Diversity-Elementary Schl</td>
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<td>EDP 600</td>
<td>Educational Psychology</td>
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<td>RDNG 603</td>
<td>Literature-Elementary School</td>
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<td>RDNG 694 Seminar (subject matter changes)</td>
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<td>RDNG 621</td>
<td>Rdng &amp; Wrtng Inst-Elem Schools</td>
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<td>RDNG 640</td>
<td>Instructing Students-Rdng Dif</td>
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<td>RDNG 641</td>
<td>Problems in Reading</td>
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<td>SPED 500</td>
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<td>SPED 601</td>
<td>Academic Intervntns:Spec Needs</td>
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<td>C&amp;I 584</td>
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Please note: Students must also complete required content coursework for teaching certification. Contact the department for the additional certification coursework required.

Due to frequent ongoing changes in teacher certification requirements, program requirements may change. Because of this, it is imperative that our students consult with a program advisor prior to the beginning of your program of study.

For further information on admission and program requirements, visit our website: http://cils.wvu.edu or write to the Chairperson of Curriculum and Instruction/Literacy Studies, College of Human Resources and Education, 602 Allen Hall, P.O. Box 6122, Morgantown, WV 26506-6122.

**Master of Arts Elementary Education Early Childhood Education (Pre K-4)**

This program is designed for those individuals who choose to become experts in early childhood education. Students gain practical experience by working with young children throughout their educational experience.

- C&I 612 Early Childhood Curriculum 1 3
- C&I 614 Early Childhood Instruction 3
- C&I 414 Course c&I 414 Not Found

Select one of the following: 3

<table>
<thead>
<tr>
<th>Art/Music Methods</th>
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<tbody>
<tr>
<td>THET 461</td>
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<tr>
<td>Course THET 461 Not Found</td>
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PET 493 Special Topics

Select one of the following: 3

<table>
<thead>
<tr>
<th>PET 688 Applied Motor Learning</th>
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<tr>
<td>Course PET 688 Not Found</td>
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Select one of the following: 3

<table>
<thead>
<tr>
<th>SPA 278 Course SPA 278 Not Found</th>
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</thead>
<tbody>
<tr>
<td>SPA 608 Hearing-Impaired School Child</td>
</tr>
<tr>
<td>SPED 500 Legal/Educntl Foundtns:Spec Ed</td>
</tr>
<tr>
<td>SPED 601 Acadmic Interventns:Spec Needs</td>
</tr>
<tr>
<td>SPED 610 Typical/Atypical Dvl:Erly Inte</td>
</tr>
<tr>
<td>CDFS 212 Course CDFS 212 Not Found</td>
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</table>

Select one of the following: 3

<table>
<thead>
<tr>
<th>CDFS 316 Course CDFS 316 Not Found</th>
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</thead>
<tbody>
<tr>
<td>C&amp;I 587 Advanced Clinical Experience</td>
</tr>
</tbody>
</table>

Graduate course in Child Development or equivalent experience

Approved restricted elective hours

Total Hours 18

An additional birth to pre k option adds the following requirement:

- CDFS 211 Course CDFS 211 Not Found

Total Hours 0

**Reading**

The Department of Curriculum & Instruction/Literacy Studies, Social & Cultural Foundations, Educational Leadership Studies offers opportunities for graduate study and research, leading to degrees in each related specialty area for the Master of Arts. Our programs are designed for educators and other professionals with educational leadership responsibilities. The primary purposes of the graduate programs in our department are to provide increased knowledge, skills, research, and professional competencies for licenses related to each specialty area in the department. Our program area faculty work with national accreditation standards for each of their programs. Our faculty contribute to the profession at advisor, state, and national levels of professional involvement. The experiences available through our graduate programs involve cutting edge technology, diversity, global initiatives, culturally responsive teaching, and effective faculty who are leaders in research, teaching and service in their scholarly work.

For more information, please visit our website: http://cils.wvu.edu/
Curriculum and Instruction/Literacy Studies, Social & Cultural Foundations, Educational Leadership Studies

Joy Faini Saab, Ed.D. Chair
602 Allen Hall

Degree Offered

• Master of Arts

The primary purpose of the master’s program in reading is to provide increased knowledge, skill, and competence for teachers or those who work in the field. The program contains a number of related options for emphasis within its framework, making it flexible enough to meet a wide variety of needs. Advanced teacher certification requirements are based on the West Virginia Department of Education’s Policy 5100 Approval of Educational Personnel Preparation Programs and Policy 5202 Licensure of Professional/Paraprofessional Personnel.

Requirements

All applicants must comply with the general West Virginia University requirements, requirements of the College of Human Resources and Education, and the reading program. As State certification requirements change, additional coursework may be required.

Professionals with successful teaching experience at the elementary, secondary, or college level may elect to enroll in these courses to increase their competencies as reading teachers, and/or literacy coaches to keep themselves informed of the latest trends and developments in reading education, or to prepare for positions of greater responsibility. Students who plan to enter the teaching field may also wish to enroll in these courses to increase their overall skills and knowledge.

Courses

Course offerings provide opportunities to become familiar with the organization, implementation, and administration of pre-kindergarten through adult reading programs. Practical opportunities for teachers and specialists-in-training are provided in the University Reading Clinic.

For further information on admission and program requirements, write:

Chairperson
Department of Curriculum and Instruction/Literacy Studies
College of Human Resources and Education
602 Allen Hall
P.O. Box 6122
Morgantown, WV 26506-6122

• Students must complete six or more hours in reading within two years after admission (probationary or regular) or admission will be invalidated and the student will be required to reapply.
• The course requirements in the program lead to reading specialist certification for qualified candidates.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDNG 621</td>
<td>Rdng &amp; Wrtng Inst-Elem Schools</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 622</td>
<td>Content Area Literacy Inst</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 624</td>
<td>Foundations of Literacy</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 627</td>
<td>Developing Reading Interests</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 640</td>
<td>Instructing Students-Rdng Dif</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 641</td>
<td>Problems in Reading</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 682</td>
<td>Assessment of Reading Ability</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 685</td>
<td>Pract:Clinical Teach Intrshp</td>
<td>6</td>
</tr>
<tr>
<td>RDNG 726</td>
<td>Literacy Leadership</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
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<tr>
<td>Total Hours</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

Faculty

Chair

• Joy Faini Saab
Higher Education Administration

Degrees Offered

The Higher Education Administration programs at West Virginia University prepares individuals for leadership positions within post-secondary institutions at the executive, administrative (business administration, academic affairs, and student affairs), and faculty level.

- Master of Arts (M.A.) degree with emphasis in Higher Education Administration
- Doctor of Education (Ed.D.) degree with emphasis in Higher Education Administration

The Ed.D. in Educational Leadership is currently under moratorium due to oversubscription. For an alternative option, see the Educational Leadership & Policy Studies area of emphasis in the Ph.D. in Education (Interdisciplinary) program at http://www.hre.wvu.edu/education_phd.

The Master of Arts program in Higher Education Administration is a 100% online program designed to enhance leadership skills while preparing students for academic and student affairs positions within university settings or affiliated employment sector.

Admissions Procedures

The Higher Education Administration program admits students to the master’s (M.A.) program during both the fall and spring terms. Application deadlines are April 15 for the fall semester, and November 30 for the spring semester. For admission consideration, applicants are required to submit the following documents:

1. Application for admission to the Graduate School (located at www.grad.wvu.edu). Please attach items 2, 3, 4, and 5 to this online application form;
2. Cover letter describing your past work experience and goals for graduate study in Higher Education Administration;
3. Resume;
4. Three (3) letters of reference commenting on your proficiency for graduate study;
5. A writing sample;
6. * All official college transcripts, undergraduate and graduate. The undergraduate grade point average must equal to or greater than 3.0 (on a four-point scale); and
7. * Graduate Record Examination (GRE) or Miller Analogies Test (MAT) scores taken within five years of the date of application. Applicants must score at or above the 50th percentile on the GRE or MAT examinations. In addition, all applicants whose native language is not English must have a minimum score of 93 on the internet-based test (IBT) TOEFL examination. [WVU Institution Code: 5904]

* Send items 6 and 7 to: Office of Admissions, West Virginia University, P.O. Box 6009, Morgantown, WV 26506-6009, Phone: (304) 293-2121, Fax: (304) 293-3080.

Acceptance Policy

The University Graduate Council sets minimum standards for admission into graduate study. However, faculty members in each respective program area decide who should be admitted into graduate study under their supervision. Ultimately it is they who certify which students have demonstrated sufficient mastery of the discipline to qualify for a graduate degree. Although a student may be admitted for the purpose of enrolling in advanced coursework, only the program faculty may grant permission for the pursuit of a degree. Likewise, a student will not be recommended for a degree until the faculties of that specific graduate program have indicated, in writing, that the student has gained satisfactory knowledge and has completed all the requirements for the graduate program.

Applicants for a Master of Arts degree in Higher Education Administration (HIED) must comply with the WVU requirements for admission to Graduate Studies, the requirements of the College of Human Resources and Education, and those that the HIED program has specified.
Admission to all programs is contingent on an assessment of complete official transcripts, including all higher education work attempted, and other evidence the faculty may deem necessary in order to judge students’ prospective success within the graduate program.

If applicants meet the minimum requirements, they may be invited to an on-campus interview. Students will receive official notification of acceptance or rejection within one month of the interview. All students accepted into the program will receive information about their assigned advisor and guidance on the development of a personalized program of study.

**Higher Education Leadership Courses**

<table>
<thead>
<tr>
<th>Required Foundation Courses</th>
<th></th>
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<tbody>
<tr>
<td>EDLS 603 Principles-Educational Leadership</td>
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</tr>
<tr>
<td>EDLS 650 Higher Education Administration</td>
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</tr>
<tr>
<td>EDLS 651 College Student Development</td>
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</tr>
<tr>
<td>EDLS 695 Independent Study</td>
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<tr>
<td>EDLS 785 Education Administration Internship</td>
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<table>
<thead>
<tr>
<th>Required Research Core Courses</th>
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</thead>
<tbody>
<tr>
<td>EDP 612 Introduction to Research</td>
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</tr>
<tr>
<td>EDP 617 Program Evaluation</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample of elective Courses (12 credit hours)</th>
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</thead>
<tbody>
<tr>
<td>EDLS 652 Assessment in Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 654 College Student Affairs</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 752 Governance Of Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 756 Higher Education Finance</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>Sample of Support Areas Courses (9 credit hours)</th>
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<tbody>
<tr>
<td>EDP 600 Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDP 640 Instructional Design</td>
<td>3</td>
</tr>
<tr>
<td>IDT 600 IDT Theories and Models</td>
<td>3</td>
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</table>

**Total Hours**: 42

The Ed. D. in Educational Leadership is currently under moratorium due to over-subscription. For an alternative option, see the Educational Leadership & Policy Studies area of emphasis in the Ph.D. in Education (interdisciplinary) program at http://www.hre.wvu.edu/education_phd.

The Ed.D. in Educational Leadership is currently under moratorium due to oversubscription. For an alternative option, see the Educational Leadership & Policy Studies area of emphasis in the Ph.D. in Education (Interdisciplinary) program at http://www.hre.wvu.edu/education_phd.

**Public Education**

**Educational Leadership Studies (EDLS) Public School**

**Overview**

The educational leadership studies program at West Virginia University prepares individuals for leadership positions in elementary, secondary, and post-secondary educational institutions. Although most of the students pursue administrative careers, some prepare for college or university research, teaching, and/or staff positions.

**Degrees Offered**

- Master of Arts (M.A.) Degree with emphasis in public school leadership
- Doctor of Education (Ed.D.) degree with emphasis on public school leadership

**Certifications Offered**

- Certification for elementary and secondary school principals
- Certification for instructional supervisors
- Certification for superintendents
The Master of Arts program is a blended program utilizing instructional technology to prepare students as dynamic leaders in educational institutions. The masters degree leads to principal certification K-12.

Admissions for Masters

Applicants for a master of arts degree in educational leadership studies must comply with the WVU requirements for admission to graduate studies, the requirements of the College of Human Resources and Education, and those of the educational leadership studies program. Admission to all programs is contingent on assessment of complete official transcripts of all higher education work attempted and other evidence the faculty may deem necessary to judge probable success in the graduate program. Admission procedures are explained more completely on the EDLS program admissions page on the department’s website. In order to graduate, students must earn at least a 3.25 grade point average on all program work attempted.

The admissions requirements for the master of arts degree are as follows:

1. Application for Admission to Graduate School http://grad.wvu.edu/admissions
2. *All official college transcripts, undergraduate and graduate.
3. The undergraduate grade point average, for the last two years of course work, must not be below 3.0 (on a four-point scale).
4. The graduate grade point average in all graduate courses taken before admissions to our program must be no lower than 3.25 (on a four-point scale).
5. *On the Graduate Record Examination applicants must score no lower than 460 for the verbal section, 500 for the quantitative, and 3.0 for the analytical section. GRE scores must be taken within five years before the date of application. In addition, all applicants whose native language is not English must submit a score of at least 93 on the internet based (IBT) TOEFL examination. [WVU institution code: 5904]
6. Statement of professional experiences and career aspirations
7. Professional resume
8. Two reference letters

* Send items 2 and 5 to: Office of Admissions, West Virginia University, P. O. Box 6009, Morgantown, WV 26506-6009, Phone: (304) 293-2121, Fax: (304)293-3080.

Curriculum Requirements

### Required Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDLS 603</td>
<td>Principles-Educational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 703</td>
<td>Economics/Education Funding</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 705</td>
<td>Public Educ:Ethics/Laws/Policy</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 707</td>
<td>Politics &amp; Education</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 708</td>
<td>Changing Organizations</td>
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<tr>
<td>EDLS 796</td>
<td>Graduate Seminar</td>
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### Elective Courses

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<th>Course</th>
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<tbody>
<tr>
<td>EDLS 601</td>
<td>Dynamics-Educational Organiztn</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 602</td>
<td>Human Resources Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 610</td>
<td>School Business Administration</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 611</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 612</td>
<td>School:Policies/Politics/Laws</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 613</td>
<td>Plan/Resch/Eval-School Leads</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 614</td>
<td>Community and Media Relations</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 620</td>
<td>Site Based Leadership</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 625</td>
<td>Topics In Supervision</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 693</td>
<td>Special Topics (subject matter changes)</td>
<td>1-9</td>
</tr>
<tr>
<td>EDLS 702</td>
<td>Superintndncy:Role/Responsblty</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 704</td>
<td>Educ Facility:Planing/Evaluatn</td>
<td>3</td>
</tr>
<tr>
<td>EDLS 706</td>
<td>Lrng Orgnztn:Cultur/Tech/Chang</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 53-61
Admissions Procedures

The Ed. D. in Public School Administration program admits students to the program during the fall term. The Application deadline is April 15 for the fall semester. For admission consideration, applicants are required to submit the following documents:

1. Application for admission to the Graduate School (located at www.grad.wvu.edu). Please attach items 2, 3, 4, and 5 to this online application form;
2. Cover letter describing your past work experience and goals for graduate study in Public School Administration;
3. Resume;
4. Three (3) letters of reference commenting on your proficiency for graduate study;
5. A writing sample;
6. * All official college transcripts, undergraduate and graduate. The undergraduate grade point average must equal to or greater than 3.25 (on a four-point scale); and
7. * Graduate Record Examination (GRE) or Miller Analogies Test (MAT) scores taken within five years of the date of application. Applicants must score at or above the 50th percentile on the GRE or MAT examinations. In addition, all applicants whose native language is not English must have a minimum score of 93 on the internet-based test (IBT) TOEFL examination. [WVU Institution Code: 5904]

* Send items 6 and 7 to: Office of Admissions, West Virginia University, P.O. Box 6009, Morgantown, WV 26506-6009, Phone: (304) 293-2121, Fax: (304) 293-3080.

Acceptance Policy

The University Graduate Council sets minimum standards for admission into graduate study. However, faculty members in each respective program area decide who should be admitted into graduate study under their supervision. Ultimately it is they who certify which students have demonstrated sufficient mastery of the discipline to qualify for a graduate degree. Although a student may be admitted for the purpose of enrolling in advanced coursework, only the program faculty may grant permission for the pursuit of a degree. Likewise, a student will not be recommended for a degree until the faculties of that specific graduate program have indicated, in writing, that the student has gained satisfactory knowledge and has completed all the requirements for the graduate program.

Applicants for an Ed. D. in Public School Administration must comply with the WVU requirements for admission to Graduate Studies, the requirements of the College of Human Resources and Education, and those that the EDLS program has specified. Admission to all programs is contingent on an assessment of complete official transcripts, including all higher education work attempted, and other evidence the faculty may deem necessary in order to judge students’ prospective success within the graduate program.

If applicants meet the minimum requirements, they may be invited to an on-campus interview. Students will receive official notification of acceptance or rejection within one month of the interview. All students accepted into the program will receive information about their assigned advisor and guidance on the development of a personalized program of study.

Special Education

Degrees Offered

- Master of Arts
- Area of Emphasis for Doctor of Education

The graduate program leading to the M.A. in special education is designed to prepare master teachers of infants, toddlers, children, and adults with exceptionalities and to provide initial training for the preparation of future supervisors and administrators of public-school special education programs. The College of Human Resources and Education awards the doctor of education, which may include an emphasis in special education. The Ed.D. with emphasis in special education has two program options: the program option in personnel preparation in special education is designed to prepare graduates for roles as faculty members and researchers, while the program option in school leadership for special education is designed to prepare graduates for roles as administrators or supervisors in public schools or community agencies. The program also prepares professionals for emerging roles associated with interdisciplinary services to persons requiring special education or disability services.

Application

All applications must comply with University, college, department, and program requirements. Teacher certification requirements are based on the West Virginia Department of Education’s Policy 5100 Approval of Educational Personnel Preparation Programs and Policy 5202 Licensure of Professional/Paraprofessional Personnel.
Certification and/or Master’s Degree Program Options

- Autism Spectrum Disorders (autism grades K–6 and/or 5–adult)
- Early Intervention/Early Childhood Special Education (preschool special needs grades pre-K–K)
- Gifted Education (grades 1–12)
- Low Vision/Blindness (visual impairments grades Pre-K–adult)
- Multicategorical Special Education (grades K–6 and/or 5–adult)
- Severe/Multiple Disabilities (severe disabilities grades K–adult)

Applicants interested in one of the program areas should review the detailed information provided at http://specialed.wvu.edu/ or contact sped@mail.wvu.edu for a brochure and application or an update on availability of specific courses.

Admission

All individuals seeking certification and/or a degree must be admitted into the special education program. Admission is granted on a competitive basis. Applications that are incomplete or fail to provide supporting documentation are NOT considered. Applicants who meet all regular admission criteria are NOT automatically admitted to the program since applications are ranked and accepted in order until all available program openings have been filled. Applicants who meet criteria for provisional are ONLY considered IF additional openings remain at that point. Under NO circumstances will ANY requirement be waived. Students are admitted as regular, provisional, or non-degree students as follows:

Regular Status

The individual who meets all admission requirements is granted regular status as a certification and/or degree-seeking student.

- An earned baccalaureate degree from a regionally accredited college or university with a minimum grade point average of 3.0 (regular admission)
- Passing scores on a nationally standardized test of academic ability within a 10–year period (850 old or 150 new on GRE or 400 on MAT or 174/172/172 on PPST)
- *Recommendation for graduate study completed by a course instructor
- *Permission for field and clinical experiences form signed by a public school system
- Other requirements specific to each program option.

Other Requirements in Certification Programs

The individual must also meet these additional requirements:

- PRAXIS Pre-professional Skills Tests (PPST) passing scores: 174 on 0710, 172 on 0720, 172 on 0730 within 10–year period or certification through the National Board for Professional Teaching Standards (NBPTS) or prior certification in some area of education or a master’s degree from an accredited institution or a composite score of 25 (26 if enhanced) on the American College Test (ACT) or a score of 1035 (1125 if re-entered) on the Scholastic Achievement Test
- Prior certification in education (only in some programs): autism spectrum disorders: early childhood education (K–4) or elementary education (K–6 or K–8) (for K–6 option only); gifted education: early childhood education or elementary education; or secondary education with emphasis in biology, chemistry, English, general science, mathematics, physics, reading education or specialist, and/or social studies; multi-categorical special education: early childhood education (K–4) or elementary education (K–6 or K–8) (for K–6 option only).

Provisional Status

The individual who has an earned baccalaureate degree from a regionally accredited college or university with a minimum GPA of 2.75 and prior certification (only in those programs where it is required) but who does not meet other admission requirements may be granted provisional status in the program. This status allows the student an opportunity to remediate deficiencies in grade point average or other requirements in order to achieve regular status. This decision will be made on an individual basis by program faculty. Contact the department for additional information. Deficiencies must be made up by the deadline set in the admission letter.

Non-degree Status

The individual who has earned a baccalaureate degree from a regionally accredited college or university but who does not seek certification or a master’s degree may be admitted as a non-degree student. This status allows the student to take courses for additional endorsement to the professional teaching certificate and/or for professional development and/or personal growth.

Additional Requirements for International Students

The individual who is not a native speaker of English must also meet these requirements:
• Test of English as a Foreign Language (TOEFL) score of 550 or higher (paper) or 215 or higher (computer) or 80 or higher (Internet)
• Personal interview and writing sample to document fluency needed for success in field experiences associated with many courses.

NOTE: The certification and Masters degree programs are online programs and international students cannot obtain a visa for study in the U.S. but may participate while residing in their own home countries.

Retention

Retention in any program requires completion of all required courses with a grade of A or B in all required courses, a passing score on all required performance assessments, and maintenance of an overall 3.0 GPA. Students who fail to maintain that average will be placed on academic probation and must achieve that average within the next semester or risk being dismissed from the program.

Culminating Practicum

All certification programs require completion of a culminating practicum experience. Practicum experiences are available through two options: On-the-job option involving supervision by a colleague in the work setting if the student is employed at a site that meets placement criteria; and full-time option involving placement in a classroom with a master professional who meets placement criteria if the student is not employed or on a leave of absence from another position.

To be eligible for practicum, students must meet the following requirements.
• Admission to the special education program and completion of all required coursework in the area of specialization with grades of A or B and an overall GPA of 3.0.
• Applicable criteria for one of the currently available practicum options
• Submission of an application for practicum and all supporting documentation no later than June 1 for Fall semester or December 1 for Spring semester.

Students should consult the program for a complete list of practicum eligibility requirements and practicum application materials.

A student who fails to achieve an acceptable level of performance in the practicum will have his or her individual performance deficits reviewed and will be given the opportunity to repeat the practicum once; such repetition may occur following completion of an indicated remediation and/or additional instruction. Any student who fails the first practicum and does not commit to a remediation plan will not be eligible to enroll in a second practicum. A student who fails the practicum on the second attempt will be dismissed from the program.

Certification

All students in a certification program must pass required tests in the Praxis series: the Pre-professional Skills (PPST) basic skills tests (before or immediately after admission) as well as the appropriate Principles of Learning and Teaching (PLT) grade-level test and the content specialization test(s) in their area of specialization prior to admission to the culminating practicum experience.

In some areas of specialization, prospective special education teachers also must hold or qualify for a teaching specialization in elementary or secondary education recognized on the professional teaching certificate.

Students are responsible for submitting an application for initial certification or additional endorsement to the appropriate state agency after they have completed all program requirements.

Note: Because of continual changes in federal mandates and state requirements, certification and degree programs in special education are always being revised, so requirements may differ from what currently appears in print; students should contact their faculty advisor for updates on all programs.

Culminating Project

All students in a degree only program must complete a culminating project at the end of the program.

To be eligible for the project, students must meet the following requirements.
• Admission to the special education program
• Completion of all required coursework in the area of specialization with grades of A or B and an overall GPA of 3.0.
• Completion of SPED 675 and SPED 680 in the same semester.
• Submission of an application for culminating project and all supporting documentation no later than April 1 for summer semester.

Students should consult the program for a complete list of project eligibility requirements and project application materials.

Graduation Requirements

To be eligible for graduation, students must meet the following requirements:
• Completion of all required courses in the program of study with a grade of A or B and an overall GPA of 3.0 within an eight year period from first course to last course.
• Enrollment in coursework during the semester in which graduation is planned.
• Application for graduation submitted prior to midterm of the semester for which graduation is planned.

The Department of Special Education offers masters degree programs in the following areas:

• [Autism Spectrum Disorders](#)
• [Early Intervention/Early Childhood Special Education](#)
• [Gifted Education](#)
• [Low Vision/Blindness](#)
• [Multicategorical Special Education](#)
• [Severe/Multiple Disabilities](#)

More information about specific programs is available at the links above. Individuals who already have a master's degree in some other area should consider a second master's degree to establish their expertise in special education or disability services, enhancing opportunities for other career options or eligibility for advanced degree programs. For most programs, students can earn a master’s degree with certification for as little as three to six additional credits.

### Areas of Specialization

NOTE: All programs are subject to revision whenever teacher education or certification requirements change.

#### Autism Spectrum Disorders

**Requirements for Certification or Master's Degree with Certification (36 hours minimum)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 500</td>
<td>Legal/Educational Foundations: Spec Ed</td>
<td>3</td>
</tr>
<tr>
<td>SPED 601</td>
<td>Academic Interventions: Spec Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPED 603</td>
<td>Classroom Behavior Management: Spec Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPED 609</td>
<td>Technology Applications: Spec Needs</td>
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</tr>
<tr>
<td>SPED 663</td>
<td>Collaborative Consultation: Inclusion Strategy</td>
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<tr>
<td>SPED 665</td>
<td>Mathematics for Spec Needs</td>
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<tr>
<td>SPED 666</td>
<td>Reading for Special Needs</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>SPED 667</td>
<td>Elementary Content Methods</td>
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<tr>
<td>SPED 668</td>
<td>Secondary Content Methods</td>
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<tr>
<td>RDNG 622</td>
<td>Content Area Literacy Inst</td>
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</tr>
<tr>
<td>SPED 650</td>
<td>Learning Characteristics: Autism</td>
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<tr>
<td>SPED 652</td>
<td>Educational Interventions: Autism</td>
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<tr>
<td>SPED 659</td>
<td>Culminating Practicum: ASD</td>
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</table>

**Total Hours** 36

NOTE: Students seeking certification for grades 5-Adult must also complete 15 credit hours of coursework in at least one academic content area (biology, English, general science, mathematics, or social studies).

**Requirements for Master’s Degree only (36 hours minimum)**

<table>
<thead>
<tr>
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<tbody>
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<td>SPED 609</td>
<td>Technology Applications: Spec Needs</td>
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<td>Select one of the following:</td>
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<td>Research to Practice</td>
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<tr>
<td>SPED 680</td>
<td>Culminating Project</td>
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### Approved Electives

<table>
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<tbody>
<tr>
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| Total Hours | 33 |

### Early Intervention/Early Childhood Special Education

<table>
<thead>
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<th>Title</th>
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<td>SPED 600</td>
<td>Instructor/Assistive Technology</td>
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<tr>
<td>SPED 604</td>
<td>Char/Ed Adapt:Dev Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPED 605</td>
<td>Fmly/Prof Colb:Devpmnt Disbty</td>
<td>3</td>
</tr>
<tr>
<td>SPED 606</td>
<td>Comm/Lit Intrvtn:Devlp Disbty</td>
<td>3</td>
</tr>
<tr>
<td>SPED 607</td>
<td>Fmly/Infml Asemnt:Devlpmt Disb</td>
<td>3</td>
</tr>
<tr>
<td>SPED 610</td>
<td>Typical/Atypical Dw/Erly Inte</td>
<td>3</td>
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<tr>
<td>SPED 611</td>
<td>Erly Learn Currclm-Erly Intrvn</td>
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<tr>
<td>SPED 612</td>
<td>Respnsv Intrvtn:Erly Intrvtn</td>
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<tr>
<td>SPED 616</td>
<td>Bhrv Guidnc/Spprt:Erly Intrvnt</td>
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<td>SPED 619</td>
<td>Culminating Practicum:EI/ECSE</td>
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### Additional Requirements for Master’s Degree with Certification (36 hours minimum)

| Approved Elective | 3 |

| Total Hours | 33 |

### Requirements for Master’s Degree Only (36 hours minimum)

<table>
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<tr>
<th>Course</th>
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<tbody>
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<td>SPED 600</td>
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<td>Comm/Lit Intrvtn:Devlp Disbty</td>
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<td>SPED 607</td>
<td>Fmly/Infml Asemnt:Devlpmt Disb</td>
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<td>Respnsv Intrvtn:Erly Intrvtn</td>
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<tr>
<td>SPED 616</td>
<td>Bhrv Guidnc/Spprt:Erly Intrvnt</td>
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</table>

| Approved Electives | 3 |

| Total Hours | 36 |

### Gifted Education Requirements

### Requirements for Certification or Master’s Degree with Certification (36 hours minimum)

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<td>SPED 601</td>
<td>Acadmic Intervntns:Spec Needs</td>
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<td>SPED 602</td>
<td>Schl-Basd Assessmnt-Spec Needs</td>
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<td>Classrm Behavr Mangt-Spec Need</td>
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<td>SPED 609</td>
<td>Technlg Applicatns-Spec Needs</td>
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<tr>
<td>SPED 663</td>
<td>Collab-Consult Inclusion Strat</td>
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<tr>
<td>SPED 670</td>
<td>Introduction-Gifted Education</td>
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<tr>
<td>SPED 672</td>
<td>Teaching Strategies:Gifted Ed</td>
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<tr>
<td>SPED 674</td>
<td>Support Spec Popultn-Gifted Ed</td>
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<tr>
<td>SPED 676</td>
<td>Critcl Thnk/Creatvty-Gifted Ed</td>
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<tr>
<td>SPED 679</td>
<td>Culminating Practicum: GE</td>
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</table>

| Total Hours | 33 |

### Additional Requirements for Master’s Degree with Certification (36 hours minimum)

### Requirements for Master’s Degree Only (36 hours minimum)

<table>
<thead>
<tr>
<th>Course</th>
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<td>SPED 601</td>
<td>Acadmic Intervntns:Spec Needs</td>
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</table>
SPED 603  Classrm Behavr Mangt-Spec Need  3  
SPED 663  Collab-Consult Inclusion Strat  3  
SPED 670  Introduction-Gifted Education  3  
SPED 672  Teaching Strategies:Gifted Ed  3  
SPED 674  Support Spec Popultn-Gifted Ed  3  
SPED 676  Critcl Thnk/Creatvty-Gifted Ed  3  
Approved Electives  6  
SPED 675  Research to Practice  3  
SPED 680  Culminating Project  3  
Total Hours  36

Low Vision/Blindness Requirements

Requirements for Certification Only or Master’s degree with Certification (36 hours minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SPED 600</td>
<td>Instruct/Assistive Technology</td>
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</tr>
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<td>SPED 603</td>
<td>Classrm Behavr Mangt-Spec Need</td>
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<tr>
<td>SPED 663</td>
<td>Collab-Consult Inclusion Strat</td>
<td>3</td>
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<tr>
<td>SPED 630</td>
<td>Intro Low Vision/Blindness</td>
<td>3</td>
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<tr>
<td>SPED 631</td>
<td>Introduction to Braille</td>
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<tr>
<td>SPED 632</td>
<td>Braille Rdg &amp; Literacy Dev</td>
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<tr>
<td>SPED 633</td>
<td>Nemeth Code &amp; Math Dev</td>
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<tr>
<td>SPED 635</td>
<td>Teach Stdnts-Low Visn/Blindnes</td>
<td>3</td>
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<tr>
<td>SPED 636</td>
<td>Teach Stdnts-Visn Multi Imprmt</td>
<td>3</td>
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<tr>
<td>SPED 637</td>
<td>Basic O &amp; M Skills</td>
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<tr>
<td>SPED 639</td>
<td>Culminating Practicum:LVB</td>
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</table>
Total Hours  33

Requirements or Master’s Degree Only (36 hours minimum)

<table>
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<tr>
<th>Course</th>
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<td>Instruct/Assistive Technology</td>
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<td>SPED 601</td>
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<td>Intro Low Vision/Blindness</td>
<td>3</td>
</tr>
<tr>
<td>SPED 635</td>
<td>Teach Stdnts-Low Visn/Blindnes</td>
<td>3</td>
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<tr>
<td>SPED 636</td>
<td>Teach Stdnts-Visn Multi Imprmt</td>
<td>3</td>
</tr>
</tbody>
</table>
| Approved Electives  6  
| SPED 675 | Research to Practice                        | 3     |
| SPED 680 | Culminating Project                         | 3     |
Total Hours  36

Multicategorical Special Education (Behavior Disorders and Learning Disabilities and Mild/Moderate Intellectual Disabilities)

Requirements for Certification or Master’s Degree with Certification (33 hours minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>SPED 500</td>
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<td>SPED 601</td>
<td>Acadmic Interventns:Spec Needs</td>
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<tr>
<td>SPED 603</td>
<td>Classrm Behavr Mangt-Spec Need</td>
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<tr>
<td>SPED 609</td>
<td>Technly Applicatns-Spec Needs</td>
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</tr>
<tr>
<td>SPED 663</td>
<td>Collab-Consult Inclusion Strat</td>
<td>3</td>
</tr>
<tr>
<td>SPED 665</td>
<td>Mathematics for Special Needs</td>
<td>3</td>
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<tr>
<td>SPED 666</td>
<td>Reading for Special Needs</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
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<tr>
<td>-------------</td>
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</tr>
<tr>
<td>SPED 667</td>
<td>Elementary Content Methods</td>
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<tr>
<td>SPED 668</td>
<td>Secondary Content Methods</td>
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<td>RDNG 622</td>
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**Additional Requirements for Master's Degree with Certification (36 hours minimum)**

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<th>Course Title</th>
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<tr>
<td></td>
<td>Total Hours</td>
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</tbody>
</table>

**NOTE:** Students seeking certification for grades 5-Adult must also complete 15 credits of coursework in at least one academic content area (biology, English, general Science, mathematics, or social studies).

**Requirements for Master's Degree Only (36 hours minimum)**

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<td>Acadmic Intervntns:Spec Needs</td>
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<tr>
<td>SPED 603</td>
<td>Classrm Behav Mangt-Spec Need</td>
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<td>SPED 609</td>
<td>Technigy Applicatns-Spec Needs</td>
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<td>SPED 663</td>
<td>Collab-Consult Inclusion Strat</td>
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<td>Mathematics for Special Needs</td>
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<td>SPED 680</td>
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<td>Total Hours</td>
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**Severe/Multiple Disabilities**

**Requirements for Certification or Master's Degree with Certification (36 hours minimum)**

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<th>Hours</th>
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<tbody>
<tr>
<td>SPED 600</td>
<td>Instruct/Assistive Technology</td>
<td>3</td>
</tr>
<tr>
<td>SPED 604</td>
<td>Char/Ed Adaptn:Dev Disabilities</td>
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<tr>
<td>SPED 605</td>
<td>Fmly/Prof Colb:Devpmnt Dsability</td>
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<td>SPED 606</td>
<td>Comm/Lit Intrvntn:Devlp Dsblty</td>
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<td>SPED 607</td>
<td>Frml/Infml Asemnt:Devlp Dsblty</td>
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<tr>
<td>SPED 620</td>
<td>Stndrd-bsd Curr:Severe Disblts</td>
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<td>SPED 622</td>
<td>Instrctnl Pgm:Sev Disabilities</td>
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<tr>
<td>SPED 625</td>
<td>Scndry/Adlt Prgms:Severe Disbl</td>
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<td>SPED 626</td>
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<td>Additional Requirements for Master's Degree with Certification (36 hours minimum)</td>
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<td></td>
<td>Total Hours</td>
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<td>SPED 620</td>
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<td>Scndry/Adlt Prgms:Severe Disbl</td>
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<td>Postve Behvr Supp:Severe Disbl</td>
<td>3</td>
</tr>
<tr>
<td>SPED 675</td>
<td>Research to Practice</td>
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</tbody>
</table>
Doctor of Education

- Personnel preparation in special education
- School leadership for special education

Applicants interested in one of the program options should review the detailed information provided at http://specialed.wvu.edu/ or contact sped@mail.wvu.edu for a brochure and application or an update on availability of specific courses.

Admission

All individuals seeking the doctoral degree emphasis in special education must be admitted into the special education program.

Regular Status

The individual who meets all admission requirements is granted regular status as a degree-seeking student.

- An earned baccalaureate degree from a regionally accredited college or university with a minimum grade point average of 3.0.
- An earned master’s degree from a regionally accredited college or university in special education or disability services with a minimum grade point average of 3.25.
- Prior certification in some area of special education (for personnel preparation option) or in special education or disability services (for school leadership option).
- Submission of Graduate Record Examination or Miller Analogies Test scores in support of potential for success in doctoral-level study: MAT score of 400 (63 percentile) or GRE score of 1,000 total (verbal plus quantitative) with minimum score of 450 verbal (prior scale) or 300 total (verbal + quantitative) with minimum score of 155 (current scale) and within a five-year period;
- Two years of documented experience providing direct service to children or adults with exceptionalities in special education and/or disability services either in instruction or intervention (for personnel preparation option) or in instruction or intervention, therapeutic interventions, assessment or behavior management, administration or supervision, or other activities (for school leadership option);
- Three letters of reference addressing the candidate’s past academic performance and qualities which would make the person suitable for doctoral-level study (contact program for specifications for reference letters).
- A personal goal statement illustrating a lifelong commitment to excellence in special education and/or disability studies and articulating career goals focused on a leadership position in personnel preparation in special education or school leadership for special education.
- An academic writing sample documenting knowledge of special education and/or disability services and skill in organizing and expressing ideas and citing current sources in the professional literature.

Additional requirements for international students:

- TOEFL score of 550 or higher (paper) or 215 or higher (computer) or 80 or higher (Internet)

Applicants who meet the criteria specified above will also be required to undergo:

- A personal interview demonstrating communication and interpersonal skills.
- A proctored writing sample to verify ability to express ideas with logic, clarity, and correct grammar.

Provisional status admission to the program with provisional student status is not permitted at the present time.

Admissions criteria are based on qualifications associated with academic success in doctoral study as well as qualifications that candidates applying for leadership positions are expected to have when seeking employment as faculty at colleges and universities (personnel preparation option) or administrators and supervisors of special education or disability services programs (school leadership option). In recognition of the fact that no single criterion is an adequate predictor of satisfactory completion of a program of study or subsequent success in a professional career, faculty endorses multiple criteria for admission to this doctoral program. Requirements for admission are weighed using a +, 0, - system in judging each applicant and are considered necessary but not sufficient eligibility criteria for admission.

Applicants who meet all criteria are NOT automatically granted admission to the program. Admission is contingent upon number of applicants, number of current students, and availability of graduate faculty.

Program of Study

Programs are designed by the doctoral student, the student’s advisor, and the Doctoral Committee to meet the student’s career goals. Programs of study comply with all applicable institutional requirements, but typically they include coursework in excess of the minimum college requirements to meet these goals.
The leadership training provided through this program draws on the many available strengths and resources of a major university. Development of research skills is a major focus of the program, along with advanced training related to the development, education, and habilitation of persons with exceptionalities. Students may complete coursework in a number of programs and colleges in order to take advantage of available interdisciplinary resources. The program encourages study and involvement with faculty from a broad range of disciplines in order to best prepare doctoral students to meet their individual career aspirations as leaders in special education and disability services.

Retention

Retention in any program requires completion of all required courses with a grade of A or B in all required courses, a passing score on all required performance assessments, and maintenance of an overall 3.25 GPA. Students who fail to maintain that average will be placed on academic probation and must achieve that average within the next semester or risk being dismissed from the program.

Graduation Requirements

To be eligible for graduation, students must meet the following requirements:

- Completion of all required courses in the program of study with a grade of A or B and an overall GPA of 3.25 within an eight year period from first course to last course and successful defense of the dissertation research within five years after admission to candidacy.
- Enrollment in coursework during the semester in which graduation is planned.
- Application for graduation submitted prior to midterm of the semester for which graduation is planned

Doctoral Program Emphasis in Special Education

Requirements for Program Option: Personnel Preparation in Special Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SPED 770</td>
<td>Policy Analysis/Development</td>
<td>3</td>
</tr>
<tr>
<td>SPED 771</td>
<td>Personnel Preparation Strategies</td>
<td>3</td>
</tr>
<tr>
<td>SPED 772</td>
<td>Prof Writing/Grant Writing</td>
<td>3</td>
</tr>
<tr>
<td>SPED 773</td>
<td>Professional Development Models</td>
<td>3</td>
</tr>
<tr>
<td>SPED 774</td>
<td>Analysis/Design of Research</td>
<td>3</td>
</tr>
<tr>
<td>SPED 779</td>
<td>Contemporary Issues and Trends</td>
<td>3</td>
</tr>
<tr>
<td>SPED 781</td>
<td>Orientation to Doctoral Study</td>
<td>1</td>
</tr>
<tr>
<td>SPED 782</td>
<td>Prof Practice-Systems Advocacy</td>
<td>1</td>
</tr>
<tr>
<td>SPED 783</td>
<td>Prof Practice-College Instructn</td>
<td>1</td>
</tr>
<tr>
<td>SPED 784</td>
<td>Prof Practice-Clinical Suprvsn</td>
<td>1</td>
</tr>
<tr>
<td>SPED 785</td>
<td>Prof Practice-Empirical Rsrch</td>
<td>1</td>
</tr>
<tr>
<td>SPED 786</td>
<td>Prof Practice-Srvc Activities</td>
<td>1</td>
</tr>
<tr>
<td>SPED 787</td>
<td>Research</td>
<td>6</td>
</tr>
<tr>
<td>SPED 798</td>
<td>Dissertation</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Total Hours: 31-36

Requirements for Program Option: School Leadership for Special Education

<table>
<thead>
<tr>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SPED 770</td>
<td>Policy Analysis/Development</td>
<td>3</td>
</tr>
<tr>
<td>SPED 773</td>
<td>Professional Development Models</td>
<td>3</td>
</tr>
<tr>
<td>SPED 774</td>
<td>Analysis/Design of Research</td>
<td>3</td>
</tr>
<tr>
<td>SPED 775</td>
<td>Prgm Administration/Supervisn</td>
<td>3</td>
</tr>
<tr>
<td>SPED 776</td>
<td>Leadership System Change</td>
<td>3</td>
</tr>
<tr>
<td>SPED 779</td>
<td>Contemporary Issues and Trends</td>
<td>3</td>
</tr>
<tr>
<td>SPED 781</td>
<td>Orientation to Doctoral Study</td>
<td>1</td>
</tr>
<tr>
<td>SPED 782</td>
<td>Prof Practice-Systems Advocacy</td>
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<tr>
<td>SPED 786</td>
<td>Prof Practice-Srvc Activities</td>
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<tr>
<td>SPED 787</td>
<td>Prof Practice-Prgm Administrtn</td>
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<tr>
<td>SPED 788</td>
<td>Prof Practice-Personnl Support</td>
<td>1</td>
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<tr>
<td>SPED 789</td>
<td>Prof Practice-Evaluation Pract</td>
<td>1</td>
</tr>
<tr>
<td>SPED 797</td>
<td>Research</td>
<td>6</td>
</tr>
<tr>
<td>SPED 798</td>
<td>Dissertation</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Total Hours: 31-36
Students must also complete college-wide requirements for the doctor of education degree including 15 credits of research core courses and 6 credits of foundations courses.

All students are expected to pass a comprehensive examination designed in cooperation with doctoral program committee members and administered after they have completed all required courses to be admitted to candidacy for the doctoral degree.

All students are expected to propose, conduct, and defend original research approved by the doctoral program committee to satisfy the requirements for the doctoral degree.

Disability Studies

http://depts.hre.wvu.edu/sped/DisStudiesHome.htm
E-mail: mzeppuhar@hsc.wvu.edu

The WVU Center for Excellence in Disabilities, in collaboration with the Department of Special Education, offers a graduate certificate program in disability studies. The certificate in disability studies prepares students, as citizens, to cope with the complex economic and social issues related to disabilities by learning directly from persons with disabilities and their families. Students will be trained to enter the workforce with the knowledge, skills, and experience needed to provide state-of-the-art services to persons with disabilities and their families, and to interact with co-workers who have disabilities.

Through the certificate program, students collaborate with, and learn from experts in the disability arena, including pediatric neurologists, geneticists, speech-language pathologists, audiologists, special education leaders, social workers, physical and occupational therapists, and others. These professionals, who are experienced clinicians, researchers, and educators, provide didactic instruction, clinical instruction, and mentorship to students.

Students will also have the opportunity to gain leadership and management skills that prepare them to enter the workforce with increased professional independence. The certificate program exposes students to social justice issues, Appalachian concerns, principles of practice, and cultural diversity while developing their expertise in rural practice environments. As part of the program, students have the opportunity to observe programs that serve those with disabilities and their families.

• Students must take two 3-credit hour mandatory interdisciplinary courses: DISB 580 and .
• Six hours may be elective courses that cover subject matter related to persons with dis- abilities or courses within the student’s own academic discipline for which they have received prior approval from the certificate program director and the course instructor. Students will be required to complete a project that applies coursework to issues relat- ing to persons with disabilities.
• Two credit hours are earned through 30 volunteer hours () in which the student has direct interaction with persons who have disabilities.
• One credit hour is the capstone experience (DISB 686), which includes samples of the student’s accumulated work in disabilities, a final essay, and an oral presentation.

Faculty

Chair
• Barbara L. Ludlow

Professors
• Elizabeth A. Dooley - Ed.D. (WVU)
  Mental retardation, Learning disabilities, Multicultural/education.
• Barbara L. Ludlow - Ed.D. (WVU)
  Severe/multiple disabilities, Early intervention/early childhood special education, Personnel preparation.

Associate Professor
• Ann M. Richards - Ph.D. (U. of Az.)
  Multicategorical special education, Transition, Law and policy issues.

Assistant Professor
• Sara A. Aronin - Ph.D.
• Kimberly K. Floyd - Ph.D.
• Chauncey D. Goff - Ph.D.
• Cathy Galyon Keramidas - Ed.D. (U. of Ky)
  Early intervention/early childhood special education, Severe/ multiple disabilities, Autism
Speech Pathology and Audiology

Overview
The undergraduate program in Speech Pathology and Audiology provides a thorough understanding of the basic processes involved in speech, swallowing, hearing, and language in addition to a broad overview of communication disorders in preparation for professional graduate study in speech-language pathology or audiology.

The Department’s Master of Science (M.S.) and Doctor of Audiology (Au.D.) programs address the knowledge and skills that prepare graduates to excel in the professions of speech-language pathology and audiology, respectively. Both graduate programs meet the clinical and academic requirements for professional licensure and certification, and both are accredited by the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association. Graduates of the professional programs are well prepared to diagnose and treat the full range of communicative disorders in all age groups, and to practice competently as speech-language pathologists and audiologists in a wide range of clinical settings.

The Doctor of Philosophy (Ph.D.) in Communication Sciences and Disorders is a customized post-professional program that prepares audiologists and speech-language pathologists to become effective teachers and researchers with an area of expertise within hearing science and disorders or within speech and language sciences and disorders.

The Department of Speech Pathology and Audiology provides professional services to the public through our on-campus clinics. The West Virginia University Speech Center offers a wide variety of speech-language pathology services to children and adults, whereas the West Virginia University Hearing Center is well equipped to provide complete diagnostic and rehabilitative audiology services. Fully staffed by professional supervisors, these state-of-the-art clinical facilities help meet the health care needs of the community, while supporting the professional education of the Department’s graduate students.

Master of Science (M.S.) Program in Speech-Language Pathology

The purpose of the Master of Science degree program in Speech Pathology is to provide aspiring professionals with a firm understanding of the normal processes of speech, language, and hearing; the competence to diagnose and treat the full range of communicative disorders in all age groups; and the opportunity to practice in a wide variety of clinical settings, including schools, hospitals, clinics, special treatment centers, and private practice. The M.S. in Speech-Language Pathology, therefore, is a professional program that emphasizes the knowledge and skills requisite for competent and ethical clinical practice. Graduation thus depends on completion of all academic requirements and the demonstration of sound clinical expertise. The M.S. in Speech-Language Pathology program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association.
Students are expected to become familiar with the 2005 Standards for the Certificate of Clinical Competence in Speech-Language Pathology. Additional information regarding graduate student expectations is outlined in the current edition of the Graduate Student Handbook for Speech-Language Pathology.

Admission

All applicants for the M.S. in Speech-Language Pathology program must have a baccalaureate degree or equivalent from a regionally accredited institution of higher learning, and present the following by the January 15 deadline:

1. An undergraduate major in Speech Pathology and Audiology or Communication Sciences and Disorders;
2. One official transcript from each college attended;
3. An overall undergraduate grade point average (GPA) of at least 3.00 (A = 4.0);
4. An official copy of the applicant’s Graduate Record Examination (GRE) scores;
5. Three (3) letters of recommendation that reflect the applicant’s academic and clinical abilities, potential for success in graduate studies, and personal qualities predictive of professional success as a speech-language pathologist; and
6. A personal statement that addresses the applicant’s goals for professional graduate study in speech-language pathology.

All applicants being considered for admission will be provided with a personal interview with members of the SPA faculty.

In some cases, applicants without preparatory coursework in speech pathology and audiology may be considered for graduate admission, but the program of study will require two (2) additional semesters of added coursework.

Please submit transcripts directly to:
West Virginia University
Office of Admissions
P.O. Box 6009
Morgantown, WV 26506-6009

The WVU Institution Code for the GRE is R5904. Applicants may have their official scores submitted from the newly revised GRE or from the older version, if taken within the past 5 years. Although no minimum is specified for either test version, GRE scores that meet or exceed the 50th percentile are recommended.

Graduation Requirements

The following are the minimum graduation requirements for the M.S. degree program:

1. Completion of all required courses in the graduate Speech-Language Pathology curriculum;
2. A minimum of 400 clock hours of supervised practicum, including at least 25 hours of clinical observation and 375 hours of direct patient/client contact; and
   An overall graduate grade point average of at least 3.00 (A = 4.0).
3. Students anticipating a May graduation must complete an Application for Graduation and Diploma and a Request to Graduate form by February 1 of the year of intended graduation. Forms and additional information, including deadlines for August and December graduation, are available on the HR&E Center for Student Advising & Records website.

Residency Requirements

All students in the M.S. program in Speech-Language Pathology must be full-time in residence during the program of study. The minimum duration for graduate study is five consecutive semesters (including summer sessions). All M.S. students are expected to complete SPA 718, during their final semester of the program. Part-time students are not eligible for admission.

Doctor of Audiology (Au.D.) Program

The Doctor of Audiology (Au.D.) program at West Virginia University was inaugurated in 2004 when the clinical doctorate became the entry-level degree for the profession of audiology. The program consists of 116 credit hours of academic coursework and clinical practicum experiences, including a fourth year residency. Graduates must demonstrate acquisition of all knowledge and skills delineated in the Standards for the Certificate of Clinical Competence in Audiology (CCC-A). The Au.D. program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association.

Students are expected to become familiar with the 2011 Standards for the Certificate of Clinical competence in Audiology. Additional information regarding graduate student expectations is outlined in the current edition of the Graduate Student Handbook for Audiology.

Program Objectives

The Au.D. program has been designed to provide a firm understanding of the normal processes of hearing and communication with the academic and clinical preparation to diagnose and treat the full range of hearing disorders in all age groups. Our goal is to prepare audiologists who are competent to work in a wide variety of clinical settings, including hospitals, clinics, special treatment centers, schools,
industry, and private practice. The program’s intent is to provide the knowledge and skills necessary to practice audiology autonomously in an effective, ethical manner. To this end, the following goals have been established by the Department of Speech Pathology and Audiology at West Virginia University:

1. Graduates will demonstrate mastery of knowledge and skills necessary to practice audiology in diverse settings encompassing all of the many facets of our profession.
2. Graduates will demonstrate an ability to work autonomously, using sound judgment in a competent and ethical manner.
3. Graduates will contribute to the profession and their community via active membership in professional organizations, scholarly activity, and taking the initiative in public education concerning hearing and balance disorders.
4. Graduates will be employed as audiologists serving the hearing impaired populace, industry and the medical community with special emphasis in underserved areas of our state.

Admission

All applicants for the Au.D. program must have a baccalaureate degree or equivalent from a regionally accredited institution of higher learning, and present the following by the January 15 deadline:

1. An undergraduate major in Speech Pathology and Audiology or Communication Sciences and Disorders;
2. One official transcript from each college attended;
3. An overall undergraduate grade point average (GPA) of at least 3.00 (A = 4.0);
4. An official copy of the applicant’s Graduate Record Examination (GRE) scores;
5. Three letters of recommendation which reflect the applicant’s academic and clinical abilities, potential for success in graduate studies, and personal qualities predictive of professional success as an audiologist; and
6. A personal statement describing the applicant’s goals, aspirations, and motivation for pursuing professional doctoral education in audiology.

All applicants being considered for admission will be provided with a personal interview with members of the SPA faculty.

In some cases, applicants without preparatory coursework in speech pathology and audiology may be considered for graduate admission, but the program of study will require two (2) additional semesters of added coursework.

Graduation Requirements

The following are the minimum graduation requirements for the Au.D. program:

1. Successful completion of 116 semester hours of course work, including:
   - 64 semester hours in SPA courses and associated laboratories;
   - 6 semester hours in related areas of Counseling, Research Methods, and Business;
   - 3 semester hours (minimum) in appropriate elective course work;
   - 19 semester hours of clinic practicum (17 audiology, 2 speech-language pathology); and
   - 24 semester hours of clinical residency.
2. An overall graduate GPA of at least 3.00 (A = 4.0) with a minimum competency level of B or S in all courses and clinical practicum;
3. Successful completion of an ASHA-approved practicum experience that is equivalent to a minimum of 12 months of full-time supervised experience;
4. Scholarly work, approved by the student’s advisory committee, submitted in written form; and
5. A passing score on the Praxis exam in Audiology (which is required prior to approval for a residency experience).

Students anticipating a May graduation must complete an Application for Graduation and Diploma form by February 1 of the year of intended graduation. This form and additional information, including deadlines for August and December graduation, are available on the HR&E Center for Student Advising & Records website.

Residency Requirements

All students in the Au.D. program must be full-time in residence during the program of study. The minimum duration for graduate study is eleven consecutive semesters (including summer sessions). Part-time students are not eligible for admission to the Au.D. degree program.

Doctor of Philosophy (Ph.D.) Program

The Ph.D. degree program provides a rigorous course of study along with mentored research and teaching experiences to enable students to become high-quality researchers and serve effectively as leaders in the discipline of communication sciences and disorders. Graduates of the program are prepared to assume careers as researchers and scholars at colleges, universities, hospitals, industrial settings, and research facilities. The program is not designed to provide an advanced clinical degree. Rather, the Ph.D. degree will be conferred in recognition of the attainment of the highest academic excellence and productive scholarship. As doctoral programs are an integral step on a life-long journey of learning and scholarship, the Department of Speech Pathology and Audiology has established the Ph.D. program in
Communication Sciences and Disorders to support students in developing knowledge, judgment, skills, and attitudes to facilitate their growth and learning throughout their careers as researchers, scholars, and teachers.

Program Objectives

The primary objective of the Ph.D. degree program is to assist students to develop in-depth mastery of subject matter in a narrow and specific area within the broad discipline of communication sciences and disorders and, simultaneously, to broaden one’s knowledge base in other fields related to the special area of interest, such as health, linguistics, education, and the physical, biological, and socio-behavioral sciences. With the intent to prepare high-quality researchers to serve as leaders in the discipline of communication sciences and disorders, graduates of the program will be prepared to assume independent careers as researchers and scholars at colleges, universities, and hospitals, as well to become key personnel at leading private and public research institutes. *Specifically, the objectives of the Ph.D. program include:*

1. The development of independent research skills through sequential experiences that involve the planning and conduct (or implementation) of research projects, the writing of grants, and the dissemination of research findings through the presentation of papers at scientific and other professional conferences and publication in peer-reviewed journals in the discipline;
2. The preparation of academicians equipped to teach the university students of tomorrow through guided coursework in educational methods and evaluation, instructional technologies including online course delivery, international and intercultural experiences, and classroom practice; and
3. The acquisition of advanced knowledge and understanding of a specialized area with the ability to apply this understanding to research, teaching, and scholarship.

A Highly Individualized Experience

The Ph.D. program in Communication Sciences and Disorders is a highly individualized experience that includes prescribed and selected coursework designed to meet the objectives of the program, ongoing participation in research and other scholarly activities, and the independent completion of a dissertation under the mentorship of a research advisor. As such, the time needed to complete the program will vary to ensure sufficient time for the building of adequate teaching and research skills and a creditable curriculum vitae. Some diligent and highly motivated students may be able to complete their work in less time, whereas others may require more time to achieve independence as a scholar and researcher.

Because the discipline of communication sciences and disorders supports two professions, audiology and speech-language pathology, students in the Ph.D. degree program may pursue one of the following *areas of emphasis:*

1. Speech and Language Sciences and Disorders
   or
2. Hearing Science and Disorders

It is expected that—through study, scholarship, and mentorship—Ph.D. candidates will develop deep expertise in a specific topic within an area of emphasis.

Admission and Performance Standards

A Ph.D. Advisory Committee composed of one member from each of the major areas of study will screen the applications and make admissions decisions based on the following criteria, in consultation with the faculty in their area of emphasis. In particular, applicants must have:

1. An entry-level clinical degree for the profession of speech-language pathology (i.e., M.A. or M.S.) or audiology (i.e., M.A., M.S., or Au.D.);
2. A cumulative grade point average of 3.25 or higher (A=4.0) upon completion of a graduate degree;
3. A score at or above the 50th percentile on the Verbal and Quantitative sections and a score of at least 4.0 on the Analytical Writing section on an official copy of the Graduate Record Examination (GRE);
4. A TOEFL score of at least 100 (internet version), 250 (computer-based), or 600 (paper-based), if English is not the applicant’s native language;
5. An interview with the Ph.D. Advisory Committee that will include the writing of an essay on an assigned topic to be evaluated by program faculty;
6. Three letters of recommendation, two of which must come from previous instructors or professors who can comment meaningfully on the applicant’s potential for Ph.D. study; and
7. A personal statement that addresses the applicant’s professional goals within *speech and language sciences and disorders* or within *hearing science and disorders.*
Program Requirements

Residency Commitment

The Ph.D. degree program in Communication Sciences and Disorders requires a full-time commitment. Each student who is accepted into the program works with faculty on a daily basis that will help to hone skills and to sharpen the research focus. Furthermore, each student will be expected to conduct research and pursue scholarship activities that will inform classroom teaching and lead to meaningful presentations and publications. Consequently, applicants are required to sign a statement confirming their commitment to full-time status before they may be admitted to the program.

Curriculum

Upon admission to the Ph.D. program, students enroll in a series of required courses in the doctoral core, in the research core, and in the area of specialization. Ph.D. students are expected to maintain a cumulative GPA of at least 3.25 each semester. Upon completion of coursework, students must successfully complete written and oral comprehensive examinations to be eligible for candidacy.

Ph.D. students enroll in a minimum of six (6) credits of independent study, extending over at least three semesters, under the supervision of their mentor. Typically, the focus of the independent study will be on the development of independent research skills through involvement with ongoing or forthcoming projects in the mentor’s research program. Each student will be expected to present at one or more scientific meetings and submit at least two manuscripts for publication in relevant peer-reviewed journals before graduating.

Technology, Learning, and Culture

Degrees Offered

- Master of Arts in Educational Psychology
- Major in Child Development and Family Studies
- Master of Arts and Doctor of Education in Instructional Design and Technology (IDT)
- Area of Emphasis in Doctor of Education

The Department of Technology, Learning, and Culture is dedicated to learning across the life span. Encompassing a diverse spectrum of education practices and human services, the department houses programs in child development and family studies, educational psychology, instructional design and technology, and program evaluation and research. Faculty and students alike master technology to share new ways to learn, teach, research, and interact in the community. With a focus on global awareness, graduates are culturally competent and develop ethical foundations to maintain integrity in their academics and professions and simultaneously inspiring others.

Child Development and Family Studies

Degrees Offered

- Master of Arts in Educational Psychology
- Area of Emphasis in Child Development and Family Studies

Child Development and Family Studies (CDFS) is an area of emphasis option within the Educational Psychology (EdP) M.A. program. This area emphasis prepares students to work with children, adolescents, and/or families in educational, applied, and clinical settings, as well as preparing students for doctoral studies. Coursework is taken in child/adolescent development, family studies, research methods, and statistics. Students also have opportunities for field experiences, independent studies, and teaching practica.

Relative to employment opportunities, students have obtained positions for which they generally would not have been competitive with the bachelor’s degree, unless they had many years of related experience. Upon graduation, graduates have been hired as directors of child care programs in corporations, hospitals, and the private sector. Some students have obtained positions as instructors and faculty members at four-year colleges and branch campuses of major universities teaching classes in child/human development and family studies. Still other students have become specialists in parenting and curriculum development for Head Start and similar agencies. Graduates have also obtained employment as parenting and family specialists in community-based family agencies and community health care agencies. Some graduate students have entered the program with teaching certificates, and have used their master’s degree in CDFS to broaden the scope of their teaching in elementary and secondary education. Graduates of the master’s degree in CDFS have also successfully pursued positions as Extension agents through land-grant universities. Salaries for CDFS graduates with master’s degrees are highly variable depending on the nature of the position and the location of employment. However, salaries are generally higher than students with bachelor’s degrees.
In addition to educational and applied careers, some students have entered the program with the aim of pursuing doctoral studies. Through rigorous coursework and the requirement to complete a research-based master’s thesis, students are prepared to pursue doctoral studies in human development, family studies, sociology, special education, developmental psychology, counseling, and related fields.

**Admission Requirements and Performance Standards**

Ideally, prospective students should have completed an undergraduate curriculum in an area of specialization related to CDFS, such as psychology, sociology, education, or social work. A student whose undergraduate degree is in an unrelated field and/or who lacks preferred foundation courses for graduate studies in CDFS will likely be required to take supplemental undergraduate courses if accepted into the program.

All CDFS faculty members review every graduate application and jointly determine whether a student will be admitted as a regular graduate student or not admitted into the program. One faculty member must be able to serve as the major advisor to the student. Final approval for admission rests with the graduate coordinator of the CDFS program. Application materials include the following:

- Completed application
- Undergraduate transcript
- GRE Scores (while a cut-off has not been established, GRE is examined vis-à-vis undergraduate transcript)
- Personal statement of interest
- Three letters of recommendation
- Resume or Curriculum Vita

**Program Requirements**

The CDFS major requires coursework in child development, family studies, statistics, research methods, elective hours, and thesis credits for a total of 33 hours. Six credits of electives are selected in consultation with the student’s faculty advisor and are based on the particular interests of individual students. For instance, students may take their electives in educational psychology, curriculum and instruction, counseling and guidance, psychology, special education, sociology, women’s studies, social work, public administration, and related disciplines.

Six credit hours are assigned to the completion of the required research-based thesis. The student and his/her major professor determine the research topic with input from other committee members. The thesis requires six research credits, an extensive literature review, development of a research design with associated methodological procedures, data collection or use of faculty data sets, in-depth analysis of data, and analytic discussion of the results. Most students conduct quantitative/statistically-based theses. However, qualitative research designs are permitted, with appropriate rigorous application of qualitative research methods in the collection and interpretation of data. The format for a thesis must be written in the style of the Publication Manual of the American Psychological Assn. (6th ed.). Theses at WVU are electronically submitted upon their approval.

**Graduate Assistantships**

Prospective students can apply for graduate assistantships (GA) in CDFS, which may include teaching or research activities. The graduate students who have demonstrated competence in preschool education are awarded assistantships to work in the West Virginia University Child Development Laboratory. Graduate students in CDFS also have had success in acquiring assistantships in other academic units in the College of Human Resources and Education and other Colleges at WVU. Within CDFS, a limited number of graduate assistantships are available on a competitive basis. Awards, granted for a one-year period with consideration for a second year, include tuition waiver and a monthly stipend. Graduate assistants work 20 hours per week, assisting CDFS faculty members in their teaching or research activities or teaching CDFS undergraduate classes. Students recognized for academic excellence and not awarded an assistantship may qualify for a limited number of meritious hours which results in a tuition reduction.

**Faculty**

**Program Coordinator**
- Carol Markstrom, 506G Allen Hall

**Professors**
- Carol Markstrom - Ph.D. (Utah St. U.)
  Family, adolescent, and social contexts.
  Status: Regular
- Barbara Warash - Ed.D. (WVU)
  Early childhood education, Reggio Emilia
  Status: Regular
Assistant Professor

- Kristin Moilanen - Ph.D. (U. of Neb.)
  Adolescent development, self regulation, risk behavior, family relationships.
  Status: Regular

- Amy Root - Ph.D. (U. of Md., College Park)
  Parenting and the development of emotional competence; individual differences; development of shy/wary behavior.
  Status: Regular

- Suzanne Walraff-Hartman - Ph.D. (George Mason Univ.)
  3 to 5 yr. child development & learning, childcare preschool environmental factors, at risk child populations.
  Status: Regular

Clinical instructor

- Nancy Wolfe-Dilgard - M.A. (WVU)
  Status: Associate

Early Childhood Teacher

- Keri Law - M.A. (WVU)
  Early childhood education, Early Childhood Teacher.
  Status: Associate

- Melissa Workman - M.S., M.A. (WVU)
  Early childhood education, Early Childhood Teacher/Associate Director of the WVU Child Development Laboratory.
  Status: Associate

Educational Psychology

Degree Offered

- Master of Arts in Educational Psychology

Master's Program General Description

The educational psychology program in the College of Human Resources and Education offers opportunities for graduate study and research leading to the master of arts (M.A.) degree. Professional preparation focuses on learning, development, instruction, and research. Accordingly, students are expected to achieve competencies in these areas. The student plans programs jointly with the student's advisor to meet the student's particular career needs. The educational psychology program in the College of Human Resources and Education offers opportunities for graduate study and research leading to the master of arts degree. The principal goal of the program is the education and training of professionals who will focus on teaching and learning environments as they carry out their missions associated with instruction, service, and research. Professional preparation centers on the following three content areas: Learning and development; instructional development; measurement, research, and statistics.

Accordingly, students are expected to achieve competencies in these areas.

The student and the student's advisor plan programs jointly with the student's committee to meet particular career needs. In addition to the general requirements of the University and the College of Human Resources and Education, there is a core of courses and supporting competencies required of all graduate students in the program.

Educational psychologists function in a variety of settings. The program is dedicated to the preparation and placement of competent educational psychologists for positions in educational settings at all levels; educational agencies at local, state, and federal levels; public and private human service centers; medical centers; business and industrial settings; and other settings. Graduates of the program are also well prepared to continue their education and professional development in doctoral programs in Educational Psychology and related disciplines.

Admission Requirements and Performance Standards

All applicants must have an undergraduate degree from an accredited institution. Each applicant is required to submit official transcripts of undergraduate and prior graduate work completed, a 500-word written goal statement, a personal vita, and three letters of recommendations. All applicants must submit official scores for either the Graduate Record Examination (GRE) or the Miller Analogy Test (MAT). All faculty members affiliated with the program screen the credentials for all applicants. The following criteria are used as guidelines to evaluate application credentials:
• Total GRE scores of 320 (on the verbal and quantitative combined) or MAT score of 412 (for an international student from a country in which English is not the native language -TOEFL score of at least 79 and a combined total score of at least 234 on the GRE verbal and the TOEFL scores),
• An undergraduate GPA of 3.0 or greater,
• Graduate GPA of 3.25 or greater for graduate work completed (if applicable),
• The extent to which the applicant’s goals and objectives may be accomplished if admitted to the program, and
• Favorable recommendations and appropriate background experiences.

To remain in good standing, the student must have an average grade of B or better for all courses in the program and be making satisfactory progress toward the completion of the program competencies (as described in the following section).

In conference with the student’s committee, directed by the advisor, with final approval by the committee, the student may complete one of the following two options (including at least 18 EDP credit hours):

Option A
At least 30 semester-hours of coursework, including six semester-hours of thesis research.

Option B
At least 30 semester-hours of coursework, including three semester-hours of practical product development.

Each student is expected to complete the following core courses as part of the master’s plan of study:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP 600</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
<td>3</td>
</tr>
<tr>
<td>EDP 611</td>
<td>Measurement/Evaluation-Educ Psyc</td>
<td>3</td>
</tr>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Area of Emphasis in Program Evaluation and Research, Reagan Curtis Program Coordinator

The area of emphasis in program evaluation and research (PER) is designed primarily for individuals with interest in conducting research and evaluation projects for private and public educational organizations and agencies. Emphasis is placed on developing proficiency in quantitative, qualitative, and mixed-methods inquiry, providing students with a breadth of methods to study varied educational, programmatic, and social research questions. All students will be required to design and conduct at least one full program evaluation during the course of their studies.

Program Outcomes

The more general outcomes for students and the state and region are a cadre of professionals prepared to conduct program evaluations and research in a variety of education and other human services settings. In addition, some of the graduates will directly or eventually enter doctoral programs in disciplines related to educational psychology, program evaluation, and research.

Program Delivery

The students in the area of emphasis will be a mix of full-time and part-time students. While most instruction and mentoring will be face-to-face, online instruction and mentoring of students will be arranged as circumstances require and permit. Specialized delivery technologies may well be utilized as needed on an individual student or learning activity basis.

Clientele and Need

The addition of an area of emphasis in program evaluation and research is unique within the state and will continue to provide a master’s program for students seeking to attain a strong foundation from which to pursue doctoral study. This area of emphasis will additionally appeal to students seeking a “quasi”-terminal degree with which to pursue employment in schools and other education oriented entities.

Employment Opportunities

With the current strong emphasis on data based decision-making driven by the No Child Left Behind legislation, Individuals with Disabilities Education Act, and other regulatory mandates, graduates of this program will be in high demand.

Admission Requirements and Performance Standards

All PER faculty members review every graduate application to the program and jointly determine whether a student will be admitted as a regular graduate student, admitted provisionally, or not be accepted into the program. A majority must indicate acceptance and one faculty
member must be willing to serve as the major advisor. Final approval for admission rests with the coordinator of the educational psychology program. Application materials include the following:

- Application
- Undergraduate transcript (GPA of 2.75)
- GRE (306) or MAT (405) and TOEFL (79 for students whose primary language is not English)
- Personal statement of interest
- Three letters of recommendation
- Vita

To remain in good standing, the student must have an average grade of B or better for all courses in the program and be making satisfactory progress toward the completion of the program competencies (as described in the following section).

All applicants must comply with the general requirements of the University and the College of Human Resources and Education. The applicant must have an undergraduate degree from an accredited institution and is required to submit official transcripts of the undergraduate work and the official scores for either the Graduate Record Examination (GRE) or the Miller Analogy Test (MAT), a 500 word written goal statement, a personal vita, and three letters of recommendation.

Program Objectives, Student Competency Expectations, and Opportunities to Learn

Student Competency Expectations

Graduates will be able to: Demonstrate understanding of the philosophical and historical foundations of inquiry, and; apply appropriate quantitative, qualitative, and mixed-methods research tools to answer practical educational, programmatic, and other social research questions.

They will also: Apply appropriate program evaluation tools to conduct formative and summative evaluations of existing and prospective educational programs. Demonstrate understanding of ethical issues in research and evaluation. Create informative reports of research and evaluation studies tailored appropriately for multiple stakeholders and decision-makers.

Opportunities to Learn

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP 611</td>
<td>Measurement/Evaluation-Educ Psych</td>
<td>3</td>
</tr>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
<td>3</td>
</tr>
<tr>
<td>EDP 617</td>
<td>Program Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EDP 685</td>
<td>Practicum</td>
<td>1-12</td>
</tr>
<tr>
<td>EDP 693</td>
<td>Special Topics</td>
<td>1-6</td>
</tr>
<tr>
<td>EDP 698</td>
<td>Thesis</td>
<td>2-4</td>
</tr>
<tr>
<td>SCFD 615</td>
<td>Qualitative Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SCFD 781</td>
<td>Nature of Inquiry 1 (S)</td>
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<td>SCFD 782</td>
<td>Nature of Inquiry 2 (S)</td>
<td>1</td>
</tr>
<tr>
<td>SCFD 783</td>
<td>Nature of Inquiry 3 (S)</td>
<td>1</td>
</tr>
</tbody>
</table>

Faculty

Chair and Program Coordinator

- Daniel E. Hursh, 506 Allen Hall

Professors

- Daniel E. Hursh - Ph.D. (Kans. U.)
  Chair and Program Coordinator. Applied behavior analysis and Instructional design.
  Status: Regular
- Anne H. Nardi - Ph.D. (WVU)
  Developmental psychology, Problem solving, Adult learning.
  Status: Regular
- Richard T. Walls - Ph.D. (Penn. St. U.)
  Educational psychology, Human learning, Memory, Problem solving vocational rehabilitation.
  Status: Regular
**Associate professors**
- Sebastian R. Diaz - Ph.D. (Ohio U.)
  Statistics, Program evaluation, Law.
  Status: Regular
- Reagan P. Curtis - Ph.D. (U.C. Santa Barbara)
  Cognition, Development, Research, Program evaluation and statistics.
  Status: Regular

**Teaching Assistant Professor**
- Patricia Haught - Ed.D. (WVU)
  Cognitive development, Learning strategies.
  Status: Associate

**Professor emeritus**
- Meng Shu Tseng

**Associate professors emeriti**
- Floyd L. Stead

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**Instructional Design and Technology**

**Degrees Offered**
- Master of Arts and Doctor of Education in Instructional Design and Technology (IDT)

A master’s level IDT degree is designed for those interested in the design, use, and evaluation of technology in any educational setting. Major features of the program include course preparation in educational psychology, instructional technology, and program evaluation. Information concerning program requirements, course sequence, and advising sequence is available.

**Entrance Requirements**
- Undergraduate GPA of 2.75 or greater
- GRE 310 minimum; or MAT 410 minimum (or a 50 score from earlier MAT version)
- GRE or MAT scores must be no older than five years or a summary of at least two years of professional experiences
- TOEFL 79 minimum (for international students)
- Cover letter explaining your interest and motivation for an IDT master’s degree
- Three letters of reference

**Program Features**
- Thirty-six course hours are prescribed (a University policy when no thesis is required). All courses are required. A two-year sequence is visualized below for those taking a full-time load (nine hours):

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDP 600</td>
<td>3</td>
<td>IDT 750</td>
<td>3</td>
<td>IDT 600</td>
<td>3</td>
</tr>
<tr>
<td>IDT 600</td>
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<td>IDT 735</td>
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<td>IDT 693</td>
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<td>EDP 640</td>
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<td>IDT 630</td>
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<td>9</td>
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</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDT 620</td>
<td>3</td>
<td>EDP 617</td>
<td>3</td>
</tr>
<tr>
<td>IDT 693</td>
<td>1-6</td>
<td>IDT 610</td>
<td>3</td>
</tr>
<tr>
<td>IDT 740</td>
<td>3</td>
<td>IDT 693</td>
<td>1-6</td>
</tr>
<tr>
<td></td>
<td>7-12</td>
<td></td>
<td>7-12</td>
</tr>
</tbody>
</table>

Total credit hours: 36-51

- A two-semester developmental capstone experience is designed into the program. A program evaluation course and application experience are necessary to develop graduates who know how to “evaluate technology innovations.”
• Prototype studio will be scheduled fall, spring, and summer. The course is required to be taken only once, but can be enrolled in multiple times as needed to complete projects.

Developmental Capstone Sequence

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDT 740</td>
<td>3</td>
<td>IDT 750</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credit hours: 6

Doctor of Education

The Ed.D. program is designed to allow a student to immediately apply knowledge and skills to pragmatic needs in education. Knowledge and skill-building are designed into the courses and are developed over the length of the program, and specifically address three areas of concern in educational settings, including interconnectivity, instructional design, software and multimedia design and deployment. Research is framed around the pragmatic needs of students, programs, and institutions. Information concerning program requirements, structure, and advising sequence is available.

Entrance Requirements

• Undergraduate GPA of 2.75 or greater
• GRE 320 minimum; or MAT 424 minimum (or a score of 60 on the older version)
• GRE or MAT scores must be no older than five years old
• TOEFL: 550 minimum (additional requirement for international students)
• Master’s degree
• Letter of application explaining your purpose and motivation for an IDT Ed.D. degree
• Three letters of references
• Scholarly writing sample
• Vita
• Optional interview

Program Features

• The 72-hour doctoral IDT program (not counting dissertation) requires 42 hours past the master’s degree.
• Advising on a dissertation begins on the first day of the program. Students are encouraged to identify topics of interest and to develop an appropriate topic for inquiry as one takes classes.
• Research in instructional technology is addressed throughout the courses and supplements the college research core requirements.
• The program features seminar courses that provide opportunities to conduct research and develop instructional interventions, including technological integration of tools.
• Teaching opportunities will be found working with faculty members, the college’s TLTC, and internships in corporate settings in the Morgantown/Fairmont area.

Program Components

• Common Core: foundations and seminars (12 hours)
• HR&E Research Core: (15 hours) required for all college Ed.D. programs.
• Competencies/Constituencies: Competencies across three areas: interconnectivity (nine hours), instructional design (nine hours), and software and multimedia design and deployment (nine hours).
• Specializations: courses within HR&E and across the University (18 hours), subject to approval by your doctoral committee.

Program Structure

72-hr. Ed.D.

<table>
<thead>
<tr>
<th>Socialization Electives</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other IDT Courses</td>
<td></td>
</tr>
<tr>
<td>Courses from Master’s program</td>
<td></td>
</tr>
<tr>
<td>Courses from other programs</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>18</td>
</tr>
</tbody>
</table>
HR&E Research Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
<td>6</td>
</tr>
<tr>
<td>&amp; EDP 614</td>
<td>and Statistical Methods 2</td>
<td></td>
</tr>
<tr>
<td>SCFD 615</td>
<td>Qualitative Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Research Elective

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP 617</td>
<td>Program Evaluation</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 15

Students will become competent in three major areas:

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interconnectivity</td>
<td>9</td>
</tr>
<tr>
<td>Instructional Design</td>
<td>9</td>
</tr>
<tr>
<td>Software and multimedia design and deployment</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Hours: 27

IDT 620  Social Network Media 3
IDT 630  Instructional Delivery Systems 3
IDT 715  School Networks 3
EDP 640  Instructional Design 3
IDT 720  Instructional Systems Design 3
IDT 740  Design Studio 3
IDT 640  Visual Literacy 3
IDT 660  IDT Authoring Systems 3
IDT 750  Prototype Studio 3

Socialization Electives 18

Other IDT Courses
Courses from Master’s program
Courses from other programs

Total Hours: 18

Faculty

Program Coordinator

- Neal Shambaugh

Associate Professor

- Terence C. Ahern - Ph.D. (Penn. St. U.)
  Instructional systems design.
  Status: Regular
- R. Neal Shambaugh - Ph.D. (Va. Tech.)
  Instructional design, Instructional technology integration, Cognition.
  Status: Regular

Assistant Professor

- Ugur Kale - Ph.D. (Ind. U. Bloomington)
  Instructional technologies, Instructional design, Professional development, Online communication, Teacher education, Content analysis, Social network analysis.
  Status: Regular
- Pamela Whitehouse - Ed.D. (Harvard Grad. Sch. of Ed.)
  Distributed cognition and constructivism, Instructional design and new technologies, Online teacher professional development.
  Status: Regular

Professors emeriti

- Paul W. DeVore
• David L. McCrory
• Edward C. Pytlak
Law

WVU Law comes from a place of strength— from the accomplished, dynamic faculty and students who define the school, from their invigorating aspirations, from the thriving city of Morgantown and the durable mountains and powerful rivers that beckon outdoor adventurers. They all contribute to our singular character.

West Virginia University College of Law provides students a unique opportunity to attend a small public law school within a nationally recognized research university. Here you can join diverse students from around the globe who come together in the beautiful mountains of West Virginia to experience public legal education with the intimacy of a fine private law school. Small class sizes and an excellent faculty-student ratio tell part of the story, but not all.

What makes the West Virginia College of Law experience different is the commitment of the faculty, staff, and students to an excellent, inclusive, exciting, and supportive educational community in which each student can pursue an individual vision of success in the legal profession.

Our faculty members are outstanding teachers, scholars, and leaders in legal education. What distinguishes our faculty from others, however, is the remarkable commitment they have in mentoring students to help them achieve individual goals. The faculty can be found supervising student articles for publication, assisting in obtaining prestigious federal judicial clerkships, or providing guidance for student-led symposia exploring cutting edge and relevant topics. In addition, whether our faculty members teach corporate securities or civil disobedience, each one exemplifies the duty of a lawyer to serve the public interest.

To fulfill its commitment to individual student success and to improving the profession by producing the leaders of the future, the West Virginia University College of Law has a rapidly developing curriculum that combines the best of traditional legal education with new courses and opportunities necessary to practice law in a global economy in the 21st Century.

About the College of Law

Mission Statement: Preparing 21st century lawyers and leaders to serve the public, government, and business—both locally and globally—while focusing on justice, ethics, professionalism, and service in a diverse, vibrant and respectful community

Established: 1878

The West Virginia University College of Law was accredited by the AALS in 1914 and the ABA in 1923.

The West Virginia University College of Law is fully approved by the American Bar Association Council of the Section of Legal Education and Admissions to the Bar.

Since 1952, the ABA Council of the Section of Legal Education and Admissions to the Bar has been approved by the U.S. Department of Education as the recognized national agency for the accreditation of professional schools of law.

Further information as to the Standards and Rules of Procedure for the Approval of Law Schools by the American Bar Association may be obtained from the Section of Legal Education and Admissions to the Bar 750 North Lake Shore Drive Chicago, IL 60611 PH: (312) 988-6738 FX: (312) 988-5681 http://www.abanet.org/legaled.

Students at the WVU College of Law must assess 91 credits to graduate and must maintain a cumulative grade point average of 2.20 or better. The first-year curriculum is a fixed set of courses taken by all students. Students are largely free to shape their own courses of study during the last two years of law school, subject to a small number of upper-level requirements.

First Year Curriculum

The first-year curriculum is a required set of courses designed by the faculty to give new law students an introduction to the fundamentals of legal practice. You will be assigned to a section of each required course. The first-year curriculum covers three areas:

1. Private Law governs the legal relationships and the resolution of disputes among private persons and entities. The Private Law courses you will take are Torts (civil wrongs), Contracts, and Property.

2. Public Law concerns governmental regulation of private persons and entities. The Public Law courses you will take are Criminal Law and Constitutional Law.

3. Practice courses teach procedural law, the norms of legal ethics, and the skills of legal research, reasoning, and writing. The Practice courses you will take are Civil Procedure (both Jurisdiction and Rules), Professional Responsibility, and two semesters of Legal Reasoning, Research, and Writing.
First Year Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 700</td>
<td>Legal Analysis/Rsch/Writing 1</td>
<td>0</td>
</tr>
<tr>
<td>LAW 703</td>
<td>Contracts 1</td>
<td>4</td>
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<tr>
<td>LAW 705</td>
<td>Criminal Law</td>
<td>3</td>
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<tr>
<td>LAW 706</td>
<td>Civil Procedure: Jurisdiction</td>
<td>2</td>
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<tr>
<td>LAW 709</td>
<td>Torts 1</td>
<td>4</td>
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<tr>
<td>LAW 707</td>
<td>Property</td>
<td>4</td>
</tr>
<tr>
<td>LAW 711</td>
<td>Legal Analysis/Rsch/Writing 2</td>
<td>4</td>
</tr>
<tr>
<td>LAW 722</td>
<td>Civil Procedure: Rules</td>
<td>3</td>
</tr>
<tr>
<td>LAW 725</td>
<td>Constitutional Law 1</td>
<td>4</td>
</tr>
<tr>
<td>LAW 742</td>
<td>Professional Responsibility</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must pass all the required first-year classes in order to graduate. Students must obtain a C or better to satisfy the Legal Reasoning, Research, and Writing (LRRW) course requirement.

Upper Level Requirements

- **Appellate Advocacy** (2 credits). Students must obtain a grade of C or better to satisfy the Appellate Advocacy requirement.
- **One research seminar** (2-3 credits, depending on length of class meetings and paper length) from an extensive menu of seminars. Seminars are specifically noted by the letters “Sem.” in the course title and are numbered as “LAW 689 or 794.” Seminars have a common structure: small-class discussions geared toward the production of a substantial (i.e. 8,000 words (~ 25 pages) or longer) written product supported by extensive research. Typically, the research seminar aims at the production of a law-review style research paper of publishable quality. Seminars may aim at other written products, such as draft legislation or jury instructions, so long as these products are accompanied by papers urging their adoption by the appropriate lawmakers. Enrollment is limited to 15 students in each seminar. Students must obtain a grade of “C” or better to satisfy the seminar requirement. Independent studies and externships do not satisfy the seminar requirement.
- **One Perspective Course.** The perspective requirement reflects the College of Law’s conviction that legal education should expand students’ horizons by connecting their studies to the traditions of the liberal arts (i.e. the humanities, social sciences, and natural sciences). Perspective courses examine law and lawyers primarily from points of view that are significantly different from the doctrinal and policy analysis taught in standard upper-level courses on various areas of practice. Rather than taking the judicial opinions, statutes, and regulations of American law as their primary texts, they immerse students in ways of thinking about the law and about lawyering that differ from the approaches most commonly used by working lawyers and judges. Perspective courses look across doctrinal boundaries, engaging the student in a conversation about the relationships between law and other disciplines; they explore the nature of the American legal system by contrasting it with other legal systems; they discuss the ways in which law and lawyers both shape and are shaped by the liberal arts and the wider culture. Some examples of perspective courses include: American Legal History, Jurisprudence, Law and Psychology, Gender & Law, Lawyers & Literature, Comparative Constitutional Law, and Empirical Legal Methods. Perspective courses are designated by an asterisk on the class schedule and are collected in an official list of perspective courses. Both the latest version of the class schedule and the official perspective list can be found on the College of Law website: http://law.wvu.edu/academics/course_schedules_and_student_resources
- **One Capstone Course.** Students must take one course from the following list of “capstone” courses. These include:
  1. Trial Advocacy (4 credits);
  2. A Clinic. Current clinical opportunities include: The Clinical Law Program (14 credits over two semesters with practice groups in General Civil Practice, Immigration Law, Child and Family Advocacy, Tax, and an innocence project), Entrepreneurship Clinic (9 credits over two semesters), U.S. Supreme Court Clinic (8 credits over 2 semesters), and Land Use/Sustainability Clinic (4 credits per semester);
  3. Federal Judicial Externship program (13 credits over one semester; 6 graded, 7 pass/fail);
  4. Public Service Externship with Federal Government Agency (13 credits over one semester; 6 graded, 7 pass/fail). Only full-semester externships with federal agencies qualify as capstone courses;
  5. Business Transactions Drafting Practicum (4 credits);
  6. When available: writing a faculty-supervised brief and making an oral argument before the U.S. Court of Appeals or the Supreme Court of Appeals of West Virginia as an independent study project (2 credits); and
  7. By petition only: an interdisciplinary project supervised by a law faculty member and a university faculty member who is not a law faculty member.

The course in Evidence is a prerequisite to taking Trial Advocacy, the General Legal Clinic, the Child and Family Advocacy Clinic, or a Federal Judicial Externship. (There is no requirement that the student attain a particular grade in Evidence prior to taking the other courses.)
Students taking Trial Advocacy must obtain a grade of “C” or better in the course in order for that course to satisfy the capstone requirement.

Faculty

President Emeritus
• David C. Hardesty, Jr.
  WVU President Emeritus & Professor of Law

Dean
• Joyce E. McConnell
  William J. Maier, Jr. Dean & Thomas R. Goodwin Professor of Law

Dean Emeritus
• John W. Fisher II
  William J. Maier, Jr. Dean Emeritus & Professor of Law

Associate Deans
• Gregory Elkins
  Associate Dean for Administration & Finance

• Anne M. Lofaso
  Associate Dean for Faculty Research & Development and Professor of Law

• John E. Taylor
  Associate Dean for Academic Affairs & Professor of Law

Assistant Deans
• Janet Long Armistead
  Admissions and Student Affairs

• Bill Coates
  Development

• Jessica A. Justice
  Continuing Legal Education

• Jennifer Powell
  Career Services

Professors
• Gerald G. Ashdown
  James H. "Buck" & June M. Harless Professor of Law

• Robert M. Bastress
  John W. Fisher, II Professor of Law

• Thomas C. Cady
  Professor of Law

• Vincent P. Cardi
  Bowles, Rice, McDavid, Graff, & Love Professor of Law

• Franklin D. Cleckley
  Arthur B. Hodges Professor of Law

• Charles R. DiSalvo
  Woodrow A. Potesta Professor of Law

• James R. Elkins
  Professor of Law

• James J. Friedberg
  Hale J. & Roscoe P. Posten Professor of Law

• Majorie A. McDiarmid
  Steptoe & Johnson Professor of Law & Technology

• Patrick C. McGinley
  Charles H. Haden II Professor of Law

• James A. McLaughlin
  Robert L. Shuman Professor of Law
• Dale P. Olson
  Professor of Law
• Grace J. Wigal
  Teaching Professor & Director of Academic Excellence Program

**Associate professors**

• Jena Martin Amerson
  Associate Professor of Law
• Valena Beety
  Associate Professor of Law
• Gregory W. Bowman
  Associate Professor of Law
• Atiba R. Ellis
  Associate Professor of Law
• Kendra Fershee
  Associate Professor of Law
• Joshua Fershee
  Associate Professor of Law
• David L. Krech
  Teaching Associate Professor & Director of Appellate Advocacy
• James Van Nostrand
  Associate Professor of Law & Director, Center for Energy and Sustainable Development
• Thomas O. Patrick
  Teaching Associate Professor
• Alison Peck
  Associate Professor of Law
• William Rhee
  Associate Professor of Law
• Camille M. Riley
  Associate Professor of Law
• Hollee S. Temple
  Teaching Associate Professor & Director of Legal Research and Writing
• Shine (Sean) Tu
  Associate Professor of Law
• Elaine W. Wilson
  Associate Professor of Law

**Visiting Faculty**

• Kelly Behre
  Visiting Associate Professor
• Michael Blumenthal
  Visiting Professor & Co-Director, Immigration Law Clinical Practice Group
• Thomas Ciancy
  Judge John T. Copenhaver, Jr. Chair of Law
• Patricia H. Lee
  Visiting Associate Professor & Director, Entrepreneurship Law Clinic
• Barton Z. Cowan
  Visiting Professor
• Jessica A. Haught
  Visiting Teaching Associate Professor
• Matthew Titolo
  Visiting Associate Professor
• Suzanne M. Weise
  Visiting Associate Professor & Director, Child & Family Law Clinical Practice Group
• Joshua Weishart
  Visiting Associate Professor
Professors emeriti

- Forest J. Bowman
  Jackson & Kelly Professor of Law Emeritus
- Robert Lathrop
  Professor of Law Emeritus
College of Physical Activity and Sport Sciences

Degrees Offered

- Master of Science
- Doctor of Philosophy

The College of Physical Activity and Sport Sciences is organized into two departments: Department of Coaching and Teaching Studies; and Department of Sport Sciences. The Department of Coaching and Teaching Studies includes the programs in athletic coaching education and physical education teacher education. The Department of Sport Sciences includes the programs in athletic training, sport and exercise psychology, and sport management.

The doctoral program in kinesiology administered through the College of Physical Activity and Sport Sciences has two major areas: sport and exercise psychology and physical education teacher education. The college’s master’s program allows specialization in teacher education, athletic training, athletic coaching education, and sport management leading to a master of science in physical education. The master’s degree program in teacher education is run using a hybrid distance education format; with courses offered in the summer on campus and courses during the academic year offered online. The master’s degree programs in athletic coaching and sport management have both on-campus and hybrid distance education cohorts. The master’s program in Sport and Exercise Psychology is only available as part of the doctoral program in that field.

The facilities of the College of Physical Activity and Sport Sciences include the gymnasium, dance studio, and swimming pool in E. Moore Hall; a gymnasium and fitness center in Stansbury Hall; bowling lanes in the Mountainlair; indoor track, sports area, in the Shell Building; outdoor areas include the stadium, tennis courts, soccer and field hockey fields, and outdoor track; and the Natatorium with its pool and diving well. The College of Physical Activity and Sport Sciences is expecting to move into a new building bordering the Student Recreation Center and intramural fields in August of 2013.

The Coliseum contains three technology classrooms and seminar rooms, faculty offices, a large gymnasium, a dance studio, and computer laboratory. These facilities will be moved to the new building. Additional faculty and staff offices are in E. Moore Hall, Stansbury Hall, the Natatorium, and the Shell Building.

For additional information, contact the Graduate Coordinator, College of Physical Activity and Sport Sciences, 277 Coliseum, P.O. Box 6116, West Virginia University, Morgantown, WV 26506-6116. Telephone (304) 293-0850.

Faculty

Ed.D

- Dana D. Brooks - Ed.D. (WVU)
  Dean

Associate Dean of Academic Affairs

- Lynn Housner - Ph.D. (U. of Pittsburgh)

Co-chairs

- Jack Watson - Ph.D. ((Fla. St. U.)
  Chair - Sport Sciences
- Valerie Wayda - Ed.D. (WVU)
  Chair, Coaching and Teaching Studies

Professors emeriti

- William Alsop - Ed.D. (WVU)
- William Bonsall - M.S. (WVU)
- J. William Douglas - Ph.D. (Ohio State U.)
- Patricia K. Fehl - Ed.D. (Indiana U.)
- Beatrice Hurst - M.A. (Columbia U.)
- Andrew Ostrow - Ph.D. (U. California-Berkeley)

Athletic Coaching Education

We offer two different formats for the master’s degree in Athletic Coaching Education (ACE). The an on-campus master’s degree focuses on Coaching and Sport Education and is designed for individuals who want to coach athletes at the highly competitive levels and/or who
are interested in coaching education and the preparation of coaches. The coursework for the distance learning master's degree is delivered using the hybrid model (online and on campus classes). This master’s degree is designed for teachers who coach at the scholastic level or at the community/club levels.

**On Campus - Coaching and Sport Education**

This master’s degree is 39 credit hours and is completed in five semesters (fall, spring, summer, fall, and spring). Students complete 24 hours of core classes and then select one of two tracks for the remainder of the courses (15 hours) depending upon their career goals.

**Track 1 Performance Coaching** is designed for individuals who will be coaching at the collegiate or elite levels. The courses in this track focus on evaluating one’s coaching methods.

**Track 2 Science of Coaching** is designed for the individual who is interested in coaching education and the preparation of coaches. There are two options within this track. The only difference between the two options is the depth of research study.

Application deadline is March 1 for fall on-campus admission.

**Core Classes (24 hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE 602</td>
<td>Action-based Research-Coaching</td>
<td>3</td>
</tr>
<tr>
<td>ACE 610</td>
<td>Training Theories for Coaches</td>
<td>3</td>
</tr>
<tr>
<td>ACE 630</td>
<td>Coaching Education Administration</td>
<td>3</td>
</tr>
<tr>
<td>ACE 639</td>
<td>Create Healthy Competitive Environment</td>
<td>3</td>
</tr>
<tr>
<td>ACE 650</td>
<td>Sport Movement Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ACE 688</td>
<td>Coaching Techniques</td>
<td>3</td>
</tr>
<tr>
<td>SEP 620</td>
<td>Individual Instruct-Sport/Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>SEP 640</td>
<td>Psychology-Sport/Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>SM 627</td>
<td>Legal Issues-Sport Administration</td>
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</tr>
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**Track 1 (15 hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACE 661</td>
<td>Strength/Condition Methods - Coaches</td>
<td></td>
</tr>
<tr>
<td>ACE 665</td>
<td>Strength/Condition Program Design Coach</td>
<td></td>
</tr>
<tr>
<td>ACE 685</td>
<td>Coaching Internship</td>
<td></td>
</tr>
<tr>
<td>SM 660</td>
<td>NCAA Compliance/Current Issues</td>
<td></td>
</tr>
<tr>
<td>or ACE 663</td>
<td>Advanced Strength/Condition Coach Tech</td>
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**Track 2 (15 hours)**

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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
<td></td>
</tr>
<tr>
<td>SEP 615</td>
<td>Research Methodology-Physical Education</td>
<td></td>
</tr>
<tr>
<td>ACE 641</td>
<td>Positive Youth Development-Sport</td>
<td></td>
</tr>
<tr>
<td>ACE 695</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>or ACE 697</td>
<td>Research</td>
<td>3</td>
</tr>
<tr>
<td>ACE 697</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>or PET 698</td>
<td>Thesis</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours**

**Distance Learning Hybrid - Sport Coaching**

This master’s degree is 39 credit hours and is completed in seven consecutive semesters (beginning and ending in the summer). Students complete 6 hours for each of the first four semesters (summer, fall, spring, summer). Across the next three terms (fall, spring, summer) students complete 4 hours and complete a coaching internship during the term that best aligns with a sport season. Summer classes are taken on campus over a two-week period. Fall and spring courses are completed in an online format.

Application deadline is March 1 for summer admission.

**Core Classes**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE 602</td>
<td>Action-based Research-Coaching</td>
<td>3</td>
</tr>
<tr>
<td>ACE 610</td>
<td>Training Theories for Coaches</td>
<td>3</td>
</tr>
<tr>
<td>ACE 618</td>
<td>Psychology of Coaching</td>
<td>3</td>
</tr>
<tr>
<td>ACE 630</td>
<td>Coaching Education Administration</td>
<td>3</td>
</tr>
<tr>
<td>ACE 639</td>
<td>Create Healthy Competitive Environment</td>
<td>3</td>
</tr>
<tr>
<td>ACE 641</td>
<td>Positive Youth Development-Sport</td>
<td>3</td>
</tr>
<tr>
<td>ACE 650</td>
<td>Sport Movement Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>
Admission Criteria

The following criteria are used to evaluate applications for admission to the master’s programs:

- Undergraduate degree grade point average (2.75 minimum for regular status) from an approved institution
- TOEFL scores for international applicants (minimum required: 550 paper; 213 computer; 80 Internet based)
- Three letters of reference
- Sport Resume
- Autobiographical description and professional goal statement (one to two pages on professional background, goals, and reasons for pursuing the master’s degree)

Faculty

Associate professors
- Valeria Wayda - Ed.D. (WVU)
  Chair, Coaching and Teaching Studies
- Daniel H. Ziatz - Ph.D. (U. Utah)

Assistant professors
- Kristen Dieffenbach - Ph.D. (U. NC-Greensboro)
- Ryan Flett - Ph.D. (Michigan St. U.)

Adjunct Instructors
- Melinda Eskridge - M.S. (WVU)
- Nathan Kile - M.S. (Georgia Southern)
- Nancy Naternicola - M.S. (WVU)

Athletic Training

The master of science degree in athletic training is completed over a two-year period, although a one-year option is available. Since this is a post-certification master’s program, all students must be NATA-BOC certified or certified eligible. Those in the two-year program complete 38 hours of graduate coursework, which includes a research (thesis or research project) or concentration track. Graduate assistantships are available for the NATA-BOC certified and other qualified individuals in the two-year program. The one-year program requires completion of 35 graduate credit hours.

Applications will be reviewed in late December/early January, and continue until the cohort is filled. The selection process for assistantships begins in late December/early January and continues until all positions are filled. Only those applicants with complete files will be considered for admission to the program and for graduate assistantships. Finalists will be contacted for an on-campus personal interview starting in January.

Admission Criteria

- Undergraduate degree grade point average (2.75 minimum for regular status) from an approved institution
- TOEFL scores for international applicants (minimum required: 550 paper; 213 computer; 80 internet based)
- Three letters of recommendation
- Resume
- Graduate Record Examination (297 minimum; qualitative and verbal together)
Curriculum Requirements

Two-Year Athletic Training Program (GA position) - 38 Hours

Students pursuing a two-year Master of Science degree in athletic training have a choice of two options: Research (thesis or research project) and Concentration. Both the research-thesis and concentration options require 38 hours of coursework, which includes 4 hours of concentration credit. The research-research project option requires 38 hours of coursework, which includes 3 hours credit for a group research project and one hour of independent study. A "plan of study" completed during the first year in the program will determine options and semester coursework.

Curriculum Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SEP 615</td>
<td>Research Methodology-Physical Educ</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 618</td>
<td>Anatomy Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 620</td>
<td>Athletic Training Practicum 1</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 640</td>
<td>Critical Thinking-Injury Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 621</td>
<td>Athletic Training Practicum 2</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 627</td>
<td>Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 650</td>
<td>Medical/Surgical Aspects-Ath Trn</td>
<td>3</td>
</tr>
<tr>
<td>SEP 720</td>
<td>Psychological Sport Performance Improvement</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 622</td>
<td>Athletic Training Practicum 3</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 625</td>
<td>Science/Theory-Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>SEP 723</td>
<td>Psychological Aspects-Sport Injury</td>
<td>3</td>
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</table>

Select one of the following:

- ATTR 697, ATTR 698, ATTR 685
- ATTR 623, ATTR 626, ATTR 655

Select one of the following:

- ATTR 697, ATTR 695, ATTR 698
- ATTR 686

Research Options

<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ATTR 697</td>
<td>Research</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 695</td>
<td>Independent Study</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 698</td>
<td>Thesis</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 686</td>
<td>Field Concentration 2</td>
<td>2</td>
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</table>

Concentration Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ATTR 685</td>
<td>Field Concentration 1</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 686</td>
<td>Field Concentration 2</td>
<td>2</td>
</tr>
</tbody>
</table>

One-Year Graduate Athletic Training Program (NO GA position) - 35 Hours

The one-year program starts Summer II (beginning of July) and ends either the following Summer I (end of June) or end of Summer II (end of July).

First Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SEP 615</td>
<td>Research Methodology-Physical Educ</td>
<td>3</td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ATTR 618</td>
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</tr>
<tr>
<td>ATTR 620</td>
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<tr>
<td>ATTR 625</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ATTR 640</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SEP 723</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

13
### Faculty

**Associate professors**
- Michelle Sandrey - Ph.D. (U. Kansas)
  Coordinator - Graduate program
- Vincent G. Stilger - HSD, ATC (Indiana U.)
  Coordinator - Undergraduate Program

**Assistant professor**
- Damien Clement - Ph.D. (WVU)

**Adjunct associate professor**
- John C. Spiker - M.Ed. (U. of Pittsburgh)

**Clinical instructors**
- Brittany Arnold
- Gary Corley - M.S. (Indiana U.)
- Michelle Dell-Pruett - M.S. (Middle Tenn. State)
- Allison Hetrick - M.Ed. (U. Cincinnati)
- David Kerns - M.S. (Ohio U.)
- Randall Meador - M.S. (WVU)

**Lecturer**
- Greg Dahmer - M.A. (WVU)

### Physical Education Teacher Education

#### Master’s Degree

The Physical Education Teacher Education (PETE) Master of Science degree is designed for certified physical education teachers who work full-time. The program is designed to advance individual skills as well as to advance one’s knowledge to develop a standards-based physical education program. Students are admitted once year and complete all coursework with a cohort. The master’s program includes a balance of online courses (taken during the spring and fall semesters) and on-campus courses (taken during the summer). Normal time to completion is four regular semesters and three summers (approximately two years). Practical application of research-based and developmentally appropriate teaching practices is emphasized by the program.

No more than 12 graduate hours may be taken toward the master’s degree as a non-degree graduate student.

#### Admission

Students are eligible to apply to the program if they are certified or are certifiable to teach in the public schools and had an UG gpa of 2.75 or higher. NOTE: All applicants are required to scan and upload a copy of their teaching certificate in the GEMS admission application under the supplemental material category listed as "other."

Students who do not meet the 2.75 grade point average requirement can be admitted as provisional graduate students if their GPA is above 2.5; they are required to attain a 3.0 grade point average in the #rst 12 hours of advisor-approved coursework in order to be reclassified as a
regular graduate student. In order to receive the degree, the student must have a minimum average of 3.0 in all coursework leading toward the degree and satisfy all department and University requirements.

**Curriculum**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET 605</td>
<td>Professional Issues-Phys Educ</td>
<td>3</td>
</tr>
<tr>
<td>PET 615</td>
<td>Research Methodology-Phys Educ</td>
<td>3</td>
</tr>
<tr>
<td>PET 638</td>
<td>Operant Principles-Physcl Educ</td>
<td>3</td>
</tr>
<tr>
<td>PET 665</td>
<td>Curriculum In Phys Educ</td>
<td>3</td>
</tr>
<tr>
<td>PET 668</td>
<td>Issues in Motor Development</td>
<td>3</td>
</tr>
<tr>
<td>PET 680</td>
<td>Theory of Fitness Education</td>
<td>3</td>
</tr>
<tr>
<td>PET 683</td>
<td>Principles-Effective Teaching</td>
<td>3</td>
</tr>
<tr>
<td>PET 685</td>
<td>Phys Educ Supervision Tech</td>
<td>3</td>
</tr>
<tr>
<td>PET 686</td>
<td>Teaching Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PET 688</td>
<td>Applied Motor Learning</td>
<td>3</td>
</tr>
<tr>
<td>PET 681</td>
<td>Motor Developmnt-Spec Populatn</td>
<td>3</td>
</tr>
<tr>
<td>PET course - Instructional Technology-Sport PE</td>
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<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>36</strong></td>
</tr>
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</table>

**Doctorate Degree**

WVU is the only institution in the state of West Virginia to offer the Doctorate of Education (Ed.D.) or the Doctorate of Philosophy (Ph.D.) in Kinesiology with a specialization in PETE. The difference between the Ed.D. and Ph.D. programs is one of depth of the research requirement rather than the central purpose of the programs. Both programs are designed to educate PETE leaders who will work at colleges, universities, educational agencies, and in school systems in order to bring the most current, research-based educational practices to PETE programs and ultimately to children, young adults and adults via school-based and community-based physical education programming.

The objectives of both doctoral programs are to:

1. Provide students with an in-depth understanding of the knowledge base surrounding the disciplines of PETE;
2. Educate, train, and produce highly competent graduates to function within PETE professions as researchers, teachers, grant writers, and applied practitioners;
3. Produce a scholars and professionals who will make significant contributions to the advancement of empirically-based knowledge in PETE;
4. Train students to produce original, theory-based research projects in PETE.

**Admissions**

Students must be admitted to the Ed.D. or Ph.D. program with either a Bachelor’s or a Master’s degree. Those admitted with a Bachelors degree will obtain a PETE Masters degree at WVU as part of their doctoral program of studies.

**Entrance standards**

The following minimum standards are all taken into consideration when admission decisions are made. When standards are not met in one area there is an expectation that other areas of performance are high enough to compensate for this deficiency. For example, some students are permitted to publish an adjudicated data-based research paper in lieu of standardized test scores that approach but do not meet minimal standards. The faculty believes that such an activity can enable students to demonstrate skills critical to completing the doctorate and successfully entering an academic career that are not addressed by standardized admissions test.

1. Undergraduate grade-point average of 3.0 from an approved institution;
2. Master’s degree grade-point average of 3.5 (Master’s applicants only);
3. Preferred 40% on verbal and quantitative and minimum 3.5 on analytical writing on the Graduate Record Exam (GRE);
4. Minimum TOEFL score of 550 (for paper-based test), 213 (for computer-based test), or 79 (for internet based test) for international applicants only;
5. Three letters of reference;
6. Professional goals statement and resume.

**Performance Standards**

Credit for courses in which a grade of lower than C is obtained will not count toward satisfying program requirements for both the Ed.D. or Ph.D. Students who fail to maintain a 3.0 GPA will be placed on probation and must bring their GPA up to 3.0 during the following semester.
If a student fails to bring his or her GPA up to 3.0, they will be dismissed from the program. Student research will be graded by the PETE faculty each semester. Research and grades will be satisfactory or unsatisfactory (S/U).

**Degree Requirements**

For the Ph.D. program the candidate must complete a series of research benchmarks beyond that required for the Ed.D. All students must complete the written and oral qualifying exam within the first two semesters of the program. All students must also pass a comprehensive exam as designated by the candidate’s doctoral committee, pass the dissertation prospectus, and successfully defend the dissertation. In addition, Ph.D. candidates must submit three publishable articles. The acceptability (publishable) of the articles will be determined by the candidate’s doctoral committee.

**Curriculum**

The curriculum for doctoral students in PETE major is comprehensive and is considered to be on the “cutting edge” of the field. The major will feature a program that includes coursework in three areas:

1. PETE
2. research methods, statistics and computer literacy, and
3. a cognate area selected by the student. Students also take a dissertation seminar, research, and dissertation credits.

**PETE Seminars and Readings (21 hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PET 735</td>
<td>Reading Research 1.</td>
<td>3</td>
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<tr>
<td>PET 745</td>
<td>Curriculum Development/Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>PET 785</td>
<td>Behavior Analysis</td>
<td>3</td>
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<tr>
<td>PET 791</td>
<td>Advanced Topics (subject matter changes)</td>
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**Research & Statistics (12-18 hours) - Possible Courses Include:**

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>EDP 612</td>
<td>Introduction to Research</td>
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<tr>
<td>EDP 613</td>
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<tr>
<td>EDP 711</td>
<td>Multivariate Methods 1</td>
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</tr>
<tr>
<td>EDP 712</td>
<td>Multivariate Methods</td>
<td>3</td>
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<tr>
<td>EDP 713</td>
<td>Designing Single Case Research</td>
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<tr>
<td>SPED 772</td>
<td>Professional Writing/Grant Writing</td>
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</table>

**Cognate (9-15 hours)**

**Dissertation Seminar & Research (24 hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SEP 765</td>
<td>Dissertation/Thesis Seminar</td>
<td>3</td>
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<tr>
<td>PET 797</td>
<td>Research</td>
<td>9</td>
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<tr>
<td>PET 796</td>
<td>Graduate Seminar (taken for a total of 12 hours)</td>
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</table>

**Benchmarks**

1. Research Benchmark #1 - Qualifying Exam
2. Research Benchmark #2 - Article Submission #1 (issues or data-based)
3. Research Benchmark #3 - Article Submission #2 (survey, pilot, or data-based)
4. Research Benchmark #4 - Comprehensive Exams
5. Research Benchmark #5 - Dissertation Prospectus
6. Research Benchmark #6 - Dissertation Defense & Article submission #3 (based on dissertation findings)

**Faculty**

**Professors**

- Andrew H. Hawkins - Ph.D. (Ohio State U.)
- Lynn Housner - Ph.D. (U. of Pittsburgh)
Associate Dean
• Robert L. Wiegand - Ed.D. (U. Georgia)

Associate professor
• Sean Bulger - Ed.D. (WVU)

Assistant professors
• Emily Jones - Ph.D. (U. Georgia)
• Andrea Taliaferro - Ph.D. (U. Virginia)

Visiting Associate

Ware Distinguished Professor

Sport and Exercise Psychology

Doctoral Program
Graduate studies in physical education leading to a Ph.D. in kinesiology with an emphasis in sport and exercise psychology. The students admitted into the doctoral program in SEP also complete a master’s degree in community counseling. Students can be admitted into the doctoral program in SEP with either a baccalaureate degree or a master’s degree.

Application Deadline
Application procedures for the Ph.D. in kinesiology with an emphasis in sport and exercise psychology must submit their on-line admission application to the Office of Admissions web site (www.wvu.edu) to be processed by the December 15 deadline for fall admission. Students must also submit an official undergraduate transcript(s) and application fee (online). Supplemental required materials (GRE scores, resume, goal statement and three letters of recommendation) must also be uploaded and submitted on-line. Once all the materials have been received, the admission application will be ready for the screening committee to review after the deadline date. Incomplete applications will not be reviewed. International applicants are strongly encouraged to submit their admission application and supplemental materials by October 1 to allow extra time for processing. Students who seek a graduate assistantship should complete and submit a Graduate Assistantship Application no later than February 1. The GA application can be downloaded by visiting the college web site at: cpass.wvu.edu and click on the "student" link at the top and the application is in a PDF format at the bottom of the first page.

Admission Criteria
The following criteria is used to evaluate applicants for admission to the doctoral program:
• Undergraduate degree grade point average of 3.0 from an approved institution
• Master’s degree grade point average of 3.5 from an approved institution (if applicable)
• Graduate Record Examination score - Verbal, Quantitative, and Writing percentiles above 50%. Student files will reviewed with scores lower than 50%.
• TOEFL scores for international students only (minimum required - 550 paper; 213 computer; 80 internet based)
• Three letters of recommendation (required to be submitted online - NO HARD COPIES)
• Professional goal (1-2 page on professional backgrounds, goals, and reasons for pursuing doctoral degree) to be submitted online
• Curriculum vitae to be submitted online
• Personal interview

The sport and exercise psychology program has procedures and requirements which are specific to the programs. In general, they include the following:
• Selection of an advisor. The program faculty, in consultation with the student, assigns an advisor to assist in planning the student’s program
• Selection of a Plan of Studies Committee. The student, in consultation with the advisor, selects a Plan of Studies Committee. This committee assists the students in developing a plan of studies which will include relevant coursework, evaluation of competencies, and an estimated time frame for its completion.
• Plan of Studies approval. The Plan of Studies Committee will meet with the student by March 1st of the first year in the program to ratify the plan. The approved plan of studies functions as the document against which completion of program requirements is assessed.
• Completion of required coursework. The student completes the coursework required by the plan of studies. The number of credit hours required and the time required to complete the coursework varies by program, but at least two years (four semesters) of coursework is normally required for students entering with a master’s degree.

• Comprehensive Examination. At the completion of coursework, the student will take a written and oral comprehensive examination specified by the program. The purpose of the examination is to assess competency in research and content areas relevant to the program. The length of the examination varies.

• Prospectus Defense. Following the successful completion of the comprehensive examination, the student will write and defend a prospectus for the dissertation. The prospectus will be evaluated by the student’s Dissertation Committee. The Dissertation Committee is often identical to the student’s Plan of Studies Committee, though additions or changes may be made to the Plan of Studies Committee at this time in order to constitute the Dissertation Committee.

• Admission to Candidacy. Once the comprehensive examination and prospectus defense are successfully completed, the student is admitted to candidacy. Admission to candidacy is permission to proceed with dissertation research as described in the prospectus.

• Defense of the dissertation. The student will write and orally defend an original research project as described in the prospectus. Successful defense will be determined by the quality of the written document as well as by the quality of the oral defense in a forum open to the academic community. All members of the student’s Dissertation Committee must be present for the dissertation defense. Successful defense of the dissertation results in the awarding of the degree. The dissertation must be successfully defended within five years of admission to candidacy.

Faculty

Professors

• Dana D. Brooks - Ed.D. (WVU)
  Dean
• Edward Etzel, Jr. - Ed.D. (WVU)
• Jack Watson - Ph.D. (Fla. St. U.)
  Chair - Sport Sciences
• Samuel Zizzi - Ed.D. (WVU)

Assistant professors

• Damien Clement - Ph.D. (WVU)
• Vanessa Shannon - Ph.D. (U. Tennessee-Knoxville)

Sport Management

On-Campus

The graduate on-campus sport management major requires 36 credit hours, including a six-hour internship. The application deadline is January 15 for fall admission to the on-campus program. The online application for graduate school, official transcript(s), and application fee must be submitted online to the Office of Admissions to be processed to begin the review by the January 15 deadline. The selection process for the 20 applicants (on-campus program only) who are accepted into the program is conducted during the spring semester and a personal or phone interview is a part of the selection process. Applicants will be notified of their selection by April 1. This program can be completed in one or two years.

A dual degree track between the on-campus sport management masters’ degree program and M.B.A. program in the College of Business and Economics also exists. This track requires two years to complete, as credits are used from each program to support the other. Students interested in the dual degree program must complete the online applications for admission to both the Sport Management Program (fall admission only) and the M.B.A. program (summer admission) and be admitted separately to both programs.

Curriculum Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SM 616</td>
<td>Sport Marketing Resrch Methods</td>
<td>3</td>
</tr>
<tr>
<td>SEP 620</td>
<td>Indvdl Intractn-Sprt/Phys Act</td>
<td>3</td>
</tr>
<tr>
<td>SM 627</td>
<td>Legal Issues-Sport Administrat</td>
<td>3</td>
</tr>
<tr>
<td>SM 630</td>
<td>Sport Sponsorshp/Sales Mgmnt</td>
<td>3</td>
</tr>
<tr>
<td>SM 635</td>
<td>Sport Management Processes</td>
<td>3</td>
</tr>
<tr>
<td>SM 646</td>
<td>Sport Marketing</td>
<td>3</td>
</tr>
<tr>
<td>SM 621</td>
<td>Sport Publicity/Public Relatns</td>
<td>3</td>
</tr>
<tr>
<td>SM 660</td>
<td>NCAA Compliance/Current Issues</td>
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</table>
Distance Education

The distance education hybrid sport management major requires 36 credit hours, including a six-hour internship. This program is completed on-line from a distance in the spring and fall semesters and on-campus during a two-week period during two consecutive summers. The application deadline is February 15 for summer admission into the hybrid distance education program. The online application for graduate school, official transcript(s), and application fee must be submitted to the Office of Admissions to begin the review process by February 15 for the distance education program. The selection process for those who apply to this program will be notified of their selection by April 15 for distance education program.

Suggested Plan of Study

### First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<tr>
<td>SM 646 (online)</td>
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<td>SM 627 (online)</td>
<td>3</td>
<td>SEP 620 (online)</td>
<td>3</td>
</tr>
<tr>
<td>SM 675</td>
<td>3</td>
<td>SM 640 (online)</td>
<td>3</td>
<td>SM 686 (on campus)</td>
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<td>SM 690 (on campus)</td>
<td>3</td>
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### Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SM 690 (online with technology presentation)</td>
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<td>SM 680 (online)</td>
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<td>SM 670 (on campus)</td>
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</tr>
<tr>
<td>SM 616 (on campus)</td>
<td>3</td>
<td>SM 690 (on campus)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credit hours: 36

### Admission Criteria

- Undergraduate degree grade point average (2.75 minimum for regular status) from an approved institution
- TOEFL scores for international applicants (minimum required: 550 paper; 213 computer, 80 internet based)
- Three letters of recommendation
- Resume, and
- 2-page Goal Statement

### Faculty

#### Associate professors
- Dallas Branch, Jr. - Ph.D. (Ohio U.)
- Dennis Floyd Jones - Ph.D. (U. of Pittsburgh)

#### Assistant professors
- Gonzalo Bravo - Ph.D. (Ohio State)
- Cindy Lee - Ph.D. (Ohio state)

#### Adjunct Instructors
- William Alsop - Ed.D. (WVU)
- Andro Barnett - Ph.D. (Temple U.)
- Matthew Borman - M.S. (WVU)
- Brad Cox - M.S. (WVU)
- Rosa D'Amico-Lopez - Ph.D. (U. of Australia)
- Anna Devito - Ph.D. (Syracuse U.)
- Daniel A. Oliver - J.D. (WVU)
• David Taylor - M.S. (WVU)
• Richard Wilson - JD (WVU)
Davis College of Agriculture, Natural Resources, and Design

Degrees Offered

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

- Division of Design and Merchandising
  - Master of Science in Design and Merchandising

- Division of Forestry and Natural Resources
  - Master of Science in Forestry
  - Master of Science in Recreation, Parks, and Tourism Resources
  - Master of Science in Wildlife and fisheries Resources
  - Doctor of Philosophy in Forest Resources Science

- Division of Plant and Soil Sciences
  - Master of Science in Genetics and Developmental Biology
  - Master of Science in Plant and Soil Sciences
  - Doctor of Philosophy in Agricultural Sciences
  - Doctor of Philosophy in Genetics and Developmental Biology

- Division of Resource Management
  - Master of Science in Agricultural and Extension Education
  - Master of Science in Agricultural and Resource Economics
  - Master of Landscape Architecture
  - Doctor of Philosophy in Resource Management and Sustainable Development

- Interdisciplinary Programs
  - Master of Agriculture, Forestry and Consumer Sciences
  - Master of Science in Genetics and Developmental Biology
  - Master of Science in Reproductive Physiology
  - Doctor of Philosophy in Agricultural Sciences Animal and Food Science, Plant and Soil Sciences
  - Doctor of Philosophy in Genetics and Developmental Biology
  - Doctor of Philosophy in Reproductive Physiology

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

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

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

Regular
A regular graduate student is a degree-seeking student who meets all of the criteria for regular admission to a program of his/her choice. The student must possess a baccalaureate degree from a college or university, have at least a grade point average of 2.75 on a 4.0 scale (or an average of 3.0 or higher for the last 60 credit hours), meet all criteria established by the degree program, and be under no requirements to make up deficiencies.

The student must:

• Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE), or the New Medical College Admissions Test (New MCAT).
• Provide three letters of reference from persons acquainted with the applicant’s professional work, experience, or academic background.
• Submit a written statement of 500 words or more indicating the applicant’s goals and objectives relative to receiving a graduate degree.
• International students have the additional requirement to submit a minimum score of 550 on the paper TOEFL examination or 213 on the electronic TOEFL examination if their native language is not English.
• The specific graduate programs may have additional requirements for admission.

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

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

A student must present evidence of a baccalaureate degree. A maximum of 12 credit hours of work as a non-degree student may be applied to a graduate degree if the student is later accepted into a graduate program.

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

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

Associate Dean for Academic Affairs
Davis College of Agriculture
Natural Resources, and Design
P.O. Box 6108
West Virginia University, Morgantown, WV 26506-6108
telephone (304) 293-2275
e-mail dsmith3@wvu.edu

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

• Ph.D. in Agricultural Sciences – Doctoral students may major in animal and food sciences or plant and soil sciences.
• Ph.D. in Forest Resources Science – Doctoral students may choose from the following areas of emphases: forest resource management; recreation, parks, and tourism resources; wildlife and fisheries management; or wood science and technology.
• Ph.D. in Resource Management and Sustainable Development – Doctoral students may choose from the following majors: agricultural and extension education; human and community development; natural resource economics; or resource management.
• Ph.D. in Genetics and Developmental Biology – Doctoral students may select areas of study related to human, plant, and animal genetics, and developmental biology in this interdisciplinary program.
• **Ph.D. in Reproductive Physiology** – Doctoral students may select courses in biochemistry, developmental embryology, endocrinology, pharmacology, physiology, reproductive physiology, and statistics in this interdisciplinary program.

http://www.wvu.edu/~exten/

Real-world learning and outreach experiences abound for undergraduate and graduate students who intern with the WVU Extension Service (WVU-ES). Part of an educational network of 105 land-grant universities, WVU-ES takes the helping hand of West Virginia University directly to thousands of West Virginians in communities scattered across the state. Through its Extension Service, the University provides a “mini-campus” in each of the state’s 55 counties. The work at these locations addresses a wide variety of community issues via a nontraditional mix of learners, faculty, staff, and volunteers.

Drawing on the strengths of WVU’s many academic disciplines, Extension educators target social, economic, environmental, and technical problems of communities. Some Extension educators work on WVU’s traditional campuses located in Morgantown, but many of the faculty work in county settings, generally located in or near each county’s government seat. Working daily with local residents, Extension faculty find their lives often intertwined with the issues that confront their local communities. They are committed to helping people find answers that work. As they solve problems along with local citizens, individually and in groups, Extension faculty and staff translate WVU’s research into action.

When graduate and undergraduate students take part in this action, they find the WVU Extension Service to be a fertile, flexible provider of a variety of internship, work-study, and volunteer experiences. Extension educators may involve students in some or in all phases of their educational projects—research, design, delivery, and evaluation. Depending on the project, students may have hands-on experience with computer networks, distance education, publication design and production, curriculum design and development, evaluation and research, and classroom teaching.

Extension’s many programs are driven by just four major initiatives: 4-H youth development, families and health, agriculture and natural resources, and community, economic, and workforce development. Extension’s program delivery, however, has roots in many career fields, including agriculture, business administration, child development, computer science, communications, environmental science, engineering, counseling and guidance, curriculum design, health education, home economics, journalism, and safety. Regardless of their academic disciplines, today’s students may find rich learning experiences—and rewarding careers—among Extension’s diverse educational programs. Examples include:

1. WVU Extension’s 4-H program builds leaders who have the confidence that comes from learning by doing. Using clubs, special interest programs, camping, school enrichment, and individual study, 4-H works with more than 7,900 adult volunteers to involve more than 80,000 youths in educational activities-reaching one in four West Virginia youths.

2. Diabetes is a major problem in West Virginia. Extension’s Dining with Diabetes is helping families learn how to select, prepare, and enjoy food that supports healthful eating habits. Each year, more than a thousand diabetes cooking school students attend classes in their own communities and learn how to plan and prepare meals that are appealing, tasty, and healthful.

3. Thousands of children in rural and low-income communities nourish their bodies and minds through the summertime Energy Express program. A partnership of WVU Extension and state and local organizations, the program helps children build critical reading skills while providing nutritious meals and valuable mentoring.

4. The First Impressions program offers West Virginia communities frank, detailed assessments of what works and what doesn’t, as seen through the eyes of strangers. Communities in Brooke, Grant, Hampshire, and Mineral counties are among those using this Extension program to make immediate improvements and guide long-term development.

5. Each year, more than 12,000 firefighters and emergency responders throughout West Virginia improve their skills through training offered by WVU’s Fire Service Extension. These programs help fire department personnel meet national certification standards and enhance their ability to protect people and property in their communities.

6. Helping West Virginia workers stay well and injury-free is the goal of WVU’s Safety and Health Extension. Industrial safety specialists teach employers and their workers how to protect themselves and the public from potential hazards encountered on the job.

7. Opening and improving farmers markets are just two approaches WVU Extension agents are using to help farm families improve their bottom line while they bring fresh, nutritious foods to local families via direct markets, grocery stores, and restaurants. WVU Extension is helping the state’s 22,000 farmers reach a wider consumer base through its Small Farm Center.

8. WVU’s International Extension programs open a window to the world. Through inter- national exchange programs, educational camps, and development projects and research studies abroad, West Virginians are learning how to cross culture and language barriers to form productive, rewarding partnerships in the global village.

Extension operates the University’s special-mission campus, which is WVU Jackson’s Mill State 4-H Camp. Located near Weston, WVU Jackson’s Mill annually draws more than 110,000 guests, who enjoy the 525-acre retreat facility’s meeting, camping, and heritage facilities.

WVU Extension programs are financed via a variety of funding combinations: federal appropriations and grants; state appropriations and grants; county commission, county school board, and other local governmental appropriations; and private grants.
Graduate and undergraduate internships, work-study appointments, and volunteer service positions may be available on the Morgantown campus and in any of the 55 counties. Program priorities and funding determine the duration of appointments during regular semester and summer sessions.

For more information, contact the WVU Extension Service at (304) 293-5691; or write to 808 Knapp Hall, P.O. Box 6031, Morgantown WV 26506-6031.

Faculty

Interim Dean
• Rudolph P. Almasy - Ph.D.
  West Virginia Agricultural and Forestry Experiment Station
  Status: Interim Director

Associate Dean for Academic Affairs
• Dennis K. Smith - Ph.D.

Associate Dean for Research and Outreach
• Tim T. Phipps - Ph.D.
  Associate Director

Division of Animal and Nutritional Sciences

Matthew E. Wilson, Interim Director
G038 Agricultural Sciences Building Division of Animal and Nutritional Sciences
e-mail: matt.wilson@mail.wvu.edu

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

The master of science in animal and nutritional sciences in the Davis College of Agriculture, Natural Resources, and Design allows maximum flexibility in courses and research problems. Students may major in either physiology, or nutrition and food sciences. They may work with beef and dairy cattle, sheep, swine, poultry, or laboratory animals and with issues in human health and nutrition. Research problems in farm animals, laboratory animals and human nutrition issues form the basis for many studies, but a comparative approach is emphasized. A master of science degree is available as a thesis or coursework option. The division offers the registered dietetic certification (RD) preparation internship program as a component of the masters of science degree program in animal and nutritional sciences.

Requirements
Prerequisites
Requirements are similar to those in other biological sciences. The student should have completed basic courses in the physical and biological sciences, including genetics, nutrition, and physiology. Deficiencies may prolong the time needed to complete degree programs. A composite graduate record examination score of 1,000 or better will be considered as a basis for admission. The fact that an applicant meets the above requirements shall not guarantee admission since each professor will accept only the number of students that can be supervised adequately with available facilities, time, and funds. Students interested in a Ph.D. should apply for admission to the doctoral program in agricultural sciences or reproductive physiology.

Faculty

Interim Director
• Matthew E. Wilson - Ph.D.

Professors
• Kenneth P. Blemings - Ph.D. (University of Wisconsin)
  Assistant Director - Academic Programs. Nutritional biochemistry.
• Robert A. Dailey - Ph.D. (University of Wisconsin)
  Reproductive physiology.
• E. Keith Inskeep - Ph.D. (University of Wisconsin)
  Reproductive physiology.
• Jeryl C. Jones - D.V.M., Ph.D. (Auburn University)
Veterinary radiology.
* P. Brett Kenney - Ph.D. (Kansas State University)
  Food science.
* Hillar Klandorf - Ph.D. (British Council for National Academic Awards)
  Physiology.
* Phillip I. Osborne - Ph.D. (Clemson)
  Extension specialist, Livestock marketing and production.

**Associate Professor**
* Eugene E. Felton - Ph.D. (University of Missouri)
  Ruminant nutrition.
* Cindy W. Fitch - Ph.D. (Case Western Reserve University)
  Human nutrition.
* Jacek Jaczynski - Ph.D. (Oregon State University)
  Muscle food safety. Food science.
* Marlon Knights - Ph.D. (West Virginia University)
  Reproductive physiology.
* Marie Krause - Ph.D. (University of Wisconsin-Madison)
  Ruminant Nutrition
* Kristen E. Matak - Ph.D. (Virginia Polytechnic Institute and State University)
  Food science and human nutrition.
* Joseph S. Moritz - Ph.D. (Kansas State University)
  Poultry science. Poultry nutrition.
* Susan N. Partington - Ph.D., R.D. (University of Wisconsin)
  Human nutrition and foods.
* Janet C. Tou - Ph.D. (University of Toronto, Canada)
  Human nutrition and foods.
* Matthew E. Wilson - Ph.D. (Iowa State University)
  Reproductive physiology.
* Jianbo Yao - Ph.D. (McGill University)
  Functional genomics.

**Assistant Professor**
* Kimberly M. Barnes - Ph.D (University of Nebraska)
  Animal science-biochemistry.
* Scott A. Bowdridge - Ph.D. (Virginia Tech)
  Food animal production, parasite immunology.
* Joseph W. McFadden - Ph.D. (Virginia Tech)
  Nutritional biochemistry.
* Melissa D. Olfert - Ph.D., R.D. (Loma Linda University)
  Graduate Dietetic Intern Program, Director. Human nutrition and foods.
* Holly Spooner - Ph.D. (Michigan State University)
  Physiology and nutrition-equine extension specialist.

**Clinical Associate Professor**
* Margaret A. Minch - D.V.M. (Ohio State University)
  Veterinary medicine.

**Teaching Assistant Professor**
* Megan Govindan - M.S., R.D. (West Virginia University)
  Human nutrition and foods.
* Crystal E. Smith - M.Agr., PAS (The Pennsylvania State University)
  Equine management

**Adjunct Faculty**
* Guendoline Brown - Ph.D. (Utah State University)
  Nutrition and health.
• Robert L. Cochrane - Ph.D. (University of Wisconsin)
• Ann Hubbs - Ph.D., D.V.M. (CSU; Texas A and M U.)
• Eric Johnson - Ph.D. (University of Wisconsin)
• Jean Meade - D.V.M., Ph.D., M.D. (VPI; West Virginia University)
• Dale Porter - Ph.D. (West Virginia University)
• Caird Rexroad - Ph.D. (Texas A and M U.)
• George R. Seiler - D.V.M. (Florida State University)
• Kenneth J. Semmens - Ph.D. (Auburn University)
• Alfred H. Still - Ph.D. (University of Cincinnati)

**Emeritus Faculty**

• William E. Collins - Ph.D. (University of Wisconsin)
• Leslie Dozsa - D.V.M. (C. Vet. Med., Budapest)
• Betty J. Forbes - R.D., L.D., M.A. (West Virginia University)
  Normal, community, and clinical nutrition.
• Mary K. Head - R.D., Ph.D. (Perdue University)
• William H. Hoover - Ph.D. (PSU)
• Paul E. Lewis - Ph.D. (West Virginia University)
  Reproductive physiology.
• M. Zafar Alam Nomani - Ph.D. (Rutgers University)
• Ronald Peterson - Ph.D. (Michigan State University)
• Edward C. Prigge - Ph.D. (University of Maine)
• Wayne R. Wagner - Ph.D. (Colorado State University)
  Extension specialist. Animal breeding and genetics.
• John Warren - Ph.D. (University of Maryland)
  Reproductive physiology.

**Reproductive Physiology**

• Robert Cochrane - PhD. (University of Wisconsin)
  Adjunct. Reproduction in laboratory and fur animals.
• Robert A. Dalley - Ph.D. (University of Wisconsin)
  Neuroendocrine control of reproduction, Follicular development, Ovulation.
• Mitchell S. Finkel - M.D. (University of Maryland)
  Cardiac endocrinology.
• Jorge A. Flores - (George Washington University)
  Hypothalamic-pituitary-ovarian interactions.
• Robert L. Goodman - Ph.D. (University of Pittsburgh)
  Neuroendocrine control of ovarian function.
• E. Keith Inskeep - Ph.D. (University of Pittsburgh)
  Neuroendocrine control of ovarian function.
• Michael G. Mawhinney - Ph.D. (West Virginia University)
  Endocrine pharmacology and metabolism of male sex accessory tissues.
• Rajesh K. Naz - Ph.D. (All India Institute of Medical Science)
  Male physiology and immunology.
• Michael W. Vernon - Ph.D. (University of Florida)
  Reproductive endocrinology.

**Agricultural Science**

Matthew E. Wilson, Interim Director
G038 AGS
Division Animal and Nutritional Sciences
e-mail: matt.wilson@mail.wvu.edu

Barton S. Baker, Director
1090 AGS
Degree Offered

- Doctor of Philosophy in Agricultural Sciences

The Davis College of Agriculture, Natural Resources, and Design offers graduate studies leading to the degree of doctor of philosophy in agricultural sciences. The doctoral program offers two majors: animal and food sciences, and plant and soil sciences. The objective of the degree program is to provide doctoral students an opportunity to study and conduct research with faculty in areas of excellence within the college. Students entering this program may select research and classes in ten areas of emphasis: agricultural biochemistry, animal nutrition, animal physiology, production management, crops agronomy, entomology, environmental microbiology, horticulture, plant pathology, and soil sciences.

Admission Requirements

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

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

- An applicant must possess a master's degree and hold a grade point average (GPA) of 3.0 or above (on a 4.0 scale) in postgraduate courses.
- The graduate record examination is required. A minimum score of 1,300 is expected for regular admission.
- A student whose native language is not English must have obtained a minimum score of 550 on the TOEFL examination.
- An applicant must provide three letters of reference.
- A one or two-page letter of intent from the student describing his/her research and professional aspirations are required.

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

After a student is admitted into the doctoral program, the appropriate division director will appoint a major professor in the appropriate field of study. Doctoral students will conduct research in support of projects approved by the West Virginia Agricultural and Forestry Experiment Station (WVAFES) or externally funded grants. The major professor, in consultation with the student and the division director, will select a Graduate Committee within the first semester of study. The committee will consist of five or more members, the majority of who must be WVU faculty, with at least one member representing a discipline outside the college. Each student and his or her committee will formulate a plan of study, which will be filed in the Office of the Associate Dean for Academic Affairs of the College. WVU regulations concerning committee membership will apply; that the chairman and at least two committee members must be regular members of the college's graduate faculty.

Core Courses

Doctoral students must satisfactorily complete a set of core courses before they will be admitted to candidacy for the Ph.D. degree. All core courses will be at the 600 or 700 level, except where indicated below. Certain course requirements may be waived if the student has received equivalent training in prior coursework. Additional coursework pertaining to the student’s area of specialization will be determined by the student’s major professor and Graduate Committee. Core courses for students in the doctoral program in agricultural sciences will be in the following areas.

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

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

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

Animal and Nutritional Science

e-mail: matt.wilson@mail.wvu.edu

Degrees Offered

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

The master of science in animal and nutritional sciences in the Davis College of Agriculture, Natural Resources, and Design allows maximum flexibility in courses and research problems. Students may major in either physiology, or nutrition and food sciences. They may work with beef and dairy cattle, sheep, swine, poultry, or laboratory animals and with issues in human health and nutrition. Research problems in farm animals, laboratory animals and human nutrition issues form the basis for many studies, but a comparative approach is emphasized. A master of science degree is available as a thesis or coursework option.

The division offers the registered dietetic certification (RD) preparation internship program as a component of the masters of science degree program in animal and nutritional sciences.

Prerequisites

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

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

Degree Discription

The master of science in animal and nutritional sciences in the Davis College of Agriculture, Natural Resources and Design allows maximum flexibility in courses and research problems. Students may major in either animal physiology and biochemistry or nutrition and food sciences. They may work with beef and dairy cattle, sheep, swine, poultry, or laboratory animals and with issues in human health and nutrition. Research problems in farm animals, laboratory animals and human nutrition issues form the basis for many studies, but a comparative approach is emphasized. A master of science degree is available as a thesis or coursework option.

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

Graduate Dietetic Internship

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

Students entering this program may select research and classes to emphasize areas of interest appropriate to the Division of Animal & Nutritional Sciences. Areas include agricultural biochemistry, animal nutrition, animal physiology, and human nutrition and food sciences. For more information, contact Dr. Matthew Wilson at (304) 293-2631 or matt.wilson@mail.wvu.edu.

Reproductive Physiology

E. Keith Inskeep, Chairperson of the Interdisciplinary Faculty
G-044 Agricultural Science Building
e-mail: einskeep@wvu.edu

Degrees Offered

• Master of Science in Reproductive Physiology
• Doctor of Philosophy in Reproductive Physiology

The graduate program in reproductive physiology, leading to master’s and doctoral degrees, is interdisciplinary, with faculty located in the Departments of Animal and Nutritional Sciences, Biology, Obstetrics and Gynecology, Pharmacology and Toxicology, Physiology, and Plant and Soil Sciences.

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

Curriculum Requirements

Research

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

Courses

The program draws on courses offered in various departments and includes courses in endocrinology, advanced reproductive physiology, biochemistry, physiology, statistics, and developmental embryology. Students present seminars and participate in journal clubs each semester.

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

Curriculum Requirements

Research

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

The program draws on courses offered in various departments and includes courses in endocrinology, advanced reproductive physiology, biochemistry, physiology, statistics, and developmental embryology. Students present seminars and participate in journal clubs each semester.

Division of Forestry and Natural Resources

Degrees Offered

- Master of Science in Recreation, Parks, and Tourism Resources
- Master of Science in Wildlife and Fisheries Resources
- Master of Science in Forestry
  - Areas of Emphasis
    - Forest Resources Management
    - Wood Science and Technology
- Doctor of Philosophy in Forest Resources Science
  - Areas of Emphasis
    - Forest Resources Management
    - Recreation, Parks, and Tourism Resources
    - Wildlife and Fisheries Resources
    - Wood Science and Technology

e-mail: Joseph.McNeel@mail.wvu.edu

The Division of Forestry and Natural Resources offers three Master of Science degree programs. Students wishing to pursue studies in forest resources management or wood science and technology should apply for admission to the Master of Science in Forestry. A student seeking admission to work toward the degree of Doctor of Philosophy in Forest Resources Science in the Davis College of Agriculture, Natural Resources, and Design may choose as the major field of study forest resources management; recreation, parks, and tourism resources; wood science and technology; or wildlife and fisheries resources. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

Admission Requirements—Master’s Degree Programs

Admission requirements are those of the Davis College of Agriculture, Natural Resources, and Design. Additionally, students seeking admission for the degree of master of science in forestry should have completed an undergraduate curriculum in forestry. A student whose undergraduate degree is in a field other than forestry will ordinarily be required to take supplemental undergraduate courses. Candidates for the degree may emphasize in forest biometry, forest ecology, forest economics, forest genetics, forest management, forest meteorology, silviculture, or wood science and technology. The candidate must complete 30 hours of approved study, six hours of which shall constitute a thesis. The program ordinarily requires two years of residence.

The Division of Forestry and Natural Resources offers program options leading to the master of science for students who wish to major in recreation, parks, and tourism resources. Students selecting this graduate program may emphasize recreation management and policy, environmental education and interpretation, and natural resource based tourism. Degree requirements are either 30 semester hours of approved study, including a six credit-hour thesis, or 36 semester hours without a thesis but including a three credit-hour field project. This program ordinarily requires two years of residence.

Graduate studies in wildlife and fisheries resources in the Division of Forestry and Natural Resources lead to the master of science degree. Students may elect either 30 semester hours of approved study, including a six-hour thesis, or 36 hours of approved study without a thesis but including a three-hour problem paper.

Curriculum Requirements for Ph.D.

Curriculum requirements for all Ph.D. candidates include a block of graduate courses in the major field, which will constitute a comprehensive review of the significant knowledge in that field, and a block of graduate courses in a minor field of study. A minimum of 60 semester hours beyond the bachelor’s degree and exclusive of the dissertation is required.
Dissertation and Final Examination

The research work for the doctoral dissertation must show a high degree of scholarship and must present an original contribution to the field of forest resources science. In addition to coursework and the dissertation, the candidate is required to pass a qualifying examination and a final examination.

Faculty

Director

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

Program coordinators

• John R. Brooks - Ph.D. (University of Georgia)
  Forest Resource Management, Professor, Forest Biometrics
• Kyle J. Hartman - Ph.D. (University of Minnesota)
  Wildlife and Fisheries Resources, Professor, Fisheries and Aquatic Ecology, Fish Management, Tropics Ecology
• David A. Smaldone - Ph.D. (University of Idaho)
  Recreation/Parks and Tourism, Associate Professor, Environmental Interpretation and Education
• Jingxin Wang - Ph.D. (University of Georgia)
  Wood Science and Technology, Professor, Forest Operations, Management, Bioenergy

Professors

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

Associate professors

• Kathryn G. Arano - Ph.D. (Mississippi State University)
  Forest Resources Management, Forest Economics
• Robert C. Burns - Ph.D. (Pennsylvania State University)
  Recreation/Parks and Tourism, Leisure Studies
• Jinyang Deng - Ph.D. (University of Alberta)
  Recreation/Parks and Tourism, Recreation and Leisure Studies

Assistant professors

• Gregory A. Dahle - Ph.D. (Rutgers University)
  Forest Resources Management, Arboriculture
• David B. DeVallance - Ph.D. (Oregon State University)
  Wood Science, Sustainable Product Development
• Kudzayi Maumbe - Ph.D. (Michigan State University)
  Recreation/Parks and Tourism, Tourism Marketing
• Gloria S. Oporto - Ph.D. (University of Maine - Orono)
  Wood Science, Wood-based Composites and Bioproducts
• Kaushlendra Singh - Ph.D. (University of Georgia)
Wood Science, Biofuel and Bioenergy Production

• Benjamin D. Spong - Ph.D. (Oregon State University)
  Wood Science, Extension Specialist, Forest Operations
• Anthony C. Tomkowski - M.S.F. (West Virginia University)
  Forest Resources Management, Forestry, Fisheries, Forest Water Quality
• Amy B. Welsh - Ph.D. (University of California - Davis)
  Wildlife and Fisheries, Ecology, Conservation Genetics
• Nicolas P. Zegre - Ph.D. (Oregon State University)
  Forest Resources Management, Forest Hydrology
• Mo Zhou - Ph.D. (University of Wisconsin)
  Forest Resources Management, Forest Economics

Research assistant professors

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

Teaching assistant professor

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

Adjunct faculty

• Kelly Bricker - Ph.D. (Pennsylvania State University)
  Recreation/Parks and Tourism
• Adam E. Duerr - Ph.D. (University of Vermont)
  Wildlife and Fisheries
• Nathan J. Harlan - M.A. (Geneva College)
  Recreation/Parks and Tourism
• Patricia M. Mazik - Ph.D. (Memphis State University)
  Wildlife Fisheries
• Gary Miller - Ph.D. (Virginia Tech)
  Forest Resources Management
• Margaret Pings - M.S. (West Virginia University)
  Recreation/Parks and Tourism
• Steven J. Storck - Ph.D. (West Virginia University)
  Recreation, Parks and Tourism
• Stuart A. Welsh - Ph.D. (West Virginia University)
  Wildlife and Fisheries
• Petra B. Wood - Ph.D. (University of Florida)
  Wildlife and Fisheries
• Sera J. Zegre - M.S. (Oregon State University)
  Recreation, Parks and Tourism

Emeritus Faculty

• James P. Armstrong - Ph.D. (State University of New York)
  Wood Science.
• Eugene C. Bammel - Ph.D. (Syracuse University)
  Recreation, Parks, and Tourism.
• Lei L. Bammel - Ph.D. (University of Utah)
  Recreation Parks and Tourism.
• Samuel D. Brock - Ph.D. (University of Minnesota)
  Forest Resources Management.
• Kenneth L. Carvell - D.F. (Duke University)
  Forest Resources Management.
• Jack E. Coster - Ph.D. (Texas A&M University)  
  Forest Resources Management  
• Ray R. Hicks Jr. - Ph.D. (State University of New York)  
  Forest Resources Management.  
• Norman D. Jackson - M.S. (North Carolina State University)  
  Wood Science.  
• William E. Kidd Jr. - M.S. (Virginia Tech)  
  Forest Resources Management.  
• Elemer M. Lang - Ph.D. (Virginia Tech & University of West Hungary)  
  Wood Science.  
• Edwin D. Michael - Ph.D. (Stephen F. Austin State University)  
  Wildlife and Fisheries.  
• David E. Samuel - Ph.D. (West Virginia University)  
  Wildlife and Fisheries.  
• Robert L. Smith - (Cornell University)  
  Wildlife and Fisheries.  
• Stanislaw Tajchman - Ph.D. (Munich University)  
  Forest Resources Management.  
• David E. White - Ph.D. (State University of New York)  
  Forest Resources Management.  
• Harry V. Wiant Jr. - Ph.D. (Yale University)  
  Forest Resources Management.  
• David O. Yandle - Ph.D. (North Carolina State University)  
  Forest Resources Management.

Doctor of Philosophy in Forest Resources Science

Degrees Offered
• Doctor of Philosophy in Forest Resource Science  
  • Areas of Emphasis  
    • Forest Resource Management  
    • Recreation/Parks and Tourism Resources  
    • Wildlife and Fisheries Resources  
    • Wood Science and Technology

Admission
A student seeking admission to work toward the degree of doctor of philosophy in forest resources science in the Davis College of Agriculture, Natural Resources, and Design may choose as the major field of study forest resources management; recreation/parks and tourism resources; wood science and technology; or wildlife and fisheries resources. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

Curriculum Requirements
Curriculum requirements for all Ph.D. candidates include a block of graduate courses in the major field, which will constitute a comprehensive review of the significant knowledge in that field, and a block of graduate courses in a minor field of study. A minimum of 60 semester hours beyond the bachelor's degree and exclusive of the dissertation is required.
Dissertation and Final Examination
The research work for the doctoral dissertation must show a high degree of scholarship and must present an original contribution to the field of forest resources science. In addition to coursework and the dissertation, the candidate is required to pass a qualifying examination and a final examination.

Master of Science in Forestry
Degrees Offered
- Master of Science in Forestry
  - Areas of Emphasis
    - Forest Resources Management
    - Wood Science and Technology

Admission Requirements—Master’s Degree Programs
Admission requirements are those of the Davis College of Agriculture Natural Resources, and Design. Additionally, students seeking admission for the degree of master of science in forestry should have completed an undergraduate curriculum in forestry or wood science. A student whose undergraduate degree is in a field other than forestry or wood science will ordinarily be required to take supplemental undergraduate courses. Candidates for the degree may emphasize in forest biometry, forest ecology, forest economics, forest business, forest management, forest hydrology, silviculture, wood science and technology, forest operations, wood composites, wood marketing, bio-energy and bio-fuels. The candidate must complete 30 hours of approved study, six hours of which shall constitute a thesis. The program ordinarily requires two years of residence. The Division of Forestry and Natural Resources in the Davis College of Agriculture, Natural Resources, and Design requires 3 letters of recommendation and a one page goal statement which identifies the area of specialization the student desires to study.

Master of Science in Recreation, Parks and Tourism Resources
Degrees Offered
- Master of Science in Recreation, Parks and Tourism Resources

A student seeking admission to work toward the degree of doctor of philosophy in forest resources science in the Davis College of Agriculture, Natural Resources, and Design may choose as the major field of study forest resources management; recreation, parks, and tourism resources; wood science and technology; or wildlife and fisheries resources. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

Cultural Resource Management Certificate
The Eberly College of Arts and Sciences also offers an interdisciplinary graduate-level 15-hour certificate in cultural resource management (CRM) that is coordinated by the Department of History. Most CRM students earn the graduate certificate in conjunction with a M.A. in history, public administration, recreation parks and tourism, geography, design, art history, or one of several other related graduate degree programs. The requirements for the CRM certificate consist of 12 credit hours of coursework and a three-hour internship or an individual research project (HIST 620). All CRM students must successfully complete HIST 600. Students who are currently admitted to, or enrolled in, a graduate degree program must register their intent to earn the CRM certificate with the CRM coordinator during the semester prior to their internship. Students who wish to pursue the graduate certificate independent of a graduate degree program must be admitted as non-degree graduate students prior to registering their intent to earn the CRM certificate. Each student is expected to maintain an average GPA of 3.0.

Admission Requirements—Master’s Degree Programs
The Division of Forestry and Natural Resources in the Davis College of Agriculture, Natural Resources, and Design offers program options leading to the master of science for students who wish to major in recreation, parks, and tourism resources. Students selecting this graduate
program may emphasize recreation management and policy, environmental education and interpretation, and natural resource based tourism.

**Curriculum Requirements**

Degree requirements are either 30 semester hours of approved study, including a six credit-hour thesis, or 36 semester hours without a thesis but including a three credit-hour field project. This program ordinarily requires two years of residence.

**Master of Science in Wildlife and Fisheries Resources**

**Degrees Offered**

- Master of Science in Wildlife and Fisheries Resources

A student seeking admission to work toward the degree of doctor of philosophy in forest resources science in the Davis College of Agriculture, Natural Resources, and Design may choose as the major field of study forest resources management; recreation, parks, and tourism resources; wood science and technology; or wildlife and fisheries resources. Within these major fields of study, specialization is limited only by the range of competencies in the graduate faculty.

**Curriculum Requirements**

Graduate studies in wildlife and fisheries resources in the Division of Forestry and Natural Resources lead to the master of science degree. Students may elect either 30 semester hours of approved study, including a six-hour thesis, or 36 hours of approved study without a thesis but including a three-hour problem paper.

**Division of Plant and Soil Sciences**

e-mail: bbaker2@wvu.edu

**Degrees Offered**

- Master of Science in Plant and Soil Sciences
- Master of Science in Genetics and Developmental Biology
- Doctor of Philosophy in Genetics and Developmental Biology

**Areas of Emphasis**

The master of science in plant and soil sciences degree is offered to students who wish to study crops agronomy, entomology, environmental microbiology, horticulture, plant pathology, or soil science. Students interested in the Ph.D. in these disciplines should apply to the doctoral program in agricultural sciences.

**Program Objective**

The objective of the M.S. in plant and soil sciences is to provide students the opportunity to take courses and conduct original, master’s-level research in their areas of specialization. The educational experience obtained through courses and research is expected to provide students with the background and expertise to enter doctoral programs or professional careers as agronomists, entomologists, microbiologists, horticulturists, and plant pathologists or soil scientists. These disciplines are critical to maintaining agriculture and forest productivity, solving environmental problems, and promoting economic development in the state.

**Admission and Performance Standards**

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

- Possess a baccalaureate degree;
- Have a minimum undergraduate grade point average of 2.75 (3.0 for acceptance as a regular graduate student.);
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or other tests/evidence;
- Provide three letters of reference from persons acquainted with the applicant’s professional work, experience, or academic background; and
- Submit a written statement of approximately 500 words indicating the applicant’s goals and objectives relative to receiving a graduate degree.
International students have the additional requirement to submit a minimum score of 213 on the computer based TOEFL examination if their native language is not English. Interviews are encouraged but not required.

Students enrolled in the M.S. in plant and soil sciences must complete STAT 511, STAT 512, and three semesters of seminar in their area of emphasis. Other class requirements will be determined by the student’s Graduate Committee and made a part of the student’s plan of study. This degree requires a minimum of 30 graduate credit hours, six of which may be research.

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

Faculty
Director
• Barton S. Baker - Ph.D. (WVU)
  Division Director, Graduate Program Coordinator

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

Associate professors
• Jedidiah Doelling - Ph.D. (Washington University)
  Genetics and Developmental Biology, Molecular Biology, Protein Degradation
• James B. Kotcon - Ph.D. (University of Wisconsin)
  Plant Pathology, Agroecology, Nematology, Organic Farming Practices
• Eugenia M. Pena-Yewtuukiw - Ph.D. (University of Kentucky)
  Soil Science
• James A. Thompson - Ph.D. (University of Minnesota)
  Soil Science, Pedology and Land Use
• Sven Verlinden - Ph.D. (Perdue University)
  Horticulture, Post Harvest Physiology, Molecular Biology

Assistant professors
• Vagner A. Benedito - Ph.D. (Wageningen University, The Netherlands)
  Genetics and Developmental Biology, Plant Genomics, Functional Genetics and Plant Physiology
• Thomas C. Griggs - Ph.D. (Texas Tech University)
  Agronomy, Field and Forage Crops
• Yong-Lak Park - Ph.D. (Iowa State University)
  Entomology, Geospatial Ecology of Insects, Integrated Pest Management, Spatial Interaction Between Insect and Plant Diseases
• Nicole Waterland - Ph.D. (Ohio State University)
  Horticulture, Flower Senescence
Faculty Emeriti

- James W. Amrine, Jr.
- Robert E. Anderson
- John A. Balasko
- John F. Baniecki
- Bradford C. Bearce
- James L. Brooks
- William B. Bryan
- Linda Butler
- Edward S. Elliott
- Mannon E. Gallegly, Jr.
- Henry W. Hogmire
- L. Morris Ingle
- Robert F. Keefer
- Joginder Nath
- Oscar E. Schubert
- John C. Sencindiver
- Rabindar N. Singh
- Charles B. Sperow, Jr.
- William Van Eck
- Robert J. Young
- Richard K. Zimmerman

Adjunct Faculty

- Michael Glenn
  Soil Science
- Lee Kass
- Stephen S. Miller
  Horticulture
- Tong-Man Ong
  Genetics
- Paul F. Ziemkiewicz
  Soil Science
- Thomas van der Zwet
  Plant Pathology

Genetics and Development Biology

Barton S. Baker, Division Director
1090 Agricultural Sciences Building
e-mail: barton.baker@mail.wvu.edu

Degrees Offered

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

Admission

To be considered for admission in the program the student must possess a baccalaureate degree from an accredited college or university, must have a grade point average of at least a 2.75 (on a 4.0 scale), or an average of 3.0 or higher for the last 60 credit hours, or an average of 3.0 or higher in all courses in sciences and mathematics.

GRE and New MCAT

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

Basic training in mathematics, physics, chemistry, and biology is required for admission. Students lacking prerequisites may be accepted in a provisional status but must fulfill them before graduation. Applications for graduate study should be sent in as early in the year as possible, but not later than April 1 for entry the following August. However, applications are accepted year-round for admission to the program in the following semester. Official transcripts of baccalaureate and/or master’s degrees must be sent directly to the WVU Office of Admissions. Application forms can be received from the WVU Office of Admissions, P.O. Box 6009, Morgantown, WV 26506-6009. For further information, write to the department chair.

Areas of Emphasis

The master of science and doctor of philosophy degrees are offered in genetics and developmental biology, an interdisciplinary program involving the faculty and facilities of a number of departments in the various colleges and schools of the University. A student may concentrate in genetics or developmental biology. The areas in which emphases are offered are as follows.

**Genetics** – Biochemical and molecular genetics, cytogenetics, developmental genetics, immunogenetics, mutagenesis, toxicology, human genetics, plant genetics, population and quantitative genetics, and animal breeding.

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

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

Requirements

Students are expected to maintain at least a 3.0 (B) grade point average in all work offered in fulfillment of the degree program. For a more complete statement of requirements, the student is referred to the program’s Guidelines for Graduate Students in the Genetics and Developmental Biology Program.

Program Objective

The objective of this program is an increased level of understanding of modern concepts and methodologies employed in genetic and developmental biological work and to prepare a student to pursue a career in teaching and/or research. Responsibility for a student’s program is vested in a graduate committee charged with arranging the student’s coursework, conducting examinations, and supervising the research.

Areas of Emphasis

The master of science and doctor of philosophy degrees are offered in genetics and developmental biology, an interdisciplinary program involving the faculty and facilities of a number of departments in the various colleges and schools of the University. A student may concentrate in genetics or developmental biology. The areas in which emphases are offered are as follows.

**Genetics** – Biochemical and molecular genetics, cytogenetics, developmental genetics, immunogenetics, mutagenesis, toxicology, human genetics, plant genetics, population and quantitative genetics, and animal breeding.

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

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

Requirements

Students are expected to maintain at least a 3.0 (B) grade point average in all work offered in fulfillment of the degree program. For a more complete statement of requirements, the student is referred to the program’s Guidelines for Graduate Students in the Genetics and Developmental Biology Program.

Program Objective

The objective of this program is an increased level of understanding of modern concepts and methodologies employed in genetic and developmental biological work and to prepare a student to pursue a career in teaching and/or research. Responsibility for a student’s program is vested in a graduate committee charged with arranging the student’s coursework, conducting examinations, and supervising the research.
Master of Science in Plant and Soil Science

Barton S. Baker, Director
1090 Agricultural Sciences Building
Division of Plant and Soil Sciences and Graduate Program Coordinator
e-mail: bbaker2@wvu.edu

Degrees Offered

- Master of Science in Plant and Soil Sciences

Area of Emphasis

The master of science in plant and soil sciences degree is offered to students who wish to study crops agronomy, entomology, environmental microbiology, horticulture, plant pathology, or soil science. Students interested in the Ph.D. in these disciplines should apply to the doctoral program in agricultural sciences.

Program Objective

The objective of the M.S. in plant and soil sciences is to provide students the opportunity to take courses and conduct original, master’s-level research in their areas of specialization. The educational experience obtained through courses and research is expected to provide students with the background and expertise to enter doctoral programs or professional careers as agronomists, entomologists, microbiologists, horticulturists, and plant pathologists or soil scientists. These disciplines are critical to maintaining agriculture and forest productivity, solving environmental problems, and promoting economic development in the state.

Admission and Performance Standards

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

- Possess a baccalaureate degree
- Have a minimum undergraduate grade point average of 2.75 (3.0 for acceptance as a regular graduate student.)
- Have an adequate academic aptitude at the graduate level as measured by the Graduate Record Examination (GRE) or other tests/evidence
- Provide three letters of reference from persons acquainted with the applicant’s professional work, experience, or academic background
- Submit a written statement of approximately 500 words indicating the applicant’s goals and objectives relative to receiving a graduate degree.

International students have the additional requirement to submit a minimum score of 213 on the computer based TOEFL examination if their native language is not English. Interviews are encouraged but not required.

Students enrolled in the M.S. in plant and soil sciences must complete STAT 511, STAT 512, and three semesters of seminar in their area of emphasis. Other class requirements will be determined by the student’s Graduate Committee and made a part of the student’s plan of study. This degree requires a minimum of 30 graduate credit hours, six of which may be research.

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

Division of Resource Management

Jerald J. Fletcher, Director
e-mail: jerry.fletcher@mail.wvu.edu
Peter V. Schaeffer, Graduate Program Coordinator
e-mail: peter.schaeffer@mail.wvu.edu

Degrees Offered

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

The Division of Resource Management’s primary mission is to prepare leaders who influence the economic, social, aesthetic, and functional development of communities, states, and nations, dedicated to the improvement of quality of life for all members of society in harmony with the natural environment.

The Division of Resource Management offers curricula in agricultural and extension education, landscape architecture, and agricultural and resource economics. The curriculum in agricultural and resource economics allows emphasis in environmental and resource economics, or agribusiness management and rural development.

Students are prepared to pursue graduate studies or work in agriculture, business, industry, government, finance, and related areas. The curriculum in agricultural and extension education prepares students to teach agriculture in secondary schools, enter the extension service, or accept professional employment in government, industry, or entrepreneurship. An agricultural and extension education major can also elect to specialize in environmental technology with employment opportunities available in related activities after graduation. The landscape architecture curriculum prepares students for professional careers with private firms and government agencies.

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

Division of Resource Management Programs that offer Doctoral Degrees

The Ph.D. in Resource Management and Sustainable Development Areas of Emphasis:
- Natural Resource Economics (NRE)
- Agricultural and Extension Education (AGEE)
- Resource Management (RM)
- Human and Community Development (HCD)

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

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

Admission Requirements

The following admission and performance standards, in addition to university and college requirements, are normally required to qualify for acceptance as a regular student to the Ph.D. program in Resource Management and Sustainable Development:
- A master’s degree and a grade point average (GPA) of 3.0 or higher (on a 4.0 scale) in graduate courses is normally required for the AGEE, RM, and HCD areas. Applicants for the NRE area that are not prepared to take the Ph.D. sequence in micro economic theory, mathematical economics, and econometrics will be admitted to the M.S. program in agricultural and resource economics.
- A minimum combined score of 300 for the verbal and quantitative sections of the Graduate Record Examination (GRE).
- Three letters of reference from individuals who can attest to the applicant’s potential for academic success and/or relevant career-related experiences should be sent directly to the graduate program coordinator, Division of Resource Management, or sealed in an envelope with the writer’s signature over the seal and included with the other application materials.
• A résumé or curriculum vita.
• Coursework in intermediate microeconomics theory, statistics, and calculus for those seeking admittance into the RM or NRE areas.
• Four years of career-related experience is required for those seeking admittance into the AGEE area.
• Other supporting materials you wish to have considered with your application.

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

Degree Requirements

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

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

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

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

Faculty

Director
• Jerald J. Fletcher

Graduate Program Coordinator
• Peter V. Schaeffer

Professors
• Alan R. Collins - Ph.D. (Ore. St. U.)
  Resource economics.
  Status: Assistant Director
• Michael J. Dougherty - Ph.D. (Va. Tech.)
  Environmental design and planning.
• Gerard E. D’Souza - Ph.D. (Miss. St. U.)
  Production economics, Finance.
• Jerald J. Fletcher - Ph.D. (U. Cal.)
  Energy, environmental and resource economics.
  Status: Director
• Stacy A. Gartin - Ph.D. (Ohio St. U.)
  Communications, Program planning, Leadership development, Teaching methods.
• Tesfa Gebremedhin - Ph.D. (Okla. St. U.)
  Farm management, Agribusiness.
• Tim T. Phipps - Ph.D. (U. Cal.)
  Resource economics, Agricultural policy.
  Status: Associate Dean
• Peter V. Schaeffer - Ph.D. (U. Southern Cal.)
  Regional science, Applied microeconomics.
  Status: Graduate Program Coordinator
• Dennis K. Smith - Ph.D. (Penn. St. U.)
  Rural development, Agribusiness management.
  Status: Associate Dean
Associate Professor

- Deborah A. Boone - Ph.D. (Ohio St. U.)
  Extension education, Leadership development, Program evaluation and development.
- Harry N. Boone, Jr. - Ph.D. (Ohio St. U.)
  Computing technology, Teaching methods, Social science research.
- Cheryl Brown - Ph.D. (U. Cal. Bk.)
  Agricultural policy, Resource economics, Agribusiness.
- Donald J. Lacombe - Ph.D. (Fla. St. U.)
  Spatial econometrics, Public choice and industrial organization.
- Steven B. McBride - M.L.A. (U. Mass.)
  Landscape construction, Site design.
- Kerry S. Odell - Ph.D. (Ohio St. U.)
  Research methodology, Microcomputer applications, Teaching methods.

Status: Provost Potomac State College

- Mark Sperow - Ph.D. (Colo. St. U.)
  Production and resource economics.
- Michael P. Strager - Ph.D. (WVU)
  Spatial analysis, Decision support.
  Computer applications, Site analysis

Assistant Professor

- J. Wesley Burnett - Ph.D. (U of Georgia)
  Resource, environmental and energy economics.
- Peter Butler - M.L.A. (Iowa St.)
  Cultural landscape planning and interpretation, Community design.
- Angela Campbell - M.L.A. (U. of Mich.)
  Natural stormwater systems, Landscape ecology.
- Hodjat Ghadimi - Ph.D. (Ohio St. U.)
  Sustainable development.
  Virtual simulation and design education.
- Fonda Holehouse - J.D. (WVU)
  Agricultural and natural resource, Environmental and Enterprise development and law.
- Ashley Kyber - M.S. (Clemson U.), M.F.A. (Cranbrook)
  Community design landscape/public art, Environmental/green design.
- Doug LaVergne - Ph.D. (Tex. A&M U.)
  Diversity and multiculturalism, Teacher education, Social science research.
- Blessing Maumbe - Ph.D. (Mich. St.)
  Agribusiness management and marketing.
- Doolarie Singh-Knights - Ph.D. (WVU)
  Natural resource economics.
  Urban design, Site design, Professional practice.

Professors Emeriti

- Donald R. Armstrong - M.L.A. (La. St.)
- Alfred L. Barr - Ph.D. (Okla. St. U.)
- Dale K. Colyer - Ph.D. (U. Wisc.)
- Gerald V. Eagan - Ph.D. (U. Tenn.)
- Robert Jack - Ph.D. (Penn St. U.)
- Walter C. Labys - Ph.D. (U. Nottingham)
- Layle D. Lawrence - Ph.D. (L.S.U.)
- George W. Longenecker - M.F.A. (U Ill.)
- Kenneth D. McIntosh - Ph.D. (U Wisc.)
Agricultural and Extension Education

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

Degrees Offered

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

There are two graduate options available in Agricultural and Extension Education. Individuals desiring advanced study in teaching agriculture in public schools, communication and leadership, or extension education may earn a Master of Science in Agricultural and Extension Education. For individuals interested in the opportunity to study and conduct research with faculty in agricultural and extension education, a Ph.D. in Resource Management and Sustainable Development with an emphasis in Agricultural and Extension Education is available.

The agricultural and extension education faculty offer master’s programs for persons desiring advanced study in teaching agriculture in public schools, communications and leadership, or extension education. Candidates for the master of science degree may be admitted on a regular or provisional basis. A student who does not have a B.S. in agriculture with a major in agricultural and extension education may be required to complete undergraduate courses in agriculture and professional education if he or she plans to obtain certification to teach. Students in the curriculum take graduate courses in both technical and professional education. Programs are planned to ensure that candidates develop competence in:

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

All graduate courses offered toward the degree must be approved by the student’s Graduate Committee. A thesis is required as part of the 30 credit-hour graduation requirement.

The agricultural and extension education faculty offers a Ph.D. with a major in agricultural and extension education (AGEE) or human and community development (HCD) as part of the Ph.D. program in resource management and sustainable development.

• Beyond the core, AGEE majors take four courses covering research design, data analysis, program development, and program evaluation. Additional courses in teaching and learning theory, educational psychology, supervision, administration and leadership, and statistics are recommended. Students will have two fields of specialization consisting of a minimum of 12 to 15 semester hours of coursework each, not counting research.

• Beyond the core, HCD majors take four courses covering research design, data analysis, program development, and program evaluation. Additional courses related to qualitative research, policy, administration, and the philosophical, theoretical, and empirical foundations related to human community growth and sustainability. Students will have two fields or specialization consisting of a minimum of 12 to 15 semester hours of coursework each.

Agricultural and Resource Economics

Peter V. Schaeffer, Graduate Program Coordinator
e-mail: Peter.Schaeffer@mail.wvu.edu

Degrees Offered

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

The Ph.D. degree is the most advanced degree offered and prepares candidates for work at the highest level of the profession as a faculty member, staff in a research organization or governmental and non-governmental agencies, or as a consultant.

M.S. in Agricultural and Resource Economics

The Agricultural and Resource Economics faculty offer a master’s program for persons desiring advanced study in agricultural, environmental, natural resource, energy, and local and regional economic development. Candidates for the master of science degree may be admitted on a regular or provisional basis. Prerequisites for admission include:

- Twelve or more semester credits in economics, agricultural and resource economics, statistics, or appropriate social science courses (should include a course in intermediate microeconomics).
- Three or more semester hours of credit in calculus.

Students lacking these prerequisites have to complete coursework to acquire them. Graduate programs are planned to ensure that candidates develop competence in:

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

Graduate courses offered toward the degree must be approved by the student’s Graduate Committee. Thesis and non-thesis options are available for the master’s degree. Students should select one option by the time 12 hours of coursework are completed (usually by the end of the first semester in the program) and after consulting with their Graduate Advisor or Committee. Candidates with graduate research assistantships must select the thesis option.

Thesis option

A minimum of 30 credit hours of approved course work can include not more than six hours of credit for the thesis. Proficiency in economics plus agricultural and resource economics is expected. Approved courses in closely related areas may be included. The student’s Graduate Committee must approve the student’s course of study and thesis topic.

Coursework option

- A minimum of 36 credit hours of approved coursework to provide proficiency in economics, resource, and agricultural and resource economics. Courses in closely related areas may be included if approved by the student’s Graduate Committee.
- The student must satisfactorily complete a written and oral examination administered by the student’s Graduate Committee.

Doctor of Philosophy

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

All doctoral students in the Division of Resource Management take a set of common core courses in (1) research methods, (2) a teaching practicum, and (3) graduate seminar for a total of at least 9 credit hours.

- Beyond the core, NRE students take courses in advanced microeconomic theory, mathematical economics, econometrics, and quantitative methods. Two fields of specialization are required.
- Beyond the core, RM students take courses covering microeconomic theory, policy analysis, natural resource and environmental economics, and econometrics/statistics. There are two fields of specialization (one must be in Spatial Econometrics and Analysis) required each with a minimum of 9 hours.
- Beyond the core, HCD students must take at least 18 credit hours of coursework in theory, methods, and application. Two fields of specialization are required, each consisting of a minimum of 9 credit hours of coursework.

An examination is required for each field of specialization. Student with a master’s degree may petition their Graduate Committee to accept this degree as meeting the requirements for one field examination.
Landscape Architecture

Charles B. Yuill, Graduate Program Coordinator

email: charlie.yuill@mail.wvu.edu

Degrees Offered

- Master of Landscape Architecture (MLA)

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

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

The landscape architecture faculty offers the master of landscape architecture (MLA) as a professional degree leading to the practice of landscape architecture. Candidates for the M.L.A. may enter the program with a B.S.L.A., B.L.A., or a related design degree and pursue a 38 credit-hour course of study culminating in the preparation of either a masters thesis or terminal project. For these students the M.L.A. will serve as a post-professional degree providing the opportunity for advanced or specialized studies in particular areas of landscape architecture. Students entering the program with a B.S. or B.A. in a non-design discipline are required to complete an additional 28 credits of leveling courses prior to entering the second year of a three-year course of study with the 38 credit-hour course of study to be completed in years two and three. For these students, the M.L.A. will serve as the first professional degree that is required for entry into the profession of landscape architecture. Studies for these students will also culminate in the preparation of a masters thesis or terminal project.

The master of landscape architecture program provides opportunities for both foundation and advanced training in the core areas of landscape architecture including site and environmental design, land use planning, construction methods and materials, landscape management, and plant materials and planting design. It is anticipated that many students, particularly those pursuing the post-professional degree, will take interdisciplinary approaches to their studies as will be expected of them in practice. There are 12 credit hours of electives in the curriculum. These would allow the student to tailor a series of course in areas of focus such as community planning and design, environmental restoration, or environmental and natural resource analysis methods including geographic information systems and remote sensing.

Coursework

A total of 38 credit hours are required for the post-professional MLA program. The requirements for the first professional degree include an additional 28 undergraduate and graduate credits prior to commencing with subsequent graduate courses.

Thesis or Terminal Project

Students will be required to complete either a research thesis on a problem in environmental or community design or landscape architecture or an applied comprehensive professional project. Each student selecting the thesis option will defend their thesis in a public forum before their committee. The comprehensive project option will result in a professional submission that includes a written report and appropriate professional drawings documenting the design project for a project subject to realistic conditions. It will also include a formal public presentation/defense before the students’ committee.

The composition of graduate advisory committees will follow Davis College and WVU guidelines and must have at least two landscape architecture faculty members and one outside member. Two of the committee members must be full members of the graduate faculty and the third may be an associate member.
Eberly College of Arts and Sciences

The Eberly College of Arts and Sciences, West Virginia University’s largest college, has approximately 300 faculty in academic departments and program areas in literature and the humanities, social and behavioral sciences, and mathematics and natural sciences. The college supports 19 graduate programs, 11 of which include doctoral programs; its departments occupy 12 buildings on the Downtown campus. Many of the faculty enjoy distinguished national and international reputations and have been honored for excellence in teaching, research, and service. Their awards not only acknowledge extreme dedication but also accentuate the relationship between the faculty and the students. Graduate students often collaborate with faculty on specialized research projects which lead to publications in national and international journals. In 2009, the faculty of the college produced over 400 publications, delivered over 450 professional presentations, and received over 200 grants and contracts, over 100 professional association citations and academic honors. In recent years, arts and sciences faculty have generated over $15,000,000 annually in external support for research and instruction.

Degrees Offered

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

- Master of Science, Doctor of Philosophy in Biology
- Master of Science, Doctor of Philosophy in Chemistry
- Master of Arts, Doctor of Philosophy in Communication Studies
- Master of Arts, Master of Fine Arts, Doctor of Philosophy in English
- Master of Arts in Foreign Languages
- Master of Science in Forensic Science
- Master of Arts, Doctor of Philosophy in Geography
- Master of Science, Doctor of Philosophy in Geology
- Master of Arts in History and Public History, Doctor of Philosophy in History
- Master of Arts in Liberal Studies
- Master of Legal Studies
- Master of Science, Doctor of Philosophy in Mathematics
- Master of Science, Doctor of Philosophy in Physics
- Master of Arts, Doctor Philosophy in Political Science
- Master of Arts, Master of Science, Doctor of Philosophy in Psychology
- Master of Public Administration
- Master of Social Work
- Master of Arts in Sociology and Anthropology
- Master of Science in Statistics

The Eberly College of Arts and Sciences offers doctoral programs in biology, chemistry, communication studies, English, geography, geology, history, mathematics, physics, political science, and psychology. Available research or teaching concentrations are as follows:

- Biology—ecology and evolutionary biology, forensic biology, genetics and genome biology, and neurobiology and endocrinology.
- Chemistry—analytical, biological, inorganic, organic, and physical.
- Communication studies—instructional, interpersonal, and organizational.
- English—literature.
- Geography—human geography, environmental geography, geographic information science.
- Geology—energy geology, geophysics, hydrogeology, environmental geology.
- History—United States (Appalachia), Europe, Africa, science, and technology.
- Mathematics—selected areas of pure, applied, and discrete mathematics.
- Physics—condensed matter, applied physics, plasma physics, astrophysics, electro-optics, elementary particle physics, and radio astronomy.
- Political science—public policy analysis (domestic and international).
- Psychology—behavior analysis, developmental psychology, and clinical psychology.
Faculty

Dean
• Robert H. Jones - Ph.D.
  Status: Regular Graduate Faculty

Associate Deans
• Joan S. Gorham - Ed.D
  Academic Affairs
  Status: Regular Graduate Faculty
• Katherine Karraker - Ph.D.
• Fred L. King - Ph.D.
  Research and Graduate Studies
  Status: Regular Graduate Faculty
• Asuntina S. Levelle - J.D.
  Finance
• L. Christopher Plein - Ph.D.
  School of Social Sciences
  Status: Regular Graduate Faculty

Biology

Degrees Offered
• Master of Science
• Doctor of Philosophy

Nature of the Program
The Department of Biology’s graduate program is dedicated to scholarship in academics and research. The objectives of the program are to empower students to:

1. recognize important biological problems;
2. design, execute, and analyze experiments aimed at solving important problems; and
3. communicate their findings in oral and written form. In addition, the program hopes to foster an awareness of the social and political issues of the day related to biology, and a desire to continue independent study after graduation.

The Department of Biology offers graduate courses and research that lead to M.S. and Ph.D. degrees in biology. The focal areas of research in the graduate program are: Biochemistry and Molecular Biology; Bioinformatics, Genetics, Genomics and Evolutionary Biology; Biology Education; Cell and Developmental Biology; Ecology; Forensic Biology; Neurobiology, Behavior and Physiology; and Plant Sciences.

Master of Science

Prerequisites and Requirements
Applicants for the master of science program in biology must show, at the minimum, the equivalent of a bachelor’s degree from an accredited institution, an undergraduate grade point average of 3.0, a 40th percentile ranking for the verbal, quantitative, and analytical sections of the Graduate Record Examination, and an adequate science and mathematics background (normally one year of mathematics, one year of physics, and two years of chemistry). Certain international applicants must have a TOEFL score greater than 250 for the computer-based exam which is roughly equivalent to more than 600–603 for the paper-based test, and roughly equivalent to more than 100 for the internet-based test.

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

The WVU general requirements for the master of science are outlined elsewhere in the graduate catalog. Students in the biology M.S. program may apply up to six hours of research credit toward the 30-hour requirement; the remaining 24 hours of credit must be earned in graduate courses that reflect a diversified exposure to biology. The establishment of an Advisory Committee and the generation of a
program of study are explained in detail in the department’s Graduate Student Handbook. A final oral examination is administered by the Advisory Committee after the program of study has been completed and the thesis has been submitted.

Doctor of Philosophy
Program
The program for the degree of doctor of philosophy reflects a flexible, research-oriented approach geared to develop the interests, capabilities, and potentials of mature students. Applicants must have met all the entrance requirements listed above for the master of science program, but a 50th percentile ranking or higher in the verbal quantitative and analytical section of the GRE is expected. Acceptance into the Ph.D. program is by vote of the Graduate Committee of the Department of Biology. This committee ensures that all entrance requirements are met or that provisions have been made to remedy the deficiencies, and that facilities and personnel are adequate to support the program to a successful conclusion.

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

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

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

Candidacy
Successful passage of the preliminary examination leads to promotion to candidacy. Once promotion to candidacy is awarded, doctoral students typically have no more than six and a half more years in which to complete the remaining degree requirements including their final examination. The expected time to completion of the Ph.D. degree is 4-5 years, however all requirements for a graduate degree must be completed within a period of 8 years, starting with the initial enrollment after the most recent degree. The final examination consists of the submission of a completed and acceptable written dissertation and an oral dissertation defense. A formal departmental seminar covering the dissertation research must be presented before graduation.

Faculty
Chairperson
• Richard B. Thomas - Ph.D. (Clemson U.)

Professors
• Ashok Bidwai - Ph.D. (Utah St. U.)
  Biochemical and molecular genetic analysis of protein kinases.
• Jonathan R. Cumming - Ph.D. (Cornell U.)
  Plant physiology, Rhizosphere ecology.
• Jorge A. Flores - Ph.D. (George Wash. U.)
  Endocrinology of reproduction, Signal transduction.
• James B. McGraw - Ph.D. (Duke U.)
  Plant ecology, Plant population biology, Conservation biology.
• Richard B. Thomas - Ph.D. (Clemson U.)
  Physiological plant ecology, Global environmental change.

Associate Professor
• Jim Belanger - Ph.D. (U. Toronto)
  Neural basis of behavior; adaptive behavior; comparative physiology.
• Clifton P. Bishop - Ph.D. (U. Va)
  Developmental and molecular biology of Drosophila.
• Kevin C. Daly - Ph.D. (U. of Az.)
  Psychophysics and neurophysiology of Manduca sexta.
• Stephen DiFazio - Ph.D. (Ore. St. U.)
  Plant genomics, Ecological genetics.
• Sarah M. Farris - Ph.D. (U. of Ill.)
  Nervous system evolution and development, entomology.
• William T. Peterjohn - Ph.D. (Duke U.)
  Biogeochemistry, Ecosystem ecology.

Assistant Professor
• Jennifer Hawkins - Ph.D. (Iowa State U.)
  Plant comparative genomics, Molecular evolution, Regulation of Gene Expression
• Rita V. M. Rio - Ph.D. (Yale U.)
  Symbiosis; microbe interactions, Vector-borne diseases.
• Shuo Wei - Ph.D. (U. of Miami, FL)
  Plant comparative genomics, Molecular evolution.
• Michelle D. Withers - Ph.D. (U. Az.)
  Biology education: scientific teaching.

Clinical Associate Professor
• Donna Ford-Werntz - Ph.D. (Wash., St. Louis)
  Plant systematics.

Chemistry

Degrees Offered
• Master of Science
• Doctor of Philosophy

Nature of the Program
The Department of Chemistry offers graduate studies leading to the degrees of master of science and doctor of philosophy with research concentration in the areas of analytical, biological, inorganic, organic, and physical chemistry. The master of science and doctor of philosophy degrees require completion of a research project which represents the principal component of the graduate program. The M.S. program is limited in scope and involves advanced coursework and a study of a problem in chemical research culminating in the preparation and oral defense of a M.S. thesis. The Ph.D. program has a much wider scope than the M.S. program. Ph.D. students are expected to take a broad range of advanced coursework, both within and outside of the major area of interest. The major emphasis of the Ph.D. program is on research. A typical research problem may take several years to complete and involves many advanced techniques and concepts at the frontiers of chemical knowledge. The Ph.D. program culminates in the preparation and and defense of the Ph.D. dissertation.

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

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

Thesis/Credits
The WVU general requirements for the master of science degree are outlined elsewhere in this catalog. Graduate students in the M.S. program in chemistry are required to submit a research thesis. They may apply up to six hours of research credit toward the 30-hour
requirement. The remaining 24 hours of credit must be earned in the basic graduate courses which reflect a diversified exposure to chemistry; no more than ten hours may be elected outside the department; and coursework taken at the 500- to 700-level must include at least three, three-credit-hour courses distributed in at least two areas outside the student’s major area of research. Students are required to enroll in the departmental seminar program and are required to attend special lectures and seminars offered by visiting scientists. A final oral examination is administered after completion and submission of the thesis.

Doctor of Philosophy
The program for the degree of doctor of philosophy reflects a flexible, research-oriented approach geared to develop the interests, capability, and potential of students. A program of courses is recommended to suit individual needs based on background and ability. These courses are classified as basic graduate courses which present the essentials of a given discipline on an advanced level, and specialized graduate courses that take one to the frontiers in a specific area of research. The course offerings are designed to provide guidelines from which students can launch their independent studies in preparation for candidacy examinations. Students are required to enroll in the departmental seminar program and are required to attend special lectures and seminars offered by visiting scientists. Graduate students in the Ph.D. program are required to satisfactorily complete a minimum of three courses (three credits each) at the 500–700 course level, offered by the Department of Chemistry and distributed in at least two areas outside their major area of research. In addition, each major area in chemistry requires students in that area to enroll in basic graduate courses presenting the essentials of that discipline on an advanced level.

Research
Research, which is the major theme of graduate studies, may be initiated as early as the student and faculty feel appropriate for the individual. Normally, a student will begin laboratory work no later than the second semester. Upon successful completion of an original piece of research, the candidate will present results in a Ph.D. dissertation and at the appropriate time defend the work in a final oral examination.

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

Faculty
Chair
- Terry Gullion - PHD (William and Mary)
  Physical Chemistry, Solid state NMR, Biological materials, Polymers

Associate Chair
- Jeffrey L. Petersen - PHD (U. Wisc-Madison)
  Physical inorganic chemistry, Electrophillic Transition metal complexes, X-ray crystallography

Professors
- Harry O. Finklea - Ph.D. (Calif. Inst. Tech.)
  Analytical/Physical chemistry, Electron transfer kinetics, Solid oxide fuel cells, Gas phase sensors
- Charles Jaffe - Ph.D. (U. Colo.)
  Theoretical chemistry, Molecular dynamics, Chaotic systems
- Fred L. King - Ph.D. (U. Va)
  Analytical chemistry, Mass spectrometry, Trace elements, Gas-phase chemistry
- John H. Penn - Ph.D. (U. Wisc.)
  Chemical education, On-line instruction methods in organic chemistry
- Kenneth Showalter - Ph.D. (U. Colo.)
  Bennett Distinguished Professor, Physical chemistry, Chemical kinetics, Multi-stability and oscillating systems.
- Bjorn C. Soderberg - Ph.D. (Royal Inst. of Tech., Sweden)
  Organic synthesis using transition metals
- Kung K. Wang - Ph.D. (Purdue U.)
  Eberly Distinguished Professor of Chemistry, Organic Chemistry, Stereoselective synthesis, Natural products

Associate Professor
- Suzanne Bell - PHD (New Mexico St. U.)
Analytical chemistry, Forensic science
• Lisa Holland - PHD (U.North Carolina)
  Micro-separations, High throughput drug screening
• Michelle Richards-Babb - PHD (Lehigh U.)
  Chemical education
• X. Michael Shi - PHD (U. Maryland)
  Organic Synthesis, Bioorganic chemistry
• Ronald B. Smart - Ph.D. (U. Michigan)
  Environmental analytical chemistry, Electrochemistry, Trace metals, Coal Chemistry
• Alan M. Stolzenberg - Ph.D. (Stanford U.)
  Inorganic chemistry, Bioinorganic chemistry, Organometallic chemistry

Assistant Professor
• Jonathan Boyd - Ph.D. (U. Tex.)
  Analytical biochemistry and toxicology
• Fabien Goulay - Ph.D (U.Rennes)
  Physical Chemistry, Laser spectroscopy
• Justin Legleiter - Ph.D. (Carnegie Mellon U.)
  Biophysical chemistry, Atomic force microscopy
• Brian Popp - PHD (U. Wisc-Madison)
  Organic and Organometallic chemistry, Catalysis

Communication Studies

Degrees Offered
• Master of Arts
• Doctor of Philosophy

Nature of Program
The Department of Communication Studies offers the M.A. and the Ph.D. degrees in Communication Studies. Communication scholars seek to discover the mechanisms and rules that govern the wide range of communication activities using a battery of social scientific techniques. We try to develop theories that will account for why we act the way we do. The graduate faculty in the Department of Communication Studies is well-known, at the regional, national, and international level, for accomplishments in research, teaching, and service.

Nature of the Program
The Department of Communication Studies offers work leading to the degree of master of arts, with a concentration in communication theory and research. Persons who possess a bachelor's degree from an accredited college or university may be admitted to the program. Qualified graduate students from a variety of disciplines are admitted to the program. The master of arts degree program is intended to qualify the student to:
• Assume a variety of professional roles in educational, organizational, health, governmental, or media institutions.
• Teach the subject matter in high school and/or college.
• Undertake advanced training toward a doctorate in the behavioral/social sciences.

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

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

All students planning to continue graduate study past the M.A. level are encouraged to enter program A. The following are required:
• At least 36 hours of graduate credit, 30 of which must be in the Department of Communication Studies. A maximum of six hours of thesis credit will be allowed.
• Completion of COMM 700 and COMM 701.
• A thesis.
• An oral examination on the thesis.

Program B

All students planning a professional career in a field other than education are encouraged to enter this program. This is normally a terminal degree program in communication studies. The following are required:

• A minimum of 36 hours of coursework with at least 30 hours in the Department of Communication Studies.
• Successful completion of written and oral comprehensive examinations. The oral examination may be waived with the approval of the student’s Examination Committee and the departmental coordinator of graduate studies.

Program C

All students planning a professional career in elementary or secondary education are encouraged to enter this program. This is normally a terminal degree program in communication studies. Students may complete this program through off-campus study, on-campus study, or a combination.

The following are required:

• A minimum of 36 hours of coursework with at least 30 hours in the Department of Communication Studies.
• Successful completion of written and oral comprehensive examinations. The oral examination may be waived with the approval of the student’s Examination Committee and the departmental coordinator of graduate studies.

Doctor of Philosophy

The Ph.D. program in Communication Studies is a 54 hour program (including dissertation hours) which affords students the opportunity to focus on three domains of communication: instructional communication, interpersonal communication, and organizational communication. Students will be awarded the Ph.D. upon completing 54 graduate credit hours, passing comprehensive exams; writing a dissertation proposal; and writing and defending a dissertation. Students are required to take:

Required Courses

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>COMM 600</td>
<td>Communication in the Classroom</td>
<td>3</td>
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<tr>
<td>COMM 602</td>
<td>Interpersonal Comm: Theory/Rsch</td>
<td>3</td>
</tr>
<tr>
<td>COMM 606</td>
<td>Theory/Rsch-Organizational Comm</td>
<td>3</td>
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<tr>
<td>COMM 700</td>
<td>Survey of Human Comm Theory</td>
<td>3</td>
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<tr>
<td>Core COMM courses at the 700 level, this may include:</td>
<td>9</td>
<td></td>
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<tr>
<td>COMM 702</td>
<td>Advanced Interpersonal Comm</td>
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<td>COMM 706</td>
<td>Advanced Organizational Comm</td>
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<tr>
<td>COMM 719</td>
<td>Advanced Instructional Comm</td>
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Research methods beyond COMM 701

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Additional COMM courses

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Dissertation research

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Total Hours

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<td></td>
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<td>54</td>
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</table>

(i.e., COMM 797 Research). A GPA of 3.0 is required for graduation and any grade lower than B does not count toward the 54 hours. Students who receive more than six hours of C may not be permitted to remain in the program.

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

Upon completion of the 36 hours of coursework, students take a comprehensive examination. The comprehensive examination consists of three sections on which students will be tested: one of the three domains of communication emphasis (i.e., instructional, interpersonal, and organizational), one domain of communication selected by the student and quantitative research methods. The written examination will be followed by an oral examination approximately one week later.
Once the written and oral comprehensive examinations have been successfully defended (as determined by the committee), students write a dissertation proposal and submit the proposal to their committee. Once the proposal has been approved, students write and defend their dissertation. The dissertation defense is open to the public.

Applying for Admission to the Program

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

1. The application for admission to graduate school at West Virginia University.
2. Scores on the Graduate Record Examination (GRE). Applicants should have a minimum combined score of 1,000 on the verbal and quantitative components of the GRE and a minimum score of 4.0 on the analytical component of the GRE. Scores should not be older than five years at the time of application.
3. Scores on the Test of English as a Foreign Language Examination (TOEFL) (for international students only whose native language is not English). Scores will be accepted from any of three versions (i.e., Internet-based test, computer-based test, paper-based test). Applicants should score in the 90th percentile of the test version taken.
4. All official undergraduate and graduate transcripts. Transcripts must be mailed directly from the registrar of the college and/or university attended. Applicants should have a minimum undergraduate GPA of 2.75 and a minimum graduate GPA of 3.30.
5. A vita. The vita should include all formal education, any teaching or professional work experience, and any research projects conducted to date.
6. A statement of interest. The statement of interest is a three- to four-page, typed document in which applicants identify
   A. their reasons for pursuing a Ph.D. in communication studies
   B. their reasons for wanting to attain their Ph.D. degree in communication studies at West Virginia University
   C. their research interests and how these interests correspond with the research conducted by the department faculty
   D. the faculty members whose research interests are most closely aligned with their own educational and career goals, and
   E. why attaining the Ph.D. degree in communication studies specifically from West Virginia University is vital to the achievement of their career goals.
7. Three letters of recommendation from individuals familiar with the applicant’s academic progress and potential. These letters of recommendation should address whether the applicant has the ability to succeed in the Ph.D. program in communication studies at West Virginia University as both a Ph.D. student and as a graduate teaching assistant.
8. A sole-authored sample of scholarly writing completed in the applicant’s M.A. program. This sample can be a course paper, a convention paper, a thesis or major project, or a journal article.
9. Any additional supporting evidence. This evidence can include, but is not limited to, awards received for outstanding research, teaching, or academic endeavors; a convention paper or journal article of which the applicant is a co-author; a newspaper or magazine article; or teaching evaluations.

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

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

Faculty

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

Professors
- Rebecca M. Chory - Ph.D. (Michigan State University) Organizational Communication, Mass Communication, Research Methods
- Joan S. Gorham - Ph.D. (Northern Illinois University) Associate dean. Instructional, intercultural, and mass media.
- Matthew M. Martin - Ph.D. (Kent State University) Chairperson. Interpersonal, Instructional, Communication traits.
- Scott A. Myers - Ph.D. (Kent State University)
group, instructional, interpersonal
• Keith Weber - Ed.D. (West Virginia University)
  Communication Campaigns, Quantitative Methods, Instructional Communication

Associate Professor
• Maria Brann - Ph.D. (University of Kentucky)
  Health, Interpersonal and qualitative research methods.
• Megan Dillow - Ph.D. (Pennsylvania State University)
  Interpersonal Communication, Communication Theory, Relational Communication
• Alan Goodboy - Ph.D. (West Virginia University)
  Instructional Communication, Interpersonal Communication, Quantitative Methods
• Brian R. Patterson - Ph.D. (University of Oklahoma)
  Developmental communications, Communication theory.

Assistant Professor
• Nicholas Bowman - Ph.D. (Michigan State University)
  Communication Technology, Media Psychology, Mass Communication, Media Effects, Entertainment and Emotion
• Danielle Dolin-Bane - Ed.D. (West Virginia University)
  Organizational Communication, Training and Development, Instructional Communication
• Christy Rittenour - Ph.D. (University of Nebraska)
  Family, Life-span, Interpersonal.
• Andrea Weber - Ed.D. (West Virginia University)
  Communication Assessment, Leadership, Communication Ethics
• David Westerman - Ph.D. (Michigan State University)
  Computer mediated communication, Mass communication, Social influence.

Professor emeritus
• James C. McCroskey - Ed.D. (Pennsylvania State University)

Professor emerita
• Virginia P. Richmond - Ph.D. (University of Nebraska)

English

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

Master of Arts

The Master of Arts (M.A.) in English is a two-year program designed for students who have shown an aptitude for sustained literary study, and who desire to pursue a more intensive and extensive academic training. The M.A. program has five primary goals: (1) to extend the student’s knowledge of the cultural, linguistic, and literary heritage of Great Britain, America, and other English-speaking lands; (2) to introduce students to the critical and professional discourses of academics in literary and linguistic studies; (3) to develop the student’s research, writing, and analytical skills, which are necessary for professional success; (4) to provide professional training to prepare students to teach English at the post-secondary level; (5) and to counsel students to craft their program of study to meet their professional and personal needs.

The M.A. program meets these goals by providing a rotation of courses in literature, linguistics, theory, and pedagogy that require extensive reading, writing, research, and oral presentations. With small classes, students receive individual attention from the faculty, which facilitates student progress. M.A. students are eligible for teaching assistantships within the English Department, which provide training in pedagogy.

The knowledge and skills that students acquire in the M.A. program provide the requisite foundation to pursue doctoral work in English, with the ultimate goal of becoming a professional scholar and academic at a post-secondary institution. The academic training provided by the M.A. also is applicable for careers in secondary education, professional writing, and editing.
Master of Arts in Professional Writing and Editing

The MA in Professional Writing and Editing is a 30-hour degree that combines theories of writing with practice in real-world writing situations. Students will study professional writing theory, the history of rhetoric, editing, rhetorical analysis, new modes of digital composition, and writing ethics. This degree prepares students for a variety of career options, including technical writing and editing, project management, writing consulting, writing instruction, and advanced graduate study in rhetoric and composition. The degree is designed for both newly-graduated undergraduates and working adults who want more training in writing and editing.

Master of Fine Arts

The Master of Fine Arts in creative writing is a three-year academic/studio program that combines an apprenticeship to the craft with more traditionally academic elements. This approach seeks to train students in ways that reflect the realities of the writer/artist’s evolving role in the academy. Because writers, when hired to teach, are often asked to handle a variety of courses beyond the creative writing workshop, the academic/studio format requires students to take literature and pedagogy courses in addition to writing workshops.

Thus, the M.F.A. is both an academic and a professional degree. As part of WVU’s comprehensive Center for Writing Excellence, this degree allows students to prepare for careers in teaching or professional writing/editing. Our objective is to nurture and mentor the many Writers in the region seeking professional training. We also intend to attract student writers from all over the country to West Virginia for the opportunity to live and write in this culturally rich state and to work with our faculty. The ultimate goal is to produce writers who will publish literature and contribute to the culture; a secondary goal is to offer practical skills and opportunities to writers interested in pursuing writing-related professions.

Doctor of Philosophy

The doctoral program in English offers opportunities for specialization in literary studies, cultural studies, or composition and rhetoric. The program has five goals: (1) to build upon the broad foundations of the M.A. degree’s focus on the cultural, linguistic, and literary heritage of Britain, America, and other English-speaking lands; (2) to help students to develop fluency in the critical discourses of the profession; (3) to help students to develop professional competency in three fields of research, as dictated by the Examination for Formal Admission to Candidacy; (4) to help students to develop the research, writing, and analytical skills necessary for professional success; and (5) to provide professional training and counseling to prepare graduates to teach English professionally on the post-secondary level.

These goals are met by the various features of our program, which include course work, examinations, and both formal and informal instruction and advising regarding professional teaching and research responsibilities. Doctoral study culminates in the writing of the dissertation, which is designed to contribute to the critical and/or theoretical discussion in its field and to prepare the doctoral candidate for further research and publication as a professional scholar and teacher.

Master of Arts

Admission

To be admitted to the Department of English as prospective candidates for the degree of master of arts, students are expected to have completed work comparable to the department’s undergraduate requirement for English majors (but with records distinctly above the average), and to present as part of their applications their scores on the verbal and analytic sections of the Graduate Record Examination General Aptitude Test and, if nonnative speakers of English, their TOEFL scores. Past experience has shown that successful graduate students usually score at least the 60th percentile on the verbal section of the GRE. Students also must provide three letters of reference and a sample of their academic writing.

Non-thesis Option

Course Requirements

M.A. candidates selecting the non-thesis option must successfully complete 30 hours of coursework in English, according to the following distribution and breadth requirements, and must fulfill the foreign language requirement. Students may take three hours of coursework in another department, subject to the approval of the Graduate Program Committee.

Distribution Requirements

• ENGL 609 (required of all graduate teaching assistants in their first semester in residence; students who do not hold an assistantship will substitute three additional hours of elective).
• Foundation course: either ENGL 680 or ENGL 682.
• Electives: 18 hours of 600-level courses or 700-level seminars in English (excluding ENGL 790). A maximum of three hours of Independent Study (ENGL 695 or ENGL 795) may be counted toward the elective hours.
• Seminars: six hours of 700-level seminars (excluding ENGL 790 Teaching Practicum).

Breadth Requirements

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

Course Requirements M.A. candidates selecting the non-thesis option must successfully complete 30 hours of coursework in English, according to the following distribution and breadth requirements, and must fulfill the foreign language requirement. Students may take three hours of coursework in other departments subject to the approval of Graduate Program Committee.

Distribution Requirements

- ENGL 609 (required of all graduate teaching assistants in their first semester in residence; students who do not hold an assistantship will substitute three additional hours of elective).
- Foundation course: either ENGL 680 or ENGL 682.
- Electives: 12 hours of 600-level courses or 700-level seminars in English (excluding ENGL 790). A maximum of three hours of Independent Study (ENGL 695 or ENGL 795) may be counted toward the elective hours.
- Seminars: six hours of 700-level seminars (excluding ENGL 790).

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

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

Master of Arts in Professional Writing and Editing

Admission

Prospective candidates for admission are expected to have completed an undergraduate degree in English or an allied field with a record distinctly above average or to have at least two years’ work experience in writing and editing. Applications must be supported by a portfolio of written work and three letters of recommendation. The GRE analytical writing test, taken within the last five years, is recommended; successful candidates will typically present a score of five or above. The program recognizes, however, that not all potentially excellent graduate students fit this profile and welcomes applications from individuals who can make a strong case that they will succeed. Non-native English speakers must present TOEFL scores of at least 600 for the written exam or equivalent scores for the online version.

Course Requirements

The M.A. in PWE requires 30 hours of coursework distributed in four areas: foundations of professional writing and editing (9 hours); electives in professional writing and editing (6 hours); general distribution (9–12 hours); and practical experience (3–6 hours). Students must work with an advisor to file an approved plan of study by the end of their first semester of study. Students may choose either the thesis or the non-thesis option (see below under Practical Experience).

Foundations of Professional Writing and Editing (9 hours): The following three classes are required of every student: ENGL 601, ENGL 602, and ENGL 605.

Professional Writing and Editing Electives (6 hours): In consultation with the advisor, students will individualize their plan of study by choosing two 600-level courses that develop a specific focus within the general field of professional writing and editing.

General Distribution (9–12 hours) Students must complete 9–12 hours of general English studies. Courses will include literature, writing, and/or linguistics courses offered by the Department of English and chosen in consultation with the advisor. General distribution hours may often include requirements dictated by graduate teaching status, prior coursework, and departmental guidelines. Students may not use the same course(s) to fulfill the general distribution and professional writing electives requirements.

Practical Experience (3–6 hours) Students must choose one of the following two summative experiences: ENGL 610 (3 hours), ENGL 698 (6 hours). The directed study option is a workplace internship. The thesis option is recommended for students who anticipate advanced study at the doctoral level.

Master of Fine Arts

Admission

Prospective candidates for the degree of master of fine arts are normally expected to have completed a bachelor’s degree in English. Admission to the program is based primarily on the excellence of a substantial writing sample in fiction, nonfiction, or poetry (10 to 20 pages of poetry; 20 to 30 pages of prose). Also required are Graduate Record Examination scores, three letters of recommendation, and a personal statement. Non-native speakers of English must present TOEFL scores. Past experience has shown that successful graduate students usually score above the 60th percentile on the verbal section of the GRE.

Course Requirements and Thesis M.F.A. students must successfully complete 45 hours, distributed as follows: 15 hours of creative writing workshops (including one workshop in another genre); 12 hours of graduate-level English courses (non-creative writing); three hours
of creative writing pedagogy; nine thesis hours; and six hours to be determined in consultation with the creative writing faculty. Only classes passed with a grade of B or better count toward the degree. The student is required to submit a book-length manuscript (ideally 48 pages in poetry, 150 pages in fiction), suitable for publication on its own, that has been approved by a thesis advisor and two additional thesis committee members. Final approval is granted following an oral defense of the thesis. The core of the program is the workshop, where students submit their own writing for discussion and critique. This writing will make up the bulk of the thesis, which will be completed under the close supervision of the thesis advisor and two additional Thesis Committee members. The non-creative writing courses will be the same as those taken by Ph.D. and M.A. students. There is no foreign language requirement.

**Doctor of Philosophy**

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

**Course Requirements and Examinations** During the first year in residence, students must enroll in ENGL 799 and pass the preliminary qualifying examination. Thirty hours of coursework must be taken prior to the examination for formal admission to candidacy. Of these 30 hours, nine hours must be in 700-level seminars, one of which must be ENGL 782. All doctoral candidates must take ENGL 680 and ENGL 609 unless they have previously taken equivalent courses. A maximum of six hours of ENGL 695 or ENGL 795 can be counted toward the 30 hours of coursework. Students are required to teach one three-hour composition course and one three-hour literature course while in residence and to register concurrently for ENGL 790; this requirement may be waived pending departmental approval for candidates who have substantial prior teaching experience. ENGL 790 does not count toward the 30 required hours of coursework. Students may take up to 12 hours of coursework in another department, subject to the approval of the Graduate Program Committee.

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

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

**Faculty**

**Chair**
- James Harms

**Ph.D. Program Supervisor**
- Dennis Allen

**M.A. Program Supervisor**
- John Lamb

**M.F.A. Program Supervisor**
- Mark Brazaitis

**M.A. P.W.E. Program Supervisor**
- Brian Ballentine

**Professors**
- Dennis Allen - Ph.D. (U. Minn.)
  Critical theory, Prose fiction, Popular culture.
- Rudolph P. Almasy - Ph.D. (U. Minn.)
  Renaissance and Reformation studies.
- Laura Brady - Ph.D. (U. Minn.)
  Composition and rhetorical theory, Writing program administration, Women’s studies.
- Mark Brazaitis - M.F.A. (B.G.S.U.)
  Creative writing: fiction.
- James Harms - M.F.A. (Ind. U.)
  Creative writing: poetry, Contemporary poetry.
• Kirk Hazen - Ph.D. (U.N.C.)
  Linguistics, Sociolinguistics.
• Kevin Oderman - Ph.D. (U. Calif.)
  American poetry, American literature, Creative writing: essay.
• Timothy Sweet - Ph.D. (U. Minn.)
  American studies (17th-19th century), Literature and environment, Native American literature.

Associate professors
• Sandy Baldwin - Ph.D. (N.Y.U.)
  Literature and media technology, 20th-century American literature, Critical theory.
• Brian Bailentine - Ph.D. (Case Western U.)
  Technical and professional writing, digital literacy.
• Gwen Bergner - Ph.D. (Princeton U.)
  African-American and multi-ethnic literatures, Post-colonial studies.
• Cari Carpenter - Ph.D. (U. Michigan)
  19th-century American literature, Native American literature.
• Ryan Claycomb - Ph.D. (U. Maryland)
  20th-century British literature, Drama.
• Anna Shannon Elfenbein - Ph.D. (U. Neb.)
  American literature, Women’s studies, Film.
• Lara Farina - Ph.D. (Fordham U.)
  Medieval literature and culture, Gender studies.
• Marilyn Francus - Ph.D. (Columbia U.)
  Restoration and 18th-century literature and culture, Women’s studies, Satire, History of the novel.
• Michael Germana - Ph.D. (U. Iowa)
  American Studies, 19th- and 20th-century American Literature, Popular culture.
• Catherine Gouge - Ph.D. (W.V.U.)
  Professional writing, New media studies, Distance learning.
• Rosemary Hathaway - Ph.D. (Ohio St. U.)
  Folklore, English education, 20th-century American Literature.
• Ellesa High - Ph.D. (Ohio U.)
  American Indian literature, Creative writing: fiction and nonfiction, Appalachian studies.
• Adam Komisaruk - Ph.D. (U.C.L.A.)
  Romanticism and 18th-century British literature.
• John Lamb - Ph.D. (N.Y.U.)
  Assistant editor, Victorian Poetry. Victorian literature and culture, Victorian historiography.
• Kathleen O’Hearn Ryan - Ph.D. (U. Mass.)
  20th-century American literature.
• Mary Ann Samyn - M.F.A. (U. Va.)
  Creative writing: poetry.
• Nathalie Singh-Corcoran - Ph.D. (U. Az.)
  Writing center theory and practice, Writing assessment.
• Ethel Morgan Smith - M.A. (Hollins Coll.)
  Creative writing: fiction, nonfiction essay, African-American literature.
• Lisa Weihman - Ph.D. (N.Y.U.)
  19th and 20th-century British and Irish literature and culture.

Assistant professors
• Piers Brown - Ph.D. (U. Toronto)
  Early Modern British studies, Poetics, History of the book.
• Lowell Duckert - Ph.D. (George Washington U.)
  Early Modern British studies, Literature and environment.
• John Jones - Ph.D. (U. Texas)
  Composition and Rhetoric, Digital literacy.
• Sarah Neville - Ph.D. (U. New Brunswick)
  Early Modern British studies, History of the book.
• Tom Sura - Ph.D. (Purdue U.)
Composition and Rhetoric, Writing program administration
• Glen Taylor - M.F.A. (Texas St. U.)
  Creative writing: fiction.

Professors emeriti
• Timothy Dow Adams
• Gail Galloway Adams
• Patrick Conner

Forensic and Investigative Science

Degrees Offered
• Master of Science

Nature of the Program
The Forensic and Investigative Sciences Program offers graduate studies leading to a master of science degree. The degree is rigorous, quantitative, and science based. Students are required to complete an approved research project. Coursework focuses on advanced forensic science classes including pattern evidence, trace evidence, forensic chemistry and DNA analysis, and laboratory management.

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

Thesis/Credits
The WVU general requirements for the master of science degree are outlined elsewhere in this catalog. Graduate students in the M.S. program in forensic and investigative science are required to submit a research thesis. They may apply up to six hours of research credit toward the 40-hour requirement. Of the remaining credit hours, 24 hours must be earned in the required core courses, at least six credit hours in approved electives, and four credit hours in graduate seminar.

GPA Requirements
During graduate study a minimum grade point average of 3.0 must be maintained in all required forensic courses. A student who fails to maintain the required average at the completion of any semester will be placed on probationary status and allowed one academic year (two semesters) to attain the required average. If this is unsuccessful the student will be dropped from enrollment in the graduate program.

Research
Research, which is the major theme of graduate studies, may be initiated as early as the student and faculty feel appropriate for the individual. Normally, a student will begin laboratory work in the third semester. Upon successful completion of the research, the candidate will present results in an MS thesis and at the appropriate time defend the work in a final oral examination.

Faculty
Director
• Keith Morris

Associate professors
• Suzanne Bell
• Keith Morris

Teaching Assistant Professor
• Patrick Buzzini
• Tina Moroose
Lecturer
• Casper Venter

Geography

Amy E. Hessl, Associate Chair for Geography
G49 Brooks Hall

Degrees Offered
• Master of Arts
• Doctor of Philosophy

Nature of the Program
The graduate program in geography at West Virginia University provides students with the opportunity to study for a master of arts or a doctor of philosophy degree with an area of emphasis in one or more of the following fields.
• Geographic information science
• Environmental geography
• Human geography

Research
Students who are interested in pursuing research in an area other than these may do so provided the research area matches the interest of a faculty member in the department who agrees to supervise the student’s program. Students who wish to focus their research on a particular region are encouraged to do so. The graduate program in geography at WVU has strong links with the University’s Regional Research Institute, the State GIS Technical Center, the geology program, the Water Research Institute, the international studies program, the West Virginia Geological and Economic Survey, the Center for Women’s Studies, and the Center for Black Culture and Research.

Admission/Application Requirements
Master of arts applicants must submit GRE scores, a personal two-page statement defining the applicant's interest in geography and career intentions, and two letters of recommendation from people who are familiar with the student's undergraduate training. Ph.D. applicants should send three letters of recommendation, GRE scores, and a personal, two-page statement defining the applicant’s interest in geography and career intentions. This material should be forwarded directly to:
The Coordinator, Geography Graduate Program,
West Virginia University 330 Brooks Hall,
P.O. Box 6300,
Morgantown, WV 26506.

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

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

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

Computing Facilities
The geography program has extensive computing facilities housed in a new 98,000 square foot building dedicated exclusively to geography and geology. The new building has five computer laboratories dedicated to teaching and research. The department has ESRI ArcGIS, ERDAS Imagine, and ENVI site licenses. In addition, the department supports SAS, SAS-Graph, JMP, Surface III, Oracle, and extensive database and statistical packages. The department’s geovisualization research group operates an immersive four-wall 3-D display environment, or CAVE. The remote sensing program operates an ASD full-range portable spectroradio meter.
Master of Arts

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

Degree Requirements

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

• Obtain 30 hours of graduate credit.
• Complete the course GEOG 601.
• Complete either GEOG 701 or GEOG 603.
• Complete GEOG 699 for four semesters (total of four hours).
• Complete nine hours of geography graduate courses (400 level and above), but excluding GEOG 689–695 and GEOG 697–699. Note: with the approval of the Graduate Committee, courses from other programs may also be used to fulfill this requirement.
• Select one of:

A. Thesis Option Complete and successfully defend a written research thesis (GEOG 697, six hours).

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

The First Year for all M.A. Students

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

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

The M.A. Thesis Option

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

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

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

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

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

The Professional Master’s Option

Overview The professional master’s option consists of an additional graduate course and a three-credit-hour project (GEOG 780). The professional master’s option is designed for students interested in a more focused project than the traditional research thesis option. It is
not recommended for students considering entering a Ph.D. program. The thesis project has strict deadlines and must be completed in one semester and after the completion of GEOG 601, and either GEOG 603 or GEOG 701.

**Deadlines and Timetable**

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

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

The student is required to have meetings with the advisor and the committee in weeks seven and 11 to present progress reports.

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

If the student completes and defends the project, but is unable to submit the project to the library by the University deadline, the student will be assigned an incomplete for the project. The student then has up to two weeks after the last day of exam week to submit the project to the library; otherwise the I is converted to a U (unsatisfactory).

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

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

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

**Project Topic and Defense**

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

The project is defended in a public presentation at the end of the project semester, but no later than the University deadline for a thesis defense. The defense time and location must be published in the department no less than two weeks in advance. The standard for passing will be that the majority of the Advisory Committee (two or more of the three members) evaluate the work as substantially meeting the goals identified in the written research plan.

Most projects are expected to be in written form (15 to 20 pages). Other forms of presentation may be acceptable, such as maps, software, video, land-use plan, image classification, field-trip guide, work of art, etc; however, a written document explaining the project is still required.

**Doctor of Philosophy**

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

Students are expected to be well grounded in one of the program’s areas of emphasis, and also in the history and philosophy of geography. Students will be awarded a Ph.D. after obtaining 54 hours of graduate credit, completing certain required courses, passing comprehensive examinations, and writing a dissertation. These steps are discussed in more detail below.

**Coursework** The courses GEOG 601 and either GEOG 701 or GEOG 603 (three hours) are required, as well as three general electives and two method electives. An additional 11 hours of other courses, which may include seminars and directed study courses, must also be completed. A limited number of the required courses may be waived if the student has already completed an equivalent course and can demonstrate proficiency with the material.

**Examinations and Dissertation** The student is required to pass an oral and three written comprehensive examinations no later than the fourth semester. The student will be examined on two areas of specialization and the student’s dissertation research topic. Upon successful completion of the comprehensive examination and no later than the end of the fifth semester, the student will be expected to defend a dissertation research proposal. The award of the Ph.D. is granted upon the successful defense of the dissertation itself.
Assistantships

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

Faculty

Chair
- J. Steven Kite

Associate Chair for Geography
- Amy Hessl

Professors
- Gregory A. Elmes - Ph.D. (Penn. State)
  GISc, Spatial modeling, Crime mapping.
- Trevor M. Harris - Ph.D. (Hull)
  Eberly Professor. GISc, Virtual Reality & GIS. Participatory GIS, Spatial Humanities.
- Randall Jackson - Ph.D. (Illinois)
  Director Regional Research Institute. Regional economic geography, Regional economic health and performance, Regional science.
- Ann M. Oberhauser - Ph.D. (Clark)
  Director of Women’s Studies. Economic geography, Regional development, Gender geography, Political economy, Appalachia.
- Timothy A. Warner - Ph.D. (Purdue)
  Remote sensing.

Professor emeritus
- Kenneth C. Martis - Ph.D. (Michigan)
  Political & Electoral geography, Historical geography.

Associate professors
- Amy Hessl - Ph.D. (Arizona)
  Biogeography, Forest ecosystems.
- J. Steven Kite - Ph.D. (Wisconsin-Madison)
  Geomorphology, Quaternary Studies, Geoarchaeology
- Brent McCusker - Ph.D. (Michigan State)
  Land use change and livelihood systems, Geography of Africa and Middle East/North Africa, GIS and remote sensing.

Associate Professor Emeritus
- Robert Q. Hanham - Ph.D. (Ohio State)
  Political economy of uneven development, Labor geography

Assistant professors
- Jamison Conley - Ph.D. (Penn. State)
  GISc, Geocomputation, Medical geography.
- Karen Culcasi - Ph.D. (Syracuse)
  Geopolitics, Identity, Middle East, Cartography.
- Eungul Lee - Ph.D. (Colorado)
  Climatology, Vegetation-Atmosphere Interactions, Asian Monsoon
- Brenden McNeil - Ph.D. (Syracuse)
  GIS, Remote sensing, Ecosystem ecology.
- Jeremia Njeru - Ph.D. (Wisconsin-Milwaukee)
Urban development and environmental change, Urban political ecology.

- Bradley Wilson - Ph.D. (Rutgers)
  Social movements, Globalization, Environmental justice, Latin America.

Clinical assistant professor

- Rick Landenberger - Ph.D. (WVU)
  Remote sensing, Educational outreach.

Post Doctoral Researchers

- Jonathan Hall - Ph.D. (Ohio State)
  Ecology, Biogeography

- Maria Alejandra Perez - Ph.D. (Michigan)
  Human Geography, Science & Society

Geology

Degrees Offered

- Master of Science
- Doctor of Philosophy

Nature of the Program

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

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

Admission Procedures and Prerequisites

Applicants for graduate studies in geology must have as a minimum requirement a bachelor’s degree and an overall grade point average of at least 2.75. Acceptance by the Department of Geology and Geography is necessary before admission of any prospective student to the program. All candidates for a graduate degree in geology must submit scores in the general aptitude tests of the Graduate Record Examination. Applicants seeking admission and financial support for the fall semester should apply by February 1. For spring semester, apply by October 1. Write to the department for an application package or download it from the website (see above).

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

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

GPA Requirements

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

**Research Linkages Around Morgantown**

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

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

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

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

**Facilities**

**Computer Facilities and Network**

Research and teaching computing facilities in the department are outstanding and are centered around a Windows client-server network. The research cluster has access to more than 10 terabytes of redundant networked storage based on a series of RAID servers, as well as diverse networked printers, large-format plotters, large-format digitizers, and scanners. The teaching cluster provides interactive computing resources for 125 students on networked computers. Classroom demonstration facilities are available in every teaching lab. The research cluster includes many workstations with dual-format displays. All resources are regularly upgraded with a replacement period of one to two years. Clusters for the GEO workgroup are linked to the WVGIS center and have gateway access to the University backbone. The entire building is networked. The department houses the GeoVirtual Lab which is centered around a four-walled immersive CAVE environment.

**Software Resources**

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

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

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

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

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

Geophysical
The department owns a Geonics very low frequency sensor, an EM34 terrain conductivity meter, a Bison Instruments 12 Channel Seismograph and a Geometrics magnetometer. The geophysics facility also offers large format plotting on 24–42 inch HP plotters. Additional survey equipment includes a Leitz Model 2100 Total Station Survey System and a two-station GPS Traveler. Wide spectrums of software resources (see above) enhance geophysical research.

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

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

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

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

Master of Science

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

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

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

Research Option
This has been the traditional option for the master of science in geology. Students considering continued studies (doctor of philosophy) or seeking employment in an area of geological research should choose this option. A minimum of 24 formal course hours, six research hours (GEOL 697), and two hours of GEOL 699 are required for graduation. A thesis based on original research under direction of a research committee also is required. With consent of the candidate’s Research Committee, the field work need not be done while in residence at WVU.

32 hours are required to graduate: (24 hours course-based, six hours research, and two hours colloquium) including certain required courses specified by the advisor.

Professional Studies Option
This option is designed specifically for students seeking experience in preparing and presenting professional problems. Students choosing this option typically expect to seek professional employment in the profession using the master’s as their terminal degree. A minimum of 33 formal course hours, six directed study research hours (GEOL 692) and two hours of GEOL 699 are required for graduation. The research hours are in lieu of a thesis and are designed to simulate the work of professional geologists as they
seek solutions to open-ended problems within a limited time frame. Experience in presentation of problems and solutions are an integral part of the program. Research hours may be earned in conjunction with off-campus experiences by consent of the candidate’s Advisory Committee.

41 hours are required to graduate: (33 hours course-based, six hours research and two hours colloquium) including certain required courses specified by the Advisory Committee.

Doctor of Philosophy

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

Faculty

Chair
• J. Steven Kite

Associate Chair for Geology
• Helen M. Lang

Professors
• Robert E. Behling - Ph.D. (Ohio State)
  Earth Science Education & Geomorphology
• Timothy Carr - Ph.D. (Wisconsin-Madison)
  Sedimentary & Petroleum Geology
• Joseph J. Donovan - Ph.D. (Penn. State)
  Hydrogeology, Quaternary Paleochemistry
• Gregory A. Elmes - Ph.D. (Penn. State)
  Geographic information science
• Trevor M. Harris - Ph.D. (Hull)
  Eberly Professor. Geographic information science
• Thomas W. Kammer - Ph.D. (Indiana)
  Centennial Professor. Paleontology & Paleoecology
• Henry W. Rauch - Ph.D. (Penn. State)
  Hydrogeology, Geochemistry, Carbon Sequestration
• John J. Renton - Ph.D. (WVU)
  Geochemistry, Earth Science Education
• Timothy A. Warner - Ph.D. (Purdue)
  Remote sensing.
• Thomas Wilson - Ph.D. (WVU)
  Geophysics

Professors emeriti
• Alan C. Donaldson - Ph.D. (Penn. State)
  Past Chair. Stratigraphy, Clastic Sedimentation
• Robert C. Shumaker - Ph.D. (Cornell)
  Structural Geology, Tectonics
• Richard A. Smosna - Ph.D. (Illinois)
  Sedimentation, Stratigraphy, Carbonate Petrology

Associate professors
• Dengliang Gao - Ph.D. (Duke)
  Geophysics
• Amy Hessl - Ph.D. (Arizona)
  Biogeography, Forest Ecosystems
Assistant professors
- Joseph Lebold - Ph.D. (WVU)
  Earth Science Education, Stratigraphy, Paleoecology
- Eungul Lee - Ph.D. (Colorado)
  Climate, Regional Climate Modelling
- Brenden McNeil - Ph.D. (Syracuse)
  GIScience & Environmental Modeling
- Shikha Sharma - Ph.D. (Lucknow)
  Isotope Geochemistry
- Amy Weislogel - Ph.D. (Stanford)
  Sedimentary Geology

Clinical assistant professor
- Rick Landenberger - Ph.D. (WVU)
  Remote Sensing, Geoscience Education

Post Doctoral Researcher
- Maria Perez - Ph.D. (Michigan)
  Karst & Cavers, Science & Society

History

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

Nature of the Program
The Department of History offers graduate courses in the history of the United States, Appalachia/regional, Europe, Africa, Asia, Latin America, world history, and in public history. Courses are designed to prepare students in historiography, research methods, and interpretation. Students can select concentrations leading to preparation for careers in teaching and scholarship and as specialists for various branches of government, business, and public service. Students in the program are normally expected to pursue the degrees of master of arts or doctor of philosophy.

Cultural Resource Management Certificate
The Eberly College of Arts and Sciences also offers an interdisciplinary graduate-level 15-hour certificate in cultural resource management (CRM) that is coordinated by the Department of History. Most CRM students earn the graduate certificate in conjunction with a M.A. in history, public administration, recreation parks and tourism, geography, design, art history, or one of several other related graduate degree programs. The requirements for the CRM certificate consist of 12 credit hours of coursework and a three-hour internship or an individual research project (HIST 620). All CRM students must successfully complete HIST 600. Students who are currently admitted to, or enrolled in, a graduate degree program must register their intent to earn the CRM certificate with the CRM coordinator during the semester prior to their internship. Students who wish to pursue the graduate certificate independent of a graduate degree program must be admitted as non-
degree graduate students prior to registering their intent to earn the CRM certificate. Each student is expected to maintain an average GPA of 3.0.

**Master of Arts**

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

**Admission**

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

**Requirements**

All Students in the regular M.A. program are required to complete a minimum of 30 hours of coursework, including six hours of thesis research credit, of which no more than 12 hours (or 40%) of the credits counted for meeting requirements can be at the 400 level. All 30 hours may be in history, or students may select up to six hours outside of the department with the approval of the director of graduate studies. M.A. students must maintain a 3.0 grade point average to remain in good standing. The history coursework shall include a well-defined core area (selected from the fields listed for comprehensive examinations or approved by the director of graduate studies) of at least 12 hours, including one readings/research seminar sequence (HIST 701 and higher), and a minor area (selected from the fields of study listed for comprehensive examinations or approved by the director of graduate studies) of six hours with at least three hours at the 500 level or higher. Also required are the department’s historiography course (HIST 700), and enrollment of all full time students in HIST 799. Credit for this last course does not count towards the degree. In addition, individual faculty may require their students to master one or more languages, to demonstrate proficiency in particular research methods (quantitative analysis, paleography, GIS, etc.) or to develop other skills as necessary for their areas of study and thesis projects.

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

**Thesis Option**

Students who chose the thesis option are required to write a master’s thesis in consultation with their main faculty advisor. The thesis must be based on original research that demonstrates a critical engagement with the secondary literature, and is developed in multiple chapters. Students must first prepare a thesis prospectus, which must be approved by their thesis committee, before writing and successfully defending the thesis in an oral examination. A maximum of 6 hours of credit for HIST 697 can be taken for writing the thesis.

**Non-Thesis (Examination) Option**

Students not wishing to pursue further graduate study in history may choose the non-thesis (examination) option. Students who choose the non-thesis option must take one readings/research seminar sequence (HIST 701 and higher), plus an additional readings seminar (HIST 701 and higher) as part of their 30 credit hours of coursework. They cannot count thesis research credits as part of their 30 credit hours of coursework. In addition, students who chose the non-thesis option are required to take an oral examination. The examination will be taken in the last semester in which the student completes coursework. The oral examination that will be conducted by a committee of three faculty members with whom the student has completed coursework and must include the student’s major faculty adviser.

**Atlantis Dual Degree Master of Arts**

The department also participates, together with Collegium Civitas of Warsaw, Poland, and the University of Tartu in Estonia, in a unique transatlantic multidisciplinary dual degree M.A. program in East-Central European area studies. Supported by a US-EU Atlantis grant, students from both sides of the Atlantic are awarded stipends to spend two academic semesters overseas and will complete relevant coursework at all three institutions. They also have the opportunity to acquire language training and gain valuable experience through professional internships.

**Admission**

Applicants apply for admission to the Atlantis program as they would for the regular M.A. in history. The statement of purpose should highlight relevant background and reasons for interest in the East-Central European region. Students should have a graduate degree in relevant disciplines and programs such as history, Slavic and East European studies, international studies, geography, and/or political science. For qualifying students from history, however, the accelerated master of arts (4+1 track) is also available. Otherwise, they must meet the same criteria for admission as applicants to the regular M.A. program.

**Requirements**

Students will complete the equivalent of 60 U.S. credit hours: 30 hours in the history program at WVU, 15 hours in the international relations program at Collegium Civitas, and 15 hours in the Baltic studies program at the University of Tartu. Master’s theses will be defended at one of the two European institutions with the participation of WVU history faculty. The dual degrees, in history from WVU and in international relations or Baltic studies from one of the two European institutions, are awarded once credit hour and degree requirements are met at all three institutions.
Public History

The department offers a 36-hour master of arts with a concentration in public history and a Ph.D. minor field in public history. Public historians are trained to conduct historical research and interpret the past for a variety of audiences. They generally work in museums, heritage sites, historic preservation, archives, as consultants, and for the federal government.

Admission

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

Requirements

The public history program consists of 30 hours of coursework, of which no more than 12 hours may be at the 400 level and the remainder at the 500 and higher level, plus a six-hour internship (HIST 614). Normally, half the courses will be public history courses and half will be selected from other history offerings. Students must take one readings/research seminar sequence (HIST 701 and higher). Relevant course work may be taken in another discipline with the approval of the director of public history. There is no foreign language requirement for public history students. All full-time public history students are expected to enroll in HIST 799. Credit for this course does not count toward the degree.

Doctor of Philosophy

Admission

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

Requirements

The Ph.D. degree program in history requires completion of two readings/research seminar sequences (and above) beyond those offered for the M.A.; enrollment in for all full-time students who have not yet taken their comprehensive examinations; passing the Ph.D. comprehensive examination of two parts (oral and written) administered by a committee of faculty members (normally at the end of a full-time student’s second year of study); preparation of a dissertation prospectus, which must be approved by the student’s dissertation committee; preparation of a dissertation based on original investigation; and successful defense of the dissertation in a final examination. In addition, individual faculty advisers may require their students to master one or more languages, to demonstrate proficiency in particular research methods (quantitative analysis, paleography, GIS, etc.) or to develop other skills as necessary for their fields of study and dissertation projects.

Fields of Study

A candidate must offer a program of study in four fields, at least three of which must be in history; the other may be in a related field with the approval of the director of graduate studies. Doctoral students must maintain a 3.0 grade point average to remain in good standing. Fields available in the department include, but are not limited to, Europe, United States, Africa, East Asia, Latin America, and Appalachia/regional. Students may also take a minor field in world history or public history. At least one field must be in a geographic area outside the major field of concentration for dissertation work.

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

Faculty

Chair

- Elizabeth Fones-Wolf

Associate Chair

- Joseph Hodge
  Director of Graduate Studies
Professors
- Katherine Aaslestad - Ph.D.
- Robert E. Blobaum
  Eberly Family Professor, Modern Central and Eastern Europe.
- Elizabeth Fones-Wolf
  Twentieth century U.S., social, economic.
- Kenneth Fones-Wolf
  Appalachian, labor.
- Jack Hammersmith
  East Asia, Recent U.S., American diplomatic.
- Robert M. Maxon

Associate Professor
- Tyler Boulware - Ph.D.
- Joseph Hodge
- Brian Luskey - Ph.D.
- Aaron Sheehan-Dean - Ph.D.
- James Siekmeier - Ph.D.
- Kathryn Staples - Ph.D.
- Mark B. Tauger
  Russia and Soviet Union, World and comparative, Historiography.
- Matthew A. Vester
  Early modern Europe, Italy.

Assistant Professor
- Joshua Arthurs
  Modern Europe, Italy, Cultural.
- Melissa Bingmann
  Public history, Twentieth century U.S.
- Ari Bryen - Ph.D.
- Krystal Frazier
  African American, oral history.
- Kimberly Welch - Ph.D.

Lecturer
- Carletta Bush - Ph.D.

Legal Studies
Degree Offered
- Master of Legal Studies

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

The MLS is offered entirely online (there are no on-campus courses), and operates through a cohort model, with a new class of students admitted each January and August. Courses are offered each term (including summers). Students following the prescribed course of study should be able to finish the degree in six terms (two calendar years, including summers). Students progressing at a different pace may take longer and have up to eight years to complete the degree.
Prospective and current students should frequently check the program’s website at http://legalstudies.wvu.edu for up-to-date program information, forms, and other guidelines.

**Admission**

In order to be considered for admission to the MLS program, one must have completed a baccalaureate degree in any major with a cumulative GPA of at least 2.75 on a 4.0 scale. In addition, it is recommended that a prospective student have some work experience in an area broadly related to the field of legal studies. Applicants who do not possess a GPA of at least 2.75 may apply to the college for admission as a non-degree student in order to register for certain classes and to document academic ability. Acceptance as a non-degree student does not guarantee acceptance into the legal studies program.

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

Office of Admissions  
P.O. Box 6009  
Morgantown, WV 26506-6009

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

1. A current resume or curriculum vitae;
2. Three letters of recommendation;
3. A one- or two-page personal statement on the subject of why and how the master of legal studies degree program will further the applicant’s career or special interests.
4. A petition of waiver for the standardized test requirement or results of standardized graduate-level tests (i.e. GRE, LSAT, GMAT, or MCAT).

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

All application materials should be submitted no later than October 15 of each year for admission in the Spring semester and by July 1 for admission in the Fall semester. The Admissions Committee will render decisions during the month of November for Spring admission and the month of July for Fall admission.

Additional information and forms may be found on the program’s website at http://legalstudies.wvu.edu or by calling the program at (304) 293-2614.

**Degree Completion**

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

**Curriculum**

The Master of Legal Studies program requires 36 hours of coursework. This coursework is broken into three different areas: core courses (18 hours), elective courses (15 hours), and an applied research capstone project (3 hours). The program provides a Suggested Plan of Study for students to use as a guide regarding registration and course offerings.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>LEGS 610</td>
<td>Law and the Legal System</td>
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<tr>
<td>LEGS 620</td>
<td>Researching the Law</td>
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<td>Law and Society</td>
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<td>LEGS 640</td>
<td>Administrative Legal Process</td>
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<td>The Legislative Process</td>
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Elective Courses
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<td>LEGS 710</td>
<td>Family Law</td>
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<td>LEGS 720</td>
<td>Media and the Law</td>
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<td>LEGS 730</td>
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<td>Commerce Law</td>
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<td>LEGS 750</td>
<td>Criminal Law and Procedure</td>
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<td>Administrative Ethics</td>
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<td>LEGS 770</td>
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<td>LEGS 780</td>
<td>Constitutional Law</td>
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Total Hours: 36

Suggested Plan of Study

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<th>First Year</th>
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<th>Spring</th>
<th>Hours</th>
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<table>
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<th>Second Year</th>
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<th>Spring</th>
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</table>

Total credit hours: 33

Faculty
Interim Chair
• John C. Kilwein - Ph.D.
  Division of Public Administration

Director
• Nancy L. Adams - Ph.D.

Coordinator
• Erin E. Estell - MPPM

Liberal Studies

Dr. Ann M. Oberhauser
Coordinator of Master of Liberal Studies Program, Professor of Geography, and Director of the Center for Women’s Studies
PO Box 6450
218 Eiesland Hall
West Virginia University
Morgantown, WV 26506
Phone: (304)293-2339 ext. 1155
Email: ann.oberhauser@mail.wvu.edu

Program Description

The Master of Arts in Liberal Studies (MALS) is an interdisciplinary degree that provides the opportunity for graduate students to undertake studies in the liberal arts within a structured program, but without an exclusive concentration in one discipline. Studies in this program generally focus on issues in the liberal arts disciplines of fine arts, social sciences, or humanities.

Students in the MALS program create their own unique interdisciplinary plans of study that combine fields such as English, foreign languages, history, philosophy, religious studies, or women’s studies. Specific topics of study may include area studies, e.g., American
studies, Appalachian studies, or French culture or other special interests, e.g., religion, media studies, or gender studies. Such topics cross
disciplinary lines and require courses in several academic units.

The multi-disciplinary MALS Committee is appointed by the program director and approved by the dean of the Eberly College of Arts and
Sciences to administer this program. This committee serves as the program’s admissions committee and plays a role that is similar to that
of an academic department in a more traditional degree program. WVU faculty members from a wide range of disciplines, both within and
outside of the Eberly College, serve on the MALS Committee and are also eligible to serve as members of a MALS student’s master’s
committee.

Admission and Application Materials

• Bachelor’s degree transcript from an accredited institution with a minimum undergraduate grade point average of 3.0 on a 4.0 scale
  (Probationary status may be granted to students who do not meet this minimum standard.)
• GRE General Test scores that demonstrate the ability to do graduate work
• Plan of study which has been approved by the MALS Committee (see below for details)
• Confidential letters of recommendation from at least two individuals who are able to assess the applicant’s ability to undertake the plan of
  study that he or she has proposed
• Written agreement from a member of the regular graduate faculty at West Virginia University to serve as chair of the applicant’s master’s
  committee
• An essay that describes the applicant’s central focus or theme to be followed in the program
• Submit an Application for Graduate Admission, along with undergraduate transcripts, transcripts from any prior graduate work, and GRE
  scores to the Office of Admissions and Records

Financial Aid is Available

The MALS program has a small number of meritorious student tuition waiver hours available each semester. Check with the WVU Financial
Aid Office for information on grants, loans, and other scholarships. See the web site address for this office below.

Plan of Study

The plan of study is submitted as part of a MALS application. This document must include the following materials:

• A schedule of proposed courses
• The graduate catalog description, including title, course number, credit hours, and prerequisites for all proposed courses
• For any proposed independent study course, teaching practicum, field experience course, or other course which is not a regularly
  scheduled classroom course: a precise description of the subject that will be studied and the faculty member who has agreed to
  supervise this course

NOTE: This is not intended to be an exhaustive list of the information that needs to be included in a MALS application essay. See the WVU
Graduate Catalog, or the MALS Program brochure, for additional guidelines. MALS_Program_Description_2012.doc (http://catalog.wvu.edu/
graduate/eberrlycollegeofartsandsciences/liberalstudies/MALS_Program_Description_2012.doc)

Degree Requirements

There are several general requirements for all graduate programs at WVU in addition to requirements specific to the MALS program.

A. University Requirements

• Graduate credit is awarded only for courses at the 400 level or above.
• No more than 40 percent of course credits counted toward a graduate degree may be at the 400 level.
• A maximum of 12 hours of course work taken before admission to a graduate program may be approved for credit toward that degree.

B. MALS Requirements

At least 36 semester hours of approved course work, subject to the following limitations:

• No more than 18 hours from a single discipline.
• No more than 9 hours of independent study. (This limit applies only to courses labeled either “independent study” or “directed study” in
  the graduate catalog.)
• At least 6 hours in different disciplines.
• 3 hours of course work in research methodology.
• A minimum 3.25 grade point average for all course work in the degree program.
• Fulfillment of all requirements of the study contract.
Successful completion of a final project such as a master’s thesis, a comprehensive examination, a lecture, a recital, a portfolio of creative work, or the design of a web site, for example.

Those interested in applying for the MALS Program should choose a member of the regular graduate faculty at WVU to chair their committee. This person will include written agreement to serve as chair of the applicant’s master’s committee.

Once admitted to the MALS Program, the student chooses the remaining members of the master’s committee, and then draws up a final plan of study with the help of the master’s committee chair, who also serves as the student’s advisor. It is recommended that the full master’s committee be chosen by the time the student completes the first 9-12 hours of courses within the program. The full committee, and any changes in the committee, must be approved by the MALS Program Director.

Mathematics

Degrees Offered

• Master of Science
• Doctor of Philosophy

Programs

The Department of Mathematics offers graduate programs leading to the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees. The master’s degree program offers specializations in pure mathematics, applied mathematics, and mathematics for secondary educators. The Ph.D. program provides for a common core of fundamental mathematics followed by specialized studies culminating in an original research dissertation directed by a faculty advisor. Depending on the student’s program and interests, there are diverse career opportunities available in education, government, and industry.

Financial Support

Most graduate students receive financial support in the form of a graduate teaching assistantship, which provides a stipend and a full tuition waiver. These are awarded taking into account primarily the student’s academic record, along with letters of recommendation and GRE score. In some cases, teaching experience and/or the potential for outstanding teaching, can be a consideration. Teaching assistants have the opportunity to work with the mathematics education faculty of the Department’s Institute for Mathematics Learning (IML). A small number of research assistantships are also available. Applications from students requesting financial aid should be received no later than February 15 to ensure full consideration for the subsequent fall semester. Late applications are accepted, but students are advised to check with the graduate director as to the availability of assistantships. Applications for admission (alone) can be considered at any time, subject to University processing deadlines. Other financial aid includes partial tuition waivers and part-time positions assisting in the instructional computer labs. TOEFL scores are required for international students whose native language is not English, with a University requirement of a 550 minimum score for admission.

For students who are not graduate assistants, the Department does have a limited number of part-time positions in a number of capacities, including assisting students at the Institute for Mathematics Learning Computer Laboratory. The number, and nature, of such positions depends on needs, scheduling, and available funding, and is generally not determined until near the beginning of the semester. However, if you are interested in being considered for such positions as may arise, send an email with your course schedule to Betsy Kuhn, the Lab Manager, at bkuhn@math.wvu.edu. Identify yourself as a Mathematics graduate student.

Master of Science

Programs are available for students to study applied mathematics, pure mathematics, industrial/applied mathematics, or mathematics for secondary educators. For regular admission to the M.S. program, students should have the equivalent of an undergraduate major in mathematics, including at least one semester of advanced calculus (Math 451 or equivalent, and courses in linear algebra and modern algebra. Students with deficiencies may be admitted provisionally, with deficiencies to be made up in the first year of study. A minimum of three semesters of calculus is normally required for such admission, but students can often complete their remaining calculus courses during the summer prior to full-time enrollment. To be in good standing, a student is expected to maintain at least a 3.0 average (B) in mathematics courses and to present at least a 3.0 average in all work offered in fulfillment of the degree program.

Admission

Admission to the M.S. program requires a WVU admission application and submission of applicable transcripts. International students must supply a passing TOEFL score or other acceptable evidence of English proficiency. Students seeking financial aid should also supply an assistantship application and three letters of recommendation. Scores from the GRE Subject Test in Mathematics are strongly recommended.
Advisory Committee

Each student will be assigned an Advisory Committee consisting of at least three members of the graduate faculty. This committee will assist the student in designing a written plan of study that takes into account the student’s interests and needs as well as the aims of the department’s graduate programs. Later changes in the plan are possible only through mutual agreement of the student and the committee.

Programs

The student’s plan of study is developed in one of these programs: pure mathematics, mathematics for secondary educators, applied mathematics, and industrial/applied mathematics. The programs are designed either for students who intend to pursue a doctor of philosophy in mathematics or the mathematical sciences, or for those planning to seek employment in education, government, or industry. Depending upon the program selected, 30 to 33 semester hours of approved coursework are required. Note: MATH 590/690/790/696/697/797 may not be counted for credit to satisfy graduate course requirements.

Examinations/Theses/Projects

Upon beginning graduate study, all M.S. students are given a basic exam in advanced calculus and linear algebra for purposes of course placement. Depending on the program chosen, students must complete examinations, a thesis, or a project as a graduation requirement.

Doctor of Philosophy

The doctor of philosophy is a research program in which the final product is an original, publishable research thesis. For students entering with regular admission status, the program requires 24 hours of approved coursework, along with graduate seminar requirements. As reflected in the interests and expertise of the faculty, students may specialize in a variety of areas of pure, applied, and discrete mathematics as well as research in undergraduate mathematics education.

Admission Requirements

For regular admission, applicants for the Ph.D. program must have completed a graduate degree similar to the M.S. in mathematics outlined above. Students with an exceptionally strong undergraduate background may sometimes be admitted provisionally, with 12–18 credit hours of additional coursework required.

The following materials should be submitted:

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

All doctoral students must demonstrate that they are prepared to undertake doctoral work and research by passing an entrance examination, given each year in April and August, by the end of their third semester after enrolling. Students choose two areas in which to be examined from among the four areas of algebra, real analysis, topology, and differential equations. For students in the CCDM option (see next page) one of these area exams is replaced by an examination over the CCDM core curriculum.

Beyond any coursework taken to remove deficiencies while a provisional student, a minimum of 24 hours of approved coursework is required of all doctoral students, which must include a major area and two minor areas. Certain level and distribution requirements apply to a student’s program. In addition, doctoral students enroll for one credit hour of graduate seminar each semester they are in residence.

Dissertation Committee

After the above requirements are satisfied, a student must request that the director of graduate studies select a Dissertation Committee of at least five members, with a dissertation advisor as chairperson and one member from outside the department.

Examinations and Dissertation

The student must pass a qualifying oral and written examination on the major and minor areas of study and present an approved dissertation prospectus. A minor examination is waived if the student has obtained at least a 3.5 GPA in the corresponding courses. If the qualifying examination results are unsatisfactory, the Dissertation Committee may reexamine the student once.

A Ph.D. candidate must complete a dissertation, representing at least 24 hours of 700-level credit, under the supervision of a dissertation advisor. The research upon which the dissertation is based must conform to scholastic standards and constitute an original and publishable contribution to mathematics.
Combinatorial computing and discrete mathematics (CCDM)

This is an option within the mathematics Ph.D. program, emphasizing interdisciplinary research at the intersection of computer science, statistics and discrete mathematics. A minimum of 33 credit hours of coursework is required, and includes designated core courses in discrete mathematics, statistics, and computer science. Students may undertake mathematics research of an interdisciplinary nature among these three areas.

Language Requirement:

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

Graduation

Applications for the graduate program should be received at the Department of Mathematics by February 15 to ensure full consideration for financial aid in the subsequent fall semester. Further information may be obtained from the department’s website at http://www.math.wvu.edu or by contacting the graduate director. Details on program requirements can be found in the Department’s Graduate Handbook, available at http://www.math.wvu.edu/graduate_handbook.

Faculty

Chair

• Edgar Fuller

Professor

• Ian Christie
  Numerical partial differential equations.
  Status: Regular
• Krzysztof Ciesielski
  Analysis, Topology, Set theory.
  Status: Regular
• Harvey Diamond
  Approximation theory, Applied mathematics.
  Status: Regular
• Harry Gingold
  Differential equations, Asymptotic methods.
  Status: Regular
• John Goldwasser
  Combinatorics, Graph theory.
  Status: Regular
• Henry W. Gould
  Emeritus. Combinatorics, Number theory, Special functions.
  Status: Regular
• Harumi Hattori
  Differential equations, Continuum mechanics.
  Status: Regular
• Caulton L. Irwin
  Associate director, National Research Center for Coal and Energy. Variational methods, Optimization, Applied mathematics.
• Hong-Jian Lai
  Graph theory, Matroid theory.
  Status: Regular
• Dening Li
  Partial differential equations.
  Status: Regular
• Michael E. Mays
  Director, Institute for Mathematics Learning. Number theory.
  Status: Regular
• Sherman D. Riemenschneider
  Chairperson. Approximation theory, Wavelet theory.
  Status: Regular
• William H. Simons
  Analysis, Differential equations, Applied mathematics.
  Status: Regular
• Jerzy Wojciechowski
  Combinatorics, Graph theory.
  Status: Regular
• Cun-Quan Zhang
  Graph theory, Combinatorics.
  Status: Regular

Associate Professor
• Marjorie Darrah
  Graph theory, Discrete mathematics, Mathematics education.
  Status: Associate
• Edgar Fuller
  Geometric knot theory, Mathematics education
  Status: Regular
• Gary H. Ganser
  Applied mathematics, Fluid mechanics, Numerical analysis.
  Status: Regular
• James E. Moseley
  Partial differential equations, Modeling.
  Status: Regular
• Laura Pyzdrowski
  Mathematics education.

Assistant Professor
• Mary Ann Clarke
  Applied mathematics.
  Status: Associate
• Jessica Deshler
  Mathematics education.
• David Miller
  Mathematics education.
  Status: Associate
• Matthew Pascal
  Mathematics education.
• Pawel Pralat
  Graph theory, Combinatorics.
  Status: Associate
• Vicki Sealey
  Mathematics education.

Physics

Degrees Offered
• Master of Science
• Doctor of Philosophy

Nature of the Program
The graduate program is designed to provide a solid background in classical and modern physics, a broad understanding of major research fields, and concentrated research experience in one area. Applicants normally enter with a bachelor of science degree in physics. A student whose background is weak in a particular area is encouraged to register for the appropriate undergraduate course. The normal first-year courses include PHYS 611; PHYS 651; PHYS 631; PHYS 633; plus possible electives. In courses no distinction is made between those students who intend a terminal M.S. degree and those who will pursue a Ph.D. degree. The minimum grade for credit in graduate courses is C, and a grade point average of 3.0 must be maintained.
GRE/TOEFL

Applicants are expected to have a bachelor’s degree in physics, with upper-division courses in electricity and magnetism, mechanics, quantum mechanics, thermodynamics, and mathematical methods. Students lacking some of these courses may be admitted provisionally and will be allowed to remedy the deficiencies by taking the appropriate undergraduate courses. The GRE general test is required and the GRE physics subject test is strongly recommended. If English is not the student’s native language, TOEFL or IELTS scores are also required. Application deadline is February 15; contact the department for additional information.

Financial Aid

With rare exceptions, all students who are admitted receive financial support. Beginning students usually receive teaching assistantships; more advanced students receive research assistantships. Several fellowships are available for outstanding students, allowing full-time concentration on coursework and research and more rapid progress toward the degree.

Master of Science

Without thesis: Students may earn an M.S. degree without writing a thesis by completing 30 hours of physics courses (with a GPA of 3.0 or better) at the 600 or 700 level. These must include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 611</td>
<td>Intro Mathematical Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 631</td>
<td>Advanced Classical Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 633</td>
<td>Electromagnetism 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 651</td>
<td>Quantum Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 761</td>
<td>Statistical Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>

With thesis: Students may earn an M.S. degree by performing research under the direction of a faculty advisor. The research results must be presented in a written thesis that is defended before a faculty committee. The M.S. degree with thesis requires 24 hours of physics courses (with a GPA of 3.0 or better) at the 600 or 700 levels. These must include:

<table>
<thead>
<tr>
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<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Advanced Classical Mechanics 1</td>
<td>3</td>
</tr>
<tr>
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<td>Electromagnetism 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 651</td>
<td>Quantum Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 761</td>
<td>Statistical Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>

Ph.D. Candidacy Examinations

To be admitted to candidacy for the Ph.D., a student must pass both a written and an oral candidacy examination. The written examination consists of three parts: a quantum mechanics exam in May, an electromagnetism exam in August, and a classical mechanics exam in January. To be eligible to take any candidacy exam, the student must be in good standing, as explained below.

The oral part of the candidacy exam is a presentation to the five faculty on the student’s doctoral committee. The student gives a lecture on some published research that has been assigned by his or her research advisor.

Requirements for Remaining in the Graduate Program

To be a graduate student in good standing requires the following:

• Maintain a GPA of 3.0 or better in graduate physics courses taken at WVU, excluding PHYS 797.
• Pass two sections of the written candidacy examination by the end of three years.
• Pass the remaining third section of the written candidacy examination by the end of four years.
• Select a Ph.D. Committee of five faculty and complete the oral candidacy examination within three semesters after completing the third section of the written candidacy examination.

Students admitted as M.S. degree candidates are not expected to take the graduate qualifying exams but must maintain at GPA of 3.0 and complete their M.S. degree within three years.

Doctor of Philosophy

Course requirements: The Ph.D. requires 36 hours of courses at the 600 or 700 levels with a GPA of 3.0 or better. These 12 courses must include the seven basic courses:
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 611</td>
<td>Intro Mathematical Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 631</td>
<td>Advanced Classical Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 633</td>
<td>Electromagnetism 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 634</td>
<td>Electromagnetism 2</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 651</td>
<td>Quantum Mechanics 1</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 652</td>
<td>Quantum Mechanics 2</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 761</td>
<td>Statistical Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select at least two from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 772</td>
<td>Semiconductor Physics</td>
</tr>
<tr>
<td>PHYS 773</td>
<td>Collective Phenomena in Solids</td>
</tr>
<tr>
<td>PHYS 774</td>
<td>Optical Properties of Solids</td>
</tr>
<tr>
<td>PHYS 783</td>
<td>Adv Kinetic Theory of Plasmas</td>
</tr>
<tr>
<td>PHYS 784</td>
<td>Adv Mgentohydrodnmc Thry-Plasma</td>
</tr>
<tr>
<td>PHYS 791</td>
<td>Advanced Topics</td>
</tr>
</tbody>
</table>

and/or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 702</td>
<td>Stellar Structure &amp; Evolution</td>
</tr>
<tr>
<td>ASTR 703</td>
<td>Galactic Astronomy</td>
</tr>
<tr>
<td>ASTR 704</td>
<td>General Relativity</td>
</tr>
</tbody>
</table>

Plus three additional graduate courses in physics or astronomy: 9

Total Hours: 36

**Research requirements**

Research is the central focus of the degree and is directed by a faculty advisor over a period of several years. When the research is completed, the student must write a dissertation and defend it before the doctoral committee of five faculty. The average completion time for the Ph.D. is five years beyond the B.S. Research specialties within the department include astrophysics, computational physics, condensed matter physics, fluid mechanics, nonlinear dynamics, and plasma physics.

**Faculty**

**Chair**

- Earl E. Scime

**Associate Chair**

- James Lewis

**Professors**

- Wathiq Abdul-Razzaq
  Solid state physics, Experiment.
- Leonardo Golubovic
  Condensed matter theory and statistical physics.
- Larry E. Halliburton
  Solid state physics, Experiment.
- Mark E. Koepke
  Byrd Professor. Plasma physics, Experiment.
- David Lederman
  Byrd Professor. Condensed matter physics, Experiment.
- Earl E. Scime
  Eberly Professor. Chairperson. Plasma physics, Experiment.
- H. Arthur Weldon
  Particle physics, Quantum fields, Theory.

**Associate Professor**

- James P. Lewis
  Computational condensed matter physics.
  Status: Associate
Graduate Eberly College of Arts and Sciences

Assistant Professor
- Duncan Lorimer
- Maura McLaughlin

• Loren Anderson
• Alan Bristow
• Paul Cassak
  Plasma physics, Theory.
• Feruz Ganikhanov
  Nonlinear optics.
• Mikel Holcomb
  Condensed matter physics, Experiment.
• D.J. Pisano
  Radio astronomy, Experiment.
• Tudor Stanescu
  Condensed matter physics, Theory.

Teaching Assistant Professor
- Paul Miller

Research Professor
- Vladimir Demidov
  Plasma physics and plasma chemistry.
- Mohindar Seehra

Research Associate Professor
- Dimitris Vassiliadis

Research Assistant Professor
- Amy Keesee
- Clayton Simien
  Atomic physics.

Professors emeriti
- Benard Cooper
- Martin Ferer - PhD
- Richard Treat

Political Science

Degrees Offered
- Master of Arts
- Doctor of Philosophy

Nature of the Program
To give advanced training to students who desire to enter research or teaching fields relating to American politics, public policy (either U.S. domestic or international), comparative politics, and/or international politics, and those seeking careers as policy analysts in government or the private sector.

Faculty
The Department of Political Science has 19 full-time faculty members. The major strengths of the graduate faculty are: American politics (specialties include political institutions, interest groups, public opinion, judicial politics); public policy (specialties include bureaucracy, health policy, social welfare policy, urban and land use policies); international politics (specialties include U.S. foreign policy, comparative foreign policy, international political economy, and national security policy); comparative politics (specialties include development politics,
comparative political parties, Latin American, Western European, Canadian, and Far Eastern regional politics, and cross-national political analysis); and research methods.

Research
Graduate students have opportunities to conduct research with political science faculty. Several members of the faculty regularly co-author papers with graduate students. Graduate students may also work with the Institute for Public Affairs, and other research organizations at the University, and with externally-funded grant projects.

Financial Aid
The department has a number of assistantships and fellowships available for students in both the M.A. and Ph.D. programs. Students interested in financial assistance should apply directly to the Department of Political Science. Graduate assistants may enroll for no more than nine credit hours per semester (excluding colloquium).

Master of Arts
The Master of Arts is designed to provide students with a broad knowledge of political science and the policy-making process. This includes the study of many over-arching factors shaping political thought, analysis, and decision making, and an examination of specific influences that shape public policies at the international, national, state, and local levels of government. A problem-analytic approach, drawn from both political science and economics, is used to develop the ability to comprehend, assess, and evaluate issues, problems, and policies in the public sector. Prospective graduates are expected to be skilled at gathering and interpreting data, as well as reporting, writing, and analyzing policy options and political behaviors. Most graduates will take jobs in government or with private firms needing specialists in policy analysis, though this degree also leaves students well-placed for further study of these issues in Ph.D. programs.

Prerequisites/Requirements
Ideally, applicants for the master of arts degree should have a B.A. in political science (with a minimum of six hours in economics). However, students from other fields and disciplines are also encouraged to apply. In addition, the applicant should have an overall grade point average of 3.00, and should submit three letters of recommendation from faculty familiar with the student’s work. All students must also submit the results of the Graduate Record Examination.

In order to remain in good standing, students must maintain a 3.0 cumulative average and receive a 3.0 average in each semester for which they are enrolled. Students who do not maintain a 3.0 cumulative average will be placed on probation and will be suspended if they fail to regain a 3.0 cumulative average in their next nine hours of study.

Admission to candidacy for the M.A. degree requires that the student complete a minimum of 36 hours. Students must complete work in political science methodology and statistical methods. All students must enroll in POLS 799 each semester in residence.

Doctor of Philosophy
The Doctor of Philosophy degree is designed for people planning careers as researchers and teachers in institutions of higher education or as policy analysts in government or the private sector. All students are expected to take course work in three of the four major subfields - American politics, international politics, comparative politics, and public policy - and to pass general exams in two of them. Students’ course work will provide them with a firm grounding in relevant literatures, and prepare them to make their own contributions to the fields in which they specialize. Course work is also available to train students as expert analysts who will leave the program with a comprehensive knowledge of policy formulation, implementation, and evaluation, as well as a thorough understanding of the dynamics of political institutions. The design of the program will ensure that our graduates are trained in research methodology and statistical techniques.

Admission
Admission to the Ph.D. program is open to students with either a bachelor’s or master’s degree. Students with degrees in political science, economics, public administration, sociology, psychology, engineering, social work, business, law, medicine, or journalism are encouraged to apply. Applicants should have a grade point average of 3.5. Some training in statistics and a strong background in written communication is desired. In addition, all applicants must submit the results of the Graduate Record Examination and at least three letters of recommendation from faculty familiar with the applicant’s work. Applicants from foreign countries must submit the official results of the Test of English as a Foreign Language (TOEFL) as well. Admission will be based on an overall assessment of the individual’s record.

Minimum Requirements
Students must complete fifty-seven hours of course work (fifteen hours in each of their three substantive fields, plus twelve hours of research methods). In addition to their course work, students must also pass written comprehensive examinations in two of their specialty fields, and complete and defend a dissertation. All coursework completed for the M.A. at West Virginia University also counts toward the Ph.D. Course work from other institutions will be evaluated on a case-by-case basis.
In order to remain in good standing, students must maintain a 3.0 cumulative average and receive a 3.0 average in each semester for which they are enrolled. Students are required to spend at least one year (two semesters) in residence enrolled in a full-time graduate program of no less than nine semester hours each semester. All graduate students must enroll in POLS 799 each semester in residence.

**Faculty**

**Chair**
- R. Scott Crichlow

**Professors**
- Robert E. DiClerico  
  Eberly Professor for Outstanding Teaching. The presidency, political parties, electoral behavior.
- Joe D. Hagan  
  Barnette professor. International relations and world politics, comparative foreign policy analysis.
- Richard A. Brisbin, Jr.  
  American constitutional development, law and public policy.
- Hong N. Kim  
  Comparative politics (Asia), comparative public policy.
- Kevin Leyden  
  Congress, political behavior, interest groups, research methods.
- Donley Studlar  
  Eberly distinguished professor. British politics, comparative politics (European and English-speaking regimes), gender and ethnic politics.
- Jeffrey S. Worsham  
  Director of graduate studies. Public policy (regulation, social welfare), bureaucratic politics and public administration.

**Associate Professor**
- Neil Berch  
  Public policy (political economy), American politics (state and local).  
  Status: Regular
- R. Scott Crichlow  
  International relations, foreign policy decision-making, Middle East politics.
- Robert D. Duval  
  Methodology, international politics and policy, public policy (energy, environmental, and national security).
- Susan Hunter  
  Public policy (environment, policy design, and ethics), Contemporary political theory.
- John Kilwein  
  Associate Chair. Public law, judicial politics, public policy, public administration.

**Assistant Professor**
- Erin C. Cassese  
  American politics and political behavior, gender, religion and public opinion, political psychology, and research methods.
- Christina Fattore  
  International relations, international political economy, international organization, and European Union politics.
- Cyanne Loyle  
  Comparative politics (developing areas), conflict, contentious politics, and human rights.
- Jason MacDonald  
  American politics, Congress, research methods.
- Philip Michelbach  
  Political theory, American political thought, German political thought, Comparative democratic theory.
- Karleen West  
  Comparative politics (developing areas), political parties, Latin American politics.
Psychology

Degrees Offered
• Master of Arts
• Master of Science
• Doctor of Philosophy

Programs Offered
The doctoral degree programs in Behavior Analysis, Behavioral Neuroscience, Clinical Psychology, Clinical Child Psychology, and Life Span Developmental Psychology prepare students for careers in teaching, research, and/or practice. The professional master’s degree in clinical psychology (master of arts) prepares students for work in community mental health centers, medical facilities, mental health and mental retardation institutions, and school systems.

Admission
Students are admitted only at the beginning of the fall semester. Application must be completed by the preceding December 1 for the doctoral program and March 1 for the clinical professional master’s program.

Acceptance is based on:
• Adequate academic aptitude at the graduate level as measured by the Graduate Record Examination;
• Achievement in undergraduate coursework with a minimum grade point average of 3.0;
• Personal qualities that predict success in graduate study and as a professional after graduation;
• Adequate preparation in psychology and related fields; and
• Fit between the applicant’s interests and the offerings of a department graduate program.

Grade Point Average
Students must have a final 3.0 average in all psychology courses attempted.

Non-Degree Students
Graduate courses in psychology are designed for regularly admitted degree-seeking psychology students as part of an extensive program of preparing those students for professional careers. Thus, students not admitted into one of the psychology graduate programs are discouraged from taking graduate courses in psychology. Non-psychology graduate students must obtain the instructor’s permission to enroll in any psychology graduate course.

Master of Arts Requirements
The master of arts degree is given to students who complete the professional M.A. degree track in clinical psychology. Two years of full-time study with a minimum of 48 hours of credit are required for the master of arts degree. Students must complete a specified sequence of courses and a six-month, full-time internship. There is no thesis requirement.

Master of Science Requirements
Students who are accepted into one of the Ph.D. programs will receive the M.S. degree upon completing the following requirements: PSYC 511, PSYC 512, one additional three-credit research methodology course, completion of a minimum of 48 total credits, and completion of an empirical master’s thesis.

Doctor of Philosophy Requirements
Students are accepted for study toward the doctor of philosophy degree upon entry into the department. Each program requires completion of a specific set of required courses and electives (described in detail in the Department Graduate Handbook). Students are formally admitted to doctoral candidacy after completion of the master’s degree or its equivalent, a comprehensive preliminary examination, and other requirements.

A dissertation and oral examination on the dissertation are required for all Ph.D. candidates. Students in the clinical psychology programs must also complete a 12-month internship. The internship must be approved by the program and by the director of clinical training.
Faculty
Chair
• Tracy L. Morris - Ph.D. (University of Mississippi)

Professors
• Barry A. Edelstein - PhD
  Eberly Family Distinguished Professor. Older adult assessment, anxiety, and decision making.
  Status: Regular
• William J. Fremouw - PhD
  Forensic psychology, Ethical issues, Criminal behaviors.
  Status: Regular
• Katherine Karraker - PhD
  Adults' perceptions of infants, Infant social development, Infant sleep, Infant temperament, Infant assessment.
  Status: Regular
• Kevin T. Larkin - PhD
  Cardiovascular reactivity and its implication in the development of cardiovascular disorders and anxiety-related problems.
  Status: regular
• Kennon A. Lattal - PhD
  Centennial Professor. Learning and behavior theory, History and philosophy of psychology, Pet behavior management.
  Status: Regular
• Cheryl B. McNeil - PhD
  Disruptive behavior disorders of children, Parent-child-interaction therapy.
  Status: Regular
• Daniel W. McNeil - PhD
  Eberly Family Professor. Experimental psychopathology, Anxiety, Pain, Behavioral dentistry and Behavioral medicine, Cross-cultural issues, Clinical research training.
  Status: Regular
• Tracy L. Morris - PhD
  Eberly Distinguished Professor. Social anxiety, Social behavior, Influence of parenting and peer relationships.
  Status: Regular
• Michael Perone - PhD
  Experimental analysis of positive and negative reinforcement, Translational research, Experimental methodology, Experimental analysis of verbal behavior, Research methodology.
  Status: Regular
• Joseph R. Scotti
  Professor. Post traumatic stress disorder in children and adults, Disaster and emergency response, Standards of practice.
  Status: Regular
• JoNell Strough - PhD
  Lifespan development, Social problem solving, Heuristics and biases in decision making, Gender development.
  Status: Regular

Associate professors
• Karen G. Anderson - PhD
  Behavioral pharmacology, Determinants of choice.
  Status: Regular
• Christina Duncan - PhD
  Pediatric psychology and adherence to medical regimens
  Status: Regular
• Amy E. Fiske - PhD
  Etiology of depression and suicidal behavior in late life
  Status: Regular
• Hawley Montgomery-Downs - PhD
  Developmental psychobiology of sleep and sleep disorders
  Status: Regular
• Julie Hicks Patrick - PhD
  Decision-making. Care giving issues related to chronic mental illness and retardation, Non-traditional family constellations.
  Status: Regular
• Claire St. Peter - PhD
Assessment and treatment of severe problem behavior, caregiver training, treatment integrity failures, and translational research methods.
Status: Regular

**Assistant professors**
- Melissa Blank - PhD
  Behavioral neuroscience
- Regina Carroll - PhD
  Applied behavior analysis
- Amy Gentzler - PhD
  Investigation of emotional experiences and the regulation of emotions.
  Status: Regular
- Steven Kinsey - PhD
  Behavioral neuroscience, effects of stress on immunological models
  Status: Regular
- Elisa Krackow
  Children's eyewitness memory, Child depression.
  Status: Regular
- Elizabeth Kyonka - PhD
  Quantitative analysis of behavior, Mechanisms of choice, Temporal control, and decision making, Behavior dynamics.
  Status: Regular
- Aaron Metzger - PhD
  Adolescent civic and political development, Adolescent/parent communication and adolescent information management.
  Status: Regular
- Miranda Reed - PhD
  Behavioral neuroscience, behavioral and molecular basis of memory
  Status: Regular
- Natalie Shook - PhD
  Social psychology, attitudes
  Status: Regular

**Teaching Associate Professor**
- Connie Toffle - PhD
  Developmental psychology; psychology of teaching

**Lecturer**
- Elizabeth Levelle - PhD
  Developmental psychology

**Professors Emeritus**
- Stanley Cohen
- Irving Goodman
- Kent Parker

**Public Administration**

**Degree Offered**
- Master of Public Administration

The Division of Public Administration offers a public administration curriculum for graduate students seeking the degree of master of public administration (M.P.A.) or a specialization as part of another graduate degree program. This program provides a professional orientation to the primary facets of public management.

**Curriculum**
The master of public administration curriculum serves the needs of students from a variety of backgrounds who wish to pursue careers in public service. It directs particular attention to developing an understanding of the management function in the public context as well as
preparation in utilizing advanced management techniques applicable to all levels of government—local, state, national, and international—as well as the not-for-profit sector, particularly health and hospital organizations.

The study program is designed to supply an academic foundation for comprehension of the range of processes and management approaches employed in public administration. These include public management theory and practice, personnel administration, budgetary and financial management, organizational dynamics, legal and ethical concerns, practically-oriented research, and leadership. Particular stress is placed on those functions and issues that require the greatest degree of adaptation, innovation, and responsiveness on the part of the professional administrator. The curriculum reflects the diversity of skills required by all levels of government. The range of needs is broad in scope; students apply from diverse backgrounds, including political science, other social sciences, physical sciences, humanities, and from positions in public service, not-for-profit, and private sectors.

Admission

Candidates must meet the WVU general admission requirements for graduation from an accredited college and grade point average. Admission into the M.P.A. program is competitive with decisions based on:

- Application for admission and transcripts (submitted to the Office of Admissions).
- Graduate Record Exam (GRE) test scores (GMAT and LSAT scores can be submitted in place of the GRE).
- Two letters of evaluation (you can request a form from the Division or download the form from our webpage: publicadmin.wvu.edu/future_students/mpa_admission_process
- Personal Statement
- Resume/Vita

In the case of practicing administrators, a record of accomplishment in administrative performance will be weighed heavily in combination with the criteria outlined above.

Application Deadline

Applicants may request admission to the M.P.A. program in the Fall, Spring, and Summer terms. The deadline for all application materials to be turned in for Fall and Summer admission is April 1; applicants will be notified of the committee’s decision around April 15. The deadline for all application materials to be turned in for Spring admission is October 15; applicants for the Spring term will be notified around October 31. Applications for admission may be considered after these deadlines on a space-available basis. Incomplete applications will not be considered.

Further information is available from:

Division of Public Administration
P.O. Box 6322
Morgantown, WV 26506
Debbie.Koon@mail.wvu.edu
(304) 293-2614
or publicadmin.wvu.edu

Healthcare Administration Specialization

Description

The Public Administration Division offers a healthcare administration specialization for students who are interested in a career in a variety of healthcare settings, including hospitals, health departments, nursing homes, mental health services, home health services, nonprofit voluntary agencies, health research foundations, public and private insurance, and a variety of governmental agencies.

Curriculum

The specialization consists of fifteen credit hours:

<table>
<thead>
<tr>
<th>Required Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBA 670</td>
<td>3</td>
</tr>
<tr>
<td>Health Systems</td>
<td></td>
</tr>
<tr>
<td>PUBA 671</td>
<td>3</td>
</tr>
<tr>
<td>Healthcare Organizatn/Operatn</td>
<td></td>
</tr>
<tr>
<td>PUBA 672</td>
<td>3</td>
</tr>
<tr>
<td>Healthcare Finance</td>
<td></td>
</tr>
</tbody>
</table>

Healthcare Electives

See electives listed on web page 3

Capstone Experience
Students who desire to specialize in this area as part of their M.P.A. degree take elective courses are offered in healthcare administration. A certificate program is also available for students who are just interested in the healthcare specialization as a non-degree seeking student. For more information: publicadmin.wvu.edu/graduate_programs/healthcare_administration_cert.

Graduate Certificate in Public Management
The Division of Public Administration offers a Graduate Certificate in Public Management as part of its programming.

Description
The Public Management Certificate Program provides 15 credit hours in graduate Master of Public Administration (MPA) courses to students. The program utilizes the same coursework, numbers, and titles as courses in the MPA program.

The certificate program is designed to provide an opportunity for students to pursue graduate level training in key aspects of public administration and management without pursuing the entire Master of Public Administration degree. However, students who begin the certificate may apply to the MPA program and, if accepted, convert their certificate courses to the MPA degree program.

Curriculum
The Graduate Certificate in Public Management consists of 15 credit hours. Students in the program must take the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBA 610</td>
<td>Public Mangmnt Theory/Practice</td>
<td>3</td>
</tr>
<tr>
<td>PUBA 620</td>
<td>Public Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>PUBA 640</td>
<td>Legal/Political Foundations</td>
<td>3</td>
</tr>
<tr>
<td>PUBA 720</td>
<td>Public Budgeting</td>
<td>3</td>
</tr>
<tr>
<td>PUBA 741</td>
<td>Human Resource System</td>
<td>3</td>
</tr>
</tbody>
</table>

For more information concerning the Public Management Certificate: publicadmin.wvu.edu/graduate_programs/public_management_certificate

Dual Degrees
The division has established both joint degree and dual degree programs with a number of other graduate programs. A dual J.D./M.P.A. degree program has been established with the College of Law to provide preparation in both law and public administration. A dual M.S.W./M.P.A degree has been developed in cooperation with the Division of Social Work to provide preparation for administrators in the social services. Dual degree programs may also be arranged with other academic programs and professional schools. Graduate studies regulations permit limited credit from one graduate degree to be applied to a second degree. Students may pursue two degrees and use approved coursework for both degrees. For more information: publicadmin.wvu.edu/graduate_programs.

Graduate Minor
A graduate minor in public administration may be taken in conjunction with other graduate degrees in the College of Arts and Sciences. In addition, a graduate minor in public administration may be part of graduate degree programs outside the college as approved by the Graduate Committee for that student.

At the master’s level, a minor consists of 12 hours of coursework (PUBA 610, PUBA 620, PUBA 640, and one advanced course). At the doctoral level, 15 hours of coursework is required (PUBA 610, PUBA 620, PUBA 640, and two advanced courses). A grade point average of 3.0 must be achieved for the courses taken in the graduate minor.

Changes in course requirements within the hour limits may be approved by the Division of Public Administration for students with specialized needs or background experience.

General Requirements
The M.P.A. degree requires the completion of 45 credit hours. The requirements are listed below. Elective courses can be tailored to individual students’ needs with revisions agreed upon by both student and advisor.
### Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBA 640</td>
<td>Legal/Political Foundations</td>
<td>9</td>
</tr>
<tr>
<td>PUBA 720</td>
<td>Public Budgeting</td>
<td></td>
</tr>
<tr>
<td>PUBA 730</td>
<td>Applied Research-Public Admin</td>
<td></td>
</tr>
<tr>
<td>PUBA 741</td>
<td>Human Resource System</td>
<td></td>
</tr>
</tbody>
</table>

### Elective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBA 751</td>
<td>Public Service Internship</td>
<td>6</td>
</tr>
</tbody>
</table>

### Integrative Capstone

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBA 700</td>
<td>Capstone Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours**: 45

*Concentrations using electives from Public Administration and other fields as developed with your advisor*

## Degree Completion

It usually takes four semesters for full-time students to complete the M.P.A. degree. Coursework can be completed in two semesters and a summer. In addition, the internship is generally one semester in length, although a variety of internship arrangements are possible. For those individuals who have had substantial public service experience, internship credit can be awarded.

## Faculty

### Interim Chair

- John C. Kilwein
  Associate Professor. Specialization: Constitutional law, public law and policy.

### Associate Professor

- L. Christopher Plein
  Eberly Professor of Outstanding Public Service. Specialization: Legal and political foundations, public policy analysis, social policy, community and economic development.

### Assistant Professor

- Adam Douglas Henry
  Specialization: Network analysis, sustainability science, public policy, and research methods.

- Maja Husar Holmes
  Specialization: Public management, public leadership, and environmental and energy policy.

- Karen Kunz
  Specialization: Financial management, corporate use of public funds, political economy.

- Margaret Stout
  Specialization: Local government, community development, public policy and public planning.

### Clinical assistant professor

- Nancy L. Adams
  Specialization: Healthcare management, organization development, service delivery systems, organization behavior, social change.

### Professors emeriti

- Gerald M. Pops
- David G. Williams

## Social Work

### Degree offered

- Master of Social Work
Nature of the Program

The graduate program in social work offers advanced study and training to prepare social workers for social work practice and leadership roles in small towns and rural areas. The Division of Social Work is nationally recognized in the area of rural social work practice and non-profit management. All degree programs offered by the division are accredited by the Council on Social Work Education.

Students have the opportunity to focus their practice interests by selecting one of two practice tracks—direct practice or community organization and social administration. Students have the opportunity to do their field internships with agencies throughout West Virginia and adjacent areas. In addition, a dual degree option is offered in conjunction with the Division of Public Administration. Graduate certificates are available in the areas of gerontology and non-profit management (http://grad.wvu.edu/).

The Division of Social Work supports both full-time and part-time graduate study at the campus in Morgantown and part-time graduate study at several extended campus sites, including Charleston, Beckley, Keyser, Wheeling, and Martinsburg. Regular standing students—those with degrees in areas other than social work or those with social work degrees who do not meet the criteria for advanced standing status—begin the program in fall semesters. It takes two years to complete the program on a full-time basis, including two summer sessions between the first and second years of the program, and three years to complete the program on a part-time basis, also including summer sessions. Full-time advanced standing students (those with a qualifying B.S.W. degree) begin the program in January and complete the program in 16 months. Part-time advanced standing students begin in the fall semester and finish in just under two years.

Applicants to the M.S.W. program come from a variety of academic disciplines and have varying degrees of experience in the field of social work. Students interested in applying to the division or seeking additional information should address inquiries to:

M.S.W. Admissions
Division of Social Work
West Virginia University
P.O. Box 6830
Morgantown, WV 26506-6830
Phone: (304) 293-3501

Application information is also available on our website at http://socialwork.wvu.edu.

Career Opportunities

Graduates of the M.S.W. program are employed throughout the United States and Canada. They work as individual, family, and group treatment specialists, planners, community organizers, and social researchers. They also work as social work educators and as administrators in a variety of programs such as mental health clinics, hospitals, correctional institutions, courts, delinquency programs, aging programs, family counseling agencies, child protective agencies, public welfare departments, child development programs, drug and alcohol abuse programs, public schools, community action agencies, settlement houses, city governments, state government planning agencies, federal administrative agencies, and private research and development organizations concerned with human problems.

There has been a constant growth in the need for professional social workers. It is anticipated by the Bureau of Labor Statistics and other research bodies that the employment demand for social workers will continue to increase in numbers and in varieties of programs. The WVU social work curriculum is designed to help students prepare for these careers. Students are required to work closely with their academic advisors in selecting appropriate components in class and field learning to meet their individual needs.

Dual M.S.W./M.P.A.

A dual degree option resulting in the master of social work (M.S.W.) and master of public administration (M.P.A.) is available through the Division of Social Work and the Division of Public Administration. For a student admitted to the regular M.S.W. program, a total of 82 credit hours are required to meet the dual degree requirements. For a student admitted to the advanced standing M.S.W. program, a total of 69 credit hours are required to meet dual degree requirements. Many students complete such requirements through one or more additional semesters of study beyond the semesters required for the M.S.W. degree. Applicants must meet the admission requirements of each program. Acceptance by one program does not guarantee acceptance by the other. Additional information and descriptive materials about the dual degree program are available from either:

M.S.W. Admissions
Division of Social Work
West Virginia University
P.O. Box 6830
Morgantown, WV 26506-6830

or

Division of Public Administration
West Virginia University
P.O. Box 6322
Admission to the M.S.W. Program

Students requesting admission must demonstrate the following:

- Proof of academic achievement. Graduate regulations require an undergraduate grade point average of at least 2.75 for approval of candidates as a regular graduate student. An accepted applicant whose grade point average is less than 2.75 is classified as provisional. See the graduate catalog section titled “Classification of Graduate Students” for a description of admission categories.
- Aptitude for graduate study as evidenced by performance on the Graduate Record Examination. (Required for applicants with less than 3.0 GPA).
- Evidence of potential to practice social work, including a commitment to human service, and the ability to work effectively with people.
- Evidence of having successfully completed at least 30 hours of upper-level courses in the liberal arts.
- Paid or volunteer human service experience.

Admission Eligibility

Regular Program

Applicants meeting the following criteria are eligible to be considered for admission to the regular M.S.W. program (58 credit hours):

- Students with a baccalaureate degree in a field other than social work.
- Students with a baccalaureate degree in social work or social welfare from a program accredited by the Council on Social Work Education whose cumulative grade point average in their social work courses is below 3.0 (on a 4.0 scale) or who have a BSW degree older than eight years
- Students with a baccalaureate degree in social work or social welfare whose cumulative grade point average in all courses is less than 2.75. Such students may be admitted as provisional students in the regular M.S.W. program.

All regular program students begin their study in August and are scheduled to complete their requirements within two years on a full-time basis and in three years on a part-time basis. Summer coursework is required of all students.

Advanced Standing

Applicants are eligible for consideration for admission to the advanced standing M.S.W. program (42 credit hours) if the following criteria are met:

- A baccalaureate degree in social work from a program accredited by the Council on Social Work Education, with a supporting recommendation from the B.S.W. director of that program.
- A cumulative GPA of 2.75 or higher (on a 4.0 scale) in all courses.
- A cumulative GPA of 3.0 or higher in their social work courses.

Part-Time Study

Applicants may be admitted as part-time students to either the regular M.S.W. program or advanced standing M.S.W. program. Part-time students must follow a degree plan that provides for the appropriate sequencing of courses. Students are required to complete at least six credit hours each semester while enrolled as part-time students. The entire degree may be completed on a part-time basis.

Application Deadlines

Each of the following deadlines refers to complete applications. Incomplete applications are held over until complete for the next deadline.

- Priority Application Deadline—March 1. Applicants admitted from the priority review will be given preference for graduate assistantships in the division and for scholarships. Applications for these awards will be sent with acceptance letters and will be due on April 15.
- Regular Application Deadline—April 1.
- Late Application Deadline—May 1. This deadline applies to those who needed more time to complete their applications and to those who were rolled over for provisional acceptance consideration. Acceptance at this point is on a space available only basis.

The M.S.W. Admissions Committee reserves the right to alter or extend deadlines for exceptional circumstances.

Transfer Students

Applicants wishing to transfer from another CSWE accredited graduate social work program must meet all of WVU’s admissions requirements and may request transfer of up to a maximum of 18 credit hours. Syllabi and bibliographies for all requested transfer courses must be submitted along with a letter of recommendation from the M.S.W. program director from that institution in addition to other required
Curriculum and Degree Requirements

Degree Requirements

The degree of master of social work (M.S.W.) is conferred upon those students who satisfactorily complete the requirements as established for graduate education. These requirements are:

- Satisfactory completion of no less than 58 semester hours for those admitted to the regular M.S.W. program and 42 semester hours for those admitted to the advanced standing M.S.W. program. These hours may be earned through the program on the campus in Morgantown, as well as at the extended campus sites.
- Satisfactory completion of all components called for by the degree plan to which students are admitted in the graduate program.

Curriculum Components

All M.S.W. students complete coursework in social work practice, social welfare policy, human behavior and the social environment, social work research, and field instruction. In addition, students select a practice track.

- Direct practice track students gain the knowledge and skills to provide direct and clinical services to individuals, families, and small treatment groups.
- Community organization and social administration track students gain knowledge and skills to provide leadership to communities in the development, administration, and support of service programs.

Field Instruction

Field instruction provides the student with an opportunity to test classroom knowledge as well as to develop and refine advanced practice skills. Field instruction opportunities are available throughout West Virginia and adjacent areas, as well as in a select number of settings outside the region.

Full-time regular standing M.S.W. students have a generalist field experience during the first two semesters of study. Advanced field placement is typically completed on a concurrent plan requiring 16–24 hours of field instruction activity each week throughout the second year of study according to degree plans.

Students are required to take at least three credits of classroom coursework concurrently with the advanced field placement and to complete assignments designed to facilitate the integration of field and classroom study. Decisions regarding the field placement assignment are jointly reached by the student, faculty advisor, and field instruction coordinator. Only sites on the Division of Social Work's list of approved agencies may be used for field instruction.

Grade Point Average (GPA) Requirements for Good Standing

All graduate courses must be completed with a grade of C or better; students may repeat any course for which the final grade is less than C one time only. Students are required to maintain an overall minimum GPA of 2.75 (on a four-point scale) to continue in the program, to be eligible for field instruction, and to be eligible for graduation.

Summary of Degree Requirements for Regular M.S.W. Program

<table>
<thead>
<tr>
<th>Required Course Credits</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalist Foundation Courses</td>
<td>4</td>
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<tr>
<td>Advanced Field Credits</td>
<td>12</td>
</tr>
<tr>
<td>Electives Credits</td>
<td>12</td>
</tr>
<tr>
<td>Total Hours</td>
<td>58</td>
</tr>
</tbody>
</table>

Summary of Degree Requirements for Advanced Standing M.S.W. Program

<table>
<thead>
<tr>
<th>Required Course Credits</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Field Credits</td>
<td>12</td>
</tr>
<tr>
<td>Electives Credits</td>
<td>12</td>
</tr>
<tr>
<td>Total Hours</td>
<td>42</td>
</tr>
</tbody>
</table>

Graduate Certificate in Gerontology

The Graduate Certificate in Gerontology is available to students who meet WVU graduate admission requirements and have an interest in learning more about the aging processes and older people. The Certificate affords students an opportunity to explore the basic
biological, psychological, and sociological processes of aging, the effects on needs and experiences of older people, and the impact of social policies related to human aging. An understanding of the unique problems and needs of older adults in Appalachia and other rural areas is emphasized.

- The Certificate requires 15 graduate credits as detailed below.
- A 3.0 grade-point average must be maintained in all Certificate coursework.

Coordination of the Graduate Certificate in Gerontology was assumed by the Beatrice Ruth Burgess Center for WV Families and Communities of the WVU Division of Social Work in Fall 2009. As Certificate requirements are reviewed, it is possible that some of them may be modified. You may want to check this site periodically or contact Dr. Kristina Hash (http://socialwork.wvu.edu/faculty_staff/faculty/hash_kristina_m), Director of the Gerontology Certificate Program for the latest information about program requirements.

Students must apply to be enrolled in the Certificate Program. An application form (http://socialwork.wvu.edu/r/download/130506) is available on this website or may be obtained from Dr. Hash or Carol R. Amendola (http://catalog.wvu.edu/graduate/eberycollegoartsandsciences/socialwork/mailto:carol.amendola@mail.wvu.edu), who may be contacted at 304.293.6374.

Those interested in the Gerontology Certificate may also want to explore the Summer Institute on Aging (http://socialwork.wvu.edu/ce/summer_institute_on_aging).

Curriculum Requirements for Gerontology Certificate program

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>9</th>
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<tbody>
<tr>
<td>GER 512</td>
<td>Public Policy of Aging</td>
</tr>
<tr>
<td>GER 645</td>
<td>Fundamentals of Gerontology</td>
</tr>
<tr>
<td>GER 681</td>
<td>Rural Gerontology</td>
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</table>

Electives (Select two)

<table>
<thead>
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<tbody>
<tr>
<td>SOWK 653</td>
</tr>
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<td>SOWK 572</td>
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<tr>
<td>GER 645</td>
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<tr>
<td>PHAR 754</td>
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</table>

Total Hours 15

For further information, please consult the Division's website, http://socialwork.wvu.edu/certificates or contact Dr. Kris Hash at KMHash@mail.wvu.edu.

For further information about the graduate certificate contact the Burgess Center.

For a complete listing of aging-related courses including graduate certificate electives, contact the:

Burgess Center
105 Knapp Hall
P.O. Box 6830
West Virginia University
Morgantown, WV 26506-6830

Or call (304) 293-3501

**Graduate Certificate in Nonprofit Management**

The Division of Social Work, in cooperation with the other units of the School of Applied Social Sciences, offers a 15-hour graduate Nonprofit Management Certificate program. The program consists of two required 3-hour courses, six hours of electives, and a 3-hour capstone project.

Required Courses for the Nonprofit Management Certificate program are SOWK 654 and SOWK 655

Electives

Students enrolled in the certificate may choose a wide variety of electives, including appropriate courses in their field of study, employment, volunteer history or other interest. In the past, certificate students have elected courses in public administration, social work, sociology, political science, geography, agriculture, journalism, and other disciplines.

Please see the Division’s website for more information. http://socialwork.wvu.edu/certificates/nonprofit_management_certificate_program

Capstone

Upon completion of the required and elective coursework, each student is required to do an individual capstone project in order to complete the certificate requirements. Students in public administration typically do their nonprofit capstone requirement concurrently with a similar
departmental requirement there. Dual-degree and social work students frequently develop their capstone projects in conjunction with their field placements.

Candidates for the graduate certificates must meet regular WVU graduate admission requirements. Program participants must maintain a minimum grade point average of 3.0 in certificate coursework.

For more information on the Graduate Certificate in Nonprofit Management, please contact Dr. Michael J. Zakour at michael.zakour@mail.wvu.edu or by calling 304.293.3027.

The application form used to apply for admission and specific requirements may be found at: http://socialwork.wvu.edu/certificates or obtained from the:

Division of Social Work
105 Knapp Hall
P.O. Box 6830
West Virginia University
Morgantown, WV 26506-6830
(304) 293-3501

Faculty

Interim Chair
• L. Christopher Plein - Ph.D (U.Missouri)
  Interim Chair, Policy Formation and Implementation, Public Administration

Professor
• Karen V. Harper-Dorton - Ph.D (Ohio St. U.)
  Professor and Chair, Title IV-E Project in Child Welfare, Rural Social Work, Social administration.

Assistant Professor
• Emily McCave - Ph.D (U. of Kans.)
  Research LGBT.

Clinical associate professor
• Linda Ferrise - MSW (WVU)
  Baccalaureate Program Director, Clinical Practice, Community mental health

Clinical assistant professor
• Patricia Chase - Ed.D (WVU)
  Child Welfare

Senior Lecturer
• Eveldora Wheeler - MSW (U. of Pitt)
  Management, Training, Deliberation and dialogue

Instructors and Faculty Equivalents
• Carol Amendola - MSW (WVU) LICSW
BSW Program Coordinator, Clinical Practice, Child Welfare
• J. Scott Dixon - MSW (Temple)
  Martinsburg MSW Coordinator, Spirituality, Mental Health, Poverty Issues
• Jacqueline Englehardt - MSW (WVU) LCSW
  Professional and Community Education. Nonprofit management.
• Lori Fell - MSW (WVU)
  MSW Coordinator, Group work, Spirituality in social work practice, Substance abuse treatment and recovery
• Samuel J. Leizear - MSW (WVU) LCSW
  Field Education Coordinator. Human diversity, Health care and aging, LGBT issues.
• Chatman Neely - MSW (WVU)
  Wheeling MSW Coordinator, Clinical practice, Teaching Instructor
• Debra Young - Ed.D (Marshall U)
  Charleston MSW Coordinator, Community organization and social administration.

Research Associate
• Rebekah Bledsoe - MSW (WVU)
  Title IV-E. Child Welfare

Emeritus Faculty
• Marjorie H. Buckholz-Cleveland - Ph.D (WVU)
• Barry Locke - Ed. D (WVU)
• Roger A. Lohmann - Ph.D (Brandeis U.)
• Nancy Lohmann - Ph.D (Brandeis U.)
• Caroline T. Mudd - MSW (U. of PA)

Sociology and Anthropology

Degree Offered
• Master of Arts in Sociology

Nature of the Program
The Division of Sociology and Anthropology offers a Master of Arts degree in sociology. The program trains students in the core areas of sociology, including research design, quantitative and qualitative methods, data analysis, theory, and sociological writing. It also teaches a range of professional skills designed to help graduates enter the academic or non-academic job markets. Emphasis is placed on writing and presentation skills, knowledge of statistical software, teaching ability, expertise in program evaluation, and ability to communicate and apply sociological theory. Graduates of the program have entered PhD programs and have taken positions in universities, government, community agencies, and private industry.

Admission
Applicants for admission to graduate study must have a bachelor’s degree from an accredited institution. Applicants must submit a university graduate application and have their college or university transcripts sent directly to the WVU Office of Admissions. Candidates should also submit three completed recommendation forms from former professors, supervisors, or employers. Applicants should submit a written statement of purpose outlining graduate study goals and plans (career plans, research experience, and any special circumstances), a short sample of academic writing, and scores for the Graduate Record Examination. Foreign students for whom English is not the native language are required by the University to submit Test of English as a Foreign Language (TOEFL) scores (a minimum score of 550 is required) and may be required to participate in the University’s language orientation sessions.

Application Deadline
The application process should be completed by March 1 for admission to the fall semester. Students seeking financial assistance must request and submit a separate application form furnished by the Division of Sociology and Anthropology.

Remediation
Students with deficient background in sociological theory, methods, or statistics may be required to do remedial work. Full-time students who are admitted as special provisional students are required to complete 12 hours of approved coursework with a B average or better within
a year; students who fail to do so are suspended. The Division’s Graduate Committee assesses all students and determines who will be permitted to continue in the program, with or without assistance. Normally, assistance is for no more than two years.

**Degree Requirements**

The 36-hour program requires 30 hours of coursework and either the completion of a thesis (six hours) or an applied research report (six hours). During the first three semesters, students are required to enroll in a series of core research courses. In addition, the student, in consultation with his or her Program Committee, chooses electives either in the Division or elsewhere in the University as a basis for gaining expertise in some specific area of concentration.

The Division of Sociology and Anthropology offers a Master’s degree in Sociology. Students are trained to be able to take positions in government, universities, community agencies, and private industry that require them to design and conduct research for purposes of evaluating policies and programs, documenting social needs, monitoring service delivery, and marketing products and services. The program also serves as a good foundation for students who may later choose to pursue doctoral studies. Students pursue individually-tailored plans of study that include training in research design and data analysis, along with advanced work in substantive areas and a grounding in policy analysis.

Employers value our graduates’ technical skills, understanding of the research process and overview of the interaction between research, planning, and policy. Many of our graduates are soon promoted to positions as project directors, managers and supervisors. As a consequence, our network for placing graduates is ever expanding.

The 36 hour program requires 30 hours of coursework and either the completion of an applied research report (six hours) based on an analysis of a social program or policy, or a thesis (six hours) for students interested in investigating a theoretical problem or methodological issue. During the first three semesters, students are required to enroll in a series of core research courses. These include survey research methods, qualitative research methods, elementary and advanced data analysis, principles of research design, and a seminar in applied social research policy.

In addition to instruction of technical skills, faculty furnish an overview of the relationship between policy and research and provide expertise in a broad range of substantive areas, including economic development in Appalachia, gender, racial and ethnic studies, sociology of education and work, the criminal justice system, health care delivery, injury prevention, community and organizational development, and conflict analysis and resolution. In addition to course work, students will have an opportunity to work with faculty who are actively engaged in research in the areas mentioned above. It is not uncommon to have students work with faculty on research that is presented at local, regional and national professional meetings, published in professional journals, and presented to development agencies and legislative bodies.

**Faculty**

**Professors**

- Ronald C. Althouse - Ph.D. (U. Minn.) Sociology
  Theory, work, occupational safety and health
- Lawrence T. Nichols - Ph.D. (Boston Coll.) Sociology
  Criminology, theory, business

**Professor emeritus**

- Jerold M. Starr - Ph.D. (Brandeis U.) Sociology

**Associate professors**

- Corey Colyer - Ph.D. (Syracuse U.) Sociology
  People processing systems, agencies of social control
- S. Melissa Latimer - Ph.D. (U. Ky.) Sociology
  Gender/race/ethnicity, inequality/labor markets/welfare systems
- James Nolan, III - Ph.D, (Temple U.) Sociology
  Criminal justice, group and social processes
- Rachael A. Woldoff - Ph.D. (Ohio State U.) Sociology
  Community, crime, inequality/race/class

**Associate professors emeriti**

- Patricia C. Rice - M.A. (Ohio St. U.) Anthropology
336 Graduate Eberly College of Arts and Sciences

• Joseph J. Simoni - Ph.D. (U. Notre Dame) Sociology
• William I. Torry - Ph.D. (Columbia U.) Anthropology

Assistant Professor
• Lisa M. Dilks - Ph.D. (U. South Carolina) Sociology
  Social psychology, group processes, law and society, quantitative methods
• Amy Hirshman - Ph.D. (Mich. St. U.) Anthropology
  Mesoamerican anthropology, social complexity, ceramics
• Jason Manning - Ph.D. (U. of Virginia) Sociology
  Conflict and social control, violence, sociology of knowledge
• Danial Renfrew - Ph.D. (Binghamton U.) Anthropology
  Environmental and political anthropology, social movements, Latin American cultures
• Rachel Stein - Ph.D. (U. Akron) Sociology
  Criminology, victimization, media and crime

Teaching Assistant Professor
• Adam Dasari - Ph.D. (Oklahoma St. U.) Sociology
  Social stratification, globalization, environmental sociology, theory

Clinical Assistant Professor
• Jennifer Steele - Ph.D. (Penn. St. U.) Rural Sociology
  Natural resource sociology, rural community and economic development

Statistics

Degree Offered
• Master of Science

Nature of the Program
The Department of Statistics offers a master of science with a major in statistics. The department also offers a minor in statistics as an option for both master of science and doctor of philosophy degree programs. The master of science degree is intended to qualify the student to assume a professional role in educational, industrial, or governmental research projects; to teach in a college; or to undertake advanced training toward a doctorate in statistics or one of the quantitative fields of science.

Because many students receive baccalaureate degrees from colleges that do not offer undergraduate programs in statistics, and because historically statistics has been primarily a field of graduate education, a student does not need a degree in statistics to enter the M.S. degree program in statistics. A good background in mathematics, science, or engineering is reasonable preparation for graduate work in statistics.

The Department of Statistics participates with computer science and mathematics to offer the combinatorial computing and discrete mathematics (CCDM) area of emphasis within the computer and information science or mathematics Ph.D. Students must be admitted to one of these degree programs. Once admitted, statistics can be chosen as a major or minor area.

Master of Science

Options The following two options are available for students seeking a master of science in statistics:
• Problem Report Option—at least 36 hours of coursework, including three hours of credit for a problem report;
• Thesis Option—at least 36 hours of coursework, including six hours of credit for a thesis.

Prerequisites Students are expected to know the material contained in the following courses or areas upon admission to the program. Otherwise, these deficiencies must be removed as early as possible in the student’s degree program under the terms specified by the Admissions and Standards Committee.
• Single and multivariable calculus (MATH 155, MATH 156, MATH 251 or equiv.)
• Linear or matrix algebra (MATH 441 or equiv.)
• Probability and statistics (STAT 215 or equiv.)
• Knowledge of a high-level programming language

**Required Courses**
Minimum requirements for either option are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 512</td>
<td>Statistical Methods 2</td>
<td>3</td>
</tr>
<tr>
<td>STAT 513</td>
<td>Design of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>STAT 545</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 561</td>
<td>Theory of Statistics 1</td>
<td>3</td>
</tr>
<tr>
<td>STAT 562</td>
<td>Theory of Statistics 2</td>
<td>3</td>
</tr>
</tbody>
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Select at least four of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>STAT 516</td>
<td>Forensic Statistics</td>
</tr>
<tr>
<td>STAT 521</td>
<td>SAS Programming</td>
</tr>
<tr>
<td>STAT 523</td>
<td>Statistical Computing</td>
</tr>
<tr>
<td>STAT 525</td>
<td>Statistical Graphics</td>
</tr>
<tr>
<td>STAT 541</td>
<td>Applied Multivariate Analysis</td>
</tr>
<tr>
<td>STAT 543</td>
<td>Bioinformatics Data Analysis</td>
</tr>
<tr>
<td>STAT 547</td>
<td>Survival Analysis</td>
</tr>
<tr>
<td>STAT 551</td>
<td>Nonparametric Statistics</td>
</tr>
<tr>
<td>STAT 555</td>
<td>Categorical Data Analysis</td>
</tr>
<tr>
<td>STAT 645</td>
<td>Linear Models</td>
</tr>
<tr>
<td>STAT 745</td>
<td>Data Mining</td>
</tr>
<tr>
<td>STAT 763</td>
<td>Stochastic Processes</td>
</tr>
<tr>
<td>STAT 765</td>
<td>Stat Methods-Bioinformatics</td>
</tr>
<tr>
<td>STAT 590</td>
<td>Teaching Practicum</td>
</tr>
<tr>
<td>STAT 682</td>
<td>Statistics Practicum</td>
</tr>
<tr>
<td>STAT 696</td>
<td>Graduate Seminar</td>
</tr>
<tr>
<td>STAT 697</td>
<td>Research</td>
</tr>
</tbody>
</table>

**Total Hours** 33-39

Credit towards the degree requirements is not given for STAT 511. Students must complete at least one hour of credit for STAT 590, STAT 682, and STAT 696, and at least three hours of credit for STAT 697. Students are expected to attend the graduate seminar every semester even if they are not registered for STAT 696. A grade of C or better and a minimum 3.0 GPA is required for courses fulfilling a major in statistics.

**Examinations** Students must pass two written comprehensive examinations on foundation material and a final oral examination on the thesis or problem report. One comprehensive examination covers the theory taught in STAT 561 and STAT 562; the other covers the applications taught in STAT 512, STAT 513, and STAT 545. These written examinations are normally given in the first four weeks of the semester in which the student expects to graduate. The final oral examination is a defense of the graduate research project required of all students, and it is usually given within four weeks after the student has presented an acceptable copy of the thesis or report to the advisor and Graduate Committee.

More information concerning graduate studies may be found in the Graduate Programs in Statistics available from the Department of Statistics (or on the web at http://www.stat.wvu.edu).

**Concentration in Statistics**

**Master’s Level** Any student pursuing a master’s degree at West Virginia University may complete a concentration in statistics by completing one of the following options.

**Applied Statistics**

• Knowledge of a high-level programming language.

Select three of the following:

<table>
<thead>
<tr>
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<th>Title</th>
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</thead>
<tbody>
<tr>
<td>STAT 512</td>
<td>Statistical Methods 2</td>
</tr>
</tbody>
</table>

STAT 513  Design of Experiments
STAT 541  Applied Multivariate Analysis
STAT 545  Applied Regression Analysis
STAT 551  Nonparametric Statistics
STAT 555  Categorical Data Analysis
STAT 561  Theory of Statistics 1
STAT 562  Theory of Statistics 2
STAT 645  Linear Models

A grade of C or better and a minimum 3.0 GPA is required for courses fulfilling a concentration in statistics. A statistics faculty member must be on the student’s Graduate Committee. The student must make a significant application of statistics in his or her problem report/thesis or demonstrate the ability to apply statistical techniques to a research problem.

**Mathematical Statistics**

<table>
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<tr>
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<td>STAT 562</td>
<td>Theory of Statistics 2</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:</td>
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<td>6</td>
</tr>
<tr>
<td>STAT 512</td>
<td>Statistical Methods 2</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>STAT 645</td>
<td>Linear Models</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 12

A grade of C or better and a minimum 3.0 GPA is required for courses fulfilling a concentration in statistics.

**Doctoral Level** A student pursuing a doctor of philosophy in the Eberly College of Arts and Sciences may complete a concentration in statistics by completing one of the following options.

**Applied Statistics**

Select five of the following: 15

<table>
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<tr>
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<td></td>
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<tr>
<td>STAT 645</td>
<td>Linear Models</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 15

A grade of C or better and a minimum 3.0 GPA is required for courses fulfilling a concentration in statistics. A statistics faculty member must be on the student’s Graduate Committee. Statistics must be one of the areas covered in the student’s comprehensive examination.

**Mathematical Statistics**

<table>
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</thead>
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<tr>
<td>STAT 562</td>
<td>Theory of Statistics 2</td>
<td>3</td>
</tr>
<tr>
<td>Select three of the following:</td>
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<td>9</td>
</tr>
<tr>
<td>STAT 512</td>
<td>Statistical Methods 2</td>
<td></td>
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<tr>
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</tr>
<tr>
<td>STAT 545</td>
<td>Applied Regression Analysis</td>
<td></td>
</tr>
</tbody>
</table>
A grade of C or better and a minimum 3.0 GPA is required for courses fulfilling a concentration in statistics. A statistics faculty member must be on the student’s Graduate Committee. Statistics must be one of the areas covered in the student’s comprehensive examination.

### Faculty

**Chair**
- E. James Harner - Ph.D.

**Professors**
- Erdogan Gunel - Ph.D.
  Bayesian inference, Biostatistics, Categorical data analysis.
- E. James Harner - Ph.D.
- William V. Thayne - Ph.D.
  Emeritus. Experimental design, Statistical genetics, Regression analysis.
- Edwin C. Townsend - Ph.D.
  Emeritus. Experimental design, Regression analysis.
- Stanley Wearden - Ph.D.

**Associate professors**
- Daniel M. Chilko - A.B.D.
  Emeritus. Statistical computing, Computer graphics.
- Gerald R. Hobbs Jr. - Ph.D.
  Biostatistics, Nonparametric statistics, Regression analysis.
- Robert Mnatsakanov - Ph.D.
  Nonparametric statistics, Statistical inverse problems, Mixture models, Change-set problems.

**Assistant professors**
- Mark V. Culp - Ph.D.
  Computational statistics, Semi-supervised learning, Ensemble algorithms, Parallel programming, Non-parametric statistics.
- Philip Turk - Ph.D.
  Statistical computing, Adaptive cluster sampling, Response surface methodology, Statistical applications to biological and environmental problems.

**Clinical Assistant Professor**
- Huey Miin Lee - Ph.D.
  Bioinformatics, Statistical education.

**Research Assistant Professor**
- Yangqing Hu - Ph.D.

**Instructor**
- Sarah Quesen - M.P.H.
  Biostatistics, Health Policy, Statistical Education.

**Research Associates**
- Anthony A. Billings - M.S.; A.B.D.
  Statistical computing, Statistical modeling, Robust estimation, Nonlinear dynamic systems, Statistical education.
- Dajie Luo - M.S.
  Statistical computing, R development, Java development.
Adjunct professor

- Michael Andrew - Ph.D.
  Epidemiological analysis, Statistical modeling, Time series analysis.

Adjunct assistant professors

- Stacey Culp - Ph.D.
  Functional data analysis, Statistical consulting.
- Fekedulegn B. Desta - Ph.D.
  Categorical data analysis. Multivariate statistical methods, Nonlinear regression, Forest growth modeling, SAS programming.

Women's and Gender Studies

Dr. Ann M. Oberhauser
Coordinator of Master of Liberal Studies Program, Professor of Geography, and Director of the Center for Women’s Studies
PO Box 6450
218 Eiesland Hall
West Virginia University
Morgantown, WV 26506
Phone: (304)293-2339 ext. 1155
Email: ann.oberhauser@mail.wvu.edu

Program Description

The Master of Arts in Liberal Studies (MALS) is an interdisciplinary degree that provides the opportunity for graduate students to undertake studies in the liberal arts within a structured program, but without an exclusive concentration in one discipline. Studies in this program generally focus on issues in the liberal arts disciplines of fine arts, social sciences, or humanities.

Specific Requirements for the Women’s Studies-directed MALS degree

- Students must take 27 hours of courses from the list of courses approved by the Women’s Studies Curriculum Committee in addition to 9 hours from outside this list of approved courses. These 9 hours of outside work may include the required research course. The distribution of these 36 hours will be determined by the student in consultation with the student’s advisor and graduate committee members, with approval from the MALS committee.

- The Women’s and Gender Studies program is committed to developing information literacy skills in all our students. Therefore, students must demonstrate knowledge of relevant print and electronic information resources, the ability to analyze and evaluate print and electronic information sources, and the ability to apply this knowledge to projects and presentations in this program.

- In addition to their focus area work, students must take the Women’s Studies capstone course, WMST 794, offered each spring semester. The topic and instructor for this course will vary, but the course will help students refine their information literacy skills and learn to apply their research skills to an action project. Students will also be encouraged to look at women’s studies issues from an international perspective.

- Students may take no more than 6 hours of independent study or field experience as part of their 36 hours of work (or a combination of independent study and field experience not to exceed 9 hours), as approved by the chair of the student’s graduate committee. These 6 hours may be part of the 9 hours that the students take outside the 27 hours of Women’s Studies-approved courses. Any of the Women’s Studies faculty associates may conduct an independent study or research course with a student using the Women’s Studies generic numbers or the generic numbers in their own departments. Students may also use the generic thesis and research numbers in Women’s Studies or in the home department of their thesis advisor.

- Students will complete a final project whose format and scope will depend on the student’s focus area and desired goals for the degree. For example, Women’s Studies-directed MALs students have developed a feminist website and conducted an AIDS-education program with at-risk girls. Students will earn 3 credit hours for this final project. These 3 hours will count as part of the 27 hours within the Women’s Studies-approved list of courses.

Financial Aid is Available

Women’s Studies-directed MALS students are eligible to apply for graduate teaching assistantships (GTAs) in Women’s Studies. The Center for Women’s Studies has five GTA positions available each year. GTAs work with the lead instructor for WMST 170 and teach two sections of the WMST 170 course or assist with other courses. Students can apply for GTA positions each winter, usually in early February. Salaries include tuition waivers for the academic year and subsequent summer. GTAs must be enrolled as full-time students (at least 9 hours).
For further information about GTA positions, please contact the Center for Women's Studies. Students may be eligible for GTA positions in the Academic Advising Center and should contact that center directly for more information.

The MALS program has a small number of meritorious student tuition waiver hours available each semester. Check with the WVU Financial Aid Office for information on grants, loans, and other scholarships. See the web site address for this office below.

**Graduate Certificate in Women’s Studies**

Any student admitted to a graduate degree program at West Virginia University may earn a Graduate Certificate in Women’s Studies. The graduate certificate will consist of 15 hours of graduate-level work in women’s studies, using courses approved by the women’s studies curriculum committee as primary or component courses for the program. This certificate offers students interdisciplinary perspectives on gender and its intersection with race, class, ethnicity, and sexuality. Our curriculum provides dynamic courses in theory and methods that help students understand the complex social, cultural, economic, political, and historical dimensions of men’s and women’s lives.

A Women’s Studies-Directed Master of Arts in Liberal Studies (M.A.L.S.) is also available. Students are advised to design an individual program that may focus on an area of concentration such as Feminist Thought or Women’s Health and Sexuality.

**Course Requirements (15 hours):**

- WMST 484 (3 cr) (may be substituted with 3 hours of Independent Study or WMST 530 Feminist Theory)
- EITHER WMST 595/WMST 795 Independent Study (3 cr) OR WMST 491 Field Experience (3 cr) may be included in the student’s curriculum but neither is required.
- No more than two 400-level courses
- Up to 12 hours of women’s studies graduate certificate courses may be double counted for a graduate degree as long as the courses taken are on the graduate level (500 and above). All of these courses may be in the same department as the student’s graduate degree program.
- In lieu of an exam at the end of the graduate certificate program, students may also make a presentation in the seminar course at the end of the semester in which they take that course.

**How do I enroll in the Graduate Certificate in Women’s Studies?**

Contact the Center for Women’s and Gender Studies at 218 Eiesland Hall (304-293-2339) or Dr. Ann Oberhauser, Director, (at 304-293-2339×1155; e-mail ann.oberhauser@mail.wvu.edu) for an appointment to discuss your program.

Check in at least once a semester with the Center to update your progress toward completion of the certificate.

**Faculty**

**Director**

- Dr. Ann Oberhauser - Ph.D
  - Director of Women’s and Gender Studies and Professor of Geography

**Associate professor**

- Dr. J. Kasi Jackson - Ph.D

**Senior Lecturer**

- Brian Jara

**Lecturers**

- Constarinia Charbonnette
- Marjorie Fuller
- Cynthia Gorman
- Nina Riivald

**Adjunct professors**

- Graeme Donovan
- Janice Spleth
Adjunct associate professors
- Ruth Kershner
- Melissa Latimer

Adjunct assistant professors
- Shelly Parsons
- Cynthia Stackpole

Part-Time Instructor
- Carroll Wilkinson

World Languages, Literatures, and Linguistics

Ángel Tuninetti, Chair
205B Chitwood Hall
Angel.Tuninetti@mail.wvu.edu

Sandra Stjepanovic, Graduate Coordinator
318 Chitwood Hall
sastjepanovic@mail.wvu.edu

Degree Offered
- Master of Arts, with five possible areas of emphasis
  - Areas of Emphasis
    - French
    - Spanish
    - Linguistics
    - Teaching English as a Second Language (TESOL)
    - Combined Areas

Nature of Program
The M.A. program in World Languages, Literatures, and Linguistics offers courses in literature, culture, literary criticism, as well as in theoretical and applied linguistics, and language teaching methodology. Students also have the opportunity to engage in research projects that reflect their interests within a given subject and that serve to complement and augment the information imparted through in-class activities. The master’s degree is intended for those students who seek more specialized knowledge in order to teach in their chosen area, as well as for students who plan to prepare for doctoral studies or other professional employment.

Admission Requirements
To be admitted to the program, a student is expected to have an undergraduate degree in the desired area of study (or an acceptable related area) with a GPA of 3.0 (overall as well as within the major). The student must complete the University admission application, including payment of the required fee, and the supplemental departmental application form, which requires a 300-word statement of purpose, an extended writing sample in the language of the area to which the student is applying, and three letters of recommendation. International students must also submit an acceptable TOEFL or IELTS score. For more information about the admission requirements and application guidelines, please visit our website http://worldlang.wvu.edu/graduate_programs/graduate/graduate_programs_how_to_apply.

Available Financial Aid
Graduate teaching assistantships are available for different languages, including Arabic, Chinese, French, German, English as a Second Language, Italian, Japanese, Russian, Portuguese, and Spanish. The assistantships carry full tuition remission and a nine-month stipend (August–May); there are also limited opportunities to teach during the University’s summer session. Assistantships are awarded annually to those students who have demonstrated potential to become effective teachers. In order to be considered for a teaching assistantship, students must fill out the Department application, and submit a writing sample as well as a recorded sample of their speech in the language they are applying to teach.

In addition to graduate teaching assistantships a limited number of meritorious tuition waiver awards are sometimes available from the Eberly College of Arts and Sciences through the Department. These awards are based on academic performance and financial need.
Degree Requirements
Students may select from five areas of emphasis (French, Spanish, Linguistics, TESOL, or a combined area that allows them to combine two areas for their degree) to complete a Master of Arts in World Languages, Literatures, and Linguistics. Students must meet all University and college requirements as outlined in the WVU Graduate Catalog as well as the specific departmental requirements described below:

General
• A minimum of 36 credit hours at the graduate level, of which 30 hours of coursework must be taken within the department. No more than 12 hours of coursework done at the 400 level will be counted toward the degree.
• No more than three hours of independent study will be applied to the degree, unless approved by the departmental chairperson. Note: independent studies will be permitted only in special circumstances; in most instances students must enroll in the regularly scheduled courses.
• No more than 12 hours can be transferred to our program from another accredited institution. In case of combination concentrations, no more than 6 hours can be transferred to any of the combined areas, for a total of 12 hours.
• No courses for the degree may be taken pass/fail.
• No more than six hours of thesis credits (697/698) can be applied to the degree.
• A 3.0 GPA is required for graduation. Note: no course for which the grade of D or below is recorded can be counted for graduation credit.
• Students must satisfy the foreign language requirement.
• Students must pass comprehensive examinations or successfully defend a thesis.

Foreign Language Requirement
Native speakers of English in TESOL, Linguistics, or a combination of the two, must demonstrate proficiency in a second language prior to graduation by completing one language course of level 204 or above, with a grade of B or better, or by taking the departmental placement examination in one language, and placing above the 204 level.

International students whose native language is not English are considered to have satisfied this requirement by virtue of their TOEFL score.

Comprehensive Examinations
The comprehensive examinations are intended to evaluate students’ knowledge, including the ability to synthesize and evaluate ideas in their area of emphasis. The examinations are based on standardized reading lists (available at http://worldlang.wvu.edu/graduate_programs/comprehensive_exams_reading_lists) and coursework. Although many of the works on the reading lists will be included in coursework, independent reading will be necessary. Students must take the comprehensive examinations the semester they intend to graduate.

Thesis
A student may request to write a thesis and prepare an oral defense. The feasibility of writing a thesis may be limited due to faculty availability, the student’s academic performance, or other factors (to see the qualifying requirements for writing a thesis, consult Graduate Program Handbook). Under this option, the student is not required to take the written comprehensive examinations but may be asked to comment on coursework and the reading lists, particularly as they relate to the thesis. For more information about this option, see the document “Thesis Guidelines” (available at http://worldlang.wvu.edu/r/download/99265).

Graduate Teaching Assistants
The department values the contributions made by our graduate assistants and strives to help them become effective teachers. Graduate assistants normally teach two courses (six class-hours per week). They work under the direct supervision of the course coordinator in the language area, but they are fully responsible for their courses (including evaluating their students’ work). The coordinator will conduct orientations and organizational meetings with graduate assistants and provide course materials (such as syllabi). In addition, the coordinator will periodically observe individual classes in order to assess the graduate assistants’ performance and to provide encouragement and assistance.

All graduate teaching assistants teaching French and Spanish must register for LANG 621 during their first semester. Graduate assistants teaching any other language must register for or LANG 521 in their first semester. In addition, graduate assistants must register for LANG 690 each semester of employment. Students who have already received an M.A. in World Languages, Literatures, and Linguistics from West Virginia University may be ineligible for an assistantship in this department.

Additional Points of Information
Advising
All graduate students will have a primary advisor (to be assigned by the chairperson). Students should consult with their advisor when they register for, or need to add or drop courses. In addition, the graduate program coordinator is available to answer questions regarding
the degree program, requirements, comprehensive examinations, graduation, etc. Students may consult with the chairperson regarding departmental matters.

**International Students**

An F-1 student visa is required for study in the U.S. The visa must be obtained in the student’s home country with an I-20 form from the WVU Office of Admissions. The I-20 will be sent by the Office of Admissions to the student’s home address once all academic, English proficiency, and financial requirements have been satisfied.

International students studying in the department on an F-1 visa should remember that they are required to carry a minimum course load of nine hours each semester (excluding the summer) in order to maintain their legal status for their visa. International students, who may be forced to withdraw from a course and thus fall below nine hours in any semester, must first check with the department chair and the Office of International Students and Scholars in E. Moore Hall. Exceptions may be possible in the student’s final semester of study.

**Study Abroad Opportunities for Graduate Students**

Qualified graduate students in French may compete for the Marguerite Eynard McBride Award, which funds an academic year in France. Year-long exchange programs for graduate students are also in place for France and Spain. The Department also sponsors study abroad during the summers in Argentina, China, France, Germany, Italy, Spain, and Taiwan that graduate students may participate in if they meet the program’s requirements. Grants are available on a competitive basis through the Department, the Eberly College of Arts and Sciences, and through the Office of International Programs to assist students who wish to study abroad.

**Page Contents:**

- French (p. 344)
- Spanish (p. 345)
- Linguistics (p. 345)
- TESOL (p. 346)
- Combined Areas (p. 346)

**French**

<table>
<thead>
<tr>
<th>Reasearch and Theoretical Bases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIBY 615 Methods Of Research</td>
<td></td>
</tr>
<tr>
<td>FRCH 611 Literary Criticism</td>
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**Knowledge/ Application**

Choose any 4 courses

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>FRCH 532</td>
<td>Early French Literature</td>
</tr>
<tr>
<td>FRCH 533</td>
<td>Seventeenth Century Literature</td>
</tr>
<tr>
<td>FRCH 534</td>
<td>Eighteenth Century Literature</td>
</tr>
<tr>
<td>FRCH 535</td>
<td>Nineteenth Century Literature</td>
</tr>
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<td>FRCH 536</td>
<td>Twentieth Century Literature</td>
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<td>FRCH 538</td>
<td>Francophone Literature</td>
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**Cultural/Social/Historical Context:**

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<td>or FRCH 432</td>
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**Language Structures:**

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<tbody>
<tr>
<td>FRCH 501</td>
<td>French Stylistics</td>
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<tr>
<td>or LING 603</td>
<td>History of French Language</td>
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**Extensions:**

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesis Option</td>
<td>6 hrs from the Extension list (see below)*</td>
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<tr>
<td>6 hrs of FRCH 697 Thesis</td>
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</tr>
<tr>
<td>Comprehensive Examination Option</td>
<td>12 hrs from the Extension list (see below)*</td>
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</table>

Total Hours 36

* For a list of approved courses, see page 2 of the French Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)
# Spanish

**Research and Theoretical Bases**: 6

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>BIBY 615</td>
<td>Methods Of Research</td>
</tr>
<tr>
<td>SPAN 611</td>
<td>Literary Criticism</td>
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**Knowledge/Applications: Choose any 4 courses**: 12

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SPAN 631</td>
<td>Latin America Short Story</td>
</tr>
<tr>
<td>SPAN 632</td>
<td>Latin American Novel to 1960</td>
</tr>
<tr>
<td>SPAN 633</td>
<td>Latin Amer Novel Since 1960</td>
</tr>
<tr>
<td>SPAN 634</td>
<td>Latin American Poetry</td>
</tr>
<tr>
<td>SPAN 635</td>
<td>Latin American Theatre</td>
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<tr>
<td>SPAN 636</td>
<td>Latin American Nobel Prize Win</td>
</tr>
<tr>
<td>SPAN 651</td>
<td>Medieval and Golden Age</td>
</tr>
<tr>
<td>SPAN 652</td>
<td>Cervantes</td>
</tr>
<tr>
<td>SPAN 653</td>
<td>18th/19th Century Literature</td>
</tr>
<tr>
<td>SPAN 654</td>
<td>Spanish Literature 1898-1936</td>
</tr>
<tr>
<td>SPAN 655</td>
<td>Spanish Literature 1936-1975</td>
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<td>SPAN 656</td>
<td>Spanish Literature after 1975</td>
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**Cultural/Social/Historical Context**: 3

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<th>Course</th>
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<tbody>
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<td>SPAN 630</td>
<td>Latin American Culture</td>
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<tr>
<td>or SPAN 650</td>
<td>Spanish Civilization</td>
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**Language Structures**: 3

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<th>Course</th>
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<tbody>
<tr>
<td>LING 501</td>
<td>Structure of Spanish</td>
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</table>

**Extensions**: 12

- Thesis Option
  - 2 courses from the Extension list (see below)*
  - 6 hours of SPAN 697 Thesis

- Comprehensive Examination Option
  - 4 courses from the Extension list (see below)*

**Total Hours**: 36

* For a list of approved courses, see page 2 of the Spanish Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)

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# Linguistics

**Research and Theoretical Bases**: 6

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BIBY 615</td>
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</tr>
<tr>
<td>LING 513</td>
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**Knowledge/Applications**: 12

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<td>LING 412</td>
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<tr>
<td>LING 611</td>
<td>Advanced Phonology</td>
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<tr>
<td>LING 612</td>
<td>Advanced Syntax</td>
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**Cultural/Social/Historical Context**: 3

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<tr>
<td>LING 514</td>
<td>Sociolinguistics</td>
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**Language Structures: Choose 1 course**: 3

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<td>LING 402</td>
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<td>Structure of Spanish</td>
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<tr>
<td>LING 511</td>
<td>ESL Linguistics</td>
</tr>
<tr>
<td>LING 616</td>
<td>Language Typology</td>
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</table>

**Language Structures**: 12

- Thesis Option:
  - 2 courses from the Extension list (see below)*
  - 6 hrs of Ling 697

* For a list of approved courses, see page 2 of the Linguistics Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)
### Comprehensive Examination Option:

4 courses from the Extension list (see below)*

**Total Hours** 36

* For a list of approved courses, see page 2 of the Linguistics Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)

### TESOL

#### Research and Theoretical Bases:

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>BIBY 615</td>
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**Research and Theoretical Bases:**

9

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<tbody>
<tr>
<td>LANG 521</td>
<td>ESL Methods</td>
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</table>

2 courses from the Application list (see below)*

#### Cultural/Social/Historical Context:

6

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<thead>
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<tbody>
<tr>
<td>ESL 630</td>
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</table>

An additional approved course

#### Language Structures:

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<td>LING 511</td>
<td>ESL Linguistics</td>
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<tr>
<td>LING 613</td>
<td>ESL-Phonetics</td>
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<tr>
<td>or Ling 411</td>
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#### Extensions:

9

<table>
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<tr>
<th>Option</th>
<th>Hours</th>
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<tr>
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<td>6 hrs of Lang 697</td>
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<tr>
<td>Thesis Option II</td>
<td>6 hrs of Lang 697</td>
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</table>

3 hrs from the Extension list (see below)*

#### Comprehensive Examination Option:

5 courses from the Extension list (see below)*

**Total Hours** 36

* For a list of approved courses, see page 2 of the Tesol Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)

### Combined Areas

**RESEARCH AND THEORETICAL BASES**

3

<table>
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</thead>
<tbody>
<tr>
<td>BIBY 615</td>
<td>Methods Of Research</td>
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</tbody>
</table>

**PRIMARY AREA**

18

A. Theoretical Bases and Knowledge/Applications: 12 hours

4 courses from the Knowledge and Application list (see below)*

B. Cultural/Social/Historical Context: (3 hours)

1 course from the Cultural/Social/Historical list (see below)*

C. Language Structures: 3 hours

1 course from the Language Structure list (see below)*

**SECONDARY AREA**

15

a. Theoretical Bases and Knowledge/Applications: 9 hours

3 courses from the Theoretical Bases list (see below)*

b. Cultural/Social/Historical Context: 3 hours

1 course from the Cultural list (see below)*

c. Approved Elective: 3 hours

1 course from the Approved elective list (see below)*

**Total Hours** 36

* For a list of approved courses, see page 2 of the Combination Plan of Study (http://worldlang.wvu.edu/graduate_programs/plans_of_study)
Faculty
Chair
• Ángel T. Tuninetti - Ph.D. (Wash. U.)
  Latin American Literature and Culture

Associate Chair
• Susan Braidi - Ph.D. (U. Del.)
  ESL/Linguistics. Applied Linguistics, Second Language Acquisition, and Syntax

Graduate Coordinator
• Sandra Stjepanovic - Ph.D. (U. of Conn.)
  Linguistics, Syntax, and Psycholinguistics

Professor emeritus
• Pablo González - Ph.D. (U. Complutense de Madrid)
  Spanish American Literature and Culture

Professors
• Valérie Lastinger - Ph.D. (U. Ga.)
  French. 18th Century French Literature, French Women Writers.
• Kathleen McNerney - Ph.D. (U. N. Mex.)
  Spanish. Catalan Language and Literature, Spanish Literature and Culture, Women Writers.
  Status: Associate
• Janice Spleth - Ph.D. (Rice U.)
  French and Francophone Literature and Culture, 19th Century French Drama.
  Status: Associate

Associate professors
• Maria Amores - Ph.D. (Penn. St. U.)
  Spanish. Foreign Language Acquisition.
  Status: Associate
• Susan Braidi - Ph.D. (U. Del.)
  Status: Associate
• Cynthia Chalupa - Ph.D. (Ohio St. U.)
  Fin de siècle German and Austrian Literature, Poetry, Foreign Language Pedagogy.
  Status: Associate
• Ahmed Fakhri - Ph.D. (U. Mich.)
  ESL/linguistics. Second language acquisition, Applied linguistics, Dis- course analysis.
  Status: Associate
• Daniel Ferreras - Ph.D. (Mich. St. U.)
  Status: Associate
• Deborah Janson - Ph.D. (U. Ca.)
  German. 18th through 21 st Century German Literature, Enlightenment, Romanticism, GDR and Post-Wende literature, Ecofeminism.
  Status: Associate
• Michael Lastinger - Ph.D. (U. Ga.)
  French. 19th Century French literature, Critical theory.
  Status: Associate
• Twyla Meding - Ph.D. (U. Va.)
  French. 16th and 17th-century French literature, The Pastoral Novel.
  Status: Associate
• Johan Seynnaeve - Ph.D. (Cornell U.)
  Linguistics, Sociolinguistics, Phonology, History of Linguistics.
  Status: Associate
• Sandra Stjepanovic - Ph.D. (U. of Conn.)
  Status: Associate
• Ángel T. Tuninetti - Ph.D. (Wash. U.)
  Status: Associate

Assistant professors
• Juliana De la Mora - Ph.D.
  Hispanic Linguistics
• Tania De Miguel Magro - Ph. D. (SUNY - Stony Brook)
  Spanish Golden Age literature.
• Sandra Dixon - Ph.D. (Brown U.)
  Spanish. Spanish American literature, Brazilian literature.
• Pablo Garcia - Ph.D. (Ind. U.)
  Latin American Colonial literature.
• Xiangying Jiang - Ph.D. (N. Az. U.)
  ESL/linguistics. Second language acquisition.

Teaching Assistant Professor
• Lisa DiBartolomeo - Ph.D. (U.N.C.-Chapel Hill)
  Russian, Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema; Science Fiction, the Holocaust
• Victoria Garrett - Ph.D. (U. Cal.)
  Latin American Literature, Argentine Popular Theater, and Latin American Studies
• Yilin Liao - Ph.D. (Purdue U.)
  Chinese Cinema, Literature, and Chinese Cultural Studies
• Hannah Lin - Ph.D. (Ohio St. U.)
  Chinese Studies
• D. Catalina Mendez Vallejo - Ph.D. (Ind. U.)
  Hispanic Linguistics and Spanish Language
• Jennifer Orlikoff - Ph.D. (Rutgers U.)
  French, 16th, 18th, and 19th Century French Literature, Second Language Acquisition and Methodology, Art History, and Feminist Criticism
• Annastella Vester - Ph.D. (U.C.L.A.)
  Italian, Contemporary Italian Literature, 18th and 19th Century Italian
Perley Isaac Reed School of Journalism

Degrees Offered

• Master of Science in Journalism
• Master of Science in Integrated Marketing Communications

The School of Journalism is located on the Downtown campus in Martin Hall, WVU’s oldest building (constructed in 1870).

Today the school has state-of-the-art electronic reporting and editing systems as well as modern broadcast news facilities. Graduate faculty, having educational and professional backgrounds in mass communications studies and media-related experiences, are highly qualified to teach mass communications at both the undergraduate and graduate levels. About one-half have earned terminal degrees and/or have worked professionally in their areas of expertise.

The master’s program has granted more than 250 degrees since its first in 1962. The School of Journalism, established in 1939 and one of the oldest in the United States, is one of approximately 100 such programs accredited by the Accrediting Council on Education in Journalism and Mass Communications. The school has nearly 4,600 graduates, the majority of whom have careers in newspaper journalism, broadcasting, advertising, public relations, or related fields.

Master of Science in Journalism Program

The master’s program offers students the choice of two tracks: the teaching research track for persons who wish to pursue a doctoral degree, and the professional track for those who wish to enhance their professional opportunities in some area of mass communications.

This program, designed to help each student reach his/her potential as a practitioner, teacher, or scholar in mass communications, prepares a graduate not only for a first job but also for long-term productive career development through the study of mass communications and related fields. Skills acquired allow the student to excel in his/her chosen profession.

School faculty are developing more specialized curricula for persons who aspire to become integrated marketing communications (IMC) practitioners, news specialists, or public relations specialists in such fields as business, energy and the environment, science, social relations, education, government, international affairs, and sports.

Assistantships

Assistantships available in and through the school each year pay stipends, health insurance, and tuition remission. Journalism graduate assistants supervise broadcast and computer laboratories, advise undergraduates, and assist professors with teaching courses, service learning, and research projects. Some journalism graduate students work in media-related positions in their own and in other WVU programs.

Admission

Those interested in learning about and applying to the master’s program should contact the director of graduate studies via e-mail (steve.urbanski@mail.wvu.edu). Graduate students specifically seeking information about the IMC Online Graduate Program should contact the IMC coordinator or visit http://www.imc.wvu.edu. Those wishing to pursue either the general master’s degree or the IMC Certificate may access WVU graduate information at http://www.wvu.edu/~graduate. The WVU Admissions online catalog is available at http://admissions.wvu.edu/graduate. Written requests for answers may also go to:

WVU, P.I. Reed School of Journalism
112 Martin Hall
P.O. Box 6010
Morgantown, WV 26506-6010

The SOJ telephone number is (304) 293-3505.

Faculty

Dean
• Maryanne Reed - M.S. (Northwestern University)

Professor
• Maryanne Reed - M.S. (Northwestern University)
Dean
Assistant professor
• Steve Urbanski - Ph.D. (Duquesne University)
  Director of Graduate Studies

IMC Program Director
• Chad Mezera - M.S. (West Virginia University)

Integrated Marketing Communications

Master of Science in Integrated Marketing Communications

The Integrated Marketing Communications (IMC) master’s program at West Virginia University teaches students to re-align their communications, seeing things the way the consumer sees them—as a constant flow of information from a variety of mediums. Graduates of the IMC program receive a practical, customized degree that is designed to help them emerge as leaders in the field.

One hallmark of the IMC program is its learn-it-today, use-it-tomorrow focus. Specifically, students are able to take the knowledge they gain in the classroom and immediately apply it to problems and challenges in their professional lives. IMC students also benefit from studying under a diverse faculty—from marketing managers to academics to entrepreneurs—who are recognized leaders in their fields. These talented instructors are highly enthusiastic about sharing their knowledge and experience with our students.

The IMC program is also renowned for its flexibility. Because our coursework is offered completely online, no classroom attendance is required. In fact, most IMC students continue to work full-time while earning their degree. In addition, all IMC courses are asynchronous, allowing students to participate at anytime, from anywhere in the world.

The master of science (M.S.) degree in Integrated Marketing Communications requires 39 hours of coursework, and each course is three credit hours (a total of 13 courses are required). The program’s academic year consists of five nine-week terms: Early fall (August–October), late fall (October–December), early spring (January–March), late spring (March–May) and Summer (May–July).

Most students take 1–2 courses per term, dedicating 12–15 hours of study per week to each course. Students generally complete their degree in about two years. Those who wish to experience the program without making a full commitment are invited to apply to the five-course IMC certificate program; any courses taken in this program may be transferred for full credit should a student decide to pursue the full master’s degree.

IMC Assistantships

Due to the online nature of the Integrated Marketing Communications program, graduate assistantships are not available for IMC students.

IMC Program Admission

Admission to the IMC program is competitive. Applicants are required to submit an IMC program application, a WVU graduate application, a resume, letters of recommendation (optional but recommended) and GRE/GMAT scores (which may be waived if certain criteria are met). The program operates on a rolling admissions basis, with students being admitted in the early fall (August), early spring (January) and summer (May) terms.

For more information about applying to the IMC program, visit the website http://www.imc.wvu.edu. Free online information sessions are offered each month. Visit the website for complete information on the IMC program, including faculty bios, curriculum and course information, details on the program’s application process, and to request additional information and sign up for a free online information session.

Master of Science in Journalism

The master of science in journalism (M.S.J.) program in the Perley Isaac Reed School of Journalism is designed to help persons involved in various aspects of mass communication to better understand and to cope not only with the increased complexity of their own majors but also with fields outside mass communications.

The program, created to assist each student in reaching his/her potential as a worker, teacher, or scholar in mass communications, prepares a master’s candidate not only for a first job but also for long-term and productive career development through the study of mass communications and related fields. Students who obtain the M.S.J. degree should excel in professional skills.

The M.S.J. program is intended to afford liberal arts graduates an opportunity to concentrate advanced study in mass communication; to provide intensive study for persons who have undergraduate journalism training and who wish to pool their journalistic skills with
extensive knowledge in another substantive area or areas (e.g., political science, economics, science); and to give persons who have had considerable professional experience an opportunity to broaden their academic bases through carefully selected advanced studies.

Admission

Admission to the M.S.J. program is limited to recipients of baccalaureate or equivalent degrees from institutions of higher learning. Applicants should have combined verbal and quantitative Graduate Record Examination (GRE) Aptitude Test scores of 153 Verbal and 144 Quantitative and should have earned at least 3.0 cumulative grade point average (GPA) on a 4.0 scale. Each applicant should submit to the School of Journalism Director of Graduate Studies a detailed statement of purpose explaining why the student wishes to undertake graduate study in journalism, what the student hopes to glean from the graduate journalism program, what his/her long-term goals are, and how graduate education in journalism can help achieve those goals.

An applicant who does not meet the minimum GRE and/or GPA requirement(s) may be accepted only if the low GPA or GRE scores are offset by extraordinary factors. Excellent recommendations, unusual grading patterns (e.g., a steady rise of grades), an outstanding statement of purpose, or examples of professional accomplishment sometimes can offset low GRE scores or a low GPA.

Students applying for admission to the M.S.J. program are encouraged to send nonreturnable supporting material to the School of Journalism Director of Graduate Studies. A list of these materials can be found at: http://journalism.wvu.edu/academics/graduate_programs/master_of_science_in_journalism/admission.

All other materials (e.g., transcripts, GRE scores, application forms) should be sent to the Office of Admissions.

Students may also apply online at: https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad

Assistantships and Tuition Waivers

Approximately five assistantships are available in the School of Journalism each academic term. Graduate assistants teach laboratories and assist professors with their courses and research. Interns work in mass communications-related jobs on campus to obtain solid professional experience.

Students may receive stipends for the academic term and may apply for tuition remission for the entire year. Although sometimes renewed for a second or third term, assistantships and internships are granted for one academic term. Graduate assistants and interns work an average of 20 hours per week during the academic year.

Persons who wish to be considered for assistantships or internships should have their applications on file with the Director of Graduate Studies before March 1 of the same year.

Emphases

The School of Journalism offers two areas of emphasis—the teaching/research track and the professional track—within the M.S.J. program.

Teaching/Research

The teaching/research track is generally a program for persons who wish to pursue a Ph.D., to teach at the college/university level, and conduct research in areas of mass communications. Persons in the track normally take research and theory courses both inside and outside the School of Journalism, statistics, and social science courses. The program culminates in a thesis, which is a scholarly theoretical study of an important aspect of mass communications.

Professional

The professional track is designed primarily for persons who wish to become excellent practitioners in some field of mass communications and who have less desire to teach or to become mass communications researchers. Persons in the professional track normally take communication and outside area courses that will help them to become better practitioners. The program culminates in a professional project, which helps a student to extend his/her practical and theoretical knowledge about a given aspect of mass communications and should be a non-routine project on which the student could work as a professional.

Time Limitation

Students must complete all graduate degree requirements, including either a thesis or a professional project, within eight years of beginning the initial coursework of the program. After this period, the core courses of the program will have to be re-taken. After 10 years, students will be required to begin the program anew.

Requirements

For the master’s degree in journalism, the student must meet the following requirements:

Teaching/Research
a minimum of 30 hours of acceptable graduate credit, including a thesis for six hours. As part of the 30 hours, a minimum of 18 hours, including the thesis, must be School of Journalism courses. Included in the 30 hours, students may take nine hours in a minor outside the School of Journalism.

**Professional**

a minimum of 30 hours of acceptable graduate credit, including a professional project for six hours. As part of the 30 hours, a minimum of 18 hours, including the professional project, must be School of Journalism courses. Included in the 30 hours, students may take nine hours in a minor conducted outside the School of Journalism. In either program the candidate is allowed to take more than the minimum required number of hours.

**All Students**

The following courses are required for all journalism graduate students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRL 600</td>
<td>Intro to Graduate Studies</td>
<td>1</td>
</tr>
<tr>
<td>JRL 604</td>
<td>Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JRL 620</td>
<td>Advanced JRL Writing/Research</td>
<td>3</td>
</tr>
<tr>
<td>JRL 689</td>
<td>Ethics-Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

* and each M.S.J. candidate must take these courses in the following sequence over a three-term period:

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRL 600</td>
<td>1</td>
</tr>
<tr>
<td>JRL 604</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRL 600</td>
<td>3</td>
</tr>
<tr>
<td>JRL 689</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total credit hours:</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

* Various electives. In both programs 60 percent of the graduate credits submitted for the degree (18 credits) must be in courses numbered 500–799.

Nine additional credit hours must be taken in the School of Journalism. All remaining credit hours should be taken outside of the School. Students should note that the majority of credits submitted for the degree must be in courses numbered 500 or above.

Every graduate student must complete coursework with a minimum 3.0 grade point average. The thesis or professional project will be graded as an S or U (satisfactory or unsatisfactory).

Except for thesis, professional project, and internship courses, no student may take a course on a P/F or S/U grade basis without prior approval of the Director of graduate studies.

**Thesis/Professional Project**

Each student must complete a thesis or a professional project involving original work in his/her area of interest. The master’s candidate should have a thesis or professional project proposal written by the end of the academic term in which the first 12 hours of coursework are completed.

Each student is responsible for developing ideas for the thesis or professional project. Through consultations with journalism faculty, the student can determine faculty interests and areas of expertise; he/she then refines a preliminary idea to a significant, feasible thesis/project topic.

Normally students will enroll for six credit hours of theses/research courses. The Director of Graduate Studies must approve any deviations from this norm.

In addition to this six-hour limit, no graduate student will be permitted to enroll in more than six hours of research and/or colloquium courses without approval from the director of graduate studies.

**Advisory Committee**

The student, with approval of the director of graduate studies, selects a journalism graduate faculty member who would be best able to chair his/her Advisory Committee, subject to the agreement of the faculty member. If questions arise about a faculty member’s interest in serving, the student can appeal to the director of graduate studies.
or knowledge, the student should consult the director of graduate studies. With the chairperson, the student further refines the topic to a “preliminary proposal” stage, in which concepts and appropriate methodology are on paper but not necessarily in formal proposal form.

After the student has written a preliminary proposal and selected a faculty chairperson, the student should select other members of his/her committee, subject to their willingness to serve. The committee must consist of no fewer than four members, at least two persons must be members of the WVU faculty; others may be from other departments at WVU. Committee chairs must be members of the SOJ graduate faculty. The fourth member of all theses committees must be affiliated with the graduate program at an accredited university (or another department at WVU). The fourth member of professional project committees may be from the professional realm.

**Proposals**

At this point students in the thesis/professional track must submit proposals to their committee, which must approve all topics (but not research methods, specific research questions, or hypotheses, etc.). Students may attend the meetings at which their proposals are discussed. After securing committee approval, students schedule a proposal defense date. Proposal defenses are required of all students.

Working under the committee’s guidance, each student revises the thesis or project proposal, extended from the preliminary proposal. Guidance for designing a proposal is available from the Director of Graduate Studies.

Once the committee agrees that the proposal is ready, a proposal defense is scheduled.

**Final Thesis/Project Approval**

After the thesis/project proposal defense, the committee votes to accept or to reject a proposal. The student whose proposal is approved works closely with a committee to complete his/her final thesis or project. A master’s candidate must inform his/her committee and consult its members for advice (as needed and as desired by them) as the thesis or project develops.

After each advisory committee member is satisfied with the thesis or project, a final defense is scheduled. Announcements of the defense should be posted in Martin Hall. Students also should make certain that they file their thesis/project signature form with the director of graduate studies (and the University Library) two weeks before their defense date.

Only committee members may vote on acceptance or rejection of a thesis. Although someone may cast a recorded dissenting vote, a majority vote is sufficient to approve a thesis/project. Furthermore, at least three signatures (two of which must belong to SOJ faculty members) must appear on the approval sheet.

Master’s candidates should follow APA or another approved stylebook during preparation of a thesis or professional project.

Each committee chairperson will ultimately decide whether the candidate has properly made the requested corrections (after the final defense); that chairperson also will check the style and form of the final version. Every graduate student is responsible for delivering a copy of a final thesis or professional project to the director of graduate studies; he/she also must file a thesis or professional project electronically (to the University Library) before the academic term’s deadline.

**Maintenance of Scholarship**

A journalism graduate student must maintain satisfactory progress toward his/her M.S.J. The candidate’s graduate record begins with the first course credited toward the master’s and includes all subsequent courses. Every graduate student must maintain at least a 3.0 grade point average and complete all requirements within eight years. Anyone who fails to meet this standard will be subject to academic probation and possible dismissal from the program.

Each person working toward the M.S.J. should register for at least one hour during every regular (fall and spring) term. This enrollment may be in coursework or in JRL 697 (Research).

**International Students**

Believing that mutual benefit is derived when scholars from other countries study in the P.I. Reed School of Journalism, the faculty welcomes international students. At the same time the faculty recognizes that journalism, more than any other field, requires language skill. To profit from journalism study, international students must have a ready understanding of English. International students, for whom English is not their official language must include TOEFL scores. The minimum TOEFL scores needed for consideration at WVU are 550 (paper test), 213 (computer test) and 79 (internet test).
School of Dentistry

Degrees Offered

- D.D.S. in Dentistry
- M.S. in Dental Specialties (Endodontics, Orthodontics, and Prosthodontics)
- M.S. in Dental Hygiene
- B.S. in Dental Hygiene

Historical Background

The School of Dentistry was established by an act of the West Virginia Legislature on March 9, 1951, and the first class was enrolled in September 1957. A class of 23 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 75 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 12 percent of each senior class. Candidates are from the academically superior 20 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. 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.

Faculty

Dean

- David A. Felton - DDS, M.S.

Associate Deans

- Richard J. Crout - D.D.S., M.S., Ph.D.
  Research
- Christina B. DeBiase - Ed.D.
  Academic and Postdoctoral Affairs
- Shelia S. Price - D.D.S., M.S.
  Recruitment and Access
- Jack Yorty - D.D.S.
  Clinical Education and Patient Care

Assistant Dean

- Robert L. Wanker - D.D.S.
  Student and Alumni Affairs

Professors

- Mohssen Ghalichebaf - D.D.S., M.S.
  Restorative Dentistry
- Harold Reed - D.D.S., M.S.
  Periodontics

Associate professors

- Eros Chaves - D.D.S., M.S., D.M.D.
  Periodontics
- Chris A. Martin - D.D.S., M.S.
  Orthodontics
- Timothy J. Tremont - D.M.D., M.S.
  Orthodontics

Assistant professor

- Bryan Dye - D.D.S., M.S.
  Restorative Dentistry
Program Directors
• Anthony T. Borgia - D.D.S., M.H.A.
  Endodontics
• Peter Ngan - D.M.D.
  Orthodontics
• Mark W. Richards - D.D.S., M.Ed., F.A.C.P.
  Prosthodontics

Interim Program Director
• Amy Funk - M.S.D.H.
  Dental Hygiene

Dental Hygiene

Degree 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 operated 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 statues 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, 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 your second attempt will result in dismissal from the Dental Hygiene program.

F. A student may repeat only TWO dental hygiene/science courses throughout the Dental Hygiene curriculum. A third D or F in a dental hygiene/science course may require the student to repeat the year as a full-time student as determined by the Academic and Professional Standards Committee. Four or more grades of D or F will result in dismissal from the Dental Hygiene program, and the student will be ineligible for readmission to the Program.

G. The Dental Hygiene Program will acknowledge West Virginia University's D/F repeat policy in relationship to determining the overall grade point average, hours attempted and hours earned. The Program will utilize both grades (attempts) to determine the dental hygiene/science grade point average. Rectifying one or more grades of D, F, W, or WU through the D/F repeat policy does not negate recognizing the original grade (1st attempt) by the Program in determining the sanctions associated with the number of courses.

H. Students repeating the year are required to repeat any dental hygiene courses in which they were enrolled that year and earned a grade of "C" or below. The Academic and Professional Standards Committee may also prescribe any additional course to enhance the student's academic progress and psycho-motor skills.

I. Prior to entrance into the fall semester of the sophomore (2nd) year, a student must have successfully completed Chemistry 111/112.

J. Prior to entrance into , a student must pass all Basic Science courses required in the first two years of the curriculum.
K. Dental hygiene/science per-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, 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 to 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).

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 38 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.

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 16th 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 Requirements — Master of Science Degree

• Complete a minimum of 40 semester credit hours: 26 required credit hours and 12 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 28 hours required by the program) leading to an acceptable thesis.

• Oral defense of the thesis is required.

• Student teaching in the undergraduate clinic a minimum of one semester.
GPA

In order to earn a master’s degree in dental hygiene students must also meet the following:

- Achieve of a 3.0 GPA or an overall academic average of at least a B in all work attempted in the master’s program. A grade of C or below in one course will require a faculty review of the student’s progress. A second C or below will result in dismissal from the program. A student may repeat only one course one time to bring the GPA up to the 3.0 requirement.
- Remove all conditions, deficiencies, and incomplete grades from the student’s transcript. Credit hours for courses with a grade lower than C do not count toward degree requirements.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I 689</td>
<td>Cultural Diversity -Classroom</td>
<td>3</td>
</tr>
<tr>
<td>DTHY 678</td>
<td>Dental Hygiene Teaching Method</td>
<td>2</td>
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<tr>
<td>DENT 687</td>
<td>Research Methods</td>
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<td>PUBH 601</td>
<td>Intro Community/Public Health</td>
<td>3</td>
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<td>DTHY 679</td>
<td>Clinical Evaluation</td>
<td>2</td>
</tr>
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<td>DTHY 680</td>
<td>Dental Hygiene Sem/Practice 1</td>
<td>3</td>
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<td>DTHY 690</td>
<td>Teaching Practicum</td>
<td>1</td>
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<tr>
<td>DTHY 697</td>
<td>Research</td>
<td>6</td>
</tr>
<tr>
<td>DTHY 691</td>
<td>Advanced Topics</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Hours: 33

* Courses taught by the schools of:
  - Business and Economics
  - Educational Psychology
  - Medicine (Community Health Promotion) and the
  - Multidisciplinary Students Program
  - Human Resources and Education

Faculty

B.S.D.H.

- Amy D. Funk
  M.S.D.H., Interim Director

Professor

- Michael D. Bagby
  Biomaterials, Restorative dentistry.
- Richard J. Crout
  Periodontics, Drug therapy and pharmacology.
- Christina B. DeBiase
  Curriculum and instruction, Special patient care.
- Mohssen Ghalichebaf
  Maxillofacial prosthetics.
- Elizabeth C. Kao
  Restorative dentistry.
- Peter W. Ngan
  Orthodontics, Craniofacial growth and development, Appliance therapy.
- Shelia S. Price
- Carol A. Spear
  Dental hygiene related topics, Instrumentation, Infection control, Education.
- Robert N. Stutchell
  Preventive dentistry, Treatment therapy.
- John G. Thomas
  Periodontology.
Endodontics

Degree Offered

- Master of Science

The School of Dentistry and its 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 24 months (two 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.

Inquiries concerning this program should be directed to the Office of Academic and Postdoctoral Affairs. Applicants will be processed in the School of Dentistry. Applicants approved for admission to the program will be notified soon after interviews are completed.

Admission Requirements

The program's admission 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.
- Must be proficient in the English language.
- Must report most recent 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 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).
- Must become familiar with the West Virginia University School of Dentistry’s policy and procedure for Bloodborne Pathogens and Infectious Diseases.
- Must consent to and pass a criminal background investigation prior to final acceptance.

Degree Requirements — Master of Science degree

- Fulfill University requirements for graduate study.
- Complete 24 months (two 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 complete all didactic and clinical work in the required curriculum.
- Must demonstrate satisfactory clinical competency in endodontics.
- Complete a minimum of 70 credit hours, including 38 hours of endodontic courses, a minimum of 17 hours of selected basic sciences subjects, seven hours teaching practicum and a thesis (8 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.

Faculty
Director
• C. Russell Jackson - D.D.S., M.S.

Chair
• Anthony T. Borgia - D.D.S., M.H.A.

Orthodontics
Degree Offered
• Master of Science

The School of Dentistry and its 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 34 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.

Inquiries concerning this program should be directed to the Office of Academic and Postdoctoral Affairs. Applications will be processed in
the School of Dentistry. Applicants approved for admission to the program will be notified soon after December 1.

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.
• Must be proficient in the English language.
• Must provide the most recent 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 in PASS by September 1. 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).
• Must become familiar with the West Virginia University School of Dentistry’s policy and procedure for Bloodborne Pathogens and
Infectious Diseases.
• Must consent to and pass a criminal background investigation prior to final acceptance.

Degree Requirements — Master of Science degree
• Fulfill University requirements for graduate study.
• Complete 34 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 satisfactorily pass the Mock ABO clinical examination which includes a written and an oral examination.
• Must pass the written component of the ABO examination.
• Must complete all didactic and clinical work in the required curriculum.
• Must demonstrate satisfactory clinical competency in this field.
• Complete a minimum of 87 credit hours, including 57 hours of orthodontic courses and a minimum of 11 hours of selected basic science
subjects, six hours of teaching practicum, and a research/thesis (13 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.

Faculty
Chair
• Peter Ngan - D.M.D.

Associate professors
• Chris A. Martin - D.D.S., M.S.
• Timothy J. Tremont - D.M.D., M.S.

Prosthodontics - Advanced Specialty Education

Degree Offered
• Master of Science

The School of Dentistry and its Department of Restorative Dentistry offers a three-year program of advanced study and clinical training in the dental specialty of prosthodontics. The program requires a minimum of 33 months (three academic years and two summers) leading to a certificate in prosthodontics and a master of science degree. The purpose of this program is to train well-qualified dentists in all aspects of advanced prosthodontics and is designed to qualify them for careers in prosthodontic clinical practice, teaching, and research.

Inquiries concerning this program should be directed to the Office of Academic and Postdoctoral Affairs. Applications will be processed in the School of Dentistry. Applicants approved for admission to the program will be notified soon after interviews have been completed.

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.
• 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 September 15. For more detailed information go to the School of Dentistry website (http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs).
• Must become familiar with the West Virginia School of Dentistry’s policy and procedure for Bloodborne Pathogens and Infectious Diseases.
• Must consent to and pass a criminal background investigation prior to final acceptance.

Degree Requirements — Master of Science degree
• Fulfill University requirements for graduate study.
• Complete 33 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 satisfactorily pass a final oral examination.
• Must complete all didactic and clinical work in the required curriculum.
• Demonstrate satisfactory clinical competency in this field.
• Complete a minimum of 84 credit hours. This includes 60 credit hours of prosthodontic courses, a minimum of 11 credit hours of selected basic science subjects, six hours of teaching practicum, and seven credit hours for completion of a master’s thesis.
• Achieve a 3.0 GPA or an overall competence in the student’s field. A minimum grade of B must be earned in all work attempted in the master’s program. A grade of C or below in two courses will require a faculty review of the student’s progress. A third C or below will result in suspension from the program.

Faculty

Director
• Mark W. Richards - D.D.S., M.Ed., F.A.C.P.

Professors
• Mohssen Ghalichebaf - D.D.S., M.S.
• Harold Reed - D.D.S., M.S.

Associate professor
• Eros Chaves - D.D.S., M.S., D.M.D.

Assistant professors
• Geoffrey Cunningham - D.D.S., M.S.
• Bryan Dye - D.D.S., M.S.
School of Nursing

Degrees Offered

- Bachelor of Science in Nursing
- Master of Science in Nursing
- Doctor of Nursing Practice
- Doctor of Philosophy in Nursing

Introduction

The mission of the WVU School of Nursing is to lead in improving health in West Virginia and the broader society through excellence in student-centered educational programs, research and scholarship, the compassionate practice of nursing, and service to the public and the profession. This mission is responsive to changing health care needs and emerging national and state changes in technology and health care 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 health care needs; advanced practice nurses to address complex health needs; and 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 health care 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 programs are 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 had 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 health care for diverse populations.

The doctor of philosophy in nursing (PhD) prepares nurse scholars/educators for roles in teaching, service, and research in nursing. The program prepares graduates who will continue unique nursing experience to the collaborative development of knowledge to improve health and quality of life.

Accreditation

Initial accreditation was received with graduation of the first class in 1964. The baccalaureate program in nursing is fully accredited by the Commission on Collegiate Nursing Education, a national accrediting agency.

Fees, Expenses, Housing, Transportation, and Immunization

Students enrolling at the Morgantown campus pay fees which are detailed at http://adm.wvu.edu/home/cost_of_attendance. Special fees and deposits are also required. Students enrolling at other sites pay the fees shown in the catalog for that site. Fees are subject to change without notice. Students’ expenses vary according to the course of study and individual needs. Information concerning financial assistance, application forms, and the Free Application for Federal Student Aid (FAFSA) form may be obtained from the financial aid website http://www.hsc.wvu.edu/fin/ or by contacting the HSC Financial Aid Office, PO Box 6004, Morgantown, WV 26506-6004; telephone (304) 293-5242 (toll free) 1-800-344-WVU1.

The University Housing and Residence Life Office, telephone (304) 293-4419, 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://www.hsc.wvu.edu/son/jobOpportunities.aspx#scholarshipOpportunities

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

Faculty

Dean

- Georgia L. Narsavage - PhD (U. of PA)
  Professor

Associate Dean for Research and PhD Programs

- Deborah Shelton - PhD (U. VA)
  Endowed Professor

Associate Dean for Graduate Practice Programs

- Cynthia Armstrong Persily - PhD (U. of PA)
  Professor, Chair-Charleston Department

Associate Dean for Undergraduate Academic Affairs

- Elisabeth Shelton - PhD (Widener U.)
  Associate Professor

Assistant Dean for Student and Alumni Affairs

- Misti Michael - MBA (Wheeling Jesuit U.)

Chair-Morgantown Department

- Roger Carpenter - PhD (WVU)
  Clinical Assistant Professor

Associate Dean for Graduate Academic Affairs

- Mary Jane Smith - PHD (N.Y.U.)
  Professor

Professors

- Laurie Badzek - MS (WVU)
- Nan Leslie - PHD (U. Pitt.)
- Susan H. McCrone - PHD (U. of Utah)

Associate professors

- K. Joy Buck - PHD (U. Va)
- Pamela Deiriggi - PHD (U. of Tx.)
  Coordinator PNP Track
- Barbara Kupchak - PHD (U. of Tx.)
- Susan Newfield - PHD (U. of Tx.)
- Catherine V. Nolan - EDD (WVU)
  Director-Evaluation
- Kari Sand-Jecklin - EDD (WVU)
Assistant professors

• Taura Barr - PhD (U. Pitt.)
• Susan Coyle - PHD (WVU)
• Stacey Culp - PHD (U of Mich.)

Research

• Patty Hermosilla - MSN (WVU)
• Dorothy M. Johnson - EDD (WVU)
• Dottie Oakes - MSN (Duke U.)

Director-Clinical Services

• Susan Pinto - MSN (WVU)
• Heidi Putman-Casdorph - PHD (Widener U.)
• Aletha Rowlands - PhD (U. of VA)
• Laurie Theeke - PHD (WVU)
• Gail O'Malley Van Voorhis - MSN (WVU)

Clinical assistant professors

• Emily Brinker Barnes - DNP (WVU)
• Sanda Cotton - MS (U. of Md.)

Director-Faculty Practice

• Daniel J. Defeo - MSN (WVU)
• Gina Maiocco - PHD (U. of Utah)
• Jennifer A. Mallow - MSN (WVU)
• Elizabeth A. Minchau - MSN (U of Pitt.)
• Judith Polak - MSN (U. of Fla.)

Coordinator NNP Track

• Amy Sparks - MSN (WVU)
• Martha Summers - MSN (WVU)

Senior Lecturer

• Lori Constantine - MSN (WVU)
• Dana Friend - MPH (WVU)
• Kathy Linkous - MSN (Bellarmine Coll.)
• Patricia Joyce Maramba - DNP (WVU)
• Diana L. McCarty - MSN (WVU)
• Danielle McGinnis - MSN (WVU)
• Joanne E. Watson - MSN (U. of Va.)

Lecturers

• April Shay - BSN (WVU)
• Debbie Bellisario - BSN (WVU)
• Jenna Elder - MSN (WVU)
• Kelly Jenkins - DNP (Duquesne U.)
• Rebecca Kromar - ND (Case Western)
• Amanda MaChesky - MSN (Walden U.)
• Terri L. Marcischak - MSN (WVU)
• Evelyn Martin - MSN (Marshall U.)
• Amy Miner - MSN (Waynesburg U.)
• Christine Mott - MSN (WVU)
• Tonya Payerchin - MSN (Waynesburg U.)
• Trisha Peltitte - MSN (WVU)
• Teresa D. Ritchie - MSN (WVU)
• Natalie Sypolt
• Kara Terhune - MSN (Wilkes U.)
Sharon Thralls - MSN (Waynesburg U.)
Kimberly Wallace - BSN (WVU)
Ashley Wilson - MSN (WVU)

Clinical instructors
- Kendra Barker
- Billie Murray - MSN (WVU)
- Dennelle Parker - MSN (WVU)
- Angel Smothers - MSN (WVU)
- Barbara Summers - MSN (Marshall U.)

Visiting Clinical Assistant Professor
- Carolyn Donovan - MSN (WVU)
- Lisa Hardman - DNP (Rush U.)

Charleston Division-Associate Professor
- Ilana Chertok - PHD (Ben-Gurion U. of the Negev.)
- Alvita Nathaniel - PHD (WVU)
  Coordinator FNP Track
- Barbara Nunley - PHD (U. of Ky.)
- Marilyn Smith - PHD (U. of Tenn.)

Charleston Division-Clinical Assistant Professor
- Robert David Lane - DNP (U. of Tenn.)
- Sheila Stephens - DNP (U. of Ky.)

Charleston Division-Lecturer
- Nancy Atkins - MSN (Bellarmine Coll.)
- Kristina Childers - MSN (Marshall U.)
- Jarena Kelly - MSN (WVU)
- Barbara Koster - MSN (WVU)
- Crystal Sheaves - MSN (WVU)

Coordinator-GSC/WVU Joint Nursing Program
- Alison Witte - MS (U. of South Africa)
  Glenville State College, Assistant Professor

WVU Tech Division-Assistant Professor
- Peggy Fink - MSN (WVU)
- Evelyn Klocke - EDD (Marshall U.)
  Chair-Department of Nursing
- Melanie Whelan - MSN (WVU)

WVU Tech Division-Senior Lecturer
- Barbara Douglas - MSN (Wright St. U.)
- Mindy Harris - MSN (Marshall U.)
- Robin Spencer - MSN (Marshall U.)

WVU Tech Division-Lecturer
- Debra Bostic - MSN (WVU)
- Kelli Kirk - MSN (Mountain St. U.)
- James Messer - MSN (U. of Phoenix)
- Amy Shaw - MSN (Marshall U.)
- Melinda Stoecklin - MSN (Marshall U.)
Adjunct professors
- Joy Henson Penticuff - PHD (Case Western Reserve)
- Gretchen Spreitzer - PhD

Adjunct assistant professors
- Diana Boyle - MSN (WVU)
- Malene Davis - MSN (WVU)
- Elizabeth Durant
- Patricia Johnston - EDD (WVU)
- Judith D. Klingensmith - MSN (U. of Pitt.)
- June Lunney - PhD (U. of MD)  
  Research
- Charlotte Nath - EDD (WVU)
- Janet Stout - MSN (Syracuse U.)
- Bonnie Wakefield - PhD

Adjunct Clinical Instructor
- Nancy K. Bradshaw - MS (Marshall U.)
- Bonnie B. Coradetti - MPH (WVU)
- Donna J. Dorinzi - MSN (WVU)
- Shirley Zinn Gainer - BSN (WVU)
- Kevin Lewis - MSN (WVU)  
  Research
- Neil R. McLaughlin - MED (Penn. St.)
- Barbara M. Mulich - MSN (WVU)
- Renee Schwertfeger
- Virginia M. Selanik - MSN (Marshall U.)
- Linda L. Singer - BSN (Ohio U.)
- Pamela Smith  
  Research

Adjunct Instructor
- Aila Accad - MSN (WVU)
- Melanie Harper Allen - MSN (Marshall U.)
- Katherine A. Alassi - MSN (Marshall U.)
- Jacquelyn P. Bauer - MSN (WVU)
- Maribeth Beckner - MSN (WVU)
- Charlotte Bennett - MSN (WVU)
- Eleanor K. Berg - MSN (WVU)
- Murrita C. Bolinger - (U. of Va.)
- Lucinda M. Brown - MSN (U. of Ky.)
- Karen Campbell - MSN (Vanderbilt U.)
- Lena Antimonova Cerbone - MSN (Yale SoN)
- Jill Cochran - MSN (WVU)
- Susan Collins - MSN (Duke U.)
- Pamela S. Courtney - MSN (WVU)
- Erin Craffey
- Peggy L. Cramer - MSN (Marshall U.)
- Brenda Daugherty - MSN (WVU)
- Tony Dichiacchio
- Karen L. Fahey - MSN (WVU)
- Deborah Falconi
- Mary Friell Fanning - MSN (WVU)
• Jann E. Foley - MSN (Case Western Reserve)
• Nancy I. Greenstreet - MSN (WVU)
• Hilda Heady - MSN (WVU)
• Patricia Horstman - MSN (WVU)
• Elizabeth Hupp - MSN (WVU)
• Jodie Jackson - MPH (Johns Hopkins U.)
• Cheryl Jones - MSN (WVU)
• Linda Joyce Justice - MSN (WVU)
• Ruth Kershner - EDD (WVU)
• Barbara J. Koster - MSN (WVU)
• Diane Ladd
• Roberta McKee - MSN (WVU)
• Julia Z. Miller - MSN (WVU)
• Diane Morris - MSN (WVU)
• Lynne Durbach Morris - MBA (WV Grad. Coll.)
• Kathleen Murphy - MSN (U. of Phoenix)
• Barbara Jean Nightengale - MSN (WVU)
• Sally Olynyk
• Mary Phillips - MSN (WVU)
• Denice Reese - MSN (Case Western Reserve)
• Samantha Richards
• Susan Ritchie - MPH (UNC)
• Bonita Roche - MSN (WVU)
• Sherry L. Rockwell - MSN (U. of Pitt.)
• Dawn M. Scheick - MN (U. of Pitt.)
• Elizabeth Schramm
• Robin W. Shepherd - MSN (Wesley Coll.)
• Cynthia A. Smith - MSN (WVU)
• Kathy Talley
• Leslie Toppins
• Blitz E. Turner - MSN (WVU)
• Suzy Walter - MSN (WVU)
• Mary Lynne Withrow
• Jerry H. Yoho - MSN (WVU)

Dean Emeritus
• Lorita Jenab - EDD (Columbia U.)

Professors emeriti
• June Larrabee - PHD (U. of Tenn.)
• E. Jane Martin - PHD (U. Pitt.)
• Gaynelle McKinney - MSN ED (Ind. U.)

Associate Professor Emeritus
• Peggy Burkhardt - PHD (U. of Tx.)
  Charleston Division
• Imogene P. Foster - EDD (WVU)
• Debra Harr - EDD (WVU)
• Jean Hoff - MPH (U of Pitt.)
• Nancy A. Koontz - MSN (U. of Md.)
• Lois O’Kelley - MSN (Wayne St. U.)
• C. Lynn Ostrow - EDD (WVU)
• Jacqueline Riley - MN (U. of Fla)
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:
   A. Determine the nature and significance of health and health care delivery phenomena
   B. Describe actions and advance strategies to improve health care delivery
   C. Develop, deliver, and evaluate theory-based health care.

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 health care 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 R.N. 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.

Note: Admission criteria are subject to change. Please see the School of Nursing Web site for the most up-to-date criteria at: http://www.hsc.wvu.edu/son/.

Application Process
The application process should be completed by March 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: http://apply.wvu.edu/)
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://www.hsc.wvu.edu/son) and to be submitted electronically*
3. 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
4. 3 Letters of references 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.*

For more information, visit the website at:
http://www.hsc.wvu.edu/son
or write to:

West Virginia University School of Nursing
P.O. Box 9600
Morgantown, WV 26506-9600
Phone (304) 293-1386

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/.

### Nursing Core Courses for Doctor of Nursing Practice

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>NSG course - Statistical Analysis</td>
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<tr>
<td>NSG course - Health Promotion of the Population</td>
<td>3</td>
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<tr>
<td>NSG course - DNP Role Analysis</td>
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<tr>
<td>NSG course - Evidence Based Practice</td>
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<tr>
<td>NSG course - Theory of Practice</td>
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<tr>
<td>NSG course - Health Care Informatics</td>
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<tr>
<td>NSG course - Focused Study</td>
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<tr>
<td>NSG course - Health Care Leadership</td>
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<tr>
<td>NSG course - Health Policy/Resource Management</td>
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<tr>
<td>NSG course - Clinical Project</td>
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<tr>
<td>NSG course - Clinical Immersion</td>
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<tr>
<td>NSG course - DNP Capstone</td>
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<td>NSG course DNP Role Application</td>
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<td><strong>Total Hours</strong></td>
<td><strong>41-43</strong></td>
</tr>
</tbody>
</table>

### Faculty

#### Lecturers

- Nancy Atkins - M.S.N., R.N.C., N.P. (Bellarmine Coll.)
  Lecturer, Charleston Division.
- Debbie Bellisario - B.S.N., R.N. (WVU)
  Lecturer.
- Linda Bombach - M.S.N., R.N. (Waynesburg U.)
  Lecturer.
- Debra Bostic - M.S.N., R.N. (WVU)
  Lecturer, WVU Tech Division.
- Robin Bowyer - M.S.N., R.N. (U. of Phoenix)
  Lecturer, WVU Tech Division.
• Kristina Butler - M.S.N., R.N. (U. of Md.)
  Lecturer.
• Kristina Childers - M.S.N., C.F.N.P. (Marshall U.)
  Lecturer, Charleston Division.
• Lori Constantine - M.S.N., R.N. (WVU)
  Senior Lecturer.
• Alicia Renee Dobranski - B.S.N., R.N. (WVU)
  Lecturer.
• Barbara Douglas - M.S.N., R.N. (Wright St. U.)
  Senior Lecturer, WVU Tech Division.
• Dana Friend - M.P.H., M.S.N., R.N. (WVU)
  Senior Lecturer.
• Mindy Harris - M.S.N., R.N. (Marshall U.)
  Senior Lecturer, WVU Tech Division.
• Jarena Kelly - M.S.N., R.N., C.F.N.P. (WVU)
  Lecturer, Charleston Division.
• Kelli Kirk - M.S.N., R.N. (Mountain St. U.)
  Lecturer, WVU Tech Division.
• Barbara Koster - M.S.N., R.N. B.C. (WVU)
  Lecturer, Charleston Division.
• Rebecca Kromar - N.D., M.B.A., R.N. (Case Western)
  Lecturer.
• Kathy Linkous - M.S.N., R.N., I.B.C.L.C. (Bellarmine Coll.)
  Senior Lecturer.
• Patricia Joyce Maramba - M.S.N., R.N. (WVU)
  Senior Lecturer.
• Terri L. Marcischak - M.S.N., C.F.N.P., R.N. (WVU)
  Lecturer.
• Danielle McGinnis - M.S.N., R.N. (WVU)
  Senior Lecturer.
• James Messer - M.S.N., R.N. (U. of Phoenix)
  Lecturer, WVU Tech Division.
• Amy Miner - M.S.N., R.N. (Waynesburg U.)
  Lecturer.
• Christine Mott - R.N., M.S.N., C.F.N.P. (WVU)
  Lecturer.
• Teresa D. Ritchie - M.S.N. (WVU)
  Lecturer.
• Rhonda Sansone - M.S.N., R.N. (Ohio St.)
  Senior Lecturer.
• Amy Shaw - M.S.N., R.N. (Marshall U.)
  Lecturer, WVU Tech Division.
• April Shay - B.S.N., R.N. (WVU)
  Lecturer.
• Crystal Sheaves - M.S.N. (WVU)
  Lecturer., Charleston Division.
• Robin Spencer - M.S.N., R.N. (Marshall U.)
  Lecturer, WVU Tech Division.
• Melinda Stoecklin - M.S.N., R.N. (Marshall U.)
  Lecturer, WVU Tech Division.
• Barbara Summers - M.S.N., R.N., C.C.R.N. (Marshall U.)
  Lecturer.
• Joanne E. Watson - M.S.N., R.N. (U. of Va.)
  Senior Lecturer.
• Melanie Whelan - M.S.N., R.N. (WVU)
  Senior Lecturer, WVU Tech Division.
Professors

- Laurie Badzek - M.S., J.D., L.L.M., R.N. (WVU)
  Professor.
  Status: Regular

- June Larrabee - Ph.D., R.N. (U. of Tenn.)
  Professor.
  Status: Regular

- Nan Leslie - Ph.D., R.N. (U. Pitt.)
  Professor.
  Status: Regular

- E. Jane Martin - Ph.D., R.N., F.A.A.N., C.S. (U. Pitt.)
  Professor.
  Status: Regular

- Susan H. McCrone - Ph.D., R.N. (U. of Utah)
  Chair of Department of Health Promotion/Risk Reduction.
  Professor.
  Status: Regular

  Professor Emerita.

  Dean and Professor.
  Status: Regular

- Cynthia A. Persily - Ph.D., R.N., F.A.A.N. (U. of Pa.)
  Associate Dean for Academic Affairs, Southern Region.
  Chair of Charleston Division.
  Professor.
  Status: Regular

- Mary Jane Smith - Ph.D., R.N. (N.Y.U.)
  Associate Dean for Graduate Academic Affairs.
  Professor.
  Status: Regular

- Janet Wang - Ph.D., R.N., F.A.A.N. (U. Pitt.)
  Professor.

Clinical Assistant Professor

- Emily Brinker Barnes - D.N.P., M.C.P. (WVU)
  Clinical Assistant Professor.

- Roger Carpenter - Ph.D., R.N. (WVU)
  Chair of Department of Health Restoration.
  Clinical Assistant Professor.
  Status: Associate

- Sandra Cotton - M.S., C.R.N.P. (U. of Md.)
  Director of Faculty Practice.
  Clinical Assistant Professor.

  Clinical Assistant Professor.

- Mary Elizabeth DuRant - M.S.N., R.N.C., W.H.N.P. (WVU)
  Clinical Assistant Professor.

- Robert David Lane - D.N.P., M.S.N. (U. of Tenn.)
  Clinical Assistant Professor, Charleston Division.

- Elizabeth A. Minchau - M.S.N., F.N.P. (U. of Pitt.)
  Clinical Assistant Professor.

- Judith Polak - M.S.N., R.N., N.N.P.-B.C. (U. of Fla.)
  Coordinator NNP Track.
  Clinical Assistant Professor.

- Kathleen Spadaro - Ph.D., R.N., P.M.H.C.N.S.-B.C. (U. of Pitt.)
  Clinical Assistant Professor.

- Amy Sparks - M.S.N., R.N. (WVU)
  Clinical Assistant Professor.

  Clinical Assistant Professor, Charleston Division.

- Martha Summers - M.S.N., R.N., C.F.N.P. (WVU)
  Clinical Assistant Professor.
• Jennifer A. Veshnesky - M.S.N., R.N., C.F.N.P. (WVU)
  Clinical Assistant Professor.

**Associate Professor**

• K. Joy Buck - Ph.D., R.N. (U. Va.)
  Associate Professor.

• Peggy Burkhardt - Ph.D., R.N., F.N.P. (U. of Tex.)
  Associate Professor, Charleston Division.
  Status: Regular

• Ilana Chertok - Ph.D., R.N., IBCLC. (Ben-Gurion U. of the Negev)
  Associate Professor.
  Status: Regular

• Pamela Deiriggi - Ph.D., R.N., P.N.P., C.P.N.P. (U. Tex.)
  Coordinator PNP Track. Associate Professor.

• Imogene P. Foster - Ed.D., R.N. (WVU)
  Associate Professor Emerita.

• Debra Harr - Ed.D, M.P.H., R.N. (WVU)
  Associate Professor Emerita.

• Jean Hoff - M.P.H., R.N. (U. Pitt.)
  Associate Professor Emerita.

• Nancy A. Koontz - M.S.N., R.N. (U. of Md.)
  Associate Professor Emerita.

• Barbara Kupchak - Ph.D., R.N. (U. Tex.)
  Associate Professor.

• Alvita Nathaniel - Ph.D., R.N.C., F.N.P. (WVU)
  Coordinator FNP Track. Associate Professor, Charleston Division.
  Status: Regular

• Susan Newfield - Ph.D., R.N., C.S. (U. Tex.)
  Associate Professor.

• Barbara Nunley - Ph.D., R.N., C.S. (U. of Ky.)
  Associate Professor, Charleston Division.
  Status: Associate

• C. Lynne Ostrow - Ed.D., R.N. (WVU)
  Associate Professor Emerita.
  Status: Regular

• Jacqueline Riley - M.N., R.N. (U. of Fla.)
  Associate Professor Emerita.

• Kari Sand-Jecklin - Ed.D., M.S.N., R.N. (WVU)
  Associate Professor.
  Status: Regular

• Elisabeth N. Shelton - Ph.D., R.N. (Widener U.)
  Associate Dean for Undergraduate Academic Affairs. Associate Professor.
  Status: Associate

• Jane A. Shrewsbury - M.N.Ed., R.N. (U. of Pitt.)
  Associate Professor Emerita.

• Patricia Simoni - Ed.D., R.N. (WVU)
  Associate Professor Emerita.

• Mary Kaye Staggers - M.S.N., R.N. (Wayne St.)
  Nursing Coordinator, Potomac State College of WVU. Associate Professor.

• Jacqueline Stemple - Ed.D., R.N. (WVU)
  Associate Professor Emerita.

• Fredona Stenger - M.S.N., R.N. (Boston U.)
  Associate Professor Emerita.

**Assistant Professor**

• Ann Cleveland - Ed.D., R.N. (WVU)
  Assistant Professor Emerita.

• Susan Coyle - Ph.D., R.N. (WVU)
Assistant Professor.

- Peggy Fink - M.S.N., R.N. (WVU)
  Assistant Professor, WVU Tech Division.
- Suzanne Gross - Ph.D., R.N. (U. Tex.)
  Assistant Professor Emerita.
- Dorothy M. Johnson - Ed.D., R.N. (WVU)
  Assistant Professor.
- Evelyn Klocke - Ed.D., R.N. (Marshall U.)
  Chair of WVU Tech Department of Nursing, Assistant Professor, WVU Tech. Division.
- Gina Maiocco - Ph.D., R.N., C.C.R.N., C.C.N.S. (U. of Utah)
  Assistant Professor.
  Status: Associate
- Kathleen Marsland - M.S., R.N. (U. Colo.)
  Assistant Professor Emerita.
  Director of Clinical Services. Assistant Professor.
- Lois O’Kelley - M.S.N., R.N. (Wayne St. U.)
  Associate Professor Emerita.
- Heidi Putman-Casdorph - Ph.D., R.N. (Widener U.)
  Assistant Professor.
  Status: Associate
- Jennifer Riggs - Ph.D., R.N. (Case Western Reserve U.)
  Assistant Professor.
- Marilyn Smith - Ph.D., R.N. (U. of Tenn.)
  Assistant Professor, Charleston Division.
  Status: Regular
- Laurie Theke - Ph.D., R.N., C.F.N.P. (WVU)
  Assistant Professor.
  Status: Associate
- Gail O’Malley Van Voorhis - M.S.N., R.N., C.N.N.P. (WVU)
  Director of LRC. Teaching Assistant Professor.
- Alison Witte - DLittet Phil, M.S., R.N.C.S. (U. of South Africa)
  Coordinator, GSC/WVU Joint Nursing Program, Assistant Professor, Glenville State College.

Visiting Clinical Assistant Professor

  Visiting Clinical Assistant Professor.

Clinical Instructor

- Patty Hermosilla - M.S.N., R.N., R.N.P.-C. (WVU)
  Clinical Instructor.
- Billie Murray - B.S.N., R.N. (Cedarville U.)
  Clinical Instructor.
- Dennelle Parker - M.S.N., R.N., C.F.N.P. (WVU)
  Clinical Instructor.
- Susan Pinto - M.S.N., R.N., C.F.N.P. (WVU)
  Clinical Instructor.
- Angel Smothers - M.S.N., R.N., C.F.N.P. (WVU)
  Clinical Instructor.

Dean

- Lorita Jenab - Ed.D., R.N. (Columbia U.)
  Dean Emerita.

Director of Evaluation

- Catherine V. Nolan - Ed.D. (WVU)
  Director of Evaluation.
Research Professor

• Irene Tessaro - Dr.P.H., M.S.N. (U. N.C., Chapel Hill)
  Research Professor.
  Status: Regular

Instructor

• Jamie Thornburg - M.S.N., R.N. (Marshall U.)
  Instructor.

Adjunct Instructor

• Alia Accad - M.S.N., R.N. (WVU)
  Adjunct Instructor.
• Jacquelyn P. Bauer - M.S.N., N.N.P. (WVU)
  Adjunct Instructor.
• Maribeth Beckner - M.S.N., R.N., C.N.O.R. (WVU)
  Adjunct Instructor.
• Charlotte Bennett - R.N., M.S.N., C.N.A.A. (WVU)
  Adjunct Instructor.
• Elena K. Berg - M.S.N., A.N.P., F.N.P., P.N.P. (WVU)
  Adjunct Instructor.
• Murrita C. Bolinger - (U. of Va.)
  Adjunct Instructor.
• Lucinda M. Brown - M.S.N., C.N.M. (U. of Ky.)
  Adjunct Instructor.
• Karen Campbell - M.S.N. (Vanderbilt U.)
  Adjunct Instructor.
• Jill Cochran - M.S.N., A.A.N.C-F.N.P. (WVU)
  Adjunct Instructor.
• Susan Collins - M.S.N., R.N. (Duke U.)
  Adjunct Instructor.
• Pamela S. Courtney - M.S.N., R.N.C., W.H.N.P. (WVU)
  Adjunct Instructor.
• Brenda Daugherty - M.S.N., R.N., N.N.P.-B.C. (WVU)
  Adjunct Instructor.
• Karen L. Fahey - M.S.N., CNM-C, F.N.P. (WVU)
  Adjunct Instructor.
• Mary Friel Fanning - R.N.C., M.S.N., C.C.R.N. (WVU)
  Adjunct Instructor.
• Jann E. Foley - M.S.N., R.N., C.N.M. (Case Western Reserve)
  Adjunct Instructor.
• Nancy I. Greenstreet - M.S.N., R.N. (WVU)
  Adjunct Instructor.
• Patricia Horstman - M.S.N., R.N. (WVU)
  Adjunct Instructor.
• Elizabeth Hupp - M.S.N., R.N. (WVU)
  Adjunct Instructor.
• Jodie Jackson - M.P.H., R.N. (Johns Hopkins U.)
  Adjunct Instructor.
• Cheryl Jones - M.S.N., R.N., C.N.A.A., O.C.N. (WVU)
  Adjunct Instructor.
• Linda Joyce Justice - M.S.N., R.N. (WVU)
  Adjunct Instructor.
• Barbara J. Koster - M.S.N., R.N. (WVU)
  Adjunct Instructor.
• Roberta McKee - M.S.N., F.N.P. (WVU)
  Adjunct Instructor.
• Julia Z. Miller - M.S.N., R.N. (WVU)
Adjunct Instructor.

- Kathleen Murphy - M.S.N., R.N. (U. of Phoenix) Adjunct Instructor.
- Barbara Jean Nightengale - M.S.N., R.N., N.N.P.-B.C. (WVU) Adjunct Instructor.
- Mary Phillips - M.S.N., A.P.R., B.C. (WVU) Adjunct Instructor.
- Denice Reese - M.S.N. (Case Western Reserve) Adjunct Instructor.
- Bonita Roche - M.S.N., R.N.-C., C.R.N.P. (WVU) Adjunct Instructor.

Adjunct Assistant Professor

- Diana Boyle - M.S.N. (WVU) Adjunct Assistant Professor.
- Malene Davis - M.S.N., M.B.A. (WVU) Adjunct Assistant Professor.
- Patricia Johnston - Ed.D., R.N., M.S.N. (WVU) Adjunct Assistant Professor.
- Judith D. Klingensmith - M.S.N., R.N. (U. of Pitt.) Adjunct Assistant Professor.
- Janet Stout - M.S.N. (Syracuse U.) Adjunct Assistant Professor.

Adjunct Clinical Instructor

- Lena Antimonova Cerbone - M.S.N., C.N.M. (Yale SoN) Clinical Adjunct Instructor.
- Bonnie B. Coradetti - B.S.N., M.P.H. (WVU) Adjunct Clinical Instructor.
- Shirley Zinn Gainer - B.S., B.S.N. (WVU) Adjunct Clinical Instructor.
- Neil R. McLaughlin - B.S., M.E.D. (Penn. St.) Adjunct Clinical Instructor.
- Barbara M. Mulich - M.S.N., C.F.N.P. (WVU) Adjunct Clinical Instructor.
Doctor of Philosophy in Nursing

The purpose of the Ph.D. program is to prepare nurse scholars/educators for roles in research, teaching, and service. The program prepares graduates who will contribute their unique nursing expertise to the collaborative development of knowledge to improve health and reduce health disparities.

The goals of the program are to prepare graduates who will:

1. Critically analyze phenomena using a variety of approaches to contribute to the development of nursing science.
2. Synthesize, reorganize, and expand knowledge from nursing and related disciplines to inform nursing science and practice.
3. Contribute to the development of the science of caring to improve quality of life.
4. Disseminate advances in scientific knowledge to diverse audiences.
5. Assume collaborative leadership roles in academia, healthcare organizations, research teams, and scholarly networks to promote and improve health.
6. Demonstrate integrity in the design, conduct, analysis, interpretation, and dissemination of research.

Admission Criteria

1. Cumulative GPA of 3.0 of four points in master's degree work.
2. Competitive achievement on the GRE.
   - If taken 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.
   - If taken 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.
3. A grade of B or higher in graduate statistics and research courses.
4. 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 Ph.D. 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 Ph.D. 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.
   A. Application for Admission to Graduate Studies (available at: http://apply.wvu.edu/)
   B. Supplemental Application for Admission to Ph.D. in the School of Nursing and Ph.D. application checklist (available at http://hsc.wvu.edu/son). Students should be certain that all materials are sent to:
      WVU School of Nursing, Student Services Office
      P.O. Box 9600
      Morgantown, WV 26506-9600
2. Supplemental Application for Admission to Ph.D. in the School of Nursing and Ph.D. application checklist (available on the School of Nursing website at: http://www.hsc.wvu.edu/son). Students should be certain that all materials are sent to:

WVU School of Nursing Student Services
Office P.O. Box 9600
Morgantown, WV 26506-9600

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 26506-981

3. Send three letters of recommendation directly to:

WVU School of Nursing Student Services Office
P.O. Box 9600
Morgantown, WV 26506-9600

Letters should address the applicant’s expertise in the advanced practice of nursing, skill 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 two, two-page scholarly essays, one describing the applicant’s research interests and one describing the applicant’s career goals.

For more information, write to West Virginia University School of Nursing, P.O. Box 9600, Morgantown, WV 26506-9600; phone (304) 293-1386.

Degree Requirements

The Ph.D. program is offered with a full-time or part-time option.

Full-Time Program Option

The full-time program is currently under revision. Funding is available for students interested in full-time programming. Please visit the School of Nursing website http://www.hsc.wvu.edu/son for additional information.

Part-Time Program Option

The nursing component of the Ph.D. program is offered during six-week summer sessions. Students attend class two days a week, taking six credits of nursing courses for four summers and then move on to the dissertation. Three curricular components comprise the 55 credits of post-master’s coursework. These are core, cognate/electives, and Dissertation

Curriculum Requirements

Core Requirements

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<td>NSG 724</td>
<td>Health Research Statistics 1</td>
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<td>NSG 725</td>
<td>Health Research Statistics 2</td>
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<td>NSG 729</td>
<td>Quantitative Research Methods</td>
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<td>NSG 727</td>
<td>Contemporary Nursing Science</td>
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<td>NSG 728</td>
<td>Theoretical Basis of Nursing</td>
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<td>NSG 731</td>
<td>Qualitative Research Methods</td>
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<td>NSG 734</td>
<td>Use of Data</td>
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<td>NSG 735</td>
<td>Principles: Nursing Education</td>
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<td>NSG 730</td>
<td>Principles of Measurement</td>
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<td>NSG 738</td>
<td>Issues in Nursing Scholarship</td>
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Cognate/Electives

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<td>NSG 781</td>
<td>Research Mentorship</td>
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<td>NSG 783</td>
<td>Dissertation Seminar</td>
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Additional Cognates

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<td>NSG 797</td>
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</table>
## Master of Science in Nursing Online Program Description

### MSN Online Program

The School of Nursing offers a program of study leading to the master of science in nursing (M.S.N.) 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 M.S.N. 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

---

### Suggested Plan of Study

<table>
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<td><strong>SPRING</strong></td>
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<table>
<thead>
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<tr>
<td>NSG 727</td>
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<td>NSG 729</td>
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<tr>
<td>NSG 730</td>
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<td>Spring</td>
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<td>NSG 731</td>
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<td>NSG 737</td>
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<td><strong>FALL</strong></td>
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<tr>
<td>NSG course Research Methods Cognates</td>
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<tr>
<td><strong>SPRING</strong></td>
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<tr>
<td>NSG 738</td>
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<tr>
<td>NSG 781</td>
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<td><strong>FALL</strong></td>
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<tr>
<td>NSG 725</td>
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<td><strong>SPRING</strong></td>
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<td>NSG 783</td>
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<tr>
<td>NSG 797</td>
<td>1-9</td>
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<tr>
<td><strong>FALL</strong></td>
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<tr>
<td>NSG 797</td>
<td>1-9</td>
</tr>
<tr>
<td><strong>SPRING</strong></td>
<td></td>
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<tr>
<td>NSG 797</td>
<td>1-9</td>
</tr>
<tr>
<td></td>
<td><strong>3-27</strong></td>
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</table>

Total credit hours: 55-79
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 44-credit program can be completed in five semesters (including a summer session) of full-time study. The average full-time load is nine to 12 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, 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 build and maintain a supportive and caring partnership.
4. Articulate viewpoints and positions in order to improve the quality of health care delivery and outcomes of successful care.
5. Consult and collaborate in interdisciplinary and interagency endeavors to advance culturally sensitive health care 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 March 1. The beginning sequence of courses in the M.S.N. 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 M.S.N. 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: http://apply.wvu.edu/).
3. Supplemental Application for Admission to Graduate Study in the School of Nursing (available on the School of Nursing website at: http://www.hsc.wvu.edu/son), 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

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://www.hsc.wvu.edu/son

or write to:
West Virginia University School of Nursing
P.O. Box 9600
Morgantown, WV 26506-9600
Phone (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 R.N. 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.


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 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/.

Curriculum Requirements

Core Courses - Master’s Degree

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 622</td>
<td>Theory &amp; Disciplined Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>NSG 623</td>
<td>Concepts of Advanced Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NSG 624</td>
<td>Advanced Pathophysiology</td>
<td>4</td>
</tr>
<tr>
<td>NSG 626</td>
<td>Lifespan Health Promotion</td>
<td>2</td>
</tr>
<tr>
<td>NSG 627</td>
<td>Research/Systematic Analysis</td>
<td>5</td>
</tr>
<tr>
<td>NSG 629</td>
<td>Advanced Practice/Families</td>
<td>2</td>
</tr>
<tr>
<td>NSG 628</td>
<td>Health Policy/Finance/Ethics</td>
<td>3</td>
</tr>
<tr>
<td>NSG 685</td>
<td>Clinical Scholarship</td>
<td>1</td>
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</table>

Total Hours

22

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

FNP Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NSG 631</td>
<td>Advanced Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>NSG 632</td>
<td>Advanced Assessment</td>
<td>2</td>
</tr>
<tr>
<td>NSG 633</td>
<td>Primary Care: Rural Families 1</td>
<td>3</td>
</tr>
<tr>
<td>NSG 634</td>
<td>Primary Care: Rural Families 2</td>
<td>4</td>
</tr>
<tr>
<td>NSG 635</td>
<td>Rural Family Hlth Practicum 1</td>
<td>5</td>
</tr>
<tr>
<td>NSG 636</td>
<td>Rural Family Hlth Practicum 2</td>
<td>5</td>
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</table>

Total Hours

22

Pediatric NP Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 631</td>
<td>Advanced Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>NSG 647</td>
<td>Assessment/Pediatric Care 1</td>
<td>5</td>
</tr>
<tr>
<td>NSG 644</td>
<td>Pediatric Primary Care 2</td>
<td>4</td>
</tr>
<tr>
<td>NSG 645</td>
<td>Pediatric Practicum 1</td>
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<tr>
<td>NSG 646</td>
<td>Pediatric Practicum 2</td>
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Total Hours

22

Neonatal NP Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NSG 631</td>
<td>Advanced Pharmacotherapeutics</td>
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<tr>
<td>NSG 654</td>
<td>Neonatal Pathophysiology</td>
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<tr>
<td>NSG 655</td>
<td>Neonatal Health Promotion</td>
<td>2</td>
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</table>
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 19 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 R.N. 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://www.hsc.wvu.edu/son/.

The required courses for post-master’s certification follow:

**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 647  Assessment/Pediatric Care 1  5
NSG 644  Pediatric Primary Care 2  4
NSG 645  Pediatric Practicum 1  5
NSG 646  Pediatric Practicum 2  5

Total Hours 19
### Required Courses for Post Master’s Neonatal Nurse Practitioner

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>NSG 654</td>
<td>Neonatal Pathophysiology</td>
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<td>NSG 655</td>
<td>Neonatal Health Promotion</td>
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<tr>
<td>NSG 663</td>
<td>Neonatal Assessment/Care 1</td>
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<tr>
<td>NSG 664</td>
<td>Neonatal Care 2</td>
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<td>NSG 665</td>
<td>Neonatal Practicum 1</td>
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<td>NSG 666</td>
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<td><strong>Total Hours</strong></td>
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### Required Courses for Post Master’s Women’s Health Nurse Practitioner

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<tr>
<td>NSG 632</td>
<td>Advanced Assessment</td>
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<tr>
<td>NSG 683</td>
<td>Primary Care:Women/Girls 1</td>
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</tr>
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<td>NSG 684</td>
<td>Primary Care:Women/Girls 2</td>
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<td>NSG 686</td>
<td>WHNP Practicum 1</td>
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<td>NSG 687</td>
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### Required Courses for Post Master’s Nursing Leadership

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<tr>
<td>NSG 610</td>
<td>Leadership in Health Care</td>
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<tr>
<td>NSG 611</td>
<td>System Based Decision Making</td>
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<td>NSG 612</td>
<td>Leading Health System Change</td>
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</tr>
<tr>
<td>NSG 613</td>
<td>Managing Health Care Resources</td>
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<tr>
<td>NSG 614</td>
<td>Health Care Informatics</td>
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<td>NSG 615</td>
<td>Program Planning/Evaluation</td>
<td>3</td>
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<tr>
<td>NSG 617</td>
<td>Leadership Practicum 1</td>
<td>2-5</td>
</tr>
<tr>
<td>NSG 618</td>
<td>Leadership Practicum 2</td>
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<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>22-28</strong></td>
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All students in post-master’s certificate programs will complete a minimum of 600 supervised clinical hours.
School of Pharmacy

Degrees Offered

• Doctor of Pharmacy (entry-level) (See Health Sciences Catalog.)
• M.S., Ph.D. in Pharmaceutical and Pharmacological Sciences

Introduction

The WVU School of Pharmacy offers graduate programs in the pharmaceutical and pharmacological sciences for both the M.S. and Ph.D. degrees. The school is advantageously located in the Health Sciences Center complex which also houses all departments of the Schools of Medicine, Nursing, and Dentistry, as well as a comprehensive medical library, audio-visual and computer-based learning center, research core facilities, and laboratory animal quarters. State-of-the-art research laboratories are located throughout the Health Sciences Center complex to facilitate interactions with the Mary Babb Randolph Cancer Center, Center for Neuroscience, and Center for Cardiovascular and Respiratory Sciences. In addition, the Health Sciences Center has easy access to the Evansdale and Downtown campuses of WVU through a personal rapid transit (PRT) system. The scientific community, which is especially well developed, draws on area scientists throughout WVU, the Centers of Disease Control/National Institute on Occupational Safety and Health (CDC/NIOSH), NASA, FBI, and a variety of research centers supported by the National Institutes of Health (NIH), National Science Foundation (NSF), and the Department of Energy. A CDC/NIOSH research facility is two blocks away, and Mylan Pharmaceuticals, a leading generic drug producer in the world, is located across the street from the Health Sciences Center. In addition, the school has long-standing collaborations with several state agencies and multinational pharmaceutical companies.

Applicants for the Ph.D. may choose between two pathways: pharmaceutical and pharmacological sciences, and health outcomes. Both pathways uniquely encompass a wide variety of interdisciplinary areas of science and technology, with translational potential. For example, students in medicinal chemistry are trained to combine knowledge in analytical/synthetic chemistry, biochemistry, pharmacology, pharmacokinetics, and toxicology and molecular modeling in the design and synthesis of new drugs; those who specialize in pharmaceutics, biopharmaceutics, and pharmacokinetics are trained to combine physicochemical methods, cellular and molecular biology, and drug metabolism in the design and evaluation of novel drug delivery systems and their impact on pharmacodynamic and therapeutic effects. Trainees who specialize in health outcomes and policy research may integrate health economics, epidemiology, behavioral research, and health policy research methods to improve health care and pharmaceutical access, quality, and affordability and reduce health disparities.

The Ph.D. degree emphasizes research training and will not qualify the recipient to take the professional practice licensing exam. For those interested in becoming a licensed pharmacist, please consult the doctor of pharmacy (Pharm.D.) program in the WVU Health Sciences Catalog.

Master of Science and Doctor of Philosophy

Students must possess a baccalaureate degree from a suitable academic discipline with an overall grade-point average of at least 3.0 and an aptitude and interest for graduate work in the pharmaceutical sciences. Furthermore, GRE scores in the verbal, quantitative, and analytical sections are required. TOEFL scores may be required of international students.

To obtain specific information related to the school’s graduate programs, graduate faculty research interests, and availability of graduate assistantships or fellowships, applicants may write directly to:

Associate Dean for Research and Graduate Programs
WVU School of Pharmacy
2037 Health Sciences Center North
P.O. Box 9500 Morgantown, WV 26506
Telephone: (304) 293-1450
e-mail: rmatsumoto@hsc.wvu.edu

To obtain specific application and admission information about the Ph.D. program in health outcomes and policy research and availability of fellowships or graduate assistantships, please visit http://pharmacy.hsc.wvu.edu/orgp/Pathways/Health-Outcomes-Pathway or e-mail smadhavan@hsc.wvu.edu.

Faculty

Dean
• Patricia A. Chase - Ph.D.

Associate Dean for Research and Graduate Programs
• Rae R. Matsumoto - Ph.D.
Regular Member

- James Antonini - Ph.D. (WVU)
- Erik A. Bey - Ph.D. (Cleveland State University)
- Patrick Cally - Ph.D. (University of California San Francisco)
- Vincent Castranova - Ph.D. (WVU)
- Glenn Dillon - Ph.D.
- Cerasela Zoica Dinu - Ph.D.
- Jeffrey Fedan - Ph.D.
- Peter Gannett - Ph.D. (University of Wisconsin)
- Robert Griffith - Ph.D. (The Ohio State University)
- Carole Harris - Ph.D.
- Ann F. Hubbs
- Jason Huber - Ph.D. (Florida A & M)
- Kimberly M. Kelly - Ph.D. (Rutgers)
- David Klinke - Ph.D.
- Bingyun Li - Ph.D.
- Suresh Madhavan - Ph.D. (Purdue University)
- Rae Matsumoto - Ph.D. (Brown University)
- S. Jamal Mustafa - Ph.D.
- James O'Donnell - Ph.D.
- Xiaoyun (Lucy) Pan - Ph.D. (University of Iowa)
- Gauri V. Pawar - M.D.
- William Petros - Pharm.D. (PCPS)
- Yon Rojanasakul - Ph.D. (University of Wisconsin)
- Usha Sambamoorthi - Ph.D. (University of Madras, India)
- Virginia (Ginger) Scott - Ph.D. (University of Minnesota)
- Xiaodong Michael Shi
- Letha J. Sooter - Ph.D. (University of Texas)
- Grazyna Szklarz - Ph.D. (Clarkson University)
- Liying Wang - Ph.D.
- Han-ting Zhang - Ph.D.

Associate Member

- Gerald M. Higa - Pharm.D. (U Pacific)
- Sobha Kurian - M.D.
- Charles Ponte - Pharm.D. (University of Utah)
- Carl R. Sullivan - M.D.
Agriculture, Forestry, and Consumer Sciences

e-mail: dsmith3@wvu.edu

Degree Offered

- Master of Agriculture, Forestry, and Consumer Sciences

Admission Requirements

Applicants must meet the minimum admission requirements of the University for regular graduate students, including a 2.75 grade point average, in order to be a regular graduate student in this program. Applications are reviewed first by the division coordinator for the master of agriculture, forestry, and consumer sciences program in one of the divisions of the college. Applicants selected for admission are recommended to the associate dean of the Davis College of Agriculture, Natural Resources, and Design.

If the student’s baccalaureate degree is not in a field sufficiently related to the proposed course of study, the division coordinator may recommend admission as a provisional student until completion of prerequisite undergraduate courses. Prime consideration is given to a program of study tailored to the career goals of the individual student.

Degree Requirements

Satisfactory completion of 36 hours of graduate-level coursework is required for the master of agriculture, forestry, and consumer sciences degree. A minimum of 18 hours must be selected from among graduate courses available within two divisions of the college, with no fewer than six hours in either division. No more than 12 hours of special topics or independent study may be counted towards the degree. The student must maintain an overall grade point average of 3.0 in all graduate courses approved by a Graduate Advisory Committee. A three-hour problem report may be included at the option of the student and the Graduate Advisory Committee.

The Graduate Advisory Committee shall consist of at least three members representing at least two divisions with at least two being members of the graduate faculty of the college. The committee shall be formed with advice from the division coordinator for the program and an approved plan of study shall be submitted to the associate dean during the first semester of enrollment. Upon completion of the coursework, the candidate must pass either an oral or written examination given by the committee.

Faculty

Associate Dean

- Dennis K. Smith
  Academic Affairs/Program Coordinator
Public Health

Degrees Offered

• Master of Public Health
  • Areas of Emphasis
    • Biostatistics
    • Epidemiology
    • Health Policy, Management and Leadership
    • Occupational and Environmental Health Sciences
    • Social and Behavioral Sciences
    • Public Health Practice (MPH online degree)

• PhD in Public Health Sciences
  • Areas of Emphasis
    • Epidemiology
    • Occupational and Environmental Health Sciences
    • Social and Behavioral Sciences

• Master of Science
  • Area of Emphasis
    • School Health Education

INTRODUCTION

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 educational and research programs.

The Master of Public Health (MPH) program, MS in School Health Education, and PhD in Public Health Sciences are fully accredited and attract graduate students from diverse professional disciplines and undergraduate majors. Our focus is on student achievement and service. WVU public health students make a difference even before they graduate. We truly believe in learning by doing. MPH students are expected to remain engaged in community health throughout their training and complete practicum/internship experiences in a diversity of settings. Our School Health Education program is nationally unique, attracting future leaders in education.

Our faculty and staff involve students in their very active research program. 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 meetings with their faculty mentors.

The practical and rigorous education we provide makes our graduates effective professionals, and very competitive in the job market. WVU public health alumni are working to improve the health of individuals and communities throughout the U.S. and around the globe. We are growing quickly to meet the needs of our students and the substantial public health challenges that face our state.

Mission

We train the coming generation of public health practitioners and researchers, and we identify and create solutions to prevent and reduce public health problems.

Vision

The West Virginia University School of Public Health serves as a model for public health influence in our state, region, and beyond.

Programs and outcomes

The emerging School presents its new public health curriculum here, built upon a CEPH-accredited program with over 100 MPH students and more than 20 PhD students. We also offer a nationally unique distance-learning MS program in School Health Education with strong attention to public health principles. Our students have achieved success in professional placements. There is a dynamic interdisciplinary research enterprise. The mission has always been to provide primary prevention, intervention, and public health research to West Virginia communities and beyond. Now, the scale and scope of our programs will increase.

The department faculty have performed nationally recognized work in competitive, externally funded centers, such as the West Virginia Rural Health Research Center, the Translational Tobacco Reduction Research Program, the Office of Health Services Research, the WVU
Biostatistics Consulting Group, the Center on Aging, the Institute for Occupational and Environmental Health, the West Virginia Prevention Research Center, and the Health Research Center.

Finally, we are dedicated to a high-quality education for our students that:

- Provides innovative, high-quality education programs.
- Prepares students to practice contemporary public health with emphasis on improving health and eliminating disparities in our region.
- Educates students to design and implement high-impact prevention, intervention, evaluation, quality assurance, and disease and injury surveillance and research programs.
- Delivers an innovative, rigorous graduate curriculum centered on a framework of preventing or alleviating health disparities in our region.
- Attains diversity and inclusion.

**Master of Public Health (M.P.H.)**

The field of public health encompasses a number of specific disciplines whose mission is to prepare individuals to help improve the health and quality of life in the population through education, research, and service. 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 M.P.H. program seeks students with a strong, genuine commitment to a career in public health. An M.P.H. 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 preventive medicine and community/population health. We welcome applications from mid-career professionals and from students who have recently completed a bachelor’s degree.

**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 these core functions through the M.P.H. degree (both on campus and online) with discipline-specific programs in the Departments of Biostatistics, Epidemiology, Health Policy Management and Leadership, Occupational and Environmental Health Sciences, and Social and Behavioral Sciences. The M.P.H. program prepares students for roles in decision-making in managed care and other integrated delivery systems, the medical products industry, health departments, and other governmental agencies, consumer groups, and community-based organizations. The MPH program is accredited by the National Council on Education for Public Health (CEPH).

**Admission Requirements**

Please see each department for additional admission requirements.

Please note that strong computer skills are needed to be successful in this program. The School has minimum computer/laptop systems requirements; every student will sign an agreement to abide by these.

Since unforeseen circumstances and program implementation may necessitate changes in our curriculum, we encourage prospective and current students to visit the School of Public Health website at: http://publichealth.hsc.wvu.edu/ for current requirements.

For more information about the M.P.H. program contact:

Leah Adkins, Educational Programs Senior Program Coordinator at leadkins@hsc.wvu.edu

Or

Janet Hunt, Interim Assistant Dean for Academic Programs at jhunt@hsc.wvu.edu.

P.O. Box 9190
WVU School of Medicine
Morgantown WV 26506
Phone (304) 293-2502
Fax (304) 293-3755

**Master of Science (M.S.) in School Health Education**

The M.S. 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).
Goal of the M.S. Program

The goal of the M.S. 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.

Course of Study

Students in this program will complete 30 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.

Since unforeseen circumstances may necessitate changes in our curriculum, prospective and current students are encouraged to visit our website at: http://publichealth.hsc.wvu.edu/ for current requirements.

For more information about the M.S. program please contact:

Ruth E. Kershner, Ed.D., R.N., Associate Professor at rkershner@hsc.wvu.edu
Coordinator of the M.S. Program in School Health Education
P.O. Box 3190
WVU School of Medicine
Morgantown WV 26506
Phone (304) 293-7440 or WVU School of Public Health Phone (304) 293-2502

Doctor of Philosophy (Ph.D.) in Public Health Sciences

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 program offers specializations in three discipline-specific areas of public health: Social and Behavioral Sciences (118 credit hours), Epidemiology (117 credit hours), and Occupational and Environmental Health 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 5 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.

Admission to the Program

Admission to the doctoral program is limited to highly qualified and motivated candidates. Competitive stipend support is offered to these students. The applications deadline is February 15.

Please note that admission is preferentially given to US citizens and permanent residents. International students are considered for acceptance by the Admissions Committee if they have excellent academic credentials and research experience and can demonstrate stipend support for the duration of PhD training from an individual source, government source, or by written agreement with a WVU HSC faculty mentor.

Detailed admissions procedures, including online application materials can be found at the School of Public Health website: http://publichealth.hsc.wvu.edu/

For more information about the Ph.D. program contact:

WVU School of Public Health
P.O. Box 9190
1 Medical Center Drive
Morgantown, WV 26506
(304) 293-2502

Faculty

Interim Dean

• Alan M Ducatman - M.Sc. (City U. of NY)
  Professor, Toxic Exposure Worker’s Compensation

Interim Associate Dean for Academic Affairs

• George Kelley - D.A. (Middle Tenn. St. U.)
  Professor, Meta-analysis, Effects of Physical Activity on Health-Related Diseases

Interim Assistant Dean for Student Affairs

• Ruth Kershner - Ed.D. (WVU)
  Professor, Coordinator - MS in School Health Education, Substance Abuse Education, Violence Prevention, Women’s Health

Interim Assistant Dean for Academic Programs

• Janet B. Hunt - M.P.H. (U. of Tenn.)
  Teaching Assistant Professor, Practicum Director, Curriculum Development and Academic Public Health
Interim Chair

- Matthew J. Gurka - Ph.D. (UNC)
  Department of Biostatistics, Associate Professor, Director of Biostatistics Consulting Group, Longitudinal Data Analysis, Model Selection, Power Analysis, Child Health, Childhood Obesity and Metabolic Syndrome
- Michael Hendryx - Ph.D (Northwestern)
  Department of Health Policy, Associate Professor, Management and Leadership, Health Policy and Health Disparities
- Michael McCawley - Ph.D. (New York U.)
  Department of Occupational and Environmental Health Sciences, Research Professor, Air Pollution, Aerosols, and Occupational Health
- Anoop Shankar - Ph.D. (Mahatma Ghandi U.)
  Department of Epidemiology, Professor, Cardiovascular Diseases, Diabetes Mellitus, Hypertension, Chronic Kidney Disease
- Keith Zullig - Ph.D. (U. of S.C.)
  Department of Social and Behavioral Sciences, Associate Professor, Director - Ph.D. in Public Health Sciences, Adolescent Quality of Life Research, Measurement, Substance Use, and Community-Based Interventions

Professors

- Jeffrey Coben - M.D. (U. of Pitt.)
  Clinical Research Methods
- Geri Dino - Ph.D. (Kansas State University)
  Management of Public Health, Tobacco Prevention
  Clinical Director, Institute of Occupational and Environmental Health, Workers’ Compensation, Repetitive Strain Disorders
- Kimberly A. Horn - Ed.D (WVU)
  Grant Writing, Tobacco Prevention, Health Disparities, Community-based Participatory Research
- Sarah Knox - Ph.D. (U. of Stockholm)
  Clinical and Populational Aspects of Cardiovascular Disease, Epigenetics and Systems Biology
- Ranjita Misra - Ph.D. (Old Dominion University)
  Diabetes and Metabolic Syndrome
- Ian R. H. Rockett - M.P.H., Ph.D. (Brown U.)
  Epidemiology of Injury and Substance Abuse, Suicide Misclassification, History of Public Health
- Pete Shaffron - Ed.D. (WVU)
  Interim Director, MPH Public Health Practice (online degree), Injury Prevention, Driver Behavior, Impact of Physical Fitness on the Older Driver

Associate Professors

- Peter Giacobbi - Ph.D. (U. of Tenn.)
  Physical Activity, Epidemiology
- Lan Guo - Ph.D. (WVU)
  Bioinformatics and Information Integration
- Gerry Hobbs - Ph.D., M.S. (Kan. St. U.)
  Biostatistics.
- Kimberly Innes - Ph.D. (Cornell University)
  Epidemiology, Etiology, Chronic Age-Related Disorders

Assistant Professors

- Rachel T. Abraham - M.D., MPH (U. of Bangalore, India)
  Bridging the Gap Between Medicine and Public Health
- Scott Cottrell - Ed.D. (WVU)
  Design of Instructional and Assessment Strategies
- Stephanie Frisbee - Ph.D. (WVU)
  Health Policy, Policy and Epidemiologic Approaches to Pediatric Cardiovascular Health Outcomes
- Kelly Gurka - Ph.D. (UNC)
  Epidemiology, Injury Prevention and Control, Maternal and Child Care
- Alfgeir Kristjansson - Ph.D. (Karolinska Institute)
  Social Research Methods, Substance Abuse Prevention
- Dusin Long - Ph.D. (U of North Carolina)
  Biostatistics
- Juhua Luo - Ph.D. (Karolinska Institute)
Cancer Epidemiology and Prevention, Health Disparities in Underserved Populations

• Michael Mann - Ph.D. (University of Florida)
  Adolescent Health

• Toni Morris - M.S. (WVU)
  Community Medicine, First Aid Instruction.

• Douglas Myers - ScD (U Massachusetts)
  Workplace Safety

• Cecil Pollard - M.A. (WVU)
  Survey Research Methods, Collaborative Research Efforts

• Kimberly Rauscher - Sc.D. (U. of Mass. at Lowell)
  Environmental Policy, Injury Control Epidemiology

• Michael D. Regier - Ph.D. (University of British Columbia)
  Biostatistics, Community Medicine

• Nancy O’Hara Tompkins - Ph.D. (U. of Md.)
  Youth Physical Activity, Obesity Prevention

• Kimberly Williams - Ph.D. (McMaster U., Canada)
  Effects of Yoga Therapy on Low Back Pain

• Motao Zhu - M.D., Ph.D. (SUNY at Albany)
  Injury Epidemiology

Assistant Research Professors

• Melissa Ahern - Ph.D. (Fla. St. U.)
  Public Health Impacts of Energy Use

• Stephanie Frost - Ph.D. (WVU)
  Influence of Built and Social Environments on Health Behavior and Factors Influencing Childhood Obesity

• Christa L. Ice - Ph.D. (Vanderbilt University)
  Pediatrics

Research Instructors

• Thomas Bias - Ph.D. (WVU)
  Public Health Policy, Obesity Prevention, Built Environment, Community Development, Program Evaluation

• Kristi Kelly - M.Ed. (WVU)
  Meta-analysis, Effects of Physical Activity on Health-Related Diseases

• Lucas Moore - Ed.D. (WVU)
  Public Health Policy

Instructor

• Bobbi Sykes - M.S. (WVU)
  Teaching Instructor, Internship Coordinator, Public Health Practice, Care Management and Access to Care

Emeritus

• Rick Briggs - EdD (WVU)
• Billy R. Carlton - Ed.D. (U of Tenn)
• Karen K. Douglas - Ph.D. (Tex. Women’s U.)
• John Pearson - MPH (Yale U.)
• William E. Reger-Nash - Ed.D. (WVU)

Senior Program Coordinator

• Leah A. Adkins

Biostatistics

DEGREES OFFERED:

• MPH in Biostatistics
MPH in Biostatistics  http://publichealth.hsc.wvu.edu/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 track include:

• Refining research questions and hypotheses;
• Identifying the appropriate study design to address a particular research question;
• Choosing the appropriate types of variables to best answer a specific hypothesis;
• Having an acute awareness of the details of data management;
• Identifying the appropriate statistical method, and being able to perform the method;
• Interpreting results from statistical analysis correctly;
• Understanding sources of bias in various observational and clinical designs and how one can (and cannot) address them statistically;
• Communicating effectively when providing statistical consultation to collaborative researchers;
• Conveying the results to others through publications and presentations.

A typical student who graduates with an MPH in biostatistics from WVU will be qualified to work as a biostatistician or research coordinator in research organizations such as a pharmaceutical company, contract research organization (CRO), a university, or a health department.

The required amount of credits for this degree is 46. The core courses and the typical schedule may be different to allow for additional coursework in biostatistics. This degree typically would take four semesters to complete.

ADMISSION Guidelines (MPH in Biostatistics)

• 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 and a course in linear algebra.
• GRE scores of 150 (verbal), 155 (quantitative), 4.0 (analytical writing).
• TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based). International Students Only.

Students interested in applying for the MPH in Biostatistics 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 MPH application and indicate Biostatistics as your preference, including three academic letters of recommendation and CV/Resume.

You may mail your MPH application, recommendation letters, and CV/Resume to:

WVU School of Public Health
MPH Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

Fall Admissions Only: Completed applications and materials for international students must be received by May 15 in order to allow for visa processing. Completed applications and materials for in-state and domestic students must be received by June 15.

Overview of MPH in Biostatistics Curriculum

Students in the MPH program in Biostatistics will complete a total of 46 credit hours (16 credit hours of School of Public Health core courses, 2 credit hours of Seminar, 22 credit hours of departmental required courses and 6 credit hours of elective courses). The culminating
experience, taken during the final semester, requires completing a consulting practicum (3 credit hours) and submitting a paper and poster. This degree will typically take 4 semesters to complete.

**Department of Biostatistics Master Level Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOS 601</td>
<td>Applied Biostatistics 1</td>
<td>3</td>
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<tr>
<td>BIOS 602</td>
<td>Applied Biostatistics Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIOS 603</td>
<td>Applied Biostatistics 2</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 604</td>
<td>Applied Biostatistics 3</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 610</td>
<td>Intermediate Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>BIOS 611</td>
<td>Data Management and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 612</td>
<td>Pb Hlth Statistl Inference 1</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 620</td>
<td>Applied Linear Models HS</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 621</td>
<td>Categorical Data Analysis HS</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 622</td>
<td>Analysis of Time-to-Event Data</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 623</td>
<td>Biostatistical Consulting</td>
<td>1</td>
</tr>
<tr>
<td>BIOS 628</td>
<td>Biostatistics Practicum</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 660</td>
<td>Applied Bioinformatics 1</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 661</td>
<td>Applied Bioinformatics 2</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 662</td>
<td>Statistics in Clinical Trials</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 663</td>
<td>Introduction to Meta-Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 696 - Graduate Seminar</td>
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**Total Hours**: 46

**Suggested Course Sequence**

**First Year**

<table>
<thead>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td>BIOS 620</td>
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<td>BIOS 612</td>
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<td>BIOS 621</td>
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<td>EPID 610</td>
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<td>BIOS 622</td>
<td>3</td>
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**Second Year**

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<th>Course Code</th>
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<th>Spring</th>
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<tr>
<td>OEHS 601</td>
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<td>EPID 611</td>
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<tr>
<td>SBHS 601</td>
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<td>BIOS 662</td>
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<tr>
<td>HPML 601</td>
<td></td>
<td>3</td>
<td>BIOS 628</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 696 - Graduate Seminar</td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Total credit hours**: 44

Note: The suggested schedule may be altered to allow for additional coursework in biostatistics.

**Culminating Experience**

The Biostatistics Practicum will be a culminating experience that generally involves biostatistical collaboration. Students will have opportunities to work in collaborative settings (research centers, etc.) where biostatistical support is needed. The student will work at least 180 hours total on a particular project, assisting an investigator with a sophisticated analysis of data that will presumably lead to a manuscript for publication or a research proposal for submission.

The purpose of practicum is to demonstrate proficiency in most if not all of the listed competencies for this degree. The student should be expected to participate in the design of research studies, if applicable, the analysis of data, presentation of results, etc. Completion of a technical report and an oral or poster presentation is required.

**Faculty**

**Chair**

- Matthew Gurka - PhD
  Interim Chair, Associate Professor
Professor
• George Kelley - DA, FACSM
  Director of the Meta-Analytic Research Group

Associate professor
• Gerry Hobbs - PhD

Assistant professors
• Dustin Long - Ph.D.
• Michael Regier - PhD

Research Assistant Professor
• Christa Ice - PhD

Epidemiology

DEGREES OFFERED:
• MPH in Epidemiology
• PhD in Public Health Science-Epidemiology

MPH in Epidemiology http://publichealth.hsc.wvu.edu/epidemiology/

The Master of Public Health (M.P.H.) degree in Epidemiology is designed for those who wish to acquire skills necessary for research in public health. This degree will be appropriate for persons interested in a career studying the relationship of risk factors to a variety of disease outcomes (e.g., the effect of high blood pressure, environmental exposures, or obesity on heart disease, cancer, longevity, reproductive outcomes). The degree focuses on development of basic research skills for the study of correlates and determinants of disease and other health conditions.

Upon completion of the MPH in Epidemiology degree, the graduate should be able to:
• Conduct high-quality epidemiologic research—including appropriate design, statistical analysis of data, and interpretation and reporting of results.
• Conduct disease surveillance as practiced in state and county health departments.
• Critically review the literature and identify strengths and weaknesses of design, analyses, and conclusions.
• Evaluate the effects of potential confounding and interaction in a research design.
• Apply knowledge of disease mechanisms and information from the biological disciplines to interpretation of statistical findings in biomedical research.
• Collaborate with or serve as a research consultant to health professionals by providing technical expertise with regard to literature review, study design, data analysis, and interpretation and reporting of results.

WVU MPH graduates in Epidemiology will be qualified to work and provide leadership in state and federal public health agencies (e.g., CDC, 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.

ADMISSION Guidelines (MPH in Epidemiology)
• Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0.
• Successful completion of a course in linear algebra.
• GRE scores of 150 (verbal), 149 (quantitative), 4.0 (analytical writing).
• TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based). International Students Only.

Students interested in applying for the MPH 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
You may mail your MPH application, recommendation letters, and CV/Resume to:

WVU School of Public Health
MPH Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

Fall Admissions Only: Completed applications and materials for international students must be received by May 15 in order to allow for visa processing. Completed applications and materials for in-state and domestic students must be received by June 15.

PhD in Epidemiology
http://publichealth.hsc.wvu.edu/epidemiology/

The Doctor of Philosophy (PhD) in Epidemiology prepares students for careers in research and teaching, often at a university, federal or state agency, or private research institution. Students develop research and teaching skills in epidemiology through coursework and practice opportunities. The curriculum provides training in epidemiologic methods for clinical, observational and community-based research including study design, statistical analysis, biological principles and disease etiology to meet the rigors of the scientific community. The program’s etiologic orientation is based on the premise that knowledge of genetic, behavioral, environmental, and physiologic factors contribute to understanding the underlying causes of complex human diseases needed to develop effective preventive measures.

Upon completion of the PhD degree in Epidemiology, graduates should be able to:

• 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 surveillance systems.
• Evaluate health behaviors and outcomes in populations by age, sex, race, ethnicity, educational and professional backgrounds, disability status and sexual orientation.
• Critically evaluate results of epidemiologic studies, including study design, analysis results, and conclusions.
• Prepare written and oral reports and presentations to effectively communicate necessary information to professional audiences, policy makers, 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.

Graduates of the PhD in Epidemiology program typically work as faculty members in academic institutions, scientists in research centers such as the NIH, CDC or the industry, or may assume leadership positions in state, or federal health agencies (such as CDC, FDA, EPA, etc.).

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 PhD program.

ADMISSION Guidelines for PhD

• 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)
• Successful completion of a course in linear algebra
• GRE scores: 155 quantitative, 150 verbal, and 4.0 for analytical writing
• A completed PhD 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 epidemiology that appeals to you?
- What have you done to prepare yourself for training in epidemiology?
- How will you use your training in epidemiology?
- What area(s) within epidemiology 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 PhD in Epidemiology must:

- Complete the WVU graduate application and submit with the processing fee.
- 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 PhD application online and indicate Epidemiology as your preference [http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp](http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp)
- Three academic letters of recommendation and CV/Resume.

You may mail your recommendation letters and CV/Resume to:

WVU School of Public Health
PhD Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

Overview of MPH in Epidemiology Curriculum

Students in the MPH program in Epidemiology will complete a total of 44 credit hours (16 credit hours of School of Public Health core courses, 2 credit hours of Seminar, 20 credit hours of departmental required courses and 6 credit hours of elective courses). The culminating experience, taken over the last 2 semesters, requires completing a proposal (2 credit hours), implementing a research-based practicum project (6 credit hours) and submitting a publishable paper and poster. This degree will typically take 4 semesters to complete.

Department of Epidemiology Mast Level Courses

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EPID 601</td>
<td>Public Health Epidemiology</td>
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</tr>
<tr>
<td>EPID 610</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>EPID 611</td>
<td>Advanced Epidemiologic Theory</td>
<td>3</td>
</tr>
<tr>
<td>EPID 612</td>
<td>Applied Epidemiology for PH</td>
<td>3</td>
</tr>
<tr>
<td>EPID 627</td>
<td>Epidemiology Proposal</td>
<td>2</td>
</tr>
<tr>
<td>EPID 628</td>
<td>Epidemiology Practicum</td>
<td>3</td>
</tr>
<tr>
<td>EPID 664</td>
<td>Chronic Disease Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>EPID 665</td>
<td>Injury Control Seminar</td>
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Suggested Course Sequence

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<tr>
<td>BIOS 601</td>
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<td>EPID 611</td>
<td>3</td>
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<tr>
<td>BIOS 602</td>
<td>1</td>
<td>EPID 612</td>
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</table>
Overview of Epidemiology PhD Curriculum

Students in the PhD in Public Health Sciences program in Epidemiology will complete a total of 117 credits hours, of which 54 are didactic (13 credit hours of School of Public Health core courses, 35 credit hours of departmental required courses, and 6 credit hours in elective courses). 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, however, after qualifying exams, students will also engage in teaching practicum (to be determined by the student’s departmental advisor).

Department of Epidemiology Doctoral Level Courses

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<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>EPID 710</td>
<td>Adv Principles-Epidemiology</td>
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<tr>
<td>EPID 711</td>
<td>Adv Epidemiologic Theory</td>
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<tr>
<td>EPID 712</td>
<td>Quantitative Methods-Epidemiology</td>
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<td>EPID 714</td>
<td>Molecular/Genetic Epidemiology</td>
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<td>EPID 715</td>
<td>Advanced Epidemiology</td>
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<tr>
<td>EPID 760</td>
<td>Demography/Transitions</td>
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<td>Cardiovascular Epidemiology</td>
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<td>Cancer Epidemiology</td>
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<td>Mind-body Medicine</td>
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<td>EPID 765</td>
<td>EPID of Transportation Safety</td>
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<td>EPID 766</td>
<td>Physical Activity Epidemiology</td>
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<td>EPID 767</td>
<td>Maternal/Child Health Epidemiology</td>
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<td>EPID 768</td>
<td>Environmental Epidemiology</td>
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<td>EPID 769</td>
<td>Occupational Epidemiology</td>
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<td>Nutritional Epidemiology</td>
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Suggested Course Sequence

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<td>EPID 625</td>
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<td>Second Year</td>
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<td>Hours</td>
<td>Summer</td>
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Total credit hours: 44
Third Year

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Fourth Year

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<td>1-15</td>
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<tr>
<td>PUBH 797</td>
<td>1-15</td>
<td>Dissertation Defense</td>
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<td>2-16</td>
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Total credit hours: 69-227

Faculty

Chair

• Anoop Shankar - MD, PhD
  Interim Chair, Associate Professor

Professor

• Ian Rockett - PhD, MPH

Associate professor

• Kim Innes - MD, PhD

Assistant professors

• Kelly Gurka - PhD, MPH
• Juhua Luo - PhD
• Motao Zhu - MD, PhD, MS

Health Policy, Management and Leadership

DEGREES OFFERED:

• MPH in Health Policy, Management and Leadership

http://publichealth.hsc.wvu.edu/hpml/

The MPH degree in Health Policy, Management and Leadership (HPML) 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, Management and Leadership, 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 & Management, 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.

ADMISSION Guidelines (MPH in Health Policy, Management and Leadership)

• Baccalaureate degree from an accredited college or university with a preferred overall GPA of 3.0.
• GRE scores of 150 (verbal), 156 (quantitative), 4.0 (analytical writing).
• TOEFL scores (minimum 550 paper-based) (minimum 213 computer-based). *International Students Only.*

Students interested in applying for the MPH in HPML must:

• Complete the WVU graduate application and submit with the processing fee.
• [https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad](https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad)
• Submit official school transcripts and official GRE/TOEFL scores to:

WVU Admissions and Records
PO Box 6009
Morgantown, WV 26506-6009
(304) 293-2121

• Complete the MPH application and indicate HPML as your preference including three academic letters of recommendation and CV/Resume.

You may mail your MPH application, recommendation letters, and CV/Resume to:

WVU School of Public Health
MPH Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

*Fall Admissions Only:* Completed applications and materials for *international* students must be received by May 15 in order to allow for visa processing. Completed applications and materials for *in-state and domestic* students must be received by June 15.

**Overview of MPH in Health Policy, Management, and Leadership Curriculum**

Students in the MPH program in Health Policy, Management, and Leadership will complete a total of 45 credit hours (16 credit hours of School of Public Health core courses, 2 credit hours of Seminar, 18 credit hours of departmental required courses and 9 credit hours of elective courses). The culminating experience, taken the last semester, requires completing an internship (6 credit hours) and submitting a paper and poster. This degree will typically take 4 semesters to complete.

**Department of Health Policy, Management and Leadership Master Level Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>HPML 601</td>
<td>Foundations of Health/Policy</td>
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<tr>
<td>HPML 610</td>
<td>Health Economics - Pop Health</td>
<td>3</td>
</tr>
<tr>
<td>HPML 620</td>
<td>Pub Hlth Leadership/Managmnt 1</td>
<td>3</td>
</tr>
<tr>
<td>HPML 622</td>
<td>Analytic Meth-Hlth Picy/Mang/Ldr</td>
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<td>HPML 624</td>
<td>Policy Tools for Pop Health</td>
<td>3</td>
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<td>HPML 660</td>
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<td>HPML 671</td>
<td>Pptn Hlth Picy Anlyss Info 1</td>
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**Total Hours** 33

**Suggested Course Sequence**

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<td>BIOS 601</td>
</tr>
<tr>
<td>BIOS 602</td>
</tr>
<tr>
<td>HPML 601</td>
</tr>
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</table>
Electives

Students must select at least 9.0 credit hours for electives. The Department of Health Policy, Management & Leadership offers 4 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 below, but only with approval, in advance, from their faculty advisor and the Department Chair.

Culminating Experience

The HPML Internship (HPML 626) has been designed to place students in health settings to further develop and apply their newly acquired knowledge and skills to address real-world problems. An appropriate internship placement could include a research organization, a local health department, a healthcare facility, or an agency of the state or federal government. With the guidance of both a faculty mentor from the Department of Health Policy, Management & Leadership, as well as a supervisor at the location of the internship, students will be expected to participate in a meaningful way in a significant management, program evaluation, health services, or policy-related project. Students will work with their internship team to identify a relevant problem, and then develop and conduct an analysis and evaluation of that problem. Students will be required to prepare a written comprehensive white paper, complete with recommendations, detailing the results of their evaluation, and present their findings to an appropriate audience of internship-related professionals.

Faculty

Chair

• Michael Hendryx - PhD
  Interim Chair, Associate Professor

Professor

• Jeff Coben - MD

Assistant professor

• Stephanie J. Frisbee - PhD

Research Assistant Professor

• Melissa M. Ahern - PhD
• Lucas Moore - PhD

Research Instructor

• Thomas Bias - PhD

Occupational and Environmental Health Sciences

DEGREES OFFERED:

• MPH in Occupational and Environmental Health Sciences
• PhD in Occupational and Environmental Health Sciences

MPH degree in Occupational and Environmental Health Sciences

http://publichealth.hsc.wvu.edu/oehs/

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. 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.

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.

Students interested in applying for the MPH in Occupational and Environmental Health Sciences 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 MPH application and indicate OEHS as your preference, including three academic letters of recommendation and CV/Resume.

You may mail your MPH application, recommendation letters, and CV/Resume to:

WVU School of Public Health
MPH Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

Fall Admissions Only: Completed applications and materials for international students must be received by May 15 in order to allow for visa processing. Completed applications and materials for in-state and domestic students must be received by June 15.

PhD in Occupational and Environmental Health Sciences
http://publichealth.hsc.wvu.edu/oehs/

The PhD 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.

Upon graduation, students in the PhD 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, 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.

ADMISSION Guidelines for the PhD

• Baccalaureate degree from an accredited college or university with some background in science (preferred GPA: 3.0 overall)
• GRE scores of: Verbal: 60th percentile or greater; Quantitative: 50th percentile or greater;
or, a combined score of 24 or higher on the MCAT, with 9 or higher in verbal;
or, a terminal degree
• A completed PhD 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 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 PhD in Occupational and Environmental Health 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 scores to:

WVU Admissions and Records
PO Box 6009
Morgantown, WV 26506-6009
(304) 293-2121

• Complete the PhD application online and indicate Epidemiology as your preference. http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp
• Three academic letters of recommendation and CV/Resume.

You may mail your recommendation letters and CV/Resume to:

WVU School of Public Health
PhD Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506
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 43 credit hours (16 credit hours of School of Public Health core courses, 2 credit hours of Seminar, 15 credit hours of departmental required courses and 9 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 (6 credit hours) or b) the proposal and practicum (6 credit hours). Both options require a paper and poster. This degree will typically take 4 semesters to complete.

Department of OEHS Master Level Courses

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<td>Environmental Practice</td>
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<td>OEHS 622</td>
<td>Public Health Toxicology</td>
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<tr>
<td>OEHS 665</td>
<td>Worksite Evaluation</td>
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<td>OEHS 691</td>
<td>Advanced Topics</td>
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Total Hours: 12-17

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 43 credit hours are required for the MPH in Occupational and Environmental Health Sciences. Students complete 18 credit hours of School of Public Health core courses, 16 credit hours of Departmental required courses, and 9 credit hours of electives.

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 to take a mix of electives. Those who want to focus on a particular area, for example environmental toxicology, may wish to take electives with the ET designation. Those interested in occupational health and safety may want to take courses with the OHS designation. There are also a number of electives related to the area of worksite wellness (WW) and several with multiple topic designations. The choice to focus or mix electives is up to the student and their advisor.

Suggested Course Sequence

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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</table>

Total credit hours: 45

Culminating Experience Options

**Internship:** The internship is the preferred culminating experience. It is 6 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 address real-world problems. The nature of the internship is dependent on the student and opportunities. An appropriate internship placement 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 internship is to provide experience in most if not all of the listed competencies for this degree. A primary focus of all internship 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 internship 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 internship-related professionals or in the poster presentations.
**Practicum (including Proposal):** The Practicum consists of one semester in which students will develop a proposal and one in which they will implement that proposal in the practicum. The practicum is an alternative to the internship and is intended for those students who may be unable to do the internship because of their employment or those who prefer to do a focused research- or practice-based project. In their next to last semester students choosing this option will develop a proposal (2 credits) to conduct a research or applied practicum project (4 credits) which they will implement in their final semester, upon the consent of their departmental advisor. This work, like the internship, provides the student the opportunity to synthesize and apply what has been learned in the Master’s program but with the focus predominantly on the research project. These activities translate into 240 hours of applied work.

**Overview of Occupational and Environmental Health Sciences PhD Curriculum**

Students in the PhD in Public Health Sciences program in Occupational and Environmental Health Sciences will complete a total of 117 credits hours, of which 53 are didactic (23 credit hours of School of Public Health core courses, 26 credit hours of departmental required courses, and 15 credit hours in elective courses). The first two years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to Occupational and Environmental Health Sciences. The last two years will largely be dedicated to dissertation research, however, after qualifying exams, 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.

**Department of OEHS Doctoral Level Courses**

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<td>Gene X Envrn Intrcts/Chrncl Ds</td>
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<td>OEHS 742</td>
<td>Outbreak Assessment</td>
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<tr>
<td>OEHS 745</td>
<td>Epigenetics/Systems Biology</td>
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**Total Hours**

15

Students in the PhD in Public Health Sciences program in Occupational and Environmental Health Sciences will complete a total of 117 credits hours, of which 53 are didactic (23 credit hours of School of Public Health core courses, 26 credit hours of departmental required courses, and 15 credit hours in elective courses). 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 to take a mix of electives. Those who want to focus on a particular area, for example environmental toxicology, may wish to take electives with the (ET) superscript designation. Those interested in occupational health and safety may want to take courses with the (OHS) superscript designation. There are also a number of electives with multiple topic designations. The choice to focus or mix electives is up to the student and his/her advisor. In addition to their coursework, PhD students will be required to complete HIPAA and Lab Environment training provided by the University.

**Suggested Course Sequence**

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<th>Hours</th>
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West Virginia University

Third Year

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Fourth Year

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</table>

Total credit hours: 63-213

Faculty

Chair

• Michael McCawley - PhD
  Interim Chair, Associate Research Professor

Professors

• Alan Ducatman - MD, MSc
• Sarah Knox - PhD

Associate professors

• Lan Guo - PhD
• Christopher Martin - MD

Assistant professors

• Rachel T. Abraham - MD, MPH
• Douglas Myers - ScD
• Kimberly Rauscher - ScD

NIOSH Researcher

• Michael Luster - PhD

Social and Behavioral Sciences

DEGREES OFFERED:

• MPH in Social and Behavioral Sciences
• MPH ONLINE in Public Health Practice
• MS in School Health Education
• PhD in Social and Behavioral Sciences

MPH in Social and Behavioral Sciences

http://publichealth.hsc.wvu.edu/sbhs/

The MPH degree in Social and Behavioral Sciences (SBS) 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 target competencies of this track include the ability to:

• Integrate the relevant theoretical concepts of program planning, intervention, and evaluation to research and practice.
• Apply appropriate demographic, social, and behavioral factors to program planning.
• Address the personal, social, economic and environmental determinants of health in designing multi-component interventions to resolve population health issues.
• Enhance skills in assessing and conducting research.
• Comprehend the importance of eliminating health disparities and unequal power differentials.

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 practice and research settings at national, state or local levels, or work in the public or private sector on health promotion program implementation and evaluation efforts. (See below for Admission Guidelines)

**MPH ONLINE in Public Health Practice**

The Online MPH degree in Public Health Practice offered by the Department of Social and Behavioral Sciences (SBS) is designed to enable current public health and health care professionals to enhance their skills in developing, implementing and evaluating programs. This curriculum couples exposure to the core public health competencies with an emphasis on methodological coursework to expand skill sets so that professionals can continue to make significant contributions to public health and health care. In combination, these courses provide students with problem-solving skills to translate theory and evidence into effective, multilevel strategies to improve population health and reduce disparities. An implicit assumption of the MPH program in Public Health Practice is that strategies based on theory are most likely to be effective in improving population health and reducing disparities. The target competencies of this track include the ability to:

• Improve methodological skills that result in enhanced program planning, implementation, and evaluation efforts in public health practice.
• Enhance skills in utilizing basic quantitative and qualitative research designs used in public health.
• Apply behavioral and social science theories and concepts used in planning and evaluating public health programs.
• Address the personal, social, economic and environmental determinants of health in designing multi-component interventions to resolve population health issues.
• Comprehend the importance of eliminating health disparities and unequal power differentials.

A student who graduates with an MPH in Public Health Practice from West Virginia University will be qualified to work and serve in leadership roles in public health and health care settings at national, state or local levels, or work in the public or private sector on health promotion program planning, implementation, and evaluation.

**ADMISSION Guidelines for both the MPH in Social and Behavioral Sciences and the Online MPH in Public Health Practice:**

• 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.*

Students interested in applying for either the MPH in SBS or the MPH in Public Health Practice must:

• Complete the WVU graduate application and submit with the processing fee.
• [https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad](https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad)
• Submit official school transcripts and official GRE/TOEFL scores to:

  WVU Admissions and Records
  PO Box 6009
  Morgantown, WV 26506-6009
  (304) 293-2121

  • Complete the MPH application and indicate SBS or MPH Public Health Practice as your preference, including three academic letters of recommendation and CV/Resume

You may mail your MPH application, recommendation letters, and CV/Resume to:

WVU School of Public Health
MPH Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

**Fall Admissions Only:** Completed applications and materials for international students must be received by May 15 in order to allow for visa processing. Completed applications and materials for in-state and domestic students must be received by June 15.

**MS in School Health Education**

http://publichealth.hsc.wvu.edu/sbhs/
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.

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=wvugrad](https://app.applyyourself.com/AYApplicantLogin/ApplicantConnectLogin.asp?id=wvugrad)
- 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, including three academic letters of recommendation and CV/Resume

You may mail your MS application, recommendation letters, and CV/Resume 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.

**PhD in Social and Behavioral Sciences**

http://publichealth.hsc.wvu.edu/sbhs/

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.

**PhD-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 the social & behavioral science knowledge base;
5. Disseminate research findings through appropriate peer-reviewed publications and presentations, and other appropriate public health community audiences;

There are 118 required credits for this degree. The curriculum is designed so that students receive a methodologically-intense training and one-on-one research experience with faculty in the social and behavioral sciences. The first two years of the program emphasizes 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 practica and choosing three additional electives.
Admission Requirements for PhD

- 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)
- Successful completion of a course in linear algebra
- GRE scores: 156 quantitative, 146 verbal, and 3.5 for analytical writing
- A completed PhD application, including a Statement of Purpose (see below for details) and,
- 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 (SBS) that appeals to you?
- What have you done to prepare yourself for training in SBS?
- How will you use your training in SBS?
- What area(s) within SBS 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 PhD in Social and Behavioral Science (SBS) 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 scores to:
  WVU Admissions and Records
  PO Box 6009
  Morgantown, WV 26506-6009
  (304) 293-2121
- Complete the PhD application online and indicate SBS as your preference http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp
- Three academic letters of recommendation and CV/Resume.

You must mail your completed recommendation letters and CV/Resume to:

WVU School of Public Health
PhD Admissions
PO Box 9190
One Medical Center Drive
Morgantown, WV 26506

Overview of MPH in Social and Behavioral Sciences Curriculum

Students in the MPH program in Social and Behavioral Sciences will complete a total of 44 credit hours (16 credit hours of School of Public Health core courses, 2 credit hours of Seminar, 17 credit hours of departmental required courses and 9 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 (5 credit hours) or b) the proposal and practicum (5 credit hours). Both options require a paper and poster. This degree will typically take 4 semesters to complete.

Department of Social and Behavioral Master Level Courses

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<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>Public Health Research Methods</td>
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<td>Intervention Design</td>
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<tr>
<td>SBHS 613</td>
<td>Public Health Program Evaluatin</td>
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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 (9 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 a concentration (currently wellness or women’s health). A certificate in women’s health may also be completed with an additional 6 credit hours of courses (50 credit hours).

Suggested Course Sequence (SBS)

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<th>Spring</th>
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Total credit hours: 44

Culminating Experience: Proposal and Practicum OR Internship

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 an internship or a proposal/practicum (as described below) that focuses on SBS (and the concentration selected, if applicable). The student will be expected to engage in meaningful participation in an agency, organization or social and behavioral sciences project.

All students will have a faculty mentor in SBS as well as a preceptor at the location of the practicum/internship. A written report and a poster will be required of all students.

Option 1:

Internship (5 credit hours)

- The Internship will be a 300-hour placement in an agency or organization that provides an SBS-focused experience (no less than 20 hours per week, up to 40 hours per week) and include learning objectives, monthly progress reports, compilation of a portfolio AND a final paper and poster.

Option 2

Practicum Proposal (2 credit hours) and Practicum (3 credit hours)

- The proposal course will be completed during the fall semester of 2nd year. The process will be similar to what we have now except that the project and proposal would be reviewed by SBS faculty.
The practicum course will comprise a minimum of 180 applied hours and will be completed during the last semester and include implementing the proposed project (applied practice or research), monthly progress reports AND the final paper and poster.

Overview of Online MPH in Public Health Practice Curriculum

Students in the online MPH program in Public Health Practice will complete a total of 44 credit hours (16 credit hours of School of Public Health core courses, 2 credit hours of Seminar, 17 credit hours of departmental required courses and 9 credit hours of elective courses). The culminating experience taken over the last 2 semesters requires completing a proposal (2 credit hours), implementing a practicum project (3 credit hours) and submitting a paper and poster. This degree will typically take 4 semesters to complete.

Suggested Course Sequence (Online MPH in Public Health Practice)

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Total credit hours: 43

Culminating Experience: Practicum Proposal (2 credit hours) and Practicum (3 credit hours)

A primary focus of all culminating experiences is to provide skill building and practical experience in public health practice. Students will be expected to engage in a meaningful project within their agency and/or job position. All students will have a faculty mentor from within the School of Public Health, as well as a preceptor at the location of the practicum.

- The proposal course will be completed during the fall semester of year 2. The proposed project and proposal will be reviewed by the SBHS faculty prior to gaining permission to proceed with the practicum project.
- The practicum course will comprise a minimum of 180 applied hours and will be completed during the last semester and include implementing the proposed project (applied practice or research), monthly progress reports AND the final paper and poster.

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 9 credit hours is pre-approved at admission.

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.

This program can be completed in two calendar years or less. All courses are web-based.

<table>
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Overview of Social and Behavioral Sciences PhD Curriculum

Students in the PhD in Public Health Sciences program will complete a total of 118 credits hours, of which 69 are didactic (28 credit hours of School of Public Health core courses, 32 credit hours of departmental required courses, and 9 credit hours in elective courses). 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. The last two years will largely be dedicated to dissertation research, however, after qualifying exams, students will also engage in teaching practicum (to be determined by the student’s departmental advisor) and take electives.

Department of SBHS Doctoral Level Courses

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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. 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 three additional electives.

Suggested Course Sequence

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Total credit hours: 68-226

Faculty

Chair

- Keith Zullig - MSPH, PhD
  - Interim Chair, Associate Professor

Professors

- Geri Dino - PhD
• Kimberly A Horn - EdD
• Ruth Kershner - EdD
• Ranjita Misra - Ph.D.
• William Reger-Nash - EdD, Emeritus
• Pete Shaffron - EdD

Associate professor
• Kenneth Simon - EdD

Assistant professors
• Alfgir Kristajansson - Ph.D.
• Michael Mann - Ph.D.
• Toni Morris - RN, MS, MFA
• Cecil Pollard - MA
• Nancy O’Hara Tompkins - PhD

Research Assistant Professor
• Stephanie Frost - PhD
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