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# Health Sciences Information

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## General Information - Health Science Center

The West Virginia University Schools of Dentistry, Medicine, Nursing, and Pharmacy at the Robert C. Byrd Health Sciences Center offer a comprehensive range of undergraduate, graduate, and professional degree programs in health care and biosciences.

The center's 29 degree programs provide West Virginia with accomplished professionals trained to meet the state's diverse health care needs. More than 10,000 WVU Health Sciences Center alumni comprise the majority of the state's physicians, dentists, and pharmacists, and many of its nurses, medical and dental technologists, and physical therapists.

A unique combination of state and federal support, income from patient care, charitable contributions from individuals and foundations, and investments by private corporations has enabled West Virginia University to build a superb environment for health education, research, and patient care.

Health Sciences Center research encompasses interdisciplinary and mission-based centers and institutes. These research hubs are led by world-renowned researchers who also serve as faculty members and mentors.

The Health Sciences Center has placed special emphasis on areas of multidisciplinary research.

The West Virginia University Health Sciences includes campuses in Morgantown, Charleston, and the Eastern Panhandle. These locations offer students the opportunity to learn their profession in a setting that realistically reflects the conditions they will encounter after graduation. A recent \$150 million expansion effort has changed the face of the Morgantown Health Sciences Campus and created some of the country's most up-to-date facilities for education and research.

## General Information - West Virginia University

Founded in 1867, West Virginia University is the land-grant, doctoral degree-granting research university in the state of West Virginia. As such, the institution occupies a unique position within the state.

Opportunities to conduct pioneering research and scholarship help attract high quality faculty and students. Students and faculty work together to create exciting and productive paths for investigation and development. WVU nurtures these symbiotic interactions to build intellectual, social, and economic development for all of West Virginia.

WVU's special responsibility is to seek out, challenge, educate, and help create opportunities for those West Virginia citizens who can benefit from its programs, especially those who have demonstrated high achievement or who possess excellent potential.

West Virginia University recognizes that diversity enriches the institution and the society it serves. The University is committed to social justice and to practicing the principles of equality of opportunity and affirmative action.

## The Mission of West Virginia University

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

## Government and Organization of WVU

Effective July 1, 2001, the West Virginia Board of Governors was vested by law with the authority for the control and management of the University. The board includes 13 lay members, two faculty members, one staff member, and one student member. The University president, appointed by the Board of Governors, is the chief executive officer of the University.

The West Virginia Higher Education Policy Commission is responsible for policy development and other statewide issues. The Commission consists of seven members appointed by the governor, the secretary of education and the arts, and the state superintendent of schools.

The Faculty Senate is the vehicle for faculty participation in the governance of the University. It is a legislative body with original jurisdiction over all matters of academic interest and educational policy that concern the entire University or affect more than one college or school. The senate's decisions are subject to review and approval by the president and the Board of Governors. Senators are elected by members of the University faculty to represent their colleges and other constituencies. The senate is presided over by an elected chair.

The University Graduate Council is the representative body governing graduate education. The Council consists of elected faculty representatives from the schools and colleges offering graduate programs. This body formulates, reviews, and recommends University-wide graduate education policies and includes oversight of graduate programs both on and off campus.

The president meets regularly with the University's administrative cabinet and monthly with the Faculty Senate Executive Committee, the Staff Council, and Student Administration. The University Faculty Assembly includes the president as presiding officer, professors, associate professors, assistant

professors, instructors holding appointments on a full-time basis, and other persons engaged in full-time professional activities. The assembly meets once a year.

West Virginia University has a tradition of strong student administration, which represents student opinion to the administration and faculty. Student administration has three main units: the executive branch, the board of governors, and the judicial board. Students also serve on University-wide committees and on the Mountainlair Advisory Council.

The Staff Council is an advisory council to the president of the University and a means for all classified employees to express their opinions about job conditions, fringe benefits, employee relations, or other areas that affect their jobs.

Local 814 of the Laborers' International Union of North America, AFL-CIO, represents employees throughout the University and its affiliates. These employees are in craft/maintenance, service, clerical, and technical job categories, with a wide variety of job classifications. Laborer's Local 814 is the only recognized union at the University by agreement through the Memorandum of Accord.

## Academic Policies and Procedures

### Page Contents:

- Absences
- Academic Integrity and Dishonesty
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  - Academic Dishonesty Defined
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## In the Section:

- Academic Integrity and Dishonesty
- Responsibilities
- Academic Dishonesty Defined
- Process to Initiate a Charge of Academic Dishonesty
- Appeal Procedures for Cases Involving Academic Dishonesty

## 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](http://bog.wvu.edu/policies) and the Student Conduct Code ([http://studentlife.wvu.edu/office\\_of\\_student\\_conduct/student\\_conduct\\_code](http://studentlife.wvu.edu/office_of_student_conduct/student_conduct_code)).

## 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 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 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 Unforgivable 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.
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.

## Apply for Academic Leave of Absence

WVU offers undergraduate students in good standing, as defined by WVU's uniform suspension policy, and not subject to disciplinary action the opportunity to request an academic leave of absence. The academic leave of absence is designed for the student who wishes to be away from his or her academic endeavors at WVU for one or more semesters but intends to return at a later date. Leave of absence status must be requested before the beginning of the semester for which the leave is desired. The academic records of students on an academic leave of absence remain in an active status. While on an academic leave of absence, the student retains the right to use certain campus facilities such as the Study Skills Center and Career Services. When a student decides to return to WVU after his or her academic leave of absence, application fees are waived. An overall grade point average of 2.0 on all work attempted while on leave combined with the WVU grade point average is acceptable. While on an academic leave of absence, the student will receive communications from WVU.

Other leaves of absence, such as medical, bereavement, or military leave, may be granted during the semester. Please refer to the Office of the University Registrar's website (<http://registrar.wvu.edu/forms>) for more information.

## Courses

Most courses taught at WVU extend for one semester, although some extend for two semesters. Credit is not awarded for a course if a student does not attend the whole course. The only exception to this rule occurs if the Committee on Academic Standards decides to grant an exception. Grades reported

at the end of the first semester in a two-semester course are merely an indication of the quality of the student's work to that point. Credit is not given for that part of the course completed. Courses taught in the summer sessions carry the same credit value as fall and spring semester courses.

A student who is currently enrolled may receive credit for a course or courses upon demonstration of competency in the course content at the discretion of the department. The department offering the course determines evaluation standards for the student's competency. If skill and cognitive abilities are components of the course, then both are evaluated. Credit is given only when a satisfactory degree of competency is shown.

A college, school, or department may ask a student to prepare a self-evaluation statement. The purpose of the statement is to determine competency and the methods by which the student achieved it. Initiate process with Dean's office. Fees are required.

## Dissertation Procedures

Procedural rules for dissertations and theses are found in the *WVU Graduate Catalog* at <http://coursecatalog.wvu.edu/>.

Junior or Senior students who have at least a 3.0 cumulative grade point average may enroll in courses numbered 500-599 after they complete an Application for an Advanced Undergraduate Student to Enroll in a Course Numbered 500-599 for Undergraduate Credit and have signatures from the instructor, their advisor, and their academic dean. This form may be obtained from their advisor and must be completed prior to enrollment. Seniors wishing to count these courses for graduate credit must complete and have approved a senior petition. Non-WVU students will also be required to submit an undergraduate application for admission and have his or her official transcripts sent to the Office of Admissions from all of the colleges and universities previously attended; the transcript cannot be one sent to the student or by facsimile (fax).

## Graduate Credit via Senior Petition

A student may begin graduate study early through the University's senior petition policy. A senior petition form may be obtained from the advisor/department and must be signed by the advisor and the dean of the college granting the student's degree and the dean of the college of the intended graduate degree (if different). An individual from another West Virginia state higher education system school desiring to take a course at WVU must have the form signed by his or her advisor and the registrar. These signatures are necessary to certify that the information contained on the form is correct and that the student has a cumulative 3.0 grade point average. The university has certain policies for a student to enroll in a graduate course for graduate credit. The policies are:

- Senior petition applies only to courses numbered 400–599. Student must be within twelve hours of receiving bachelor's degree, and grade point average must be at least 3.0 on a 4.0 scale.
- Student can receive only twelve graduate hours through the senior petition.
- Student must have the proper signatures on the senior petition by the time of enrollment in the petitioned courses.
- Return the approved senior petition to the Office of the University Registrar. It is kept on file so that the student receives graduate credit for these courses on the permanent record. The dean of the college or school in which the student is taking graduate courses must approve any exceptions to the policy.

Note: If you receive graduate credit for a course, the credit for that course does not count for your undergraduate degree.

## Evaluation of Student Progress

Progress is evaluated by a variety of methods. The measurement and evaluation of learning are consistent with the objectives of the course and provide the opportunity for the student and instructor to evaluate progress. The University discourages evaluation by final examination only. The student is responsible for all materials presented or assigned in scheduled instructional sections. Students who do not complete all assigned work may earn an incomplete (I) or a failing grade (F). A grade of incomplete (I) requires a written contract between the student and instructor and must include a timeline of no more than one semester.

## Experiential Learning

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

## 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.

## Finals

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

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

## Last Week of Classes

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

## In this Section:

- Grading System
- Auditors
- Evaluation of Student Progress
- Grade Points
- Grade Point Average
- GPA Calculation
- Grade Reports
- Honors - Dean's and President's list
- Repeat Policy
- Final Grade Appeal Process
- Pass / Fail Grading

## Grading System

Grade	Description
A	Excellent (Given only to students of superior ability and attainment.)
B	Good (Given only to students who are well above average but not in the highest group.)
C	Fair (Average for undergraduate students.)
D	Poor but passing (Cannot be counted for graduate credit.)
F	Failure
I	Incomplete
W	Withdrawal from a course before the date specified in the University calendar.
P	Pass (See Pass/Fail grading below.)
X	Auditor, no grade and no credit.
CR	Credit but no grade
PR	Progress; final grade to be issued at end of second semester (HSC)

S	Satisfactory
U	Unsatisfactory (Equivalent to F)
H	Honors (Professional School Courses only.)
IF	Incomplete grade not removed by next regular term (Computed as an F.)
UF	Unforgivable F (Not eligible for D/F repeat policy.)

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

## Auditors

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

## Grade Points

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

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

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

- Courses with a grade of W, P, S, and X carry no grade value. The grade of incomplete (I) initially carries no grade value.
- The grade of I is given when the instructor of the course believes that the work is unavoidably incomplete or that an additional examination is justified. There must be a written contract between the student and instructor, including a timeline for completion of the work. To remove the grade of I, a student does not register for the course again; instead, he or she arranges to submit incomplete or supplemental work to the original instructor of the course.
- When a student receives the grade of I and the incomplete grade is later removed, the grade point average is calculated on the basis of the new grade. If the I grade is not removed within the next semester, the grade is treated as an F (failure). The Academic Standards Committee of the appropriate college or school may allow a student to postpone removal of the I grade if the student can justify a delay.

If a student is working toward teacher certification, he or she is responsible for every registration in a course in which the grade of A, B, C, D, F, P, X or I is received.

## Grade Point Average

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

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

## GPA Calculation

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

D. Political Science 101 - B

E. Spanish 101 - D

F. Psychology 201 - P

2. Course, Credits, Grade, Value, Credits x Value, Grade Points Earned

A. English 101, 3, B, 3,  $3 \times 3 = 9$

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

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

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

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

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

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

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

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

## Evaluation of Student Progress

Progress is evaluated by a variety of methods. The measurement and evaluation of learning are consistent with the objectives of the course and provide the opportunity for the student and instructor to evaluate progress. The University discourages evaluation by final examination only. The student is responsible for all materials presented or assigned in scheduled instructional sections. Students who do not complete all assigned work may earn an incomplete (I) or a failing grade (F). A grade of incomplete (I) requires a written contract between the student and instructor and must include a timeline of no more than one semester.

## Grade Reports

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

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

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

## HONORS - Dean's and President's list

Outstanding academic achievement is recognized by awarding President's List and Dean's List status to students who obtain a 4.0 GPA or 3.5 GPA, respectively. Students must be enrolled full-time to be eligible for such recognition.

Students may receive summa cum laude (with highest honors a minimum 3.8 GPA); magna cum laude (with high honors, a minimum 3.6 GPA to less than a 3.8 GPA); or cum laude (with a minimum 3.4 GPA to less than a 3.6 GPA) recognition upon graduation. These guidelines are set by the University.

## Repeat Policy

### D/F Repeat

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

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

1. The original grade is disregarded for the purpose of determining the overall GPA; it is marked as excluded (E) in the semester that the student originally took the course.
2. The original grade is not deleted from the student's permanent record.

3. The second grade is entered on the student's transcript and marked as included (I) in the semester that the course was repeated.
4. Grades of Unforgivable F (UF) are not eligible for D/F repeat. Such a failure is indicated on the student's permanent record by an UF and is calculated in the GPA.

## Other Repeated Courses

Courses repeated, but not eligible for the provisions of the D/F repeat policy, follow this procedure:

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

## Final Grade Appeal Procedures (Not Involving Charges of Academic Dishonesty)

Students have the right to appeal final course grades which they believe reflect a capricious, arbitrary, or prejudiced academic evaluation, or reflect discrimination based on race, sex, age, handicap, veteran status, religion or creed, sexual orientation, color, or national origin. The grade appealed shall remain in effect until the appeal procedure is completed or the problem resolved. 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.

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 with 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.

## Pass/Fail Grading

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

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

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

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

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

## Incompletes

The grade of I is given when the instructor believes that the coursework is unavoidably incomplete or that a supplementary examination is justifiable. Before any graduate degree can be awarded, the grade of I must be removed either by finishing the incomplete or by having it recorded as a permanent incomplete. Only the instructor who recorded the I or, if the instructor is no longer at WVU, the chairperson of the unit in which the course was given may initiate either of these actions. When a student receives a grade of incomplete and later removes that grade, the grade point average is recalculated on the basis of the new grade. If you do not remove the I grade within the next semester, the grade of I is treated as an F (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.

Grade changes other than "I" to a letter grade must be accompanied by an explanatory memo.

## Grade Reports

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

Final grades are due to the Office of the University Registrar within 48 hours after the end of the University's final examination and are viewable to students within one week of submission to the Office of the University Registrar.

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

## 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.).

## Apply for 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 is not in the student's home college, the contact person can work with his/her counterpart in the appropriate college. Several outcomes are possible:
  - A. If the course is substantially complete and the student has done passing work, the student should receive the grade earned at that time. It is anticipated that this would be the outcome in the majority of the courses. **NOTE: Students who receive orders with sufficient advance notice are expected to notify their professors of their upcoming deployment date and meet with their professors to come to an agreement on what regular course assignments they can reasonably complete prior to the deployment date (the details of this arrangement should be included in a contract initialed by both the instructor and the student; contracts must be placed in the student's file). Students should not be penalized for not completing assignments, quizzes, tests, or exams due after their deployment date.**
  - B. If a critical competency has yet to be covered in a competency-based course, the instructor should award a grade of "I" and work with the student to develop a plan to complete that critical part of the course. To alleviate confusion at a later date, the plan should be in writing and signed by both the instructor and the student. Students called to active duty for a relatively short duration that includes exam week may arrange for an "I" with provision to make up the final exam after completing the period of duty.

- C. If the student chooses to withdraw from the course, the contact person will work with the appropriate University office to provide an administrative withdrawal.

### **Leave for Military Drill**

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.

## **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](http://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>.

## **Summer Sessions**

WVU has one summer term, which begins in the middle of May and ends the second week of August. Requirements for admission and work performance for the summer term are the same as for the regular semesters. Courses are offered in a variety of time frames, e.g., one-week, three-week, six-week, and 12-week.

A student may earn credit toward a baccalaureate, master's, doctoral, or professional degree in the summer term. Summer offerings vary from year to year.

## Visitors

Full-time University students may attend classes as visitors. To visit a class, the student must have permission in writing from his or her advisor and the instructor of the course. A member of the administration, teaching staff, or other regular University employees may attend classes as visitors. These individuals must have written permission from their department and the instructor of the class. A visitor does not receive credit for a class and may not apply for credit by exam in a class in which he or she was a visitor.

## Withdrawal from the University for the Semester

### Withdrawal Policy

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

### Withdrawal/Drop From Individual Classes

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

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

### Withdrawal From All Classes for the Term

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

## Procedures

1. To withdraw from all classes through the last day to drop a class with a W, a student would log on to their MIX account and drop their classes through STAR.
2. To withdraw from the term after the last day to drop a class with a W, 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:
    - i Full name
    - ii Last four digits of your student identification number
    - iii Reason for your withdrawal
    - iv Address
    - v Telephone number
  - C. Mail a request to: Office of University Registrar, West Virginia University, P.O. Box 6878, Morgantown, WV 26506. Please Include:
    - i Full name
    - ii Student identification number
    - iii Reason for your withdrawal
    - iv Address
    - v Telephone number
    - vi Signature
  - D. Fax a request to: (304) 293-8991. Please include:
    - i Full name
    - ii Student identification number
    - iii Reason for your withdrawal
    - iv Address

v Telephone number

vi Signature

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

## Re-Enrollment After Withdrawal

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

## Committee on Academic Standards

The Committee on Academic Standards of each college or school shall have authority to proceed according to its best judgment in regard to students referred to it for consideration. All orders of the committee shall become effective when approved by the dean of the college or school. In exercising its authority, the committee shall not suspend a student during a semester except for willful neglect and in cases where the student's class grades are so low that further class attendance would be a waste of time. No suspension shall become effective until approved by the dean of the college or school.

## HSC Appeal of Dismissal—Failure to Meet Academic Standards

The procedures and appeals described here do not apply to dismissal as a sanction for academic dishonesty. The time limitations stated herein are suggested in order to render a decision as expeditiously as possible. In the case of University holidays or absence of person(s) involved, reasonable delays may be expected.

A decision to dismiss a student for failure to meet academic standards (as distinguished from academic dishonesty) can 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, there shall then be a formal review of the student's status by the appropriate departmental or program committee 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.

A committee recommendation for dismissal, including any documentation provided by the student to the committee, shall be forwarded to the student's dean and to the student. Within 15 calendar days of receipt of the committee's recommendation, the dean shall inform the student and the student's department or program of his or her decision. A decision to dismiss shall specify whether the dismissal is from the program or college or school. The dean may also dismiss a student from the institution if the student does not meet institutional standards.

### Step 1

The student shall prepare and sign a document which states the facts constituting the basis for the appeal. A copy of this document must reach the dean within 30 calendar days of receipt of written notice of dismissal. The student shall be given an opportunity to discuss the appeal with the dean at any time in Step 1. If the matter is not resolved satisfactorily within 15 calendar days of the dean's receipt of the student's appeal, the student may proceed to Step 2.

### Step 2

The student will forward a copy of the appeal to the appropriate vice president within 15 calendar days of failure to resolve the matter at the dean's level. Prior to the decision of the vice president, the student will be given an opportunity to discuss the appeal with the vice president. The decision of the vice president, as the president's designee, shall be rendered within 15 days of receipt of the student's appeal and is final.

## HSC Appeal of Dismissal—Failure to Meet Academic Requirements or Performance Standards

Dismissal, based on failure to meet academic requirements or performance standards irrespective of grades or grade point average, from, graduate programs, professional programs, and/or from the institution, may also be appealed. Students have the right to appeal academic dismissal based on requirements or standards other than grades or grade point average which they believe reflect capricious, arbitrary, or prejudiced academic evaluation, or reflect discrimination based on race or color, sex, sexual orientation, veteran status, religion, age, disability, national origin, creed, ancestry, or political affiliation.

### Step 1

The student shall prepare and sign a document which states the facts constituting the basis for the appeal. A copy of this document must reach the dean within 30 calendar days of receipt of written notice of dismissal. The student shall be given an opportunity to discuss the appeal with the dean at any

time in Step 1. If the matter is not resolved satisfactorily within 15 calendar days of the dean's receipt of the student's appeal, the student may proceed to Step 2.

## **Step 2**

The student will forward a copy of the appeal to the University Committee on Student Rights and Responsibilities, which, within 15 calendar days of receipt of the student's appeal, will arrange a hearing using the following procedures:

- All parties involved shall receive written notice of date, time, and place of hearing.
- The student may be advised by a person of his or her choice from the institution; likewise, the academic officer recommending academic dismissal may have an advisor from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings unless they are given specific permission by the University Committee on Student Rights and Responsibilities chairperson.
- The administrative procedure is not adversarial in nature; the formal rules of evidence do not apply.
- Witnesses may be called by any of the parties involved.
- A record of the appeal shall be prepared in the form of summary minutes and relevant attachments and will be provided to any of the parties involved upon written request.

The University Committee on Student Rights and Responsibilities will reach a decision within seven days. The committee's recommendation for dismissal must be reviewed by the appropriate vice president, who may confirm or remand the recommendation with specific instructions. Prior to the decision of the vice president, the student will be given an opportunity to discuss the appeal with the vice president. Within 15 calendar days of a recommendation for dismissal confirmed by the vice president, the student may appeal to the president. The decision of the president is final.

## **Dismissal**

Dismissal from a graduate or professional program may be based on program and/or professional performance standards other than cumulative grade point average. Reasons must be based on catalog and other written documents describing academic and professional performance standards and expectations.

## **Procedures**

- Counseling by departmental committee or representative as soon as possible after discovery of problem.
- Second counseling by departmental committee or representative after opportunity to improve if performance is not changed sufficiently.
- Formal review of student status by department or program committee. The formal review will result in one of the following actions:
- Student retained or recommended for dismissal.
- Counseling or remediation required as a condition of retention.
- Appeals available if dismissal recommended.
- A dismissal decision by the dean of the student's school or college may be appealed to the University conduct/appeals committee which will hold a hearing using the following procedures:
- The student may be advised by a person of his or her choice to assure due process protection not to affect the outcome of the proceedings. The advisor may consult with the student but shall not speak on behalf of the student or participate directly unless granted specific permission by the University conduct/appeals committee.
- The formal rules of evidence do not apply.
- The administrative procedure is not adversarial in nature.
- Witnesses may be presented and examined under oath.
- An accurate record of the procedure is to be kept. The student may request a transcript of the proceedings at the student's expense.
- An academic appeals committee has the right to counsel in those proceedings in which the student has retained counsel. Such counsel may not speak on behalf of the institution or otherwise participate directly in the proceedings.
- A decision for dismissal must be reviewed by the appropriate academic vice president who may confirm or remand the recommendation with specific instructions.
- Recommendation for dismissal confirmed by the appropriate academic vice president may be appealed to the president. The decision of the president is final.

## **Absences**

Class attendance contributes significantly to academic success. Students who attend classes regularly tend to earn higher grades and have higher passing rates in courses. Excessive absences may jeopardize students' grades or even their ability to continue 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, since medical conditions are confidential and frequently not verifiable.

**Make-Up Examinations** Students absent from regularly scheduled examinations because of authorized University activities will have the opportunity to take them at an alternate time. Such make-up examinations should be of comparable difficulty to the original examination.

Students in courses with regularly scheduled evening examinations shall have the opportunity to make up these examinations if they miss them in order to attend a regularly scheduled class that meets at the same time. Such make-up examinations should be of comparable difficulty to the original examination.

Attendance at a regularly scheduled evening examination will not excuse a student from a regularly scheduled class that meets at the same time as the examination.

Days of Special Concern Instructors are urged not to schedule examinations or field trips on "days of special concern" that are identified in the Schedule of Courses.

## 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.

## Admissions

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## WVU Transient Students

In order to take a course or courses at another school, a student must have written approval from his or her advisor, dean, and director of admissions or designee. To receive such approval, a student must have an overall 2.0 grade-point average. All approved college-level work is accepted for transfer from accredited institutions, provided the above requirements have been met. To view a list of schools and courses already reviewed, visit <http://tes.sa.wvu.edu/>. In addition, an official transcript must be received by the Office of Admissions before any coursework can be counted toward degree requirements.

## Advanced Placement Program (AP)

WVU encourages you to work to your full capacity and to earn your degree at your own learning speed. As a high school junior or senior, you can take college-level courses at your school in conjunction with the College Entrance Examination Board (CEEB). The Advanced Placement Service administers three-hour examinations to show competency equal to that received by taking the actual college course. The chart can be found at the WVU Office of Admission's website: <http://apply.wvu.edu/admissions/freshmen/credits.aspx>.

## College Level Examination Program (CLEP)

If an incoming student has gained a significant level of maturity through life experiences, he or she may receive college credit for those educationally-related experiences through the College Level Examination Program (CLEP) of the CEEB. A policy of the WVU Board of Governors allows University credit to be awarded for successful completion of hours of general education or elective credit may be earned for successful performance on the CLEP general examinations. Although this program was designed primarily for adults, exceptionally well-qualified high school seniors may use the CLEP program. The chart at the WVU Office of Admission's website: [http://adm.wvu.edu/freshman/ap\\_\\_clep\\_and\\_ib](http://adm.wvu.edu/freshman/ap__clep_and_ib) indicates the areas for which WVU grants credit based on the minimum scores required. It should be noted that no student is eligible for CLEP credits after he or she has enrolled at WVU.

A student with at least one year of active military service may receive college-level credit by submitting a copy of his or her DD214 or a Sailor/Marine/ACE Registry Transcript (SMART) or Army/ACE Registry Transcript System (AARTS) transcript. The chart can be found at [http://adm.wvu.edu/freshman/ap\\_\\_clep\\_and\\_ib](http://adm.wvu.edu/freshman/ap__clep_and_ib).

## International Baccalaureate (IB)

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

## Undergraduate and Professional Programs

### Admission

To apply for admission to the various schools of the Health Sciences Center, go to: [http://adm.wvu.edu/home/health\\_sciences\\_students](http://adm.wvu.edu/home/health_sciences_students)

Questions can be directed to the Health Sciences Admissions office at 304-293-3521.

Because we are primarily a group of professional schools and most of our applicants are enrolled in undergraduate studies at a residential college or university, we remind students to include their permanent home address with requests for application forms.

Specific entrance requirements for all Health Sciences programs are detailed in the section pertaining to each program. For information about freshman, transfers, and international admission to West Virginia University, please refer to the WVU Undergraduate Catalog.

During the first semester of the first year at the WVU Health Sciences Center, we require that students complete certain prescribed immunization and diagnostic procedures.

### Application Fees

Application fees for dental hygiene, medical laboratory science, nursing, and occupational therapy are \$25 for residents of West Virginia and \$45 for non-residents. Application fees for dentistry, doctor of physical therapy, and doctor of pharmacy are \$50. Application fee for medicine is \$100.

When accepted into one of our programs, students are asked to pay a deposit to make their acceptance official. These deposits are applied toward the first semester's tuition. If a student pays a deposit but does not enroll, a written request for refund must be received. Deposit amounts and refund deadlines vary and are subject to change.

### Second or Multiple Bachelor's Degree

To earn a second baccalaureate degree, students must earn at least 30 credits beyond the requirements for the first degree. All requirements, departmental and otherwise, must be satisfied for the second degree. A second bachelor's degree cannot be earned if a student has not met the University's residence requirement. (See Residence Requirements.)

If a student wishes to earn two baccalaureate degrees at the same graduation date, then a student must satisfactorily complete a minimum of 158 credits and meet all requirements, departmental and otherwise, of both degree programs. Admission must be granted from both programs.

## Classification of Students

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

Classification	Hours
Freshman	1-28 hours, inclusive
Sophomore	29-58 hours, inclusive
Junior	59-88 hours, inclusive
Senior	89 or more semester hours

## Academic Forgiveness Policy

WVU allows an academic forgiveness to some students who are not successful in their first attempt at higher education.

To be eligible, a student cannot have been enrolled at a West Virginia state system of higher education institution for at least five calendar years and cannot have been enrolled in any other institution of higher learning during those five years. In order to determine eligibility, students must complete the Academic Forgiveness Form which is available at the Office of Admissions.

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

- Admission to WVU under the Academic Forgiveness Policy is conditional upon satisfying the above stated non-enrollment period. In addition, a recommendation that the student be admitted under the academic forgiveness policy must be submitted by the dean of the college or school that the student plans to enter, and the recommendation must be approved by the Office of the Vice President for Academic Affairs.
- Upon admission to WVU under this policy, the student will be credited with the hours earned for courses completed with a grade of D or higher.
- Grades earned during any prior enrollment period will not be counted for purposes of calculating the student's grade point average, but grades earned will remain on the student's permanent record.
- The student must meet and complete all coursework required to meet the college or school's requirements for graduation, but under no circumstances after the student has been admitted under the Academic Forgiveness Policy shall the student complete fewer than 64 credit hours prior to earning a degree.
- A student admitted to WVU under this policy will follow all regulations regarding probation, suspension, and expulsion.

## Graduate Programs

### Health Sciences Center Graduate Council

The Health Sciences Center Graduate Council advises the vice president for Health Sciences. In this role the council monitors and administers the graduate studies policies of the schools located at the Health Sciences Center.

### Application and Admission

Prospective graduate students are urged to initiate application for admission as early as possible. The first step of a student interested in a degree program should be to ask for information from the department, division, school, or college offering the program desired; the reply to such an inquiry will include instructions for applying to the particular program.

Application for admission to graduate study must be made online or on standard forms provided online at <http://admissions.wvu.edu/graduate>. If using a paper application, the completed form may be returned to the Office of Admissions, PO Box 6009, West Virginia University, Morgantown, WV 26506, and must be accompanied by payment of a nonrefundable special service fee of \$60. Applicants who have attended another institution, other than WVU, must request that the registrar or records office of the college(s) attended send an official transcript directly to the Office of Admissions. No one is admitted to graduate study that does not hold a baccalaureate degree from an accredited college or university.

If the applicant meets the minimum admission requirements of WVU, a copy of the application is forwarded to the faculty of the program of interest. Any graduate degree program is permitted to set admission requirements which go beyond the minimum admission standards of the University. No one can pursue an advanced degree at WVU unless admitted to the appropriate degree program.

## GRE

Many programs at WVU require Graduate Record Examination (GRE) scores from all applicants, but in no program is an examination score the sole criterion for admission. Some programs require both the general aptitude and the appropriate advanced test before considering an applicant for admission. Please check with your department of interest for specific requirements.

## 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.

When eight years have passed since initial coursework, a student must reapply. The application fee will be assessed.

## Intra-University Transfers

To transfer from one school or department to another, a student may initiate a transfer request by contacting the Health Sciences Center Graduate Programs Office or his or her advisor. The advisor must contact the Health Sciences Center Graduate Programs Office, which will complete the transfer.

## Credits

Credit toward a graduate degree may be obtained only for courses listed in the *WVU Graduate Catalog* and numbered 400–799, in which the grade earned is A, B, C, or S. No course in which the grade earned is D, P, F, or U can be counted toward a graduate degree.

## Transfer Credit

To apply graduate-level credits from other accredited institutions toward a master's degree at WVU, students must get permission from the individual schools or colleges. The standardized transfer application form must be approved and signed by a unit chairperson or designate, prior to the student's enrolling in the course(s) to be transferred to WVU. The school or department submits the approved form to the Health Sciences Graduate Programs Office for final approval and submission to the Office of Admissions. It is the student's responsibility to see that Admissions gets an original transcript from the other institution. Only credit earned at institutions accredited at the graduate level may be transferred.

Graduate courses taken elsewhere will not be approved for transfer credit unless the transfer application form was approved before enrolling in them. When a school or department approves the form, it is sent to the Health Sciences Center Graduate Programs Office for approval. A maximum of 12 semester hours from other institutions will be accepted for credit at WVU in master's programs requiring 30 to 41 semester hours. Eighteen semester hours will be accepted for master's degree programs requiring 42 or more semester hours. Individual graduate programs may accept fewer credit hours.

## 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). TOEFL or IELTS results must be 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.

The items above should be sent to:

Admissions  
West Virginia University  
P.O. Box 6009  
Morgantown, West Virginia 26506-6009

All material must be received by the application deadline. 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.

## 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 and/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 08541-6154, 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 need not submit TOEFL/IELTS results. However, applicants only having 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 IAP-66 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 sponsoring agency. In all cases, original or certified copies of financial/sponsorship documents must be submitted before the I-20 or IAP-66 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 ESL courses or a TOEFL score above 550 or its new TOEFL equivalent or an IELTS score of 6.5. Inquiries about the Intensive English Program should be directed to:

Intensive English Program

Department of Foreign Languages

West Virginia University

P.O. Box 6298

Morgantown, WV 26506-6298

## Regular Graduate Students

Regular graduate students are degree-seeking students who meet all the criteria for regular admission to a program of their choice. The student must 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 obligation to make up deficiencies.

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 may have an undergraduate scholastic record which shows promise, but less than the 2.75 grade point average required for regular admission.

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, but the student must obtain a 2.5 grade point average on the first 12 credit hours of coursework and maintain this average as long as enrolled. 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.

## 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 taken during the provisional period. Individual degree programs may set higher grade point average requirements.

No later than the completion of the 18th credit hour, a unit must review the student's record and make a final decision on the student's admission. 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 to be applied to a degree count in the 18th credit-hour limit, i.e., undergraduate or graduate credit, P/F, S/U, graded courses, credit by senior petition, and transfer credit.

## Regular or Provisional to Non-Degree

- 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 a Graduate Studies Transfer/Status form through the Health Sciences Center Graduate Programs Office.

## Non-Degree to Regular or Provisional

- Non-degree students who later wish to become degree candidates must transfer and present all the credentials required by the degree program. This requires the processing of a Departmental Decision Form by the student's advisor through the HSC Graduate Programs Office.
- 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.

## Employed Graduate Students

Graduate students will be required by their advisors to limit their credit loads in proportion to the outside service rendered and the time available for graduate study. In general, persons in full-time service to the University, or other employer, will be advised to enroll for no more than six hours of work in any one semester and those in half-time service for no more than 12 hours. Maximum credit loads may be less for employed graduate students in some academic colleges, schools, and departments.

## Non-Degree Graduate Students

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 credit toward a degree.

## Academic Advising

When entering West Virginia University, students are assigned an academic advisor. The advisor assists preparing a schedule, assigning classes as required by the student's degree program, and certifies the student's study list to the University Registrar's Office. The advisor is also expected to give advice and sympathetic guidance. Students are expected to meet with their advisor to discuss academic problems.

Students interested in medical technology, nursing, pharmacy, physical therapy, or occupational therapy may be admitted to a pre-program in order to complete entrance requirements for admission to the degree program. Students in these pre-programs are advised through the Undergraduate Academic Services Center. Students must apply for admission with an undergraduate application.

## Advising, Degrees, and Graduation

### Page Contents:

- Abbreviations Used in Course Listings
- Academic Advising
- Commitment to Assessment
- Credit Hours
- Credits Required
- Degree Programs Offered by WVU
- Degree Works
- Dual Degrees/Double Majors
- General Education Curriculum (GEC)
- Goals of Undergraduate Education
- Graduation
- Graduation with Honors
- Plan for Numbering Courses/Common Courses
- Plan of Study
- Official Program Designations
- Official Transcripts
- Regulations Affecting Degrees
- Residency Requirements
- Second Degrees
- Student Responsibility
- Students' Committees
- Schedule of Courses
- Work Done Out of Residence

### Abbreviations Used in Course Listings

Abbreviation	Description
I	a course given in the first (fall) semester
II	a course given in the second (spring) semester
I, II	a course given each semester
I and II	a course given throughout the year
Yr	a course continued through two semesters
S	a course given in the summer
HR	credit hours per course
Lec	lecture period
Rec	recitation period
Lab	laboratory period
GLAB	graded lab
WEB	web-based course
CONC	concurrent - usually listed with PR meaning course must either be completed prior to or at the same time as enrollment in the course it is listed for

PR	prerequisite - course must be completed in a term prior to enrollment in the course it is listed for
Coreq	co-requisite - courses must be taken in the same term
Consent	consent of instructor required
CR	credit but no grade

Freshmen and transfer students enter West Virginia University as general studies, pre-majors, or direct admits to their majors, depending on individual academic program admission requirements. The requirements to enter a major may include a minimum number of credit hours, specific prerequisite coursework, a minimum or competitive grade point average, minimum or competitive test scores, and/or an entrance exam. For specific program entry requirements, refer to individual degree and major programs in this catalog.

Every student at West Virginia University has access to academic advising. Direct admit students who have matriculated into their majors, and some first and second-year pre-majors, are advised by staff and faculty in their respective academic units. The University College (UC) advises pre-majors who are not advised by the college/school of the student's intended major, as well as ACCESS and non-degree students. Students who are undecided on their majors also are advised in the UC under general studies until they select a major.

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

Students are expected to become familiar with the Undergraduate Catalog and DegreeWorks as it relates to their academic goals and standing, be able to articulate their major and University requirements and prepare for their own course planning and registration processes, use the various majors' website, and make full use of academic advising.

## Commitment to Assessment

The West Virginia University Assessment Council (WVUAC) works with the main WVU campus and divisional campuses to provide resources devoted to sharing best assessment practices and enhancing student learning through assessment activities. The WVUAC holds monthly meetings to review and provide counsel to program-level assessment activities submitted as part of BOG Program Reviews, and its goals include strengthening the effectiveness of assessment programs at all levels aimed at enhancing students learning; assisting and helping to create an institutional culture of assessment; aligning the institutional assessment plan with the WVU mission; and serving as an institutional clearinghouse for assessment best practices from around the country.

## Credit Hours

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

## Face-to-Face Classroom Learning

One credit hour is equivalent to one hour of guided instruction (fifty minute class) and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or the equivalent amount of work over a different amount of time such as during the summer sessions, which may vary in duration. One credit hour in other academic activities, as established by the institution, including laboratory work, internships, practicums, studio work, study abroad, experiential learning opportunities, online learning, and other academic work must include an equivalent amount of required work listed in the preceding paragraph and is outlined in more detail below.

## Online Classroom Learning

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

## Experiential Learning

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

## Study Abroad

One credit hour is equivalent to fifteen hours of guided instruction and thirty hours of cultural, linguistic or other types of engagements as described by the syllabus and approved by the faculty, department Chair, Dean, and Associate Provost. Exceptions to this general rule would need to be justified and approved on an individual basis.

## Studio/Ensemble Work

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

## Variable Credit Offerings

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

Undergraduate degree programs at West Virginia University are based upon a combination of required courses and electives. All undergraduate degree programs include the General Education Curriculum (GEC), require a minimum grade point average of 2.0 or higher, and require at least 120 credit hours. In addition, the various colleges and schools may determine their own specific graduation requirements which may include additional course or credit requirements, minimum course grades, and grade point averages higher than a 2.0. Most degree programs require additional hours (see specific requirements for each major) to complete the degree.

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

Students entering WVU as an undergraduate student with fewer than twenty-nine hours must also earn a passing grade in WVUE 191 First Year Seminar in their first semester at WVU. Those who do not pass the course must re-enroll for subsequent semesters until they earn a passing grade. In certain majors, alternative courses are acceptable. These courses will be identified for students by their advisors.

## By College

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

## College of Business and Economics

Program	Bachelor's	Master's	Doctoral/Professional
Accounting	B.S.B.Ad.		
Business Administration		M.B.A	

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

## College of Creative Arts

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

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

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

Program	Bachelor's	Master's	Doctoral/Professional
Aerospace Engineering	B.S.A.E.	M.S.A.E.	
Biometric Systems - AOE: DNA/ Molecular Biology	B.S.B.S.		
Biometric Systems - AOE:Microsensors & Circuits	B.S.B.S.		
Biometric Systems - AOE: Signal Processing	B.S.B.S.		
Biometric Systems - AOE: Statistics	B.S.B.S.		
Biometric Systems - AOE: Software Systems	B.S.B.S.		
Chemical Engineering	B.S.Ch.E.	M.S.Ch.E.	
Civil Engineering	B.S.C.E.	M.S.C.E.	

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

## College of Education and Human Services

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

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

Multidisciplinary Studies- Elementary Education - AOE:Early Childhood Education, PreK-K	B.M.D.S.
Multidisciplinary Studies- Elementary Education - AOE: English Education	B.M.D.S.
Multidisciplinary Studies- Elementary Education - AOE: Foreign Language Education	B.M.D.S.
Multidisciplinary Studies- Elementary Education - AOE: Integrated Science	B.M.D.S.
Multidisciplinary Studies- Elementary Education - AOE: Interdepartmental Studies(Social Studies)	B.M.D.S.
Multidisciplinary Studies- Elementary Education - AOE: Mathematics Education	B.M.D.S.
Multidisciplinary Studies- Elementary Education - AOE: Multicategorical Special Education K-6 + 5-Adult	B.M.D.S.
Multidisciplinary Studies- Multidisciplinary (Education) Studies	B.M.D.S.
Multidisciplinary Studies- Secondary Education - AOE: Biology & Integrated Science	B.M.D.S.
Multidisciplinary Studies- Secondary Education - AOE: Chemistry & Integrated Science	B.M.D.S.
Multidisciplinary Studies- Secondary Education - AOE: Physics & Integrated Science	B.M.D.S.
Reading	M.A.
Rehabilitation Counseling	M.S.
Secondary Education - AOE: Advanced Science	M.A.
Secondary Education - AOE: Advanced Social Studies	M.A.
Secondary Education - AOE: Biology Education	M.A.
Secondary Education - AOE: Chemistry Education	M.A.
Secondary Education - AOE: English Education	M.A.
Secondary Education - AOE: Foreign Language Education	M.A.
Secondary Education - AOE: General Science Education	M.A.
Secondary Education - AOE: Higher Education Curriculum & Teaching	M.A.
Secondary Education - AOE: Math Education	M.A.
Secondary Education - AOE: Physics Education	M.A.
Secondary Education - AOE: Secondary Advanced	M.A.
Secondary Education - AOE: Secondary Education	M.A.

Secondary Education - AOE: Social Studies Education	M.A.
Secondary Education - Secondary/English	M.A.
Secondary Education - Secondary/Foreign Languages	M.A.
Secondary Education - Secondary/Interdepartmental Studies	M.A.
Secondary Education - Secondary/Mathematics	M.A.
Secondary Education - Secondary/MDS - AOE: Biology and Integrated Science	M.A.
Secondary Education - Secondary/MDS - AOE: Chemistry and Integrated Science	M.A.
Secondary Education - Secondary/MDS - AOE: Physics and Integrated Science	M.A.
Special Education - Special Education	M.A.
Special Education - Autism Spectrum Disorders - AOE: Autism K-6	M.A.
Special Education - Autism Spectrum Disorders - AOE: Autism 5-Adult	M.A.
Special Education - Early Intervention.Early Childhood - Pre-school Special Needs PreK-K	M.A.
Special Education - Gifted Education - AOE: Gifted 1-12	M.A.
Special Education - Low Vision/Blindness - AOE: Visual Impairments PreK-Adult	M.A.
Special Education - Multicategorical Special Education - AOE: Multicategorical Special Education K-6	M.A.
Special Education - Multicategorical Special Education - AOE: Multicategorical Special Education 5-Adult	M.A.
Special Education - Severe/Multiple Disabilities - AOE: Severe Disabilities K-Adult	M.A.
Speech-Language Pathology - Speech Pathology	M.S.
Speech Pathology and Audiology	B.S.

## College of Law

Program	Bachelor's	Master's	Doctoral/Professional
Law			J.D.

## College of Physical Activity and Sports Science

Program	Bachelor's	Master's	Doctoral/Professional
Kinesiology - Kinesiology - AOE: Physical Education Teacher Education			Ph.D.

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

## Davis College of Agriculture, Forestry, and Consumer Sciences

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

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

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

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

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

## Eberly College of Arts and Sciences

Program	Bachelor's	Master's	Doctoral/Professional
Biology	B.A., B.S.		
Biology - AOE: Cellular & Molecular Biology			Ph.D.

Biology - AOE: Environmental Plant Biology		Ph.D.
Biology - AOE: Population Genetics		M.S.
Chemistry	B.A., B.S.	
Chemistry - AOE: Analytical Chemistry		M.S. Ph.D.
Chemistry - AOE: Inorganic Chemistry		M.S. Ph.D.
Chemistry - AOE: Organic Chemistry		M.S. Ph.D.
Chemistry - AOE: Physical Chemistry		M.S. Ph.D.
Chemistry - AOE: Theoretical Chemistry		M.S. Ph.D.
Communication Studies - AOE: Communication in Instruction		M.A.
Communication Studies - AOE: Communication Theory & Research		M.A.
Communication Studies - AOE: Corporate & Organizational Communication		M.A.
Communication Studies - AOE: Health Communication	B.A.	
Communication Studies - AOE: Integrated Communication	B.A.	
Communication Studies - AOE: Interpersonal Communication	B.A.	
Communication Studies - AOE: Social Media & Communication	B.A.	
Communication Studies - AOE: Strategic/Organizational Communication	B.A.	
Computational Statistics		Ph.D.
Creative Writing		M.F.A.
Economics	B.A.	
English - AOE: Creative Writing	B.A.	
English - AOE: Literary/Cultural Studies	B.A.	M.A. Ph.D.
English - AOE: Professional Writing and Editing	B.A.	
English - AOE: Writing		M.A.
English - English/Secondary Education	B.A.	
Forensic and Investigative Science		M.S.
Forensic and Investigative Science - AOE: Forensic Biology	B.S.	
Forensic and Investigative Science - AOE: Forensic Chemistry	B.S.	
Forensic and Investigative Science - AOE: Forensic Examiner	B.S.	
Forensic and Investigative Science - AOE: Forensic Toxicology	B.S.	
Geography - AOE: Energy & Environmental Resources		M.A.
Geography - AOE: Geographic Information Systems		Ph.D.
Geography - AOE: GIS/Cartographic Analysis		M.A.

Geography - AOE: International Area Studies B.A.

Geography - AOE: Natural Resources, Environment & Development B.A.

Geography - AOE: Planning and Regional Development B.A.

Geography - AOE: Regional Development Ph.D.

Geography - AOE: Regional Development and Urban Planning M.A.

Geography - AOE: Spatial Analysis/ GIS B.A.

Geology B.S.

Geology - Environmental Geoscience B.A.

Geology - AOE: Gemorphology Ph.D.

Geology - AOE: Geophysics Ph.D.

Geology - AOE: Hydrology Ph.D.

Geology - AOE: Palentology Ph.D.

Geology - AOE: Petrology Ph.D.

Geology - AOE: Professional Studies M.S.

Geology - AOE: Research M.S.

Geology - AOE: Stratigraphy PH.D.

Geology - AOE: Structure Ph.D.

History B.A.

History - AOE: African History M.A. Ph.D.

History - AOE: African-American History M.A. Ph.D.

History - AOE: American History M.A. Ph.D.

History - AOE: Appalachian/Regional History M.A. Ph.D.

History - AOE: East Asian History M.A. Ph.D.

History - AOE: European History M.A. Ph.D.

History - AOE: History of Science & Technology M.A. Ph.D.

History - AOE: Latin American History M.A.

History - AOE: Public History M.A.

Interdepartmental Studies - AOE: Appalachian Studies B.A.

Interdepartmental Studies - AOE: Individualized Studies B.A.

Interdepartmental Studies - AOE: Medieval & Renaissance Studies B.A.

Interdepartmental Studies - AOE: Social Studies B.A.

Interdepartmental Studies - Biochemistry - AOE: Chemistry B.A.

Interdepartmental Studies - Biochemistry - AOE: Molecular Biology B.A.

Interdepartmental Studies - Biochemistry/Biology B.A.

Interdepartmental Studies - Biochemistry/Chemistry B.A.

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

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

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

World Languages, Literature, and Linguistics - World Languages/  
Secondary Education B.A.

## Perley Isaac Reed School of Journalism

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

## School of Dentistry

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

## School of Medicine

Program	Bachelor's	Master's	Doctoral/Professional
Biochemistry and Molecular Biology			Ph.D.
Biomedical Sciences		M.S.	
Cancer Cell Biology			Ph.D.
Cellular and Integrative Physiology			Ph.D.
Clinical and Translational Science		M.S.	
Exercise Physiology		M.S.	Ph.D.
Exercise Physiology - AOE: Aquatic Therapy	B.S.		
Exercise Physiology - AOE: Health Professions	B.S.		

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

## School of Nursing

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

## School of Pharmacy

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

## School of Public Health

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

Public Health Sciences - AOE: Occupational and Environmental Health Sciences Ph.D.

Public Health Sciences - AOE: Social and Behavioral Sciences Ph.D.

## University College

Program	Bachelor's	Master's	Doctoral/Professional
Regents BA - AOE: Advertising/ Public Reactions	R.B.A.		
Regents BA - AOE: American History	R.B.A.		
Regents BA - AOE: Anthropology	R.B.A.		
Regents BA - AOE: Art History	R.B.A.		
Regents BA - AOE: Business Administration	R.B.A.		
Regents BA - AOE: Child Development	R.B.A.		
Regents BA - AOE: Communication Studies	R.B.A.		
Regents BA - AOE: Creative Writing	R.B.A.		
Regents BA - AOE: Crime & Social Control	R.B.A.		
Regents BA - AOE: Economics	R.B.A.		
Regents BA - AOE: Foreign Literature in Translation	R.B.A.		
Regents BA - AOE: French	R.B.A.		
Regents BA - AOE: Geography	R.B.A.		
Regents BA - AOE: Geology	R.B.A.		
Regents BA - AOE: German	R.B.A.		
Regents BA - AOE: GIS & Remote Sensing	R.B.A.		
Regents BA - AOE: History	R.B.A.		
Regents BA - AOE: International Studies-African/Mid East	R.B.A.		
Regents BA - AOE: International Studies-Asia	R.B.A.		
Regents BA - AOE: International Studies-Development Studies	R.B.A.		
Regents BA - AOE: International Studies-Europe	R.B.A.		
Regents BA - AOE: International Studies-The Americas	R.B.A.		
Regents BA - AOE: Linguistics	R.B.A.		
Regents BA - AOE: Literature	R.B.A.		
Regents BA - AOE: Philosophy	R.B.A.		
Regents BA - AOE: Political Science- General	R.B.A.		
Regents BA - AOE: Political Science- International/World Affairs	R.B.A.		
Regents BA - AOE: Political Science- Law & Legal Studies	R.B.A.		
Regents BA - AOE: Professional Writing	R.B.A.		
Regents BA - AOE: Psychology	R.B.A.		
Regents BA - AOE: Religious Studies	R.B.A.		

Regents BA - AOE: Russian	R.B.A.
Regents BA - AOE: Sociology	R.B.A.
Regents BA - AOE: Spanish	R.B.A.
Regents BA - AOE: Women & Gender Studies	R.B.A.

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

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

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

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

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

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

One of the primary ways in which students accomplish WVU's goals of undergraduate education is through completion of the nine General Education Curriculum (GEC) objectives. Each of the objectives is satisfied by completion of courses designated as GEC courses. For a description of the General Education Curriculum and a listing of approved courses, visit the Office of Registrar's website: <http://registrar.wvu.edu/>. B.A. candidates in certain degree programs are also required to attain a specified level of proficiency in a language other than English.

In order to graduate, a student must file an application for graduation in the academic dean's office of his or her major department during the first month of the semester or summer term in which he or she expects to graduate. If a student is uncertain about graduation requirements, the department chairperson may be contacted for clarification. The student should also meet with his or her academic advisor for guidance.

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

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

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

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

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

## 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. Undergraduates in any class carrying a 500-level course number must have a 3.0 cumulative grade point average and written approval on an Application for an Advanced Undergraduate Student to Enroll in a Course Numbered 500-599 for Undergraduate Credit from the course instructor, student's advisor(s) and academic dean. Seniors may count these courses for graduate credit only after completion and approval of a senior petition.

**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.

## Common Course Numbers and Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

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 Will be S/U.)

698/798. Thesis or Dissertation. 2-4 hr. PR: Consent.

Note: This is an optional course for programs that believe that this level of control and supervision is needed during the writing of students' reports (698), theses (698), or dissertations (798).

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 S/U; 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.

## Plan of Study

Within the first academic year, the student submits a plan of study to the Health Sciences Center Graduate Programs Office. Once approved, the plan of study becomes part of the student's record. It serves as a formal agreement between the student and program faculty as to the requirements for completing the graduate degree. Any changes to the plan of study must be made through mutual agreement, and the student must submit a memorandum of changes to the Health Sciences Center Graduate Program's Office.

## Official Program Designations

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

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

Area of Emphasis: a specific subject area within an approved degree program and major. Normally, a minimum of twelve credit hours and no more than eighteen credit hours are expected for an area of emphasis.

Minor: strategic work in an area of study that encourages students to pursue a secondary field. Students may not earn a minor in the same field as their major. Requirements for a minor are set by the academic unit offering the minor and must include at least fifteen hours of coursework, with a minimum of nine hours at the upper division level (course numbers 300 or above).

## 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.

## Second Degrees

### Student Responsibility

Students are responsible for their own academic well-being, including knowing their scholastic standing as it relates to the published regulations and standards of WVU. This responsibility includes familiarity with the regulations and requirements of their academic college or school or the University College and the regulations and requirements of the department or division in which they are pursuing a degree. Students are encouraged to meet with their university advisor or academic advisor when questions arise or when the student is confronted with multiple challenges.

### Residency Requirements

If transferring to WVU from another institution of higher learning, the transfer should occur no later than the start of the student's third year. Under no circumstances will a student who enters WVU after October 1 in any year be allowed to receive a degree at the next commencement.

In some special cases, students can leave WVU at the end of their third year, and still receive a degree from WVU. The student must enter another accredited institution with the purpose of taking a combined program that will lead to two degrees or prepare for graduate study. Before leaving, the student must apply to the college's Academic Standards Committee to request permission to do the work of the fourth year, or a part thereof, at the other institution but still receive the degree from WVU. The student will receive a degree when the proper records from the other school are presented.

A transfer student who has completed all undergraduate work in another school in the West Virginia system of higher education must complete either the last 30 hours of work at WVU or at least 36 hours of work at WVU, of which 16 of the last 32 hours must be on campus. Transfer students whose undergraduate work has been completed outside of the West Virginia system of higher education must complete a total of 90 hours or at least the last 30 hours of work in residence at WVU. Students may be required to earn up to 15 hours in a major field regardless of the number of hours or the nature of the courses transferred.

### Students' Committees

Doctoral dissertation committees will consist of no fewer than five members, the majority of whom, including the chairperson, will be regular graduate faculty. No more than one person may be a non-member. At least one member of every doctoral committee must be from a department other than the one in which the student is seeking a degree.

Master's committees of programs requiring a thesis will consist of no fewer than three members, the majority of whom will be regular graduate faculty, including the chairperson. No more than one person may be a non-member.

Master's committees of programs not requiring a thesis will 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.

Committee approval must be obtained prior to the second semester for a master's degree and prior to the fourth semester for the doctorate. Committee approval for the nursing program is after the third semester.

### Committee Approval

All graduate committees are subject to the approval of the school dean or designate and the Health Sciences Center Graduate Programs Office.

### 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.

### Work Done Out of Residence

WVU's policy is to discourage taking regular residence courses in absentia. If a student begins a course at WVU but fails to complete it due to illness or some other acceptable reason, he or she may receive permission to complete the work in absentia. Permission must be granted by the Academic Standards Committee of the college or school concerned, and the work must be completed under the guidance of a WVU professor. Credit in such cases is allowed only upon a report of a grade of C or better on the final examination. This regulation does not apply to WVU off-campus courses or to courses offered through Extended Learning or Study Abroad.

A student who fails a course (receives a final grade of F) taken at WVU must repeat the course at WVU or at a regional campus to receive credit for that course. The dean of the college or school in which the student is enrolled may authorize an exception to this regulation. If so, then the dean should provide a letter to be placed in the student's folder, authorizing the exception and explaining its basis.

Students should be aware of the requirements for residence and specific degree requirements described in the catalog when transferring credit from other institutions.

## 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 non-member 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 twelve 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 twenty-four hours of coursework other than thesis credit. A minimum of thirty 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
- 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 degrees 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 twenty-four 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% 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% 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 twenty-four 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 twelve 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 non-member 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 twelve 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 twelve 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
- 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 twenty-four 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 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.

## West Virginia University Calendar

### Fall 2013

Date	Activity
Thursday, August 15	New Student Orientation
Friday, August 16	General Registration
Monday, August 19	On-Campus First Day of Classes
Monday, August 19	Late Registration Fee in Effect for All Students
Friday, August 23	Last Day to Register, Add New Courses, Make Section Changes, Change Pass/Fail and Audit
Monday, September 2	Labor Day Recess: University Closed
Thursday, September 5	Rosh Hashanah (Day of Special Concern)
Saturday, September 14	Yom Kippur (Day of Special Concern)
Friday, October 4	Mid-Semester
Friday, October 11 by noon	Mid-Semester Reports Due
Monday, October 14 thru Tuesday October 15	Fall Break Recess
Friday, October 25	Last Day to Drop a Class
Monday, November 11	Veterans Day (Day of Special Concern)
Tuesday, November 12	Birth of Baha'u'llah (Day of Special Concern)
Monday, November 25 thru Friday, November 29	Fall Recess
Monday, December 9	Last Day to Withdraw from the University

Tuesday, December 10	Last Day of Classes
Wednesday, December 11	Prep Day for Finals
Thu., Fri., Sat., Mon., Tues., Wed., Dec. 12, 13, 14, 16, 17, 18	Final Exam Week
Thursday, December 19	Winter Recess Begins
Friday, December 20	December Convocation
Wednesday, December 25	Christmas Day (Day of Special Concern)
Friday, December 27	Degree Conferring Date

## Spring 2014

Date	Activity
Wednesday, January 1	New Year's Day
Monday, January 6	New Student Orientation
Tuesday, January 7	General Registration
Wednesday, January 8	On-Campus First Day of Classes
Wednesday, January 8	Late Registration Fee in Effect for All Students
Tuesday, January 14	Last Day to Register, Add New Courses, Make Section Changes, Change Pass/Fail and Audit
Monday, January 20	Martin Luther King's Birthday Recess: University Closed
Friday, January 31	Chinese New Year (Day of Special Concern)
Friday, February 28	Mid-Semester
Friday, March 7 by noon	Mid-Semester Reports Due
Friday, March 7	Last Day to Drop a Class
Monday, March 10 thru Friday, March 14	Spring Recess
Friday, March 14	Textbook Selection Deadline (for Summer and Fall 2012)
Friday, March 21	Naw-Ruz (Day of Special Concern)
Friday, April 18	Friday Before Easter Recess: University Closed
Saturday, April 19	Passover (Day of Special Concern)
Monday, April 21	Feast of Rivdan (Day of Special Concern)
Thursday, April 24	Last Day to Withdraw from the University
Friday, April 25	Last Day of Classes
Monday, April 28 thru Saturday, May 3	Final Exam Week
Friday, May 9 thru Sunday, May 11	Commencement
Saturday, May 10	Alumni Day

## 12-Week Summer Session 2014

Date	Activity
Monday, May 19	Registration
Monday, May 19	On-Campus First Day of Classes
Monday, May 26	Memorial Day Recess: University Closed
Friday, June 27	Final Exam for First Six-Week Session
Friday, July 4	Independence Day Recess: University Closed
Friday, August 8	Final Exam for Second Six-Week Session and 12-Week Session
Friday, August 15	Degree Conferring Date (No Ceremonies)

- **Late registration fee in effect on the second day of class for all classes.**

## Distinguished Professors

- Jame Abraham, Bonnie Wells Wilson Distinguished Professor and Eminent Scholar
- Daniel Alkon, Toyota Chair for Neurodegenerative Disease Research
- James Anderson, Davis Michael Professor of Forestry and Natural Resources
- Gerald G. Ashdown, James H. "Buck" and June M. Harless Professor of Law

- Karl Barth, Samples Professorship of Civil and Environmental Engineering
  - Robert M. Bastress, John W. Fisher II Professor of Law
  - Chris Bise, Robert E. Murray Chair for the Department of Mining
  - Robert E. Blobaum, Eberly Family Distinguished Professor of History
  - Melanie Booth-Butterfield, Peggy Rardin McConnell Chair of Speech Communications
  - Laura Brady, Eberly Distinguished Professor of Outstanding Teaching
  - James E. Brick, Dr. Edmund B. Flink Chair of Internal Medicine
  - Jim Brown, K-Mart Corporation Chair of Marketing
  - Vincent P. Cardi, Bowles, Rice, McDavid, Graff and Love Professor of Law
  - Tim Carr, Marshall S. Miller Energy Professor of Geology
  - William H. Carter, Warren Point Chair of Internal Medicine
  - Judie F. Charlton, Jane McDermott Shott Chair of Ophthalmology
  - Patricia Chase, Gates E. Wigner Dean for the School of Pharmacy
  - Nigel N. Clark, George B. Berry Chair of Engineering
  - Roger Congleton, BB&T Chair of Economics
  - Robert Dailey, Davis-Michael Professor of Animal and Veterinarian Sciences
  - Walter Dekeseredy, Anne Deane Carlson Endowed Chair of Social Sciences
  - Lisa DiBartolomeo, Armand E. and Mary W. Singer Professor in the Humanities
  - Charles R. DiSalvo, Woodrow A. Potesta Professor of Law
  - Joanne R. Duffy, West Virginia University Hospital (WVUH) Evidence-Based Practice Research Professorship in Nursing
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- 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
  - Sanford Emery, RTF Cline Chair in Orthopedic Surgery
- 
- Eve Faulkes, J. Bernard Schultz Endowed Professor Art
- 
- Ali Feliachi, Electric Power Systems Chair
  - John W. Fisher, II, William J. Maier, Jr. Dean Emeritus
  - Paula F. Fitzgerald, Nathan Haddad Professor of Business Administration
  - Kenneth Fones-Wolf, The Stuart and Joyce Robbins Chair in History
  - Mathis P. Frick, O. F. Gabriele Chair of Radiology
  - James J. Friedberg, Hale J. and Roscoe P. Posten Professor of Law
  - Hota Gangarao, Wadsworth Professorship
  - Keith Garbutt, Eberly Family Professor for Outstanding Teaching
  - Laura Gibson, Alexander B. Osborn Distinguished Professor in Hematological Malignancies Research
  - Ronald L. Gross, Jane McDermott Shott Chair of Ophthalmology
  - Rakesh K. Gupta, George and Carolyn Berry Chair
  - Ludwig Gutmann, Hazel Ruby McQuain Chair of Neurological Research
  - Joseph Hagan, Barnette Professor of Political Science
  - Trevor M. Harris, Eberly Family Professor of Geography
  - Keith Heasley, Charles T. Holland Professor of Mining Engineering
  - JoAnn Hornsby, Interim Hazel Ruby McQuain Arthritis/Rheumatic Disease Chair
  - Glen P. Jackson, Ming Hsieh Teaching Professor of Forensic and Investigative Science
  - Abnash Jain, Abnash C. Jain Distinguished Professorship in Cardiology
  - Thomas Kammer, Eberly College Centennial Professor of Geology
  - Vlad Kecojevic, Massey Foundation Professor of Mining Engineering
  - Kennon A. Lattal, Eberly College Centennial Professor of Psychology
  - Richard D. Layne, Grace Kinney Mead Chair of Geriatrics
  - 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
  - Matthew Marvel, James Clark Coffman Distinguished Chair of Entrepreneurial Studies

- Michael Mays, Eberly Distinguished Professor of Outstanding Teaching
- Joyce E. McConnell, William J. Maier, Jr. Dean and Thomas R. Goodwin Professor
- Marjorie A. McDiarmid, Steptoe and Johnson Professor of Law and Technology
- Patrick C. McGinely, Charles H. Haden, Jr. Professor of Law
- James McGraw, Eberly Family Professor of Biology
- James A. McLaughlin, Robert L. Shuman Professor of Law
- Daniel McNeil, Eberly Family Professor for Outstanding Public Service
- Keith Morris, Ming Hsieh Distinguished Professor of Forensic and Investigative Science
- Tracy Morris, Eberly Family Professorship of Teaching
- William Neal, James H. Walker Chair of Pediatric Cardiology
- Daniel Panaccione, Davis Michael Professor of Plant and Soil Sciences
- John Parker, N. Leroy Lapp Professorship of Pulmonary and Critical Care Medicine
- Syd S. Peng, Charles E. Lawall Chair in Mining Engineering
- William P. Petros, Mylan Chair of Pharmacology
- Christopher Plein, Eberly Family Professor for Outstanding Public Service
- Joseph Prudomme, Christopher Cline Chair in Orthopedic Surgery
- Lois Raimondo, Shott Chair of Journalism
- Scot Remick, Laurence and Jean DeLynn Chair of Oncology
- Richard A. Riley, Louis F. Tanner Distinguished Professor of Public Accounting
- Terry L. Rose, Ernest L. Hogan Chair of Life Insurance
- Greg Rosencrance, Patricia T. Ayash Distinguished Professorship/Internal Medicine Charleston Div.
- J. Michael Ruppert, Jo and Ben Statler Eminent Scholar and Chair, Breast Cancer Research
- Mary Ann Samyn, The Ruth and Russell Bolton Teaching Professorship
- Earl Scime, Eberly Family Distinguished Professor of Physics
- Kenneth Showalter, C. Eugene Bennett Chair of Chemistry
- David Siderovski, E. J. Van Liere Medicine Professorship
- Timothy Sweet, Eberly Professor of American Literature
- Harry Turtle, Fred T. Tattersall Distinguished Chair in Finance
- Richard Turton, Russell and Ruth Bolton WVU Professorship for Outstanding Teaching
- Michael Vernon, Sanger Chair of Family Planning and Reproductive Physiology
- Kung Wang, Eberly Family Professorship of Chemistry
- Stephen Wetmore, Romeo Lim and Maria Lim Chair of Otolaryngology
- Joshua Blackmer Williamson, Mabel DeVries Tanner Endowed Professor of Theatre and Dance
- Brian D. Woerner, Stephanie and Raymond J. Lane Endowed Professor
- John Zaniewski, Asphalt Technology Professorship
- C. Q. Zhang, Eberly Family Professorship of Mathematics
- Forest Bowman, Jackson and Kelly Professor of Law, Emeritus
- Linda M. Carson, Ware Distinguished Professor, Emerita
- Franklin D. Cleckley, Arthur B. Hodges Professor of Law, Emeritus
- Bernard R. Cooper, Claude W. Benedum Professor of Physics, Emeritus
- Robert DiClerico, Eberly Family Professor Outstanding Teaching, Emeritus
- Arthur I. Jackowitz, The Arthur I. Jackowitz Distinguished Chair of Clinical Pharmacy, Emeritus
- Hayne W. Reese, Centennial Professor of Psychology, Emeritus
- Patricia Rice, Eberly Family Professor for Outstanding Teaching, Emerita
- Mohindar Seehra, Eberly Professor in Physics, Emeritus
- Donley Studlar, Eberly Family Professor of Political Science, Emeritus

## Extended Learning

WVU Extended Learning coordinates online and off-campus programming, Summer Sessions, iDesign, and K12 initiatives. Extended Learning provides seamless access to academic courses, lifelong learning opportunities, and student services through a personalized yet convenient process.

WVU hosts more than 400 undergraduate online classes, and this number increases every year. Depending on the program, courses can be delivered in the following ways:

- Completely online
- Online with some campus visits (a blended format)
- Off-campus 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=graduate>). Students should carefully review the information provided by individual programs.

## Admission to West Virginia University

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

### WVU Online (<http://online.wvu.edu>)

WVU Online hosts more than 400 undergraduate online classes, and this number increases every year. WVU Online is a unit within Extended Learning that coordinates online and off-campus programs. The staff provides assistance with registration (<http://online.wvu.edu/Registration>), billing questions (<http://online.wvu.edu/Registration/billingquestions.php>), and online tools (<http://online.wvu.edu/students>) such as eCampus (<http://online.wvu.edu/students/current/wvucampusInstructions.php>) and MIX e-mail (<http://online.wvu.edu/students/current/mixInstructions.php>).

Students must be admitted to WVU to take online classes, and visiting students may choose to enroll with a guest pass for their first semester. Priority registration is available for part-time, adult learners in the fall and spring terms. In the summer, online classes are generally open to all students providing them with an excellent opportunity to move ahead, earn GEC credits, or add a minor. In addition to hundreds of online courses, there are three undergraduate degree completion programs available to online students:

- Regents Bachelor of Arts (RBA) (<http://online.wvu.edu/RBA>)
- Multidisciplinary Studies (MDS) (<http://online.wvu.edu/mds>)
- Nursing (RN to BSN) (<http://online.wvu.edu/rnbsn>)

Community college students have the option to transfer into the online MDS degree through the B.A. Pathway Program (<http://online.wvu.edu/pathway>).

## Admission to West Virginia University (<http://admissions.wvu.edu>)

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

### Guest Pass Students (Undergraduate) (<http://online.wvu.edu/Registration/forms/GuestApp.pdf>)

The guest pass is for students who want to take an online course or two but not enroll in a degree program. Students may enroll at WVU using a Guest Application/Registration form (<http://online.wvu.edu/Registration/forms/GuestApp.pdf>) which is valid for one term of admission. The application fee of \$15 plus tuition and fees enables visiting students to take up to twelve hours of undergraduate courses in one term offered by Extended Learning. Note: students who want to take on-campus courses must use the transient form (<http://admissions.wvu.edu/admissions/transient>).

A student who wants to enroll in a second term must resubmit another Guest Application/Registration form and pay the \$15 application fee plus tuition and fees. A student can be admitted in multiple terms as long as the student has not exceeded the twelve credit hour maximum. However, it is recommended that a student who wants to take classes on an on-going basis or take more than twelve hours should apply for regular admission.

Once the term is over, the student's guest status is deactivated and the student cannot enroll again without reapplying to WVU either as a guest or as a regular student.

Upon completion of the course(s), students can request an official transcript ([http://registrar.wvu.edu/transcripts/internet\\_transcript](http://registrar.wvu.edu/transcripts/internet_transcript)) online through the Office of the University Registrar (<http://registrar.wvu.edu>).

Guest students are admitted as non-degree undergraduate students. The hours earned in this non-degree status may or may not count toward a degree program, and students are encouraged to talk with their academic advisor.

Admission via the Guest Application/Registration form (<http://online.wvu.edu/Registration/forms/GuestApp.pdf>) does not guarantee acceptance to WVU. However, guest students are encouraged to continue their studies at West Virginia University as an admitted student. The admission requirements to WVU can be found at: <http://adm.wvu.edu>.

Students can send the application fee of \$15 with the Guest Application/ Registration form (<http://online.wvu.edu/Registration/forms/GuestApp.pdf>). Mail the completed application along with payment to: Extended Learning, P.O. Box 6800, West Virginia University, Morgantown, WV 26506-6800 or fax to 304-293-4899.

The deadline for guest pass application is ten days prior to the start of the course. For questions about calculating tuition, contact Extended Learning via email at [elearn@mail.wvu.edu](mailto:elearn@mail.wvu.edu) or call 1-800-253-2762.

WVU accepts checks or credit cards. The amount of tuition and fees can be found on the Extended Learning Fee Schedule (<http://online.wvu.edu/Registration/tuitionFees.php>).

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

The Extended Learning staff can answer questions about programs (<http://online.wvu.edu/degrees/index.php?level=undergraduate>), 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](http://online.wvu.edu/students/images/NewStudentOrientationManual_101910.pdf)), or serve as the first point-of-contact for off-campus students.

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.

Depending on the program, courses can be delivered in the following ways:

- Completely online
- Online with some campus visits (a blended format)
- Off-campus 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=graduate>). 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](http://online.wvu.edu)
- e-mail at: [wvuonline@mail.wvu.edu](mailto: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.

## Admission to West Virginia University ([https://app.applyyourself.com/AYApplicantLogin/fl\\_ApplicantConnectLogin.asp?id=wwugrad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=wwugrad))

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

## 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) (<http://www.pin.ed.gov>). You will use the PIN to sign your online Free Application for Federal Student Aid (FAFSA), review your processed information, correct FAFSA data, and conduct other important business directly with the US Department of Education. Save the PIN you are issued because you will need it for future transactions.

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

## Aid Offer Notification

WVU will receive your information electronically if you included our school code on your FAFSA. After your FAFSA is reviewed for accuracy, an award notification will be sent. 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 both quantitative (required gpa) and qualitative (successful completion of a % of all attempted hours) as well as degree completion within 150% of the number of hours required for the degree (undergraduates only).

Undergraduates must complete at least 67% of all attempted hours with the following GPA:

- 1-28 attempted hours - 1.6 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 [financialaid.wvu.edu](http://financialaid.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.

Students can reach the Veterans Advocate at: 304-293-8262. Students can reach the VA Certifying Official at 304-293-5242 or by emailing: [veterans@mail.wvu.edu](mailto:veterans@mail.wvu.edu). Students can obtain additional information from the Veterans website at [wvuveterans.wvu.edu](http://wvuveterans.wvu.edu).

## Consequences of Withdrawal

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

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

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

1. Unsubsidized Direct Stafford Loan

2. Perkins Loan
3. Direct PLUS (Graduate Student)

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

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

## Additional Information

For more information on applying and maintaining financial aid eligibility while enrolled at WVU, visit our website at [financialaid.wvu.edu](http://financialaid.wvu.edu).

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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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## Consequences of Withdrawal

If a student receives financial aid and s/he withdraws, s/he 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 (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)
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.

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

## Additional Information

For more information on applying and maintaining financial aid eligibility while enrolled at WVU, visit our website at [financialaid.wvu.edu](http://financialaid.wvu.edu).

# Governance and Administration

## In this Section:

- Governor of West Virginia
- West Virginia Higher Education Policy Commission
- West Virginia University Board of Governors
- West Virginia University Administration
  - Senior Administration
  - Deans
  - Directors

## 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, American Federation of Teachers, Charleston, WV*
- Kathy G. Eddy, *Parkersburg, WV*
- John Estep, *Richwood, WV*
- Kay H. Goodwin, *Ex-Officio, Cabinet Secretary, Department of Education and the Arts, Charleston, WV*
- David K. Hendrickson, *Charleston, WV*
- Paul L. Hill, *Chancellor, Charleston, WV*
- John Leon, *Fairmont, WV*

- James B. Phares, *Ex-Officio, State Superintendent of Schools, Charleston, WV*
- David R. Tyson, *Huntington, WV*

## West Virginia University Board of Governors

- David B. Alvarez, *Bridgeport, WV*
- Ryan Campione, *Student Representative, Morgantown, WV*
- Ellen S. Cappellanti, *Charleston, WV*
- Lesley Cottrell, *Faculty Representative, Morgantown, WV*
- James W. Dailey II, *Martinsburg, WV*
- Thomas V. Flaherty, *Charleston, WV*
- Robert K. Griffith, *Faculty Representative, Morgantown, WV*
- Raymond J. Lane, *Menlo Park, CA*
- Diane Lewis, *Morgantown, WV*
- Dixie Martinelli, *Classified Staff Representative, Morgantown, WV*
- William O. Nutting, *Wheeling, WV*
- Andrew A. Payne III, *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 May, 2013, for the 2013-2014 academic year.

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 an Equal Opportunity/Affirmative Action Institution. The University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color, or national origin in the administration of any of its educational programs or activities or with respect to admission or employment. Further, faculty, staff, students, and applicants are protected from retaliation for filing complaints or assisting in an investigation under the University's Equal Opportunity/Affirmative Action Plan. Inquiries regarding the University's non-discrimination policy may be sent to the director, Affirmative Action Office/Equal Employment Opportunity Programs, West Virginia University.— Office of the President.

## West Virginia University Administration

### Senior Administrators

- President, James P. Clements
- Provost and Vice President for Academic Affairs, Michele G. Wheatly
- Chancellor for Health Sciences, Christopher C. Colenda
- Chief of Staff, Jay Cole
- Executive Officer for Policy Development, Jennifer Fisher
- Chief Diversity Officer, David Fryson
- Vice President for Student Affairs, Kenneth D. Gray
- Vice President for Legal Affairs and General Counsel, William H. Hutchens III
- Vice President for University Relations, vacant
- Vice President for Research and Economic Development, Fred King
- Vice President for Human Resources, Margaret R. Phillips
- Vice President for Administration and Finance, Narvel G. Weese
- Director of Athletics, Oliver Luck
- Senior Associate Provost, Russell K. Dean
- Campus Executive Officer, WVU Institute of Technology, Carolyn D. Long
- Campus Provost, Potomac State College of WVU, Leonard A. Colelli
- Associate Provost for Graduate Academic Affairs, Katherine Karraker
- Associate Provost for Undergraduate Academic Affairs, Elizabeth A. Dooley
- Associate Provost for International Academic Affairs, Michael Lastinger
- Associate Provost for Academic Personnel, Cecil B. Wilson

- Associate Provost for Information Technology and Chief Information Officer, John Campbell
- Associate Vice President for Academic Strategic Planning, Nigel Clark
- Director of Cooperative Extension Service, Steven C. Bonanno (Interim)
- University Registrar, Stephen E. Robinson
- Special Assistant to the Governing Board, Valerie Lopez
- Special Assistant to the President, Sara A. Master
- Director of Internal Audit, William Quigley
- Executive Director of University Events and Liaison to the President, Robin Yorty
- Senior Associate Vice President for Finance, Dan Durbin
- Assistant Vice President for Finance, Anjali Halabe
- Associate Vice President for Facilities and Services, Randy Hudak
- Associate Vice President for Planning and Treasury Operations, Elizabeth Reynolds
- Vice President for Planning and Operations, Fred R. Butcher
- Chief Financial Officer for Health Sciences, Wendy King
- Associate Vice President for Health Sciences—Charleston Division, Clark L. Hansbarger
- Associate Vice President for Health Sciences—Eastern Division, Konrad C. Nau
- President, West Virginia University Hospitals, Inc., Bruce McClymonds
- Associate Vice President for Legal Counsel and Executive Deputy General Counsel, April Min
- Senior Deputy General Counsel for Health Sciences, Jacquelyn Core
- 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
- Associate Vice President for International Student Affairs and Global Services, David Stewart
- Associate Vice President for Student Affairs, Michael Ellington
- Assistant Vice President for Student Success, Barbara Copenhaver-Bailey
- Assistant Vice President for Student Affairs Communications, Sabrina Cave
- Assistant Vice President for Student Wellness, Cathy Yura
- 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, Lisa DiBartolomeo
- Chair, West Virginia University Staff Council, Lisa A. Martin
- President, West Virginia University Student Government Association, Ryan Campione

## Deans

- *College of Business and Economics*, José V. Sartarelli
- *College of Creative Arts*, Paul K. Kreider
- *College of Education and Human Services*, Lynne Schrum
- *College of Law*, Joyce McConnell
- *College of Physical Activity and Sport Sciences*, Dana D. Brooks
- *Davis College of Agriculture, Natural Resources, and Design*, Dan Robison
- *Dean of Students*, G. Corey Farris
- *Eberly College of Arts and Sciences*, Robert H. Jones
- *Extended Learning*, Sue Day-Perroots
- *Honors College*, Keith Garbutt
- *Perley Isaac Reed School of Journalism*, Maryanne Reed
- *School of Dentistry*, David A. Felton
- *School of Medicine*, Arthur J. Ross III
- *School of Nursing*, Elisabeth Shelton (Interim)
- *School of Pharmacy*, Patricia A. Chase
- *School of Public Health*, Jeffrey Coben (Interim)

- *University College*, Elizabeth A. Dooley
- *University Libraries*, Myra N. Lowe (Interim)

## Directors

- AAO/EEO Program, ADA Compliance, Nichelle Perkins
- Administrative Technology Solutions, Kate Hazen
- Admissions and Recruitment, Stephen Lee
- Blanchette Rockefeller Institute of Neuroscience, Shana Phares
- Bureau of Business and Economic Research, Nancy McIntyre (Interim)
- Career Services Center, David L. Durham
- Center for Black Culture and Research, Marjorie Fuller
- Center for Chinese Business, William B. Riley Jr.
- Center for Excellence in Disabilities, Ashok Dey
- Center for Women's and Gender Studies, Ann Oberhauser
- Center for Writing Excellence, Laura Brady
- Center on Aging, vacant
- Cultural Resource Management Program, Melissa Bingmann
- Dining Services, David Friend
- Economic Development, Fred King
- Environmental Health and Safety, John Principe
- External and Federal Relations, Rick French
- Federal Research Relations, Mary Bowman
- Financial Services, Lisa Lively
- Financial Aid, Tresa Weimer (Interim)
- Institute for Public Affairs, Kevin Leyden
- Institute of Occupational Environmental Health, Christopher Martin
- Institutional Research, Roberta Dean
- Internal Auditing, William R. Quigley
- International Student Affairs and Global Services, Tom Sloane
- Mary Babb Randolph Cancer Center, Scot C. Remick
- Military Science, Air Force ROTC, Lt. Col. Jeremy A. Anfinson
- National Research Center for Coal and Energy, Richard Bajura
- Physical Plant HSC, Leonard Lewis
- Procurement, Contracting and Payment Services, Brenda Mowen
- Regional Research Institute, Randall W. Jackson
- Research Compliance, Daniel Vasgird
- Sponsored Programs, Alan B. Martin
- Student Affairs Information Technology, Steve Watkins
- Student Health Services, Jan E. Palmer
- Student Recreation Center, David H. Taylor
- Technology Transfer, Bruce Sparks
- Telecommunications, Timothy P. Williams
- Undergraduate Academic Services Center, Anita Mayer
- University Events, Stephanie Ballard Conrad
- University Housing, Corey Farris
- University Police, Robert E. Roberts
- University Relations-Design, Angela M. Caudill
- University Relations-News and Photo, John Bolt
- University Relations-Trademark Licensing, Marsha Malone
- University Relations-Video, John E. Duwall
- University Relations-Web, Cathy Orndorff

- Visitors Center, Danica Ann Wilburn
- WVU Press, Carrie Mullen

## Oak Ridge Associated Universities

### Oak Ridge Associated Universities

Since 1957, students and faculty of West Virginia University have benefited from their membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of ninety-nine colleges and universities and a contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE) - the DOE facility that ORAU operates - undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science and engineering related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the ORISE Catalog of Education and Training Programs, which is available at: <http://www.ora.gov/orise/educ.htm> or by calling either of the contacts below.

ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members, private industry, and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research and support programs, as well as services to chief research officers.

For more information about ORAU and its programs, contact: Richard A. Bajura, Director, National Research Center for Coal and Energy ORAU Councilor for West Virginia University: (304)293-6034 or [Richard.Bajura@mail.wvu.edu](mailto:Richard.Bajura@mail.wvu.edu); Monnie E. Champion ORAU Corporate Secretary: (865) 576-3306; or visit the ORAU home page (<http://www.ora.org>).

## Support Services

## Tuition, Fees and Residency

### Page Contents:

- **Residency Policy**
- **Fee Regulations**
- **Special Fees, Library Fee, and Technology Fee**
- **Laboratory Fees**
- **Music Fees**
- **Other Fees**
- **Remission of Fees**
- **Summer Tuition and Fees**
- **Refund of Tuition and Fees**
- **Non-Sufficient Funds Check Policy**
- **Estimated Expenses for Graduate/Professional Health Sciences Center Programs**
- **Identification Card**

## Residency Policy

### Section 1:

This policy bulletin contains general information regarding its scope and dates of adoption.

### 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.

### **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 previously. 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 Trustees 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.

**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 from 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.

**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.

## 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.

## Summer Tuition and Fees

Check the website <http://adm.wvu.edu/>.

## Refund of Tuition and Fees

Current information on refunding can be found on the WVU Finance Division's webpage <http://studentaccounts.wvu.edu/refunds/>.

## Non-Sufficient Funds Check Policy

Payments of tuition, fees, and other charges by check, draft, or money order are subject to WVU's Non-Sufficient Funds Check Policy. 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.

## Estimated Expenses for Graduate/Professional Health Sciences Center Programs

For current accurate tuition costs, call the Office of Admissions at 1-800-344-WVU1 or visit the website at <http://adm.wvu.edu/>. Tuition and registration fees are the same for both semesters. Some programs require summer sessions. Additional tuition and fees apply.

## 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 confiscate of the card. For more information about the Mountaineer Card visit <http://wvucard.wvu.edu/> or contact them at [WVUCard@mail.wvu.edu](mailto:WVUCard@mail.wvu.edu).

# Health Sciences Public Health

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## Degrees Offered:

### Master of Public Health

- Biostatistics
- Epidemiology
- Health Policy, Management and Leadership
- Occupational and Environmental Health Sciences
- Social and Behavioral Sciences

### Master of Public Health (Online)

### Master of Science

- School Health Education

### PhD in Public Health Sciences

- Epidemiology
- Occupational and Environmental Health Sciences
- Social and Behavioral Sciences

### Certificate Programs

- Applied Biostatistics Certificate
- Women's Health Certificate

## 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 programs that focus on education, research, and service.**

West Virginia University and its academic programs are accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. The Master of Public Health (M.P.H.) program is further accredited by the Council on Education in Public Health (CEPH). The WVU School of Public Health has been approved to conduct an intensive self-study as it transitions from an accredited program to a CEPH-accredited School of Public Health. M.P.H. Students from throughout the world who choose West Virginia University begin making a difference even before graduation. We truly believe in learning by doing. Students remain engaged in community health throughout their training and complete practicum/internship experiences in diverse settings. Our School Health Education program is nationally unique and attracts future leaders in education. The Ph.D. in Public Health Sciences prepares graduates for future careers in academia and research in a variety of settings.

School of Public Health faculty and staff involve students in their active research programs. Research efforts at the School often focus on the health of rural communities, consistent with our West Virginia roots. Students publish in leading peer-reviewed journals and present at national scientific conferences with their faculty mentors.

The practical and rigorous education WVU provides prepares our graduates to be effective professionals and competitive in today's job market. Our established programs are growing quickly to meet the needs of our students and the substantial public health challenges that face our state. WVU School of Public Health alumni continue to improve the health of individuals and communities throughout the U.S. and around the globe.

## 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.

We are dedicated to a high-quality education for our students that:

- Provides innovative, high-quality education programs with focus on research and service.
- 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 for all graduate students.

For additional information about the School of Public Health or our many affiliates, which provide a wealth of research and service, please visit our website at <http://publichealth.hsc.wvu.edu>.

## 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 Kelly - 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 Gandhi U.)  
Department of Epidemiology, Professor, Cardiovascular Diseases, Diabetes Mellitus, Hypertension, Chronic Kidney Disease
- Keith Zullig - Ph. D. (U. of S.C.)  
Department of Socail 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
- Edward J. Doyle - M.S. (Geo. Wash. U)  
Clinical Director, Institute of Occupational and Environemntal Health, Worker's 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 Population Aspects of Cardiovascular Disease, Epigenetics and Systems Biology
- Ranjita Misra - Ph. D. (Old Dominion University)  
Diabetes and Metabolic Suyndrome
- Ian R. H. Rockett - 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. (Kan. St. U.)  
Biostatistics
- Kimberly Innes - Ph.D. (Cornell University)  
Epidemiology, Etiology, Chronic Age-Related Disorders

## Assistant Professors

- Rachel T. Abraham - M.D. (U. of Bangalore, India)  
Bridging the Gap Between Medicine and Public Health
- Scott Cottrell - Ed. D. (WVU)  
Design and 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 Caree
- Alfgeir Kristjansson - Ph.D. (Karolinska Institute)  
Social Research Methods, Substance Abuse Prevention
- Dustin 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
- Dougals Myers - Sc. D (U of 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 - Ph. D. (SUNY at Albany)  
Injury Epidemiology

## Assistant Research Professor

- Melissa Ahern - Ph.D. (Fla. St. U.)  
Public Health Impacts of Energy Use
- Stephanie Frost - Ph. D. (WVU)  
Influence of Build 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 - Ed.D. (WV)
- 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

## 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. A 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 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 MPH 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 M.P.H. 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 MPH program, contact:

Leah Adkins, Educational Programs Senior Program Coordinator at [leadkins@hsc.wvu.edu](mailto:leadkins@hsc.wvu.edu).

Or

Janet Hunt, Interim Assistant Dean for Academic Affairs at [jhunt@hsc.wvu.edu](mailto:jhunt@hsc.wvu.edu).

P.O. Box 9190

WVU School of Public Health

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 \(SREB\)](#).

### Program Description

Students in this program will complete thirty credit hours of coursework. Students may transfer nine credit hours that are pre-approved, upon admission. All courses are offered on-line. Students can complete this degree in two years or less. The goal of the 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.

### 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.**

Ruth E. Kershner, Ed.D., R.N., Professor at [rkershner@hsc.wvu.edu](mailto:rkershner@hsc.wvu.edu)  
P.O. Box 9190  
WVU School of Medicine  
Morgantown WV 26506  
Phone (304) 293-7440 or (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 (117 credit hours), Epidemiology (114 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 five members).

## Dissertation Summary

The program will culminate in a dissertation research project on an important public health topic. The dissertation can take the form of a traditional research dissertation or a series of three publishable papers or monographs on a related, important public health topic. The papers must be cleared for submission by the committee and submitted before the dissertation defense. We emphasize peer-reviewed research publications as desired outcomes because of their positive impact on skills and the professional placement options for our graduates. This is consistent with a trend in public health Ph.D. programs around the country.

The dissertation will be defended in a forum that has been announced to the school and university. All members of the Dissertation Committee must sign the dissertation approval form for the dissertation to be complete. The dissertation must be submitted following WVU policy regulating electronic submission of theses and dissertations.

## Program Delivery

Most courses in the program will be taught using the face-to-face, on-campus, small, or large group format. A small number of core courses and some electives will be delivered by web-based technology.

## 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 application 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 Ph.D. 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 contact:

Dr. Keith Zullig, Ph.D., MSPH

Director, Ph.D. in Public Health Science programs

PO Box 9190

1 Medical Center Drive

Morgantown, WV 26505-9190

(304) 293-1091

kzullig@hsc.wvu.edu

## Biostatistics

### Degrees Offered:

- M.P.H. in Biostatistics

### M.P.H. in Biostatistics

The M.P.H. 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 M.P.H. 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; and
- Conveying the results to others through publications and presentations.

A typical student who graduates with an M.P.H. 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 forty-three. 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.

## Faculty

### Interim Chair

- Matthew Gurka - Ph. D. (UNC)  
Associate Professor, Director of Biostatistics Consulting Group, Longitudinal Data Analysis, Model Selection, Power Analysis, Child Health, Childhood Obesity and Metabolic Syndrome

### Professor

- George A. Kelly - D.A. (Middle Tenn. St. U.)  
Meta-Analysis, Effects of Physical Activity on Health Related Diseases

### Associate Professor

- Gerry Hobbs - Ph. D. (Kan. St. U.)  
Biostatistics

### Assistant Professors

- Dustin Long - Ph. d. (U of North Carolina)  
Biostatistics
- Michael D, Regier - Ph. D. (University of British Columbia)  
Biostatistics, Community Medicine

### Assistant Research Professor

- Christa L. Ice - Ph.D. (Vanderbilt University)  
Pediatrics

## Overview of M.P.H. in Biostatistics Curriculum

Students in the M.P.H. program in Biostatistics will complete a total of forty-three credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of Seminar, nineteen credit hours of departmental required courses, and six credit hours of elective courses). The culminating experience, taken during the final semester, requires completing a consulting practicum (three credit hours) and submitting a paper and poster. This degree will typically take four semesters to complete.

## Department of Biostatistics Master Level Courses

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

BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
BIOS 603	Applied Biostatistics 2	3
BIOS 604	Applied Biostatistics 3	3
BIOS 610	Intermediate Biostatistics	4
BIOS 611	Data Management and Reporting	3
BIOS 612	Pb Hlth Statistical Inference 1	3
BIOS 620	Applied Linear Models HS	3
BIOS 621	Categorical Data Analysis HS	3
BIOS 622	Analysis of Time-to-Event Data	3
BIOS 623	Biostatistical Consulting	1
BIOS 624	Consulting Experience	2

BIOS 628	Biostatistics Practicum	3
BIOS 660	Applied Bioinformatics 1	3
BIOS 661	Applied Bioinformatics 2	3
BIOS 662	Statistics in Clinical Trials	3
BIOS 663	Introduction to Meta-Analysis	3
BIOS 696	Graduate Seminar	1
Total Hours		48

## Suggested Course Sequence

### First Year

Fall	Hours Spring	Hours
BIOS 610	4 BIOS 620	3
BIOS 612	3 BIOS 621	3
EPID 610	3 BIOS 622	3
BIOS 611	3 BIOS 623	1
PUBH 696	1 PUBH 696	1
	<b>14</b>	<b>11</b>

### Second Year

Fall	Hours Spring	Hours
OEHS 601	3 BIOS 662	3
SBHS 601	3 BIOS 628	3
HPML 601	3 BIOS 624	2
BIOS 696	1	
	<b>10</b>	<b>8</b>

Total credit hours: 43

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.

## Epidemiology

Degrees Offered:

- M.P.H. in Epidemiology
- Ph.D. in Public Health Science-Epidemiology

### M.P.H. in Epidemiology

Upon completion of the M.P.H. degree in Epidemiology, graduates should be able to:

- Conduct high-quality epidemiologic investigations—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
- Understand and evaluate the effects of bias and effect modification in research design
- 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 M.P.H. graduates in Epidemiology are qualified to work and provide leadership in state, federal, and global health agencies (e.g. Centers for Disease Control and Prevention [CDC], The National Institute for Occupational Safety and Health [NIOSH]); hospitals; infection control departments in multiple industries; academic health centers and other healthcare organizations; research institutions, foundations; insurance and managed care organizations; and pharmaceutical and biotechnology companies.

## Ph.D. in Epidemiology

<http://publichealth.hsc.wvu.edu/epidemiology/>

The doctor of philosophy (Ph.D.) in epidemiology prepares students for careers in research, teaching, and consulting. Students develop research and teaching skills in epidemiology through coursework and practice opportunities. The curriculum provides rigorous and comprehensive training in epidemiologic methods for clinical and population-based research including study design, statistical analysis and interpretation of results, as well as research areas of focus for epidemiologic research including chronic diseases, infectious diseases, injury, and gene by environment interactions. The program's etiologic orientation is based on the premise that knowledge of genetic, physiologic, behavioral, and environmental factors contribute to understanding the underlying causes of complex human diseases needed to develop and evaluate effective preventive and treatment measures.

Upon completion of the Ph.D. degree in epidemiology, graduates 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 disease and injury surveillance systems
- Evaluate health behaviors and outcomes in populations by such variables as age, sex, race/ethnicity, socioeconomic status, and disability
- Critically evaluate results of epidemiologic studies, including study design, analysis results, and conclusions
- Prepare written and oral reports and presentations to effectively communicate to professional audiences, policy makers, and the general public
- Prepare research proposals for extramural peer-reviewed funding
- Promote and model ethical conduct in epidemiologic practice
- Bring epidemiologic perspectives to the development and analysis of public health policies

Graduates of the Ph.D. in epidemiology program typically work as faculty members in academic institutions; scientists in research centers, e.g., the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC) or the pharmaceutical industry; or may assume leadership positions in state or federal health agencies (such as CDC, Food and Drug Administration [FDA], and the Environmental Protection Agency [EPA]).

Students who have not earned a relevant master's or professional degree may still be admitted to the doctoral program. However, these students are required to complete basic public health/epidemiology courses in the School of Public Health. These students should still apply directly to the Ph.D. program.

The Master of Public Health (M.P.H.) degree is designed for those who wish to acquire knowledge and skills necessary for epidemiologic practice and research. This degree will be appropriate for persons interested in a career studying the relationship of risk factors to a variety of disease, injury, and other health-related states. This degree requires forty-four credit hours and typically takes four semesters to complete.

## Faculty

### Interim Chair

- Anoop Shankar - Ph. D. (Mahatma Gandhi U.)  
Professor, Cardiovascular Diseases, Diabetes Mellitus, Hypertension, Chronic Kidney Disease

### Professor

- Ian R. H. Rockett - Ph. D. (Brown U.)  
Epidemiology of Injury and Substance Abuse, suicide Misclassification, History of Public Health

### Associate Professor

- Kimberly Innes - Ph. D. (Cornell University)  
Epidemiology, Etiology, Chronic Age-Related Disorders

### Assistant Professors

- Kelly GURka - Ph. D. (UNC)  
Epidemiology, Injury Prevention and Control, Maternal and Child Care
- Juhua Luo - Ph.D. (Karolinska Institute)  
Cancer Epidemiology and Prevention, Health Disparities in Underserved Populations
- Motao Zhu - Ph. D. (SUNY at Albany)  
Injury Epidemiology

## Overview of M.P.H. in Epidemiology Curriculum

Students in the M.P.H. program in Epidemiology will complete a total of forty-four credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of Seminar, twenty credit hours of departmental required courses, and six credit hours of elective courses). The culminating experience, taken over the last two semesters, requires completing a proposal (two credit hours), implementing a research-based practicum project (six credit hours), and submitting a publishable paper and poster. This degree will typically take four semesters to complete.

### Department of Epidemiology Master Level Courses

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

EPID 601	Public Health Epidemiology	3
EPID 610	Principles of Epidemiology	3
EPID 611	Advanced Epidemiologic Theory	3
EPID 612	Applied Epidemiology for PH	3
EPID 625	Principles of Clinical Trials	3
EPID 627	Epidemiology Proposal	2
EPID 628	Epidemiology Practicum	6
EPID 664	Chronic Disease Epidemiology	3
EPID 665	Injury Control Seminar	1
Total Hours		27

### Suggested Course Sequence

#### First Year

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

#### Second Year

Fall	Hours Spring	Hours
SBHS 601	3 EPID 628	6
EPID 627	2 ELECTIVE	3
HPML 601	3	
ELECTIVE	3	
	<b>11</b>	<b>9</b>

Total credit hours: 44

## Overview of Epidemiology Ph.D. Curriculum

The Doctor of Philosophy (Ph.D.) in epidemiology prepares students for careers in research, teaching, and consulting. Students develop research and teaching skills in epidemiology through coursework and practice opportunities. The curriculum provides rigorous and comprehensive training in epidemiologic methods for clinical and population-based research including study design, statistical analysis, and interpretation of results, as well as research areas of focus for epidemiologic research including chronic diseases, infectious diseases, injury, and gene by environment interactions. The program's etiologic orientation is based on the premise that knowledge of genetic, physiologic, behavioral, and environmental factors contribute to understanding the underlying causes of complex human diseases needed to develop and evaluate effective preventive and treatment measures.

#### PhD in Epidemiology Competencies

- Design investigations of acute and chronic conditions, as well as other adverse health outcomes in targeted populations
- Analyze and evaluate data from epidemiologic investigations and disease and injury surveillance systems
- Evaluate health behaviors and outcomes in populations by such variables as age, sex, race/ethnicity, socioeconomic status, and disability
- Critically evaluate results of epidemiologic studies, including study design, analysis results, and conclusions
- Prepare written and oral reports and presentations to effectively communicate to professional audiences, policymakers, and the general public

- Prepare research proposals for extramural peer-reviewed funding
- Promote and model ethical conduct in epidemiologic practice
- Bring epidemiologic perspectives to the development and analysis of public health policies

Students who have not earned a relevant master's or professional degree may still be admitted to the doctoral program; however, these students are required to complete basic public health/epidemiology courses at the master's level in the Department of Epidemiology before they begin their doctoral coursework. This may add one to two years to the program depending on their preparation. These applicants should still apply directly to the Ph.D. program.

## Curriculum

Students in the Ph.D. in Public Health Sciences program in epidemiology will complete a total of 114 credit hours, of which fifty-seven are dedicated toward research. The first two years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to epidemiology. The last two years will largely be dedicated to dissertation research.

## Epidemiology Ph.D. Required Courses

EPID 625	Principles of Clinical Trials	3
EPID 710	Adv Principles-Epidemiology	3
EPID 711	Adv Epidemiologic Theory	3
EPID 712	Quantitative Methods-Epidemlgy	3
EPID 796	Graduate Seminar	1
BIOS 603	Applied Biostatistics 2	3
BIOS 604	Applied Biostatistics 3	3
BIOS 610	Intermediate Biostatistics	4
BIOS 611	Data Management and Reporting	3
SBHS 601	Social and Behavioral Theory	3
SBHS 660	Survey Research Methods	3
SBHS 701	Public Health Grant Writing	3
SBHS 712	Qualitative Research Methods	3
BMS 700	Scientific Integrity	1
BMS 720	Scientific Writing	2
C&I 789	Teaching In Higher Education	3
Total Hours		44

### Electives

Students will complete a minimum of nine credit hours of electives during their Ph.D. program. These may be selected from among the department's, School of Public Health's, or university's many course offerings. These courses will be discussed and approved with the faculty advisor.

## Teaching Practicums

Students will spend two semesters in a mentored relationship with a faculty member, assisting with the implementation of a course.

## Comprehensive Exams

The Qualifying Examination is the capstone experience for Ph.D. program coursework. Successful completion of the examination signifies competence in the field of public health sciences and indicates readiness to engage in independent research. The Qualifying Examination consists of both a written and oral component. Qualifying exams should not include testing on content of the dissertation. The oral defense of the dissertation proposal will serve that purpose. The Qualifying Examination is planned and administered by the five-member dissertation committee, under the direction of the committee chairperson. If necessary and at the discretion of the Program Director, another faculty member may be appointed to serve on the committee.

The oral portion of the exam may not be attempted until the written component is completed and must be attempted within two academic weeks of the written component. Students are expected to take the qualifying exam during the summer sessions between their fourth and fifth academic semesters. However, the written component must be completed no later than the second week in July. Students are not eligible to begin their dissertation or enroll in dissertation hours until they have successfully completed the Qualifying Examination.

## Research

Students will participate in research rotations during their first year, meeting and working with research faculty with similar interests in order to develop mentorships for dissertation research. A total of fifty-seven credit hours of rotations and dissertation research will be completed during the program.

## The Dissertation Proposal, Defense, and Approval

Although students may choose to pursue a traditional dissertation format, the majority of Ph.D. students format their dissertation using the Three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with chairperson of their dissertation committee. As a reminder, students will not be allowed to defend their dissertations until they have at least one first-authored publication in any form of acceptance, based on their Ph.D. dissertation, in a peer-reviewed journal by the time of the dissertation defense. Note: This required publication does not necessarily need to be one of the three articles generated through the JAF dissertation format.

## Suggested plan of Study

### First Year

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

### Second Year

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

### Third Year

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

### Fourth Year

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

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Total credit hours: 114

## Health Policy, Management and Leadership

### Degrees Offered:

- M.P.H. in Health Policy, Management and Leadership

The M.P.H. 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 M.P.H. 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 M.P.H. in Health Policy, Management and Leadership, 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.

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## Faculty

### Interim Chair

- Michael Hendryx - Ph. D. (Northwestern)  
Associate Professor, Management and Leadership, Health Policy and Health Disparities

### Professor

- Jeffrey Coben - M.D. (U. of Pitt.)  
Clinical Research Methods

### Assistant Professor

- Stephanie Frisbee - Ph. D. (WVU)  
Health Policy, Policy and Epidemiologic Approaches to Pediatric Cardiovascular Health Outcomes

### Assistant Research Professor

- Melissa Ahern - Ph. D. (Fla. St. U.)  
Public Health Impacts of Energy Use

### Research Instructors

- Thomas Bise - Ph. D. (WVU)  
Public Health Policy, Obesity Prevention, Built Environment, Community Development, Program Evaluation
- Lucas Moore - Ed. D (WVU)  
Public Health Policy

## Overview of M.P.H. in Health Policy, Management and Leadership Curriculum

Students in the M.P.H. program in health policy, management and leadership will complete a total of forty-five credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of seminar, eighteen credit hours of departmental required courses, and nine credit hours of elective courses). The culminating experience, taken the last semester, requires completing an internship (six credit hours) and submitting a paper and poster. This degree will typically take four semesters to complete.

## Department of Health Policy, Management and Leadership Master Level Courses

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

HPML 601	Foundations of Health Policy	3
HPML 610	Health Economics-Poplt n Health	3
HPML 620	Pub Hlth Leadership/Managmnt 1	3
HPML 622	Anlytc Mthd-Hlth Plcy/Mang/Ldr	3
HPML 624	Policy Tools for Popltn Health	3
HPML 626	Internship	1-6
HPML 660	Methods-Hlth Services Rsrch 1	3
HPML 661	HSR Informatics	3
HPML 670	Policy Analysis-Popltn Hlth 1	3
HPML 671	Popltn Hlth Plcy Anlyss Info 1	3

Total Hours 28-33

## Suggested Course Sequence

### First Year

Fall	Hours Spring	Hours
EPID 601	3 SBHS 601	3

BIOS 601	3 OEHS 601	3
BIOS 602	1 HPML 622	3
HPML 601	3 HPML 624	3
PUBH 696	1 PUBH 696	1
	<b>11</b>	<b>13</b>
<b>Second Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
HPML 610	3 HPML 620	3
Electives	9 HPML 626	1-6
	<b>12</b>	<b>4-9</b>

Total credit hours: 40-45

## Electives

Students must select at least nine credit hours for electives. The Department of Health Policy, Management and Leadership offers four elective courses; additionally, any course offered by any department within the School of Public Health is an acceptable elective. Students may select a course not listed specifically 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 and Leadership and 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.

# Occupational and Environmental Health Sciences

## Degrees Offered:

- M.P.H. in Occupational and Environmental Health Sciences
- Ph.D. in Occupational and Environmental Health Sciences

## M.P.H. Degree in Occupational and Environmental Health Sciences

The M.P.H. 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 M.P.H. degree in occupational and environmental health sciences is designed to meet the following occupational and environmental health sciences' competencies:

- Judge the precision and accuracy of methods for quantifying environmental agents
- Understand the routes of entry of environmental agents into the body and how those routes affect toxicity
- Provide management expertise for planning and carrying out disaster preparation
- Determine the relevance of toxicological and epidemiologic data for regulatory use and integrate scientific, regulatory, and social information for risk communication
- Design approaches for achieving environmental sustainability in communities and industry
- Integrate multiple data sources to determine the underlying causes of injury
- Understand the role of genetics in mediating host susceptibility to disease

Upon completion of the M.P.H. 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 M.P.H. degree is ideal for recent college graduates or early to mid-career public health professionals seeking to develop or advance their current careers.

## Ph.D. in Occupational and Environmental Health Sciences

<http://publichealth.hsc.wvu.edu/oehs/>

The Ph.D. in Public Health Sciences in occupational and environmental health is a degree for scientist-practitioners in the area of prevention of premature mortality, morbidity, and disability resulting from occupational and environmental exposures, communicable and chronic disease, and injury. This degree emphasizes both evidence-based primary prevention of disease and injury and health promotion research and practice. Students completing this degree will have the necessary theoretical knowledge and critical understanding of occupational and environmental health problems, including analytical and methodological research skills, to investigate, evaluate, and find solutions to public health challenges.

The Department of Occupational and Environmental Sciences has a close collaboration with the National Institute of Occupational Safety and Health (NIOSH), which shares our Health Sciences campus in Morgantown. Collaborating NIOSH faculty add important enrichment and mentorship potential for the interested student.

Upon graduation, students in the Ph.D. in Public Health Sciences program from the Department of Occupational and Environmental Health Sciences will have the following core competencies:

- Analyze issues and problems in occupational and environmental health and safety using critical evaluation, applied research methodology, and statistical methods
- Characterize the human health effects of major environmental and occupational hazards, both acute and chronic, including: air pollution, contamination of drinking water, and physical hazards
- Analyze sources, pathways, and routes of exposure to environmental and occupational hazards and identify populations at high risk of exposure and communicate that risk effectively
- Create programs that protect the environment using proven technologies and novel approaches
- Evaluate the management of occupational and environmental problems and develop long and short term goals for reducing or eliminating their impact

### Admission Guidelines for the Ph.D.

- Baccalaureate degree from an accredited college or university with some background in science (preferred GPA: 3.0 overall)
- GRE scores of: Verbal: sixtieth percentile or greater; Quantitative: fiftieth percentile or greater; or, a combined score of twenty-four or higher on the MCAT, with nine or higher in verbal; or, a terminal degree
- A completed Ph.D. application, including a Statement of Purpose (see below for details)
- Three letters of recommendation

#### Statement of Purpose

The essay is a critical piece of the admissions process. We will evaluate both the content of the essay and your writing skills in considering your application. All applicants should write an essay of 600 words or less. In this essay, please address the following questions:

- What is it about Occupational and Environmental Health Sciences (OEHS) that appeals to you?
- What have you done to prepare yourself for training in OEHS?
- How will you use your training in OEHS?
- What area(s) within OEHS do you wish to emphasize and why?
- Applicants should also include any additional information about their interests, prior background, or special circumstances which may be helpful to the Admissions Committee in evaluation of the application.

Students interested in applying for the Ph.D. in Occupational and Environmental Health must:

- Complete the WVU graduate application and submit with the processing fee
- Submit official school transcripts and official GRE scores to:

WVU Admissions and Records  
PO Box 6009  
Morgantown, WV 26506-6009  
(304) 293-2121

- Complete the Ph.D. application online and indicate occupational and environmental health as your preference <http://www.hsc.wvu.edu/resoff/hscresoff/publichealth/phapp.asp>
- 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

## Faculty

### Interim Chair

- Michael McCawley - Ph. D. (New York U.)  
 Research Professor, Air Pollution Aerosols, and Occupational Health

### Professors

- Alan M. Ducatman - M. Sc. (City U. of N.Y.)  
 Toxic Exposure Worker's Compensation
- Sarah Knox - Ph. D. (U of Stockholm)  
 Clinical and Populational Aspects of Cardiovascular Disease, Epigenetics and Systems Biology

### Associate Professor

- Lan Gho - Ph. D. (WVU)  
 Bioinformatics and Information Integration

### Assistant Professors

- Rachel T. Abraham - M.D. (U. of Bangalore, India)  
 Bridging the Gap between Medicine and Public Health
- Douglas Myers - Sc. D. (U. Massachusetts)  
 Workplace Safety
- Kimberly Rauscher - Sc. D. (U. of Mass. at Lowell)  
 Environmental Policy, Injury Control Epidemiology

### Overview of M.P.H. in Occupational and Environmental Health Sciences Curriculum

Students in the M.P.H. program in occupational and environmental health sciences will complete a total of forty-three credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of seminar, fifteen credit hours of departmental required courses, and nine credit hours of elective courses). Students have two options for the culminating experience, usually completed during the last year of the program. These options are: a) the internship (six credit hours) or b) the proposal and practicum (six credit hours). Both options require a paper and poster. This degree will typically take four semesters to complete.

### Department of OEHS Master Level Courses

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

OEHS 601	Environmental Health	3
OEHS 610	Environmental Practice	3
OEHS 622	Public Health Toxicology	3
OEHS 665	Worksite Evaluation	2
OEHS 691 - Advanced Topics (subject matter changes)		1-6
Total Hours		12-17

The M.P.H. curriculum is designed so that students have a broad exposure to the core disciplines in public health and an introduction to occupational and environmental sciences in the first year of the program. An internship or proposal/practicum is required in the second year of study. The degree would typically take two years to complete. A minimum of forty-three credit hours are required for the M.P.H. in occupational and environmental health sciences. Students complete eighteen credit hours of School of Public Health core courses, sixteen credit hours of departmental required courses, and nine credit hours of electives.

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

#### First Year

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

#### Second Year

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

Total credit hours: 40-45

### Culminating Experience Options

**Internship:** The internship is the preferred culminating experience. It is six credits, which translates to 360 hours of work, and has been designed to place students in occupational or environmental settings to further develop and apply their newly acquired knowledge and skills in a way that addresses real-world problems. The nature of the 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 (two credits) to conduct a research or applied practicum project (four 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 Ph.D.

The Ph.D. in Public Health Sciences in occupational and environmental health is a degree for scientist-practitioners in the area of prevention of premature mortality, morbidity, and disability resulting from occupational and environmental exposures, communicable and chronic disease, and injury. This degree emphasizes both evidence-based primary prevention of disease and injury, as well as health promotion research and practice. Students completing this degree will have the necessary theoretical knowledge and critical understanding of occupational and environmental health problems, including analytical and methodological research skills, to investigate, evaluate, and find solutions to public health challenges.

The Department of Occupational and Environmental Sciences has a close collaboration with the National Institute of Occupational Safety and Health (NIOSH), which shares our Health Sciences campus in Morgantown. Collaborating NIOSH faculty add important enrichment and mentorship potential for the interested student.

## Ph.D. in OEHS Competencies

- Analyze issues and problems in occupational and environmental health and safety using critical evaluation, applied research methodology, and statistical methods
- Characterize the human health effects of major environmental and occupational hazards, both acute and chronic, including: air pollution, contamination of drinking water, and physical hazards
- Analyze sources, pathways, and routes of exposure to environmental and occupational hazards, identify populations at high risk of exposure, and communicate that risk effectively
- Create programs that protect the environment using proven technologies and novel approaches
- Evaluate the management of occupational and environmental problems and develop long and short term goals for reducing or eliminating their impact

## Curriculum

Students in the Ph.D. in Public Health Sciences program in occupational and environmental health sciences will complete a total of 117 credits hours, of which fifty-eight are dedicated toward research. The last two years will largely be dedicated to dissertation research; however, after qualifying exams, during the dissertation period, students will also engage in teaching practicum (to be determined by the student's departmental advisor). The dissertation requires a minimum of three published articles with an integrative summary.

The OEHS Department does not require students to pick a track or concentration. Rather, students are encouraged to design their own program of electives. Students interested in a variety of topics may choose with the permission of their advisor to take a mix of electives. The choice to focus or mix electives is up to the student and his/her advisor. In addition to their coursework, Ph.D. students will be required to complete HIPAA and Lab Environment training provided by the university.

## Occupational and Environmental Health Sciences REquired Courses

OEHS 601	Environmental Health	3
OEHS course - Occupational and Environmental Hazard Assessment		4
OEHS 732	Occupational Injury Prevention	3
OEHS 745	Epigenetics/Systems Biology	3
OEHS 796	Graduate Seminar	1
OEHS 790	Teaching Practicum	2
EPID 601	Public Health Epidemiology	3
EPID 769	Occupational Epidemiology	3
HPML 601	Foundations of Health Policy	3
BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
BIOS 603	Applied Biostatistics 2	3
SBHS 601	Social and Behavioral Theory	3
SBHS 701	Public Health Grant Writing	3
PUBH course - Special Topics Seminar		1
BMS 700	Scientific Integrity	1
BMS 720	Scientific Writing	2
Total Hours		42

## Electives

Students will complete a minimum of fifteen credit hours of electives during their Ph.D. program. These may be selected from among the department's, School of Public Health's, or university's many course offerings. These courses will be discussed and approved with the faculty advisor.

## Teaching Practicums

Students will spend two semesters in a mentored relationship with a faculty member, assisting with the implementation of a course.

## Comprehensive Exams

The Qualifying Examination is the capstone experience for Ph.D. program coursework. Successful completion of the examination signifies competence in the field of public health sciences and indicates readiness to engage in independent research. The Qualifying Examination consists of both a written and oral component. Qualifying exams should not include testing on content of the dissertation. The oral defense of the dissertation proposal will serve that purpose. The Qualifying Examination is planned and administered by the five-member dissertation committee, under the direction of the committee chairperson. If necessary and at the discretion of the Program Director, another faculty member may be appointed to serve on the committee.

The oral portion of the exam may not be attempted until the written component is completed and must be attempted within two academic weeks of the written component. Students are expected to take the qualifying exam during the summer sessions between their fourth and fifth academic semesters. However, the written component must be completed no later than the second week in July. Students are not eligible to begin their dissertation, or enroll in dissertation hours, until they have successfully completed the Qualifying Examination.

## Research

Students will participate in research rotations during their first year, meeting and working with research faculty with similar interests in order to develop mentorships for dissertation research. A total of fifty-eight credit hours of rotations and dissertation research will be completed during the program.

## The Dissertation Proposal, Defense, and Approval

Although students may choose to pursue a traditional dissertation format, the majority of Ph.D. students format their dissertation using the Three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with chairperson of their dissertation committee. As a reminder, students will not be allowed to defend their dissertations until they have at least one first-authored publication in any form of acceptance, based on their PhD dissertation, in a peer-reviewed journal by the time of the dissertation defense. Note: This required publication does not necessarily need to be one of the three articles generated through the JAF dissertation format.

## Suggested Plan of Study

### First Year

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

### Second Year

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

### Third Year

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

### Fourth Year

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

Total credit hours: 118

## Social and Behavioral Sciences

### Degrees Offered

- M.P.H. in Social and Behavioral Sciences

- M.P.H. ONLINE in Public Health Practice
- M.S. in School Health Education
- Ph.D. in Social and Behavioral Sciences

## M.P.H. in Social and Behavioral Sciences

The M.P.H. degree in Social and Behavioral Sciences (SBHS) addresses the behavioral, social, and environmental factors related to individual and population health and health disparities over the life span. Research and practice in this track contributes to the development, administration, and evaluation of programs and policies in public health to promote and sustain healthy environments and lives for individuals and populations. The 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 a M.P.H. 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.)

## M.P.H. Online in Public Health Practice

The Online M.P.H. degree in public health practice offered by the Department of Social and Behavioral Sciences (SBHS) is designed to enable current public health and healthcare 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 healthcare. 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 M.P.H. 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 a M.P.H. in public health practice from West Virginia University will be qualified to work and serve in leadership roles in public health and healthcare settings at national, state, or local levels, or work in the public or private sector on health promotion program planning, implementation, and evaluation.

## M.S. in School Health Education

<http://publichealth.hsc.wvu.edu/sbhs/>

The mission of the M.S. 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>).

## Ph.D. 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.

Ph.D.-Specific Competencies:

1. Display broad knowledge and application of relevant public health social and behavioral theories to health promotion and disease prevention strategies
2. Demonstrate rigorous understanding of methodological and statistical principles that enhance research in the public health sciences
3. Review and synthesize pertinent behavioral literature and formulate focused specific aims and research questions that address identified knowledge gaps
4. Design and conduct original research that uniquely contributes to the social and behavioral science knowledge base
5. Disseminate research findings through appropriate peer-reviewed publications and presentations and other appropriate public health community audiences

There are 117 required credits for this degree. The curriculum is designed so that students receive methodologically-intense training and one-on-one research experience with faculty in the social and behavioral sciences. The first two years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to the social and behavioral sciences. During the final two years of the program, students are engaged in their dissertation research while given the freedom to further diversify their training by completing teaching practica and choosing three additional electives.

## Faculty

### Interim Chair

- Keith Zullig - Ph.D. (U. of S.C.)  
Associate Professor, Director-PhD. in Public Health Sciences, Adolescent Quality of Life Research, Measurement, Substance Use, and Community-Based Interventions

### Professors

- Geri Dino - Ph.D. (Kansas State University)  
Management of Public Health, Tobacco Prevention
- Kimberly A. Horn - Ed.D (WVU)  
Grant Writing, tobacco Prevention, Health Disparities, Community-Based Participatory Research
- Ruth Kershner - Ed.E (WVU)  
Coordinator-MS in School Health Education, Substance Abuse Education, Violence Prevention, Women's Health
- Ranjita Misra - Ph. D. (Old Dominion University)  
Diabetes and Metabolic Syndrome
- Pete Shafron - Ed. D. (WVU)  
Interim Director-MPH PublicHealth Practice (online degree, Injury Prevention, Driver Behavior, Impact of Physical Fitness on the Older Driver)

### Assistant Professors

- Alfgeir Kristjansson - Ph.D. (Karolinska Institute)  
Social Research Methods, Substance Abuse Prevention
- Michael Mann - Ph.D. (University of Florida)  
Management of Public Health, Tobacco Prevention
- Toni Morris - M.S. (WVU)  
Community Medicine, First Aid Instruction
- Cecil Pollard - M.A. (WVU)  
Survey Research Methods, Collaborative Research Efforts
- Nancy O'Hara Tompkins - Ph.D. (U. of Md.)  
Youth Physical Activity, Obesity Prevention

### Assistant Research Professor

- Stephanie Frost - Ph.D. (WVU)  
Influence of Built and Social Environments on Health Behavior and Factors Influencing Childhood Obesity

## Overview of M.P.H. in Social and Behavioral Sciences Curriculum

Students in the M.P.H. program in social and behavioral sciences will complete a total of forty-four credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of seminar, seventeen credit hours of departmental required courses, and nine credit hours of elective courses). Students have two options for the culminating experience, usually completed during the last year of the program. These options are a) the internship (five credit hours) or b) the proposal and practicum (five credit hours). Both options require a paper and poster. This degree will typically take four semesters to complete.

## Department of Social and Behavioral Master Level Courses

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

SBHS 601	Social and Behavioral Theory	3
SBHS 610	Public Health Research Methods	3
SBHS 611	Community Assessment	3
SBHS 612	Intervention Design	3
SBHS 613	Public Health Program Evaluatn	3
SBHS 614	Cmmnty-Bsd Participatory Rsrch	3
SBHS 626	Internship	1-5
SBHS 627	Practicum Proposal	2
SBHS 628	Practicum	3
SBHS 630	Foundations of Wellness	3
SBHS 633	Women and Violence	3
SBHS 634	Issues in Women's Health	3
SBHS 660	Survey Research Methods	3
SBHS 662	Issues in Men's Health	3
Total Hours		39-43

The curriculum is designed so that students have a broad exposure to the core disciplines in public health and introduction to the social and behavioral sciences during their first academic year with a greater focus on SBHS in their second academic year. The standard schedule allows for students to select three electives (nine credit hours). It is highly recommended that these electives be selected from the approved list of electives for students in SBHS. Students may also opt to complete a concentration (currently wellness or women's health). A certificate in women's health may also be completed with an additional six credit hours of courses (fifty credit hours).

### Suggested Course Sequence (SBHS)

#### First Year

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

#### Second Year

Fall	Hours Spring	Hours
SBHS 612	3 SBHS 626	1-5
SBHS 613	3 Elective	3
Electives	6	
	<b>12</b>	<b>4-8</b>

Total credit hours: 40-44

#### 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 SBHS (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 SBHS 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 (five credit hours)**

- The Internship will be a 300-hour placement in an agency or organization that provides an SBHS-focused experience (no less than twenty hours per week, up to forty hours per week) and include learning objectives, monthly progress reports, compilation of a portfolio, AND a final paper and poster.

**Option 2****Practicum Proposal (two credit hours) and Practicum (three credit hours)**

- The proposal course will be completed during the fall semester of second year. The process will be similar to what we have now except that the project and proposal would be reviewed by SBHS 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 Curriculum in Public Health Practice**

Students in the online program in public health practice will complete a total of forty-four credit hours (sixteen credit hours of School of Public Health core courses, two credit hours of seminar, seventeen credit hours of departmental required courses, and nine credit hours of elective courses). The culminating experience taken over the last two semesters requires completing a proposal (two credit hours), implementing a practicum project (three credit hours), and submitting a paper and poster. This degree will typically take four semesters to complete.

**Suggested Course Sequence (Online M.P.H.)****First Year**

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

**Second Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
SBHS 627	2 SBHS 628	3
SBHS 613	3 SBHS 660	3
SBHS 627	2 Elective	3
Elective	3	
	<b>10</b>	<b>9</b>

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Total credit hours: 43

**Culminating Experience: Practicum Proposal (two credit hours) and Practicum (three 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 two. 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 M.S. in School Health Education Curriculum**

Students in the online M.S. program in School Health Education will complete a total of three credit hours of coursework. Students may transfer nine credit hours if 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.

C&I 604	School Curriculum	3
CHPR 655	Intro to Health Promotion	3
CHPR 680	School Health Concepts	3
C&I 687	Advanced Teaching Strategies	3
C&I 688	Classroom Organization & Mang	3
CHPR 671	Public and Community Health	3
CHPR 509	Community Hlth:Drug Education	3
CHPR 507	Community Hlth:Human Sexuality	3
CHPR 640	School Health Program Design	3
CHPR 604	Advanced School Health	3
Total Hours		30

## Overview of Social and Behavioral Sciences Ph.D. Curriculum

Our mission is to provide state of the art doctoral education in the theory and application of social and behavioral science to a select group of highly qualified and committed students who desire to transform public health. This program trains students using a research intensive curriculum led by a distinguished faculty at the cutting edge of public health science. The Social and Behavioral Sciences Ph.D. program emphasizes both evidence-based, theory-driven primary prevention of disease and injury, and health promotion research and practice. Graduates will complete their degrees with a competitive record of research achievement and the competence to embark on high-impact research careers.

### PhD in SBHS Competencies

1. Display broad knowledge and application of relevant public health social and behavioral theories to health promotion and disease prevention strategies
2. Demonstrate rigorous understanding of methodological and statistical principles that enhance research in the public health sciences
3. Review and synthesize pertinent behavioral literature and formulate focused specific aims and research questions that address identified knowledge gaps
4. Design and conduct original research that uniquely contributes to social and behavioral science knowledge base
5. Disseminate research findings through appropriate peer-reviewed publications and presentations and to other appropriate public health community audiences

### Curriculum

Students in the Ph.D. in public health sciences, Social and Behavioral Sciences program will complete a total of 117 credits hours, of which fifty-three are dedicated toward research. The curriculum is designed so that students receive a methodologically-intense training and one-on-one research experience with faculty in Social and Behavioral Sciences, typically over a four-year period.

The first two years of the program emphasize research and statistical methods complemented by theoretical and process-oriented coursework relevant to Social and Behavioral Sciences. During the final two years of the program, students are engaged in their dissertation research while given the freedom to further diversify their training by choosing electives. After qualifying examinations, students will also engage in teaching practicum (to be determined by the student's departmental advisor).

### Social and Behavioral Sciences PhD REquired courses

SBHS 601	Social and Behavioral Theory	3
SBHS 610	Public Health Research Methods	3
SBHS 611	Community Assessment	3
SBHS 612	Intervention Design	3
SBHS 613	Public Health Program Evaluatn	3
SBHS 660	Survey Research Methods	3
SBHS 701	Public Health Grant Writing	3
SBHS 710	Adv Evaluation Public Health	3
SBHS Course - Research Translation for Health		3
SBHS 712	Qualitative Research Methods	3
SBHS 796	Graduate Seminar	1
BIOS 601	Applied Biostatistics 1	3
BIOS 602	Applied Biostatistics Lab	1
BIOS 603	Applied Biostatistics 2	3

BIOS 604	Applied Biostatistics 3	3
EPID 601	Public Health Epidemiology	3
C&I 789	Teaching In Higher Education	3
BMS 700	Scientific Integrity	1
BMS 720	Scientific Writing	2
Total Hours		50

## Electives

Students will complete a minimum of twelve credit hours of electives during their Ph.D. program. These may be selected from among the department's, School of Public Health's, or university's many course offerings. These courses will be discussed and approved with the faculty advisor.

## Comprehensive Exams

The Qualifying Examination is the capstone experience for Ph.D. program coursework. Successful completion of the examination signifies competence in the field of public health sciences and indicates readiness to engage in independent research. The Qualifying Examination consists of both a written and oral component. Qualifying exams should not include testing on content of the dissertation. The oral defense of the dissertation proposal will serve that purpose. The Qualifying Examination is planned and administered by the five-member dissertation committee, under the direction of the committee chairperson. If necessary and at the discretion of the Program Director, another faculty member may be appointed to serve on the committee.

The oral portion of the exam may not be attempted until the written component is completed and must be attempted within two academic weeks of the written component. Students are expected to take the qualifying exam during the summer sessions between their fourth and fifth academic semesters. However, the written component must be completed no later than the second week in July. Students are not eligible to begin their dissertation or enroll in dissertation hours until they have successfully completed the Qualifying Examination.

## Research

Students will participate in research rotations during their first year, meeting and working with research faculty with similar interests in order to develop mentorships for dissertation research. A total of fifty-three credit hours of rotations and dissertation research will be completed during the program.

## The Dissertation Proposal, Defense, and Approval

Although students may choose to pursue a traditional dissertation format, the majority of Ph.D. students format their dissertation using the Three Journal Article Format (JAF). The decision of which format to use is something that students should discuss with chairperson of their dissertation committee. As a reminder, students will not be allowed to defend their dissertations until they have at least one first-authored publication in any form of acceptance, based on their Ph.D. dissertation, in a peer-reviewed journal by the time of the dissertation defense. Note: This required publication does not necessarily need to be one of the three articles generated through the JAF dissertation format.

## Suggested plan of study

### First Year

Fall	Hours Spring	Hours Summer	Hours
EPID 601	3 BIOS 603	3 PUBH 797	1
BIOS 601	3 SBHS 660	3 BMS 720	2
BIOS 602	1 SBHS 611	3 C&I 789	3
SBHS 610	3 SBHS 701	3	
SBHS 601	3 PUBH 797	2	
PUBH 797	1		
BMS 700	1		
	<b>15</b>	<b>14</b>	<b>6</b>

### Second Year

Fall	Hours Spring	Hours Summer	Hours
SBHS 612	3 SBHS 710	3 PUBH 797	9
PUBH 796	1 SBHS 712	3	
BIOS 604	3 PUBH 797	3	
SBHS 613	3 Elective	3	
SBHS 660	3 Qualifying Exam		
	<b>13</b>	<b>12</b>	<b>9</b>

**Third Year**

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

**Fourth Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
PUBH 796	1 PUBH 797	10
PUBH 797	6 Dissertation Defense	
Elective	3	
	<b>10</b>	<b>10</b>

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Total credit hours: 117

# Health Sciences School of Dentistry

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## Degrees Offered

- D.D.S. in Dentistry
- M.S. in Dental Specialties (Endodontics, Orthodontics, and Prosthodontics)
- M.S. in Dental Hygiene
- B.S. in Dental Hygiene

## Historical Background

The School of Dentistry was established by an act of the West Virginia Legislature on March 9, 1951, and the first class was enrolled in September 1957. A class of twenty-three students graduated in 1961, receiving the first dental degrees awarded in West Virginia. In September 1961, the first two students were enrolled in the school's baccalaureate degree program in dental hygiene and graduated in 1965.

## Mission

It is the mission of the West Virginia University School of Dentistry to promote a diverse and dynamic learning environment that addresses the present and future oral health needs of the citizens of West Virginia and beyond by providing an oral health center committed to excellence and innovation in education, research, patient care, service, and technology.

The WVU School of Dentistry offers degrees of doctor of dental surgery, master of science in dental specialties and dental hygiene, and bachelor of science in dental hygiene. The Department of Oral and Maxillofacial Surgery offers a four-year residency program, a one-year internship, and a one-year general practice residency program. Programs leading to the master of science and doctor of philosophy degrees are available in the associated basic sciences, public health, and business. Continuing education courses for dentists and auxiliaries are offered throughout the year on a wide variety of dental topics.

## Accreditation

All programs are accredited by the Commission on Dental Accreditation of the American Dental Association.

## Administration

The dean is responsible for implementing the established policies of the School of Dentistry, the Health Sciences Center, and the University. The dean of the School of Dentistry reports to the chancellor for Health Sciences.

## Dental Clinic

Clinical training and experience constitute a major part of the curriculum for dental and dental hygiene students. Facilities for dental and dental hygiene students include over seventy-five treatment cubicles and all necessary related laboratories. Students treat their assigned patients under close supervision of faculty and receive practical experience while rendering service to thousands of patients annually.

## Books and Instruments

Dental and dental hygiene students are required to obtain necessary textbooks for the scheduled courses and special instruments for use in the various laboratories and clinics. Lists of approved instruments and books will be provided at the time of registration, and these supplies will be made available through University services. Official authorization is essential in the purchase of all instruments and books used in dental courses. All dental students must maintain a library of required textbooks through graduation. Used instruments and equipment are not acceptable.

## Organizations

*American Student Dental Association.* Pre-doctoral and advanced education dental students are eligible to become members of the American Student Dental Association. Membership provides for student membership in the American Dental Association.

*American Association of Dental Research.* All dental and auxiliary students, including advanced education students, are eligible to become student members of the American Association of Dental Research during the period of enrollment in the School of Dentistry.

*American Dental Education Association.* All dental and auxiliary students, including advanced education students, are eligible to become student members of the American Dental Education Association during the period of enrollment in the School of Dentistry.

*American Association of Women Dentists.* The objectives and purposes of the West Virginia University School of Dentistry Chapter of the American Association of Women Dentists are to offer opportunities for personal growth through association with women in the dental profession, support the goals of the American Association of Women Dentists, aid in the advancement of women in dentistry, promote professional support and cooperation among its members, and promote the fundamentals of good oral health.

*Academy of Dentistry for Persons with Disabilities.* The Academy of Dentistry for Persons with Disabilities is an international organization for dental students and dental hygiene students interested in management and treatment of special care patients. Community services are provided by assisting with Special Olympics and presenting disability awareness programs to area grade schools. Guest speakers are sponsored on topics such as: "Managing the Hearing Impaired Patient in the Dental Office," "Use of Restraint in Treating Patients with Disabilities," and "Child Abuse and Neglect in Special Needs Children."

*WVU School of Dentistry Alumni Association.* In a series of meetings held during May 1961, the first senior class of the School of Dentistry established the WVU School of Dentistry Alumni Association. The association promotes the educational program of the School of Dentistry. Full membership is extended to all graduates of the school, and associate memberships are available to others interested in the aims of the association.

*Omicron Kappa Upsilon.* On February 6, 1961, the Alpha Beta Chapter of Omicron Kappa Upsilon, national honorary dental society, was chartered at the School of Dentistry. Student membership is limited to twelve percent of each senior class. Candidates are from the academically superior twenty percent.

*Dental Fraternity.* Chapter of Delta Sigma Delta International Dental Fraternity.

*Student American Dental Hygienists' Association.* Dental hygiene students are eligible for membership in the official organization representing the dental hygiene profession.

*Sigma Phi Alpha.* The Alpha Xi chapter of the national dental hygiene honorary society, Sigma Phi Alpha, was established on March 19, 1968. Student membership is limited to ten percent of each graduating class. Candidates are selected on the basis of scholarship, character, and leadership potential as a dental hygienist.

## Faculty

### Dean

- David A. Felton - D.D.S., M.S

### Associate Deans

- Richard J. Crout - D.D.S., M.S., Ph.D.  
Research
- Christina B. DeBiase - Ed.D, M.A.  
Academic & Postdoctoral Affairs
- Shelia S. Price - D.D.S., Ed.D  
Admissions, Recruitment and Access
- Jack S. Yorty - D.D.S., M.A.  
Clinical Education and Patient Care

### Assistant Dean

- Robert L. Wanker - D.D.S.  
Student and Alumni Affairs

### Professors emeriti

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

#### Dental Hygiene

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

### **Clinical assistant professors**

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

## Dental Practice and Rural Health

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

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

## Dental Practice and Rural Health

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

**Professors**

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

Oral and Maxillofacial Surgery, Hospital Dentistry

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

### **Clinical professors**

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

### **Clinical associate professors**

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

Oral and Maxillofacial Surgery, Hospital Dentistry

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

### **Adjunct professor**

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

### **Associate professors**

- Eros S. Chaves - D.M.D. (U. Pitt.) MS (U of Michigan)  
Periodontics
- Geoffrey R. Cunningham - D.D.S., MS (WVU)  
Restorative Dentistry
- Cathryn Frere - M.S. (U.S.C.)  
Dental Hygiene
- Chris Martin - D.D.S., MS (WVU)  
Orthodontics
- Elliot Shulman - D.D.S., MS (Loma Linda U)  
Pediatric Dentistry
- Louise Tupta Veselicky - D.D.S., MS (WVU), MDS (U of Pitt)  
Periodontics

### **Interim Chair**

- Bryan Dye - D.D.S. (WVU), MS (UTSA Health Science Center)  
Restorative Dentistry

### **Interim Director**

- Amy Funk - R.D.H., B.S., M.S. (WVU)  
Dental Hygiene

### **Assistant professors**

- Thomas N. Brindock - D.M.D., MPH (U of Pitt)  
Restorative Dentistry
- Ashlee Charnoplosky - MS (WVU)  
Dental Hygiene
- M. Suann Gaydos - B.S., M.S. (WVU)  
Dental Hygiene
- Lora D. Graves - D.D.S. (WVU)  
Restorative Dentistry
- Frank Mastalerz, Jr. - D.D.S. (WVU)  
Restorative Dentistry
- Michael Meador - D.D.S. (WVU)  
Restorative Dentistry
- Shelia Ann Scumaci - BS, MBA (WVU)  
Dental Hygiene
- Alcinda Trickett Shockey - MA (WVU)  
Dental Hygiene
- Bei Wu - PhD. (U Mass)  
Dental Practice and Rural Health
- Thomas N. Brindock - D.M.D. (U of Pitt)  
Restorative Dentistry

- Ashlee Charnoplosky - BSDH, MS (WVU)  
Dental Hygiene

### **Associate professors emeriti**

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

### **Clinical instructors**

- Katie Kilcollin - D.D.S. (WVU)  
Dental Practice and Rural Health
- Zachary Law - D.D.S. (WVU)  
Dental Practice and Rural Health
- Angela London - D.D.S. (WVU)  
Pediatric Dentistry
- Valerie Perrine - D.D.S. (WVU)  
Dental Practice and Rural Health

### **Co-chairs**

- Richard L. Meckstroth - D.D.S. (Loma Linda U.)  
Dental Practice and Rural Health
- Peter W. Ngan - D.M.D. (Harvard)  
Orthodontics
- Thomas F. Razmus - D.D.S. (U. Mich), MS (U of Texas Health Science Center)  
Diagnostic Sciences
- Bryan D. Weaver - D.D.S., M.D. (WVU)  
Oral and Maxillofacial Surgery, Hospital Dentistry

### **Adjunct Professor Emeritus**

- Robert L. Murphy - M.S. (Cath. U. AM.)  
Periodontics

### **Instructor**

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

## **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 statutes and ordinances, both on and off campus, refrain from behavior incompatible with the responsibilities of the dental profession, and follow the specific rules of conduct established in West Virginia University Board of Governors Policy #10.

In all disciplinary proceedings, students are considered innocent until allegations with regard to violations of this policy have been established by clear and convincing evidence.

#### II. Professional Performance Standards

##### A. Personal Appearance:

Students are required at all times to be in compliance with the requirements of dress and appearance contained in the document entitled *WVU School of Dentistry Policy on Professional Appearance* (Appendix A).

##### B. Personal Behavior/Conduct:

Students are required at all times to be in compliance with the *Student Code of Academic and Professional Behavior* (Appendix B).

#### III. Dental Hygiene Academic Policies

At mid-term and the conclusion of every semester, the Dental Hygiene Committee on Academic and Professional Standards reviews the status of every student in the program. The committee may also convene more frequently as any Professional/Academic situations arise. The Committee recommends promotion, probation, suspension, or dismissal to the dean of the School of Dentistry.

If students fulfill all course requirements, meet all professional standards, and have the necessary grade point averages, promotion is unconditional.

A. All students enrolled in the Dental Hygiene Program must maintain full-time status and meet with the Director prior to making any changes to their prescribed schedule. Alterations in your schedule could adversely affect your ability to meet Program expectations and could result in sanctions up to and including dismissal.

B. Students must maintain cumulative and dental hygiene/science grade point averages of 2.25 (2.5 for the incoming freshman class, effective fall 2011) or higher. The dental hygiene/science grade point average is based upon the average of grades earned in all attempts of the following courses, or their equivalent:

C. A grade of F in a dental hygiene/science course or failure to attain a 2.25 (2.5 for the incoming freshman class, fall 2011) cumulative or dental hygiene/science grade point average in any semester will result in placing a student on probation.

D. Students on probation who do not raise their cumulative or dental hygiene/science grade point average to 2.25 (2.5 for the incoming freshman class, fall 2011) or better the following semester may be dismissed from the Dental Hygiene program.

E. A student who receives a grade of D, F, W, or WU in a required dental hygiene/science course must repeat that course. These courses may only be repeated ONCE. Failure to earn a grade of C or better on the student's second attempt will result in dismissal from the Dental Hygiene program.

F. A student may repeat only TWO dental hygiene/science courses throughout the Dental Hygiene curriculum. A third D or F in a dental hygiene/science course may require the student to repeat the year as a full-time student as determined by the Academic and Professional Standards Committee. Four or more grades of D or F will result in dismissal from the Dental Hygiene program, and the student will be ineligible for readmission to the Program.

G. The Dental Hygiene Program will acknowledge West Virginia University's D/F repeat policy in relationship to determining the overall grade point average, hours attempted and hours earned. The Program will utilize both grades (attempts) to determine the dental hygiene/science grade point average. Rectifying one or more grades of D, F, W, or WU through the D/F repeat policy does not negate recognizing the original grade (1<sup>st</sup> attempt) by the Program in determining the sanctions associated with the number of courses.

H. Students repeating the year are required to repeat any dental hygiene courses in which they were enrolled that year and earned a grade of C or below. The Academic and Professional Standards Committee may also prescribe any additional course to enhance the student's academic progress and psycho-motor skills.

I. Prior to entrance into the fall semester of the sophomore (2<sup>nd</sup>) year, a student must have successfully completed Chemistry 111/112.

J. Prior to entrance into the major, a student must pass all Basic Science courses required in the first two years of the curriculum.

K. Dental hygiene/science pre-requisite courses in which students earn a grade of D, F, W, or WU must be repeated prior to the student's progression to the next course in that sequence and at the discretion of the Academic and Professional Standards Committee, which may result in repeating the year.

L. The Division of Dental Hygiene reserves the right to recommend imposition or academic sanctions, to require remedial work, or to withhold the opportunity to take one or more licensing exams. This policy would affect any student who may have met formal curriculum requirements but who lacks the professional skills and/or behavior and conduct considered necessary for the baccalaureate degree in Dental Hygiene.

M. Students recommended for dismissal have the opportunity for due process by writing to the Academic and Professional Standards Committee within five working days of receipt of the written notice and may be asked to meet in person with the recommending Committee. (See Academic Sanctions: Procedures and Appeals in the WVU Student Handbook.) The dean may accept, modify, or reject the Academic and Professional Standards Committee's recommendation. The dean's decision is final.

N. Successful completion of the National Dental Hygiene Board Examination is a requirement for graduation. Failure to produce evidence of taking this examination before the first day of the spring semester of the senior year will result in academic sanctions up to and including repeating the year or dismissal.

O. All students are also required to take a clinical board for licensure prior to graduation.

P. The School of Dentistry Division of Dental Hygiene reserves the right to declare a student ineligible for any licensure examination (national, regional, or state boards).

## **Faculty**

### **Interim Director**

- Amy D. Funk - MSDH

### **Associate professor**

- Cathryn L. Frere - BSDH, MSEd

### **Assistant professors**

- Ashlee B. Charnoplosky - BSDH, MSDH
- M. Suann Gaydos - BSDH, MSDH
- Lisa E. Lisauckis - BSDH, MSDH

- Sheila A. Scumaci - BSDH, MBA
- Alcinda K. T. Shockey - BSDH, MA, DHSc

### Clinical instructor

- Kristafer L. Adkins - BSDH, MSDH

#### Advanced Standing Admission (Sophomore Entry)

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

#### Required Math and Science Courses:

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

### Major in Dental Hygiene Requirements

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

DTHY 100	Health Care Terminology	1
DTHY 101	Introduction to Dental Hygiene	2
DTHY 185	Oral Anatomy	2
DTHY 186	Dental Anatomy	2
DTHY 205	Theory/Practice of Prevention	2
DTHY 210	Dental Radiology	2
DTHY 211	Dental Radiology	1
DTHY 220	Dental Nursing Techniques	2
DTHY 225	Dental Hygiene Techniques	4
DTHY 226	Clinical Dental Hygiene	1
DTHY 300	Anesthesia for Dental Hygiene	1
DTHY 350	Public Health	2
DTHY 351	Dental Health Education	3
DTHY 360	Dental Materials	3
DTHY 361	Expanded Functions	2

DTHY 363	Periodontics 1	1
DTHY 364	Periodontics 2	2
DTHY 366	Technical Expression/Dentl Lit	1
DTHY 370	Dental Hygiene Clinical Methds	2
DTHY 372	Clinical Dental Hygiene 1	2
DTHY 374	Clinical Dental Hygiene 2	3
DTHY 378	Dental Hyg Teachng Methd	2
DTHY 402	Dental Hygiene Ethics/Practice	1
DTHY 405	Adv Clinical Dental Hygiene 1	4
DTHY 406	Adv Clin Dentl Hygiene 2	3,4
DTHY 407	Adv Dental Hygiene Methds 2	2
DTHY 440	Senior Integration Seminar	1
DTHY 445	Applied Pharmacology	1
DTHY 450	Dental Health Education 2	2
DTHY 451	Dental Health Education 3	2
DTHY 478	Clinical Evaluation	1
DTHY 491	Prof Fld Expr:Rural Health	4
<b>Dental/Biomedical Science Courses</b>		
HN&F 171	Introduction to Nutrition	3
NBAN 205	Introduction to Human Anatomy	3
NBAN 206	Human Anatomy Laboratory	1
NBAN 309	Oral Histology	2
MICB 200	Medical Microbiology	3
PATH 300	Introduction to Pathology	3
PATH 302	Oral Pathology	3
PCOL 260	Pharmacology	3
PSIO 241	Elementary Physiology	4
<b>Dental Hygiene Electives</b>		
DTHY 490	Teaching Practicum	1-3
DTHY 493@		
Total Hours		90-93

## Suggested Plan of Study

### First Year

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

GEC Objective (Select from objectives 3, 5, 8, or 9)*	3		
	<b>19</b>	<b>19</b>	<b>6</b>
<b>Second Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
DTHY 185	2 DTHY 186	2 DTHY 226	1
DTHY 205	2 DTHY 211	1 PCOL 260 (Web)	3
DTHY 210	2 DTHY 225	4	
NBAN 207	4 ENGL 102*	3	
MICB 200	3 SOCA 101	3	
PSYC 241*	3 NBAN 309	2	
	<b>16</b>	<b>15</b>	<b>4</b>
<b>Third Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours Summer</b>	<b>Hours</b>
DTHY 350	2 DTHY 300	1 DTHY 491	1-18
DTHY 360	3 DTHY 351	3	
DTHY 363	1 DTHY 361	2	
DTHY 366	1 DTHY 364	2	
DTHY 370	2 DTHY 374	3	
DTHY 372	2 DTHY 378	2	
PATH 300	3 PATH 302	3	
GEC Objective (Select from objectives 3, 5, 8, or 9)*	3		
	<b>17</b>	<b>16</b>	<b>1-18</b>
<b>Fourth Year</b>			
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>	
DTHY 402	1 DTHY 406	3,4	
DTHY 405	4 DTHY 407	2	
DTHY 445	1 DTHY 440	1	
DTHY 450	2 DTHY 451	2	
DTHY 478	1 Select one of the following electives:	2	
Select one of the following electives:	1 DTHY 490		
DTHY 490	DTHY 492		
DTHY 492	DTHY 495		
DTHY 495	GEC Objective (Select from objectives 3, 5, 8, or 9)*	3	
GEC Objective (Select from objectives 3, 5, 8, or 9)*	3		
	<b>13</b>	<b>13-14</b>	

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Total credit hours: 139-157

\* Courses subject to varied sequencing.

e-mail: afunk@hsc.wvu.edu

## Degree Offered

- Master of Science

The School of Dentistry and its Division of Dental Hygiene offer a program of advanced study leading to the degree of master of science. This program requires a minimum of thirty-eight semester hours through full-time or part-time enrollment in the School of Dentistry. It is designed to qualify dental hygienists for careers in teaching, administration, research, and management.

Inquiries concerning this program should be directed to the Office of Academic and Postdoctoral Affairs, School of Dentistry. Applications should be filed by July 1 for fall admission and by October 15 for spring enrollment.

## Degree Requirements — Master of Science Degree

- Complete a minimum of thirty-eight semester credit hours: twenty-six required credit hours and twelve credit hours in an elective area(s) of dental hygiene specialization. Two elective areas of specialization are offered. These areas are teaching/administration and special patient care. The student chooses one area of study. Courses within these specializations are taught by a number of schools or colleges within the University. An individualized program will be devised for each student.
- Complete a maximum of six hours in research (part of the twenty-eight hours required by the program) leading to an acceptable thesis.
- Oral defense of the thesis is required.
- Student teaching in the undergraduate clinic a minimum of one semester.

## GPA

In order to earn a master's degree in dental hygiene students must also meet the following:

- Achieve of a 3.0 GPA or an overall academic average of at least a B in all work attempted in the master's program. A grade of C or below in one course will require a faculty review of the student's progress. A second C or below will result in dismissal from the program. A student may repeat only one course one time to bring the GPA up to the 3.0 requirement.
- Remove all conditions, deficiencies, and incomplete grades from the student's transcript. Credit hours for courses with a grade lower than C do not count toward degree requirements.

C&I 689	Cultural Diversity -Classroom	3
DTHY 678	Dental Hygiene Teaching Method	2
DENT 687	Research Methods	1
PUBH 601	Intro Community/Public Health	3
DTHY 679	Clinical Evaluation	2
DTHY 680	Dental Hygiene Sem/Practice 1	3
DTHY 690	Teaching Practicum	1
DTHY 697	Research	6

**Elective area(s) of dental hygiene specialization - choose from the following:** 17

DTHY 691 Advanced Topics Course

Business & Economics courses

Educational Psychology courses

Medicine (Community Health Promotion)

Multidisciplinary Students Program

Human Resources and Education

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Total Hours 38

- \* Courses taught by the schools of:  
 Business and Economics  
 Educational Psychology  
 Medicine (Community Health Promotion) and the  
 Multidisciplinary Students Program  
 Human Resources and Education

## Doctor of Dental Surgery

### Doctor of Dental Surgery

The WVU School of Dentistry is dedicated to fostering a humanistic learning environment and preparing students to meet the oral health needs of a diverse society. A dental degree offers a variety of career options including private practice, teaching, research, and public health dentistry. In addition to the Doctor of Dental Surgery (DDS) degree, specialty practice areas may be pursued by advanced training. Oral health professionals are integral to

the health care team. Emerging research indicates oral systemic health linkages and profound oral health disparities. The School of Dentistry engages students in a plethora of educational research experiences to identify reasons for these disparities and to develop culturally sensitive and interventions.

Due to the large number of applications received each year and limited class size, qualified West Virginia residents receive priority consideration, and outstanding nonresident applicants are also considered. Residency status is determined by the WVU Office of Admission in accordance to the Higher Education Policy Commission Rules and Policies, Series 25. Because the dental admissions committee utilizes a holistic selection process, it does not set absolute minimum Grade Point Averages (GPA) and Dental Admission Test (DAT) scores. Competition for admission has elevated the academic profile of admitted candidates to a rather high plateau. Nonresident applicants generally have earned a GPA of 3.75 or above and DAT scores of 19 or above. The School of Dentistry recognizes the importance of diversity in fulfilling its mission and encourages individuals from diverse backgrounds to apply.

## Admission Requirements

Admission to the WVU School of Dentistry Doctor of Dental Surgery (D.D.S.) program is contingent upon satisfactory completion of all admission requirements, appropriate completion of all application instructions, submission of all transcripts from each college attended, submission of Dental Admission Test (DAT) scores, a personal interview, satisfactory completion of all courses taken before the time of registration in dental school (includes courses taken during the summer session immediately preceding initial enrollment), and all other requirements as set forth by the dental admission committee. Detailed information is available on the dental admissions webpage: <http://dentistry.wvu.edu/admissions>.

Applications should be submitted in the summer or early fall of the year prior to anticipated enrollment. Candidates for the D.D.S. degree must have abilities and skills of five varieties including observation; communication; motor; intellectual; conceptual; integrative; quantitative; behavioral and social. Technological compensation can be made for some disabilities in certain areas, but a candidate should be able to perform in a reasonably independent manner. (Refer to the School of Dentistry website for additional details about technical standards).

Applicants for admission must also present evidence of having successfully completed at least three years of college course work in U.S. or Canadian colleges or universities. To be considered for admission, applicants must have completed a minimum of 90 semester credit hours at the time of application. The prerequisites for admission include:

### Courses

English composition and rhetoric, or equivalent	6
Zoology or Biology (with laboratory)	8
Inorganic Chemistry (with laboratory)	8
Organic Chemistry (with laboratory)	8
Physics (with laboratory)	8
<b>Total Hours</b>	<b>38</b>

Completion of courses in anatomy and physiology, microbiology, embryology/developmental biology, biochemistry, physiology, cellular and molecular biology, genetics and psychology are strongly recommended. In addition, courses in the humanities and the social sciences are recommended for a well-rounded intellectual background for the study and practice of dentistry. The School of Dentistry participates in the Associated American Dental Schools Application Service (AADSAS). All applications must be submitted online via AADSAS at <http://www.adea.org>. The AADSAS application becomes available in the beginning of June each year. November 1st is the deadline for submission of a completed AADSAS application for the West Virginia University School of Dentistry. Because the Dental Admissions Committee uses a rolling admissions process and begins admitting highly qualified individuals on December 1, applicants to the DDS program are strongly encouraged to apply early via the AADSAS. Each applicant is required to have letters of recommendation submitted to the AADSAS. Specific information regarding letter of recommendation requirements is available on the School of Dentistry website. Satisfactory completion of the Dental Admission Test (DAT) is required. The test is given at testing centers throughout the U.S. and in Canada. DAT registration is available on the American Dental Association (ADA) website [www.ada.org](http://www.ada.org) (<http://www.ada.org>). DAT scores must be submitted by November 1st of the year preceding the date of anticipated matriculation. The Dental Admission Committee evaluates all AADSAS applications and invites selected applicants to submit a secondary (WVU) application. Applicants who are West Virginia residents are usually interviewed, although the admissions committee may elect not to interview an unrealistic applicant. Selected non-resident applicants will also be invited for an interview depending on their qualifications. Individuals who receive provisional acceptance must obtain criminal background clearance and provide documentation of the specified immunizations prior to matriculation.

### International Dental Graduate Guidelines

International dental graduates who wish to apply to the WVU School of Dentistry Doctor of Dental Surgery (D.D.S.) program as a student in the first-year class must:

Submit an application through the Associated American Dental Schools Application Service (AADSAS) by November 1. For additional information, please refer to the general admissions requirements, which include completion of at least 90 semester credit hours at a U.S. or Canadian College or University prior to application submission.

1. Provide documentation of a D.D.S. or D.M.D. degree (or equivalent) from a non-U.S. dental school.

2. Demonstrate proficiency in the English language as demonstrated by performance on the TEST of English as a Foreign Language (TOEFL) - paper-based minimum score of 500 or computer-based minimum score of 173 or internet-based test minimum score of 61 - and completion of English 1 and English 2 (Or equivalent) at an accredited U.S. college or university earning grade of C or above.
3. Provide three letters of recommendation by college instructors who are familiar with the applicant, excluding family members.
4. Submit Dental Admission Test (DAT) scores showing at least average competence in the various subsections of the test - 17 minimum score, or provide evidence of having successfully passed the National Board Dental Examination, Part I, within five years preceding the application.
5. Have all previous coursework from non-U.S. colleges evaluated by Educational Credential Evaluators (ECE) or the World Educational Services (WES). An official or certified copy of the evaluation must be provided to WVU. The applicant is responsible for payment of fees for this service.
6. Provide official transcripts from all schools attended in the original language of issue.

If granted an interview, applicants must present to the school for personal interview with the admissions committee. Applicants who are invited for an interview must complete the secondary (institution) application for admission and submit the associated fees. The transcripts of international dental graduates who are approved for an interview will be evaluated by the WVU Office of Admission, International unit. West Virginia residents will be given priority consideration.

## **Degree Requirements**

Candidates for graduation are recommended by the faculty of the School of Dentistry to the Board of Governors for approval and for the conferring of the degree of Doctor of Dental Surgery (D.D.S.), provided they fully meet the following conditions:

- Shall have been in regular attendance in the School of Dentistry for the academic period prescribed for each student.
- Shall have completed the prescribed curriculum for each of the academic sessions.
- Shall have shown good moral character and shall have demonstrated a sense of professional responsibility in the performance of all assignments as a student.
- Shall have met in full all financial obligations to the University.

In view of public and professional responsibilities, the faculty of each of the professional schools of WVU has the authority to recommend to the president of the University the removal of any student from its rolls whenever, by formal decision reduced to writing, the faculty finds that the student is unfit to meet the qualifications and responsibilities of the profession.

## **Curriculum**

The required courses in the prescribed curriculum are presented throughout eight semesters and three summer sessions. During this time, all students are enrolled in courses designed primarily to prepare them to be competent in the general practice of dentistry. Throughout the program, overall student progress is continually monitored by the Academic and Professional Standards Committee. Students must remain full-time and must satisfactorily complete all courses for which they have registered. Additional requirements include participation in mock board examinations and a minimum of six weeks of remote-site training by fourth-year students.

## **Promotion**

At the end of each grading period (i.e., each academic semester or summer session) all students will have their individual progress reviewed by the Academic and Professional Standards Committee convened for their class. The progress of each student in the curriculum is governed by minimum acceptable performance standards upon which the committee bases its decisions.

The standards consist of three categories: scholastic performance, clinic performance and utilization, and professional development. Scholastic performance requires that each student must earn a specified grade point average to be promoted to the succeeding year. Clinic performance and utilization requires that each student must utilize a specified percentage of available clinic time to demonstrate steady progress toward attainment of clinical competency. Professional development is an important component of the study of dentistry. The criteria for determining this development are based on the student's personal behavior and patient management skills.

These performance standards are explained in detail in the document entitled WVU School of Dentistry Academic and Professional Standards. All first-year students are presented this document prior to entering school and are required to acknowledge by their signature that they have read and accepted the conditions set by the material contained therein. At the completion of each academic term, following the Committee on Academic and Professional Standards meetings, the status of each student is reported to the dean. The committee may recommend that a student be promoted unconditionally, be promoted on probation, be allowed to make up deficiencies, be given the opportunity to repeat the year, or be suspended or dismissed from further studies in the School of Dentistry. Final disposition in each case is the prerogative of the Dean of the School of Dentistry.

## **Endodontics**

The Division of Dental Hygiene and the Departments of Endodontics, Orthodontics, and Restorative Dentistry offer programs of advanced study leading to the degree of master of science. The department of oral and maxillofacial surgery offers one four-year residency. A general practice residency is also

an option. Continuing education courses are offered throughout the year. Detailed information concerning admission requirements, courses of study, etc., may be obtained from:

the Office of the Associate Dean for Academic and Postdoctoral Affairs  
WVU School of Dentistry  
P.O. Box 9402  
Morgantown, WV 26506

## Faculty

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

## Degree Offered

- Master of Science

## General Information

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 twenty-four 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.

A stipend plus tuition waiver will be provided for graduate students in Endodontics at the end of the first year for the Summer Session and Fall/Spring Semesters. Special fees are not covered by the tuition waiver. You must pay special fees each term/semester.

Inquiries concerning this program should be directed to the Office of 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 are completed.

This program is accredited by the Commission on Dental Accreditation of the American Dental Association. For details about the faculty, publications, and alumni information, please visit the Department website at <http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Master-of-Science-in-Endodontics>.

## Program Goals

- Provide the education and training necessary for graduate dentists to practice in the specialty of Endodontics.
- Provide the basis for a specialist in Endodontics to achieve Board Certification in Endodontics.

## Graduate Courses

**Advanced Oral Surgery:** Advanced study of therapeutics, hospital protocol, and surgical aspects of oral surgery involving lectures, seminars, demonstrations, and clinical applications.

**Advanced Topics:** Biomedical Sciences Module Series: The Biomedical Sciences Module series has been designed as an online course for students enrolled in the advanced education programs in the WVU School of Dentistry. Four modules are planned. They include pharmacology, physiology/biochemistry, anatomy/histology/embryology, and microbiology/immunology/genetics.

The content of these modules focuses on the clinical application of each of the biomedical sciences to dentistry. Cases will be used to integrate theory and practice. Students will attend a virtual classroom by viewing online lectures, reading prescribed materials, and interacting with faculty and classmates through an online discussion forum.

**Advanced Topics:** Investigation of advanced topics not covered in regularly scheduled courses.

**Applied Biostatistics for Health:** Statistical models, distributions, probability, random variables, tests of hypotheses, confident intervals, regression, correlation, transformations, F and Chi-square distributions, analysis of variance and multiple comparisons.

**Clinical Endodontics:** Graduate of an accredited dental school and admission to the Advanced Education Program in Endodontics or consent. Clinical endodontic practice in the areas of: ordinary endodontic cases, complex endodontic cases, hemisection, root amputation, replantation, transplantation, endodontic implantation, vital pulp therapy, apexification, and bleaching.

**Endodontic Theory:** Provides seminar discussions in the topics of: basic endodontic techniques, advanced endodontic techniques, endodontic literature review, case presentation, and advanced endodontic theory.

**Research:** Research activities leading to a thesis, problem report, research paper, or equivalent scholarly project.

**Special Studies in Oral Pathology:** Advanced study of local or systemic disease processes affecting oral structures through seminars.

**Teaching Practicum:** Supervised practice in college teaching of dentistry.

## Orthodontics

The Division of Dental Hygiene and the Departments of Endodontics, Orthodontics, and Restorative Dentistry offer programs of advanced study leading to the degree of master of science. The department of oral and maxillofacial surgery offers one four-year residency. A general practice residency is also an option. Continuing education courses are offered throughout the year. Detailed information concerning admission requirements, courses of study, etc., may be obtained from:

the Office of the Associate Dean for Academic and Postdoctoral Affairs  
WVU School of Dentistry  
P.O. Box 9402  
Morgantown, WV 26506

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## Faculty

### Chair

- Peter Ngan - D.M.D.

## Degree Offered

- Master of Science

## General Information

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 thirty-four months (three academic years and two summers) of full-time residency in the School of Dentistry. It is designed to qualify dentists for careers in orthodontic clinical practice, teaching, and research.

A stipend plus tuition waiver will be provided for graduate students in Orthodontics at the end of the second year for summer session and fall/spring semesters. Special fees are not covered by the tuition waiver. You must pay special fees each term/semester.

Inquiries concerning this program should be directed to the Office of 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.

This program is accredited by the Commission on Dental Accreditation of the American Dental Association. For details about the faculty, publications, and alumni information, please visit the Department website at <http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Master-of-Science-in-Orthodontics>.

## Program Goals

The postgraduate program is designed to develop skilled practitioners who can easily transition into and manage a busy orthodontic practice. The goal of this program is to teach a variety of treatment mechanics that are scientifically valid, and let the residents make choices based on treatment needed on a case-by-case basis. Clinical experiences are diverse, including cleft lip and palate and orthognathic surgery cases. An original master's thesis project is required and is designed to obtain results suitable for publication in a reputable dental journal. The curriculum focuses on didactic and clinical materials to prepare residents in taking the American Board of Orthodontics (ABO) Examinations. Classes pertaining to the written board are given throughout the three-year program. It is a requirement for every third year resident to take and pass the written component of the ABO, and all residents are encouraged to complete the board certification process.

## Graduate Courses

**Advanced Orthodontic Mechanics:** A continuation of the previous course involving more difficult case types and introducing more sophisticated appliance therapy.

**Advanced Topics:** Investigation of advanced topics not covered in regularly scheduled courses.

**Advanced Topics:** Biomedical Sciences Module Series: The Biomedical Sciences Module series has been designed as an online course for students enrolled in the advanced education programs in the WVU School of Dentistry. Four modules are planned. They include pharmacology, physiology/biochemistry, anatomy/histology/embryology, and microbiology/immunology/genetics.

The content of these modules focuses on the clinical application of each of the biomedical sciences of dentistry. Cases will be used to integrate theory and practice. Students will attend a virtual classroom by viewing online lectures, reading prescribed materials, and interacting with faculty and classmates through an online discussion forum.

**Applied Biostatistics for Health:** Statistical models, distributions, probability, random variables, tests of hypotheses, confident intervals, regression, correlation, transformations, F and Chi-square distributions, analysis of variance, and multiple comparisons.

**Biomechanics:** Design and function of the teeth and their surrounding structures, and response of these tissues to orthodontic procedures.

**Cephalometrics:** Use of radiographic cephalometry in studying growth of the human face, analysis of dentofacial malformations, and evaluation of orthodontic treatment.

**Craniofacial Growth and Maturation:** The current concepts of craniofacial growth and maturation are presented and integrated for application to clinical problems.

**Directed Study:** Directed study, reading, and/or research.

**Graduate Seminar:** It is anticipated that each graduate student will present at least one seminar to the assembled faculty and graduate student body of program.

**Growth and Development:** Seminar course on normal and abnormal growth of the human head and its application to orthodontics.

**Independent Study:** Faculty supervised study of topics not available through regular course offerings.

**Orthodontic Clinic:** Clinical treatment of selected patients.

**Orthodontic Diagnosis:** Seminar class on technique of patient examination, acquiring diagnostic records.

**Orthodontic Materials:** Physical properties of materials used in orthodontic appliances.

**Orthodontic Mechanics:** Seminar and laboratory course on basic orthodontic mechanical properties.

**Orthodontic Seminar:** Discussions including all branches of dental science, with special emphasis on the orthodontic interest. Assigned topics and articles in the literature are discussed.

**Orthodontic Technique:** Laboratory course in techniques related to fabrication and manipulation of orthodontic appliances and wires.

**Research:** Research activities leading to thesis, problem report, research paper, or equivalent scholarly project or a dissertation.

**Seminar:** Seminars arranged for advanced graduate students.

**Special Studies in Oral Pathology:** Advanced study of local and systemic disease processes affecting oral structures through seminars, assignment of specific topics, or research activities.

**Special Topics:** A study of contemporary topics selected from recent developments in the field.

**Teaching Practicum:** Supervised practice in the college teaching of dentistry.

## Prosthodontics

The Division of Dental Hygiene and the Departments of Endodontics, Orthodontics, and Restorative Dentistry offer programs of advanced study leading to the degree of master of science. The department of oral and maxillofacial surgery offers one four-year residency. A general practice residency is also an option. Continuing education courses are offered throughout the year. Detailed information concerning admission requirements, courses of study, etc., may be obtained from:

the Office of the Associate Dean for Academic and Postdoctoral Affairs  
 WVU School of Dentistry  
 P.O. Box 9402  
 Morgantown, WV 26506

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## Faculty

### DDS

- Mark W. Richards  
 FACP, Director

## Degree Offered

- Master of Science

## General Information

The School of Dentistry and its Department of Restorative Dentistry offer a program of advanced study and clinical training leading to the degree of Master of Science. The program requires a minimum of thirty-three months (three academic years and two summers) of full-time residency in the School of Dentistry. It is designed to qualify dentists for careers in prosthodontic clinical practice, teaching, and research.

A stipend plus tuition waiver will be provided for graduate students in Prosthodontics at the end of the second year for summer session and fall/spring semesters. Special fees are not covered by the tuition waiver. You must pay special fees each term/semester.

Inquiries concerning this program should be directed to the Office of 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.

This program is accredited by the Commission on Dental Accreditation of the American Dental Association. For details about the faculty, publications and alumni information, please visit the Department website at <http://dentistry.hsc.wvu.edu/Academic-Programs/Graduate-Programs/Master-of-Science-in-Prosthodontics>.

## Program Goals

The postgraduate program is designed to train well qualified dentists in all aspects of prosthodontics. Advanced training in prosthodontics consists of an integrated education program designed to provide both knowledge in the dentally applied basic sciences and experiences in the clinical science of prosthodontics. These include but are not limited to, complete denture prosthodontics, removable partial denture prosthodontics, fixed partial denture prosthodontics, maxillofacial prosthetics, and surgical and prosthodontic dental implantology. A series of structured didactic and clinical courses provides the student with a level of knowledge and skill development necessary to practice prosthodontics as a specialty and to prepare for a career in teaching and research. The program qualifies the student for examination and certification by the American Board of Prosthodontics.

## Graduate Courses

**Advanced Clinical Prosthodontics:** Advanced prosthodontic practice in the areas of fixed and removable partial dentures, complete dentures, temporomandibular dysfunction, maxillofacial prosthetics and surgical and prosthodontic implant therapy.

**Advanced Implant and Periodontal Therapy:** Didactic and clinical experience in periodontal surgical therapy including: wound healing, crown lengthening, regeneration, grafting and implant placement.

**Advanced Oral Surgery:** Advanced study of therapeutics, hospital protocol, and surgical aspects of oral surgery involving lectures, seminars, demonstrations, and clinical applications.

**Advanced Prosthodontic Theory:** Advanced theories and techniques in fixed and removable partial dentures, complete dentures, maxillofacial prosthetics, implantology and geriatric prosthodontics to include case presentations, literature surveys and articulator analysis seminars.

**Advanced Topics:** Biomedical Sciences Module Series: The Biomedical Sciences Module series has been designed as an online course for students enrolled in the advanced education programs in the WVU School of Dentistry. Four modules are planned. They include pharmacology, physiology/biochemistry, anatomy/histology/embryology, and microbiology/immunology/genetics.

The content of these modules focuses on the clinical application of each of the biomedical sciences to dentistry. Cases will be used to integrate theory and practice. Students will attend a virtual classroom by viewing online lectures, reading prescribed materials, and interacting with faculty and classmates through an online discussion forum.

**Advanced Topics:** Investigation of advanced topics not covered in regularly scheduled courses.

**Applied Biostatistics for Health:** Statistical models, distribution, probability, random variables, tests of hypotheses, confidence intervals, regression, correlation, transformations, F and Chi-square distributions, analysis of variance, and multiple comparisons.

**Dental Materials:** Physical properties of dental materials.

**Research:** Research activities leading to thesis, problem report, research paper, or equivalent scholarly project or a dissertation.

**Special Studies in Oral Pathology:** Advanced study of local or systemic disease processes affecting oral structures through seminars, assignment of specific topics, or research activities.

**Teaching Practicum:** Supervised practice in college teaching of dentistry.

# School of Dentistry Course Schedule

## First Year

Fall	Hours Spring	Hours Summer	Hours
DENT 701	2 DENT 700	1 DENT 703	3
DENT 710	4 DENT 704	4 DENT 722	4
DENT 712	3 DENT 711	2 DENT 734	6
NBAN 724	7 BIOC 705	5 DENT 745	1
PSIO 743	5 DENT 715	2	
	DENT 719	1	
	NBAN 718	6	
	DENT 731	2	
	<b>21</b>	<b>23</b>	<b>14</b>

## Second Year

Fall	Hours Spring	Hours Summer	Hours
DENT 707	2 DENT 707	2 DENT 725	1
MICB 702	5 DENT 721	2 DENT 726	7
DENT 722	4 DENT 726	7 DENT 737	2
DENT 727	2 PATH 728	5 DENT 740	1
DENT 729	3 DENT 737	2 DENT 746	1
DENT 734	6 DENT 739	1 DENT 770	0-6
DENT 735	1 PATH 738	3 DENT 775	0-6
PCOL 760	5 DENT 744	1 DENT 776	0-6
DENT 756	4 DENT 766	2 DENT 777	0-6
	DENT 774	2 DENT 780	0-6
	DENT 757	4 DENT 781	0-4
		DENT 783	0-6
		DENT 784	0-6
		DENT 786	0-6
		DENT 787	0-6
		DENT 789	0-6
	<b>32</b>	<b>31</b>	<b>12-76</b>

## Third Year

Fall	Hours Spring	Hours Summer	Hours
DENT 752	2 DENT 730	2 DENT 733	1
DENT 754	2 DENT 747	1 DENT 771	2
PATH 753	2 DENT 751	1 DENT 781	0-4
DENT 759	2 DENT 752	2 DENT 791	1-6
DENT 761	1 DENT 759	2 Third Year Clinical Courses	
DENT 763	2 DENT 765	1 DENT 770	0-6
DENT 773	1 DENT 781	0-4 DENT 775	0-6
DENT 778	2 DENT 791	1-6 DENT 776	0-6
DENT 781	0-4	DENT 777	0-6
		DENT 780	0-6
		DENT 783	0-6
		DENT 784	0-6
		DENT 785	0-6
		DENT 786	0-6
		DENT 787	0-6
		DENT 789	0-6
	<b>14-18</b>	<b>10-19</b>	<b>4-79</b>

**Fourth Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
DENT 758	2 DENT 758	2
PATH 755	1 DENT 767	1-15
DENT 781	0-4 DENT 781	0-4
	<b>3-7</b>	<b>3-21</b>

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Total credit hours: 167-341

\* Courses denoted by PR (Progress) are two semesters in length. Credit hours and grades are earned during the final semester of the course.

\*\* Clinic courses receive a designation of PR until the semester in which the student graduates. Six credit hours are earned in each clinical discipline upon graduation.

*Fourth-Year Clinical Courses*

Taken First and Second Semester

DENT 770	Clinical Oral Radiology	0-6
DENT 775	Practice Managemnt	0-6
DENT 776	Removable Prosthodontics	0-6
DENT 777	Periodontics	0-6
DENT 780	Endodontics	0-6
DENT 783	Operative Dentistry	0-6
DENT 784	Oral Surgery	0-6
DENT 785	Orthodontics	0-6
DENT 786	Pediatric Dentistry	0-6
DENT 787	Clinical Oral Diagnosis	0-6
DENT 789	Fixed Prosthodontics	0-6
DENT 790	Teaching Practicum	1-3
DENT 788	Clinic Completion Practicum (also taken Summer)	0-15

# Health Sciences School of Medicine

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## Degrees Offered

- M.D., Doctor of Medicine
- M.D. /Ph.D., Joint Doctor of Medicine and Doctor of Philosophy
- Ph.D. in Biochemistry and Molecular Biology
- Ph.D. in Cancer Cell Biology
- Ph.D. in Cellular and Integrative Physiology
- M.S. in Clinical and Translational Science
- Ph.D. in Immunology and Microbial Pathogenesis
- 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).

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## 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
- Maria 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

All doctoral students will be required to present a minimum of six one-hour graduate seminars to faculty and students before graduating. Doctoral students who desire to obtain additional teaching will be able to obtain this as part of their training. Students are expected to present their research data at national meetings and publish their data in appropriate peer-reviewed journals prior to graduation. However, the student's faculty advisor must give approval before any research or scholarly material is submitted for presentation or publication, and the material must recognize all appropriate co-authors and grant sources.

## **Required Research Participation**

Because the doctorate is a research degree, students will be expected to be involved in research from the beginning of their programs. Doctoral students will participate in three research rotations with faculty in exercise physiology during the first two semesters of enrollment. Students are expected to choose a dissertation chair and a dissertation committee by the end of the first year of enrollment. Students should work with their dissertation advisor to design appropriate pilot studies and with that data identify a dissertation project and appropriate research questions/hypothesis to be tested by

the proposed research. All approved research projects must be hypothesis-based, and whenever possible, the research questions should address mechanistic questions that explain biological phenomenon relevant to exercise physiology.

Research is conducted throughout the doctoral program with a goal of having at least three manuscripts published or submitted to a journal for peer review before graduation. Students should strive to present their research findings at a minimum of one national/international meeting annually beginning no later than the second year of enrollment in the doctoral program. A minimum of one peer-reviewed manuscript that is derived from the student's dissertation research must be published before graduation.

## Directed Research

All preliminary research must be collected under the supervision and approval of the dissertation chair. The student is expected to engage in directed research under the supervision of the dissertation chair to learn techniques and collect pilot data that will be the basis of a future dissertation project. Studies to obtain pilot data should be presented to the dissertation committee to demonstrate the student's competency in research skills, and, that his/her research ideas and hypotheses are appropriate and justified. This process facilitates progression through the program in a timely and efficient manner. Nevertheless, the dissertation committee may require the student to obtain additional pilot data or research skills prior to approving the research proposal as a dissertation topic. The student's directed research efforts should be progressing towards approval of a dissertation topic from the members of the dissertation committee, once they have been identified (before the end of the first semester of year two). This research training will provide the student background data/information from which to base grant proposal and dissertation topic as part of the requirements for completing Part II of the Comprehensive Examination.

## Comprehensive/Qualifying Examination

The comprehensive (qualifying/candidacy) examination will evaluate a student's readiness for advancement to doctoral candidacy. This will consist of a written and an oral component to determine that the student is qualified to complete the doctoral dissertation and conduct independent research.

## Requirements of the Qualifying/Candidacy Examination

Graduate students will be admitted to Ph.D. candidacy after successfully completing all coursework and passing a candidacy examination. The purpose of the candidacy examination is to evaluate a student's readiness for advancement to doctoral candidacy. The candidacy examination will consist of writing and orally defending a dissertation proposal. Advancement to candidacy means that in the judgment of the faculty, the doctoral student has an adequate knowledge of exercise physiology, knows how to use academic resources, and has potential to do original research autonomously. In other words, the student is qualified to complete the doctoral dissertation. In addition, no student with a grade point average of less than 3.0 will be eligible to take this examination.

The qualifying examination should be taken after completion of the formal coursework as defined by the student's dissertation committee and chair/ advisor of the dissertation committee in conjunction with the Director for Graduate Studies. When a student has passed the candidacy/qualifying examination, he/she will be admitted to candidacy for the Ph.D.

The following are prerequisites for advancement to the qualifying examination:

- The student must have a dissertation advisor and a dissertation committee.
- The student must have demonstrated competent research skills.
- The student must have a suitable dissertation topic that is approved by the dissertation committee.
- The student must be in good academic standing as defined in the doctoral program and have satisfactorily completed the first two years of course requirements (including those specified by the student's advisory committee) with at least six credit hours (or equivalent) of laboratory research experience.

Appropriate (recommended) lengths for each section of the qualifying examination/research proposal (single spaced) are as follows:

- Specific aims: one page
- Background and significance: two to three pages
- Preliminary studies and pilot data: three to five pages
- Research design and methods: six to seven pages
- Budget and justification: two to four pages including justification pages
- References: three to four pages

## Oral Examination of Research Proposal

Normally, the oral examination is set within two to four weeks following the acceptance of the written examination. However, the oral exam component can only be scheduled if the members of the dissertation committee judge the written submission to be acceptable (or acceptable pending minor revisions). If the written proposal is acceptable by the members of the dissertation committee, the chair of the dissertation committee will schedule the oral portion of Part II of the examination.

The following guidelines should be reviewed by the student and his/her dissertation committee before scheduling the oral examination.

In the oral examination, the student will make a professional formal presentation (using PowerPoint computer slides or similar media) that clearly identifies the research area, hypotheses, and questions that they wish to pursue as part of his/her Ph.D. dissertation and pilot data that they have obtained (about forty to forty-five minutes). The chair of the dissertation committee will also chair Part II of the examination. The chair will permit members of the audience (faculty, graduate students, etc.) to ask questions of the graduate presenter for approximately ten to fifteen minutes. Thereafter, the guests will be dismissed and the meeting will be closed except for the members of the student's dissertation committee and other invited (i.e., non-voting) members of the graduate faculty that have been approved by the chair of the dissertation committee.

Failure to successfully complete the comprehensive examination after two attempts is grounds for dismissal. Students will be permitted due process and the division chair will convene the graduate faculty as a whole, who will consider written appeals from any student who has been dismissed by virtue of failing the qualifying/candidacy examination.

## Temporary Committee Substitutions

- Membership on a doctoral dissertation committee signifies the highest level of commitment to all phases of the student's doctoral training. All committee members must therefore be present for the oral research design exam. If all the members of the committee are not present at the beginning of the oral defense for Part II, the oral examination cannot continue. Absence of a committee member from the exam is only acceptable in the event of illness or some other serious unforeseen problem
- If a committee member is unexpectedly unable to participate in a scheduled oral examination, the examination should be rescheduled for another time within the next two weeks when all members can be present. The student may request that the examination not be rescheduled, provided that a substitute committee member can be found (if one is needed to meet minimal dissertation committee requirements). Requests for member substitution will be granted in only very rare and exceptional circumstances. The division chair must approve any temporary substitutions.
- The substitute must have adequate time to read the written proposal and prepare for the examination. The substitute must be a suitable graduate faculty with established expertise in an area previously represented by the absent committee member. It is not appropriate to substitute one faculty with another if a different research expertise would be represented by the substitution. Any substitute must be acceptable to both the student and the dissertation advisor, and the substitute must meet the requirements for dissertation committee membership. The substitute member will be considered a full-voting member of the dissertation committee for the purpose of administering and grading the examination. The substitute member will also be provided copies of the student's written responses for Parts I and II. The final examining committee may contain no more than one substitute member, and the students' advisor (normally dissertation committee chair) may not be substituted.

## Qualifications for Advancement to Ph.D. Candidacy

The student must demonstrate the following:

- A wide base of knowledge in exercise physiology
- An ability to think independently
- Integration of existing knowledge into a practical research question by identifying what is known, what is not known, etc.
- Critical evaluation of literature
- Problem-solving skills
- Acceptable written and oral communication skills including the ability to "think on one's feet"

## Submission of Written Research Proposal to a Funding Agency

The written candidacy examination also serves an additional purpose. Graduate students are expected to submit at least one grant proposal to an external granting agency by the end of his/her second year of enrollment. Constructing the proposal is a part of the requirements for graduation. The candidacy examination provides the graduate student the opportunity to complete these requirements for submitting the grant proposal while also preparing for the qualifying examination and assembling ideas for the dissertation project.

The student should wait until successfully negotiating the candidacy examination (both written and oral components) and revise the grant according to the suggestions of his/her dissertation chair and dissertation committee. Graduate students should not submit a grant proposal without input, feedback, and approval of the committee chair and dissertation committee. It is acceptable and appropriate for the student to obtain feedback from all members of the dissertation committee before submitting it to a funding agency.

The submission of the grant proposal to a funding agency should be used to: (a) seek a graduate student stipend and other research supplies as allowed by the external source, (b) seek funding for travel to national/international meetings if it is permitted by the funding agency, (c) obtain independent external review of the student's research proposal/dissertation project, and/or (d) obtain experience in writing grants for external funding. The student should also notify the Director of Graduate Studies of the grant submission. This will be accomplished by submitting a copy of the front page of the grant proposal (with the title, signatures, etc.) and the budget page of the grant to the Director of Graduate Studies.

## General Dissertation Requirements

The purpose of the dissertation is to provide experiences that will assist the student in becoming an independent investigator and constructing manuscripts from the data collected in the research process. Typical dissertation projects will be about three years in length.

The student must complete a dissertation in which they have obtained original data that makes a novel and important contribution to knowledge in the broad field of exercise physiology and submit all manuscripts containing these data to peer-reviewed journals. Students must pass an oral examination based upon his/her dissertation.

The dissertation must be constructed in a format suitable to the graduate school and the advisor. Preferable formats will include writing the data chapters as if they have been submitted to peer-reviewed journals (including abstract, introduction, methods and materials, results, discussion, and literature cited in each chapter). In addition, the final one to two chapters of the dissertation should include an integrative discussion concerning the total research project and evaluation of hypothesis that were tested. The typical doctoral dissertation will yield three to five peer-reviewed manuscripts. To optimize feedback from the co-authors and to ensure timely publication, the manuscripts originating from dissertation work should be submitted for peer review prior to graduation, and some manuscripts may be published before the student graduates. Proper acknowledgment for funding of the research should be noted in both the dissertation and the manuscripts obtained from dissertation work. It is expected that several of these manuscripts that will be included in the dissertation will have been published before graduation. It is further expected that all of the manuscripts will be submitted to a peer-reviewed journal for consideration for publication before graduation. The student must have published a minimum of one manuscript as a first author from the completed dissertation work prior to graduation. The process of writing the chapters as journal manuscripts will facilitate this process.

## Student Evaluations

Students will be formally evaluated by the program faculty on a yearly basis with respect to courses, research, teaching, professional development, and progress through the program. The student will be asked to fill out an activity report encompassing these areas and submit it to the Chair of the Division of Exercise Physiology. The chair will convene the program faculty to evaluate each student. The chair will provide the students a written assessment of their progress.

## Biochemistry and Molecular Biology

Isalati@hsc.wvu.edu

### Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

The disciplines of biochemistry and molecular biology seek to understand biology by exploring the functions of the molecular components of cells. A major goal of this program is to foster ability for independent thought. To this end, our faculty cultivates an open, collegial relationship with one another and with our students. Close collaboration between scientists, the sharing of ideas, and open inquiry are critical components of our training plan. Our goal is to develop independence as a scientist.

The hallmarks of graduate training in biochemistry and molecular biology are the emphasis placed on the use of the scientific literature in advanced coursework and on protecting time for laboratory research. In addition, students will have time for professional development through seminar presentation, attendance at national meetings, teaching opportunities, and seminar programs both within the department and throughout the Health Sciences Center.

Faculty research in the program can provide the student with training in multiple basic sciences areas:

- Regulation of gene expression
- Chromatin silencing
- RNA processing
- Cell survival mechanisms
- Intermediary metabolism
- Regulation of signal transduction by nutrients and metabolites
- Nutritional biochemistry
- Cell proliferation and cell cycle regulation
- Cell adhesion
- Ion channel biochemistry
- Kinases and phosphatases in signal transduction mechanisms involved in cancer cell metabolism
- Spirochete biology
- Oxidant-induced cellular stress
- Structure/function relationships of proteins

- Molecular genetics of visual and auditory development
- G protein-mediated signaling in retina photoreceptors
- Molecular basis of age-related blindness

These research areas provide fundamental knowledge toward both the normal health-state and the amelioration of multiple diseases: atherosclerosis, blindness, cancer, deafness, diabetes, and metabolic disorders.

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## Faculty

### Graduate Program Director

- Dr. Lisa Salati

## 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.

## Biomedical Sciences Graduate Programs

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rlseitz@hsc.wvu.edu

pphillips@hsc.wvu.edu

## Overview

The WVU Health Sciences Center offers biomedical research training leading to the Ph.D. and M.S. degrees and the joint M.D./Ph.D. degree. Our Ph.D. and M.S. students matriculate into a common, integrated core curriculum including research laboratory rotations. This integrated first year allows students to build competence in key areas of contemporary science, gain exposure to our seven training programs, and network scientifically and socially. In the second semester, students customize their coursework by selecting from an array of program-specific electives. By April of year one, students have acquired the necessary didactic and research knowledge to make an informed selection of a research advisor and one of our seven 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 as follows: biochemistry and molecular biology; cancer cell biology; cellular and integrative physiology; exercise physiology; immunology and microbial pathogenesis; neuroscience; and pharmaceutical and pharmacological sciences.

Successful completion of the Ph.D. degree requires a 3.0 GPA, A's, B's, 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 of 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, keep a 3.0 GPA, and exhibit 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).

## 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

## Ph.D. Undifferentiated First Year

### Advantages of an undifferentiated first year:

- Students acquire a fundamental yet in-depth exposure to relevant contemporary science.
- Students have one year to select a specific training program and research advisor.
- There are larger numbers of available graduate faculty to select from for a research advisor.
- Students develop important intellectual and social connections.
- It enhances future collaborations among research laboratories.

### In year one, students:

- Take 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 grant

### 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 one of the United States Medical Licensing Examination (USMLE), students enter the research portion of their Ph.D. training. There are two M.D./Ph.D. training programs: biomedical sciences and public health sciences. The research opportunities in these two training programs are numerous and include cell and molecular biology, integrative physiology, immunology, exercise physiology, cardiovascular sciences, receptor biochemistry, bacterial pathogenesis, lung cell biology and environmental exposures, inflammation, molecular genetics, pharmacological sciences, neuroendocrine and reproductive biology, developmental biology, tumor invasion and angiogenesis, cancer cell biology, neurodegenerative disorders and stroke, functional brain imaging and cognitive behavior, learning and memory, as well as population-based outcomes and epidemiology studies relevant to public health. Before transitioning back to the clinical clerkships, students brush-up on their clinical skills by shadowing physicians, conducting physicals, and presenting case studies at the monthly M.D./Ph.D. forums.

## Medical School, Years Three and Four

After the writing and successful defense of the doctoral dissertation, students complete years three and four of medical school at the Morgantown campus.

## Cancer Cell Biology

sweed@hsc.wvu.edu

## Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

Research interests include biochemical, molecular, and cellular basis of cancer origin and progression. Current research areas include the following:

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

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

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

## Qualifying Examination

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

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## Faculty

### Graduate Program Director

- 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 the following:

- Integrative and systems physiology
- Pathophysiology
- Pharmacology
- Translational research
- Small animal physiology, biomedical engineering
- Biophysics

It also integrates information from genetics, functional genomics, and proteomics into whole animal and human physiology.

This interactive and cross-disciplinary environment, together with an atmosphere filled with enthusiasm and passion for scientific discovery, makes our program a uniquely exciting place for doing research and the training of students. Specific topics of research emphasis include the following:

- Hemodynamics and Cardiovascular Control in Health and Disease
- Microcirculation and Cellular Biophysics
- Respiratory Function and Control in Health and Disease

- Neuroendocrine Control of Reproduction
- Neural Control of Sensory Physiology

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

## Qualifying Examination

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

## Faculty

### Graduate Program Director

- Dr. Robert W. Brock

## Exercise Physiology

### Degrees Offered

- Bachelor of Science
- Master of Science
- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

John M. Hollander, Ph.D., Associate Professor and Director of Doctoral Graduate Studies, [jhollander@hsc.wvu.edu](mailto:jhollander@hsc.wvu.edu); <http://www.hsc.wvu.edu/ResOff/PhDPrograms/Biomedical-Sciences/pages/Graduate-Programs/Exercise-Physiology>; <http://medicine.hsc.wvu.edu/ep/Education/Program-Curriculum>

Stephen E. Alway, Ph.D., Professor and Chair and Director of Graduate Studies Master's Program, [salway@hsc.wvu.edu](mailto:salway@hsc.wvu.edu); <http://medicine.hsc.wvu.edu/ep/Education/Master-of-Science>

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

## Introduction

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

The Bachelor of Science program meets the knowledge, skill, and aptitude (KSA) requirements for students to be eligible to take the American College of Sports Medicine Health and Fitness National Examination and the National Strength and Conditioning Association Certified Strength and Conditioning Specialist Examination.

## What is an Exercise Physiologist?

Exercise physiology is the study of the biological and biochemical processes associated with exercise and overload that affects the underlying function of cells and organ systems in the human body. Exercise physiology is a rapidly evolving field that is becoming increasingly important in the delivery of healthcare. Exercise physiologists work to prevent or delay the onset of chronic disease in healthy participants or to provide therapeutic or functional benefits to patients with known disease. Services may be offered in a variety of medical settings such as hospitals, rehabilitation centers, and out-patient clinics; in community, corporate, commercial, and university fitness and wellness centers; in nursing homes and senior citizens centers; as well as in research and academic settings.

Research by scientists trained in exercise physiology have greatly expanded our understanding of the ways in which exercise affects cell function. Advances in research in exercise physiology have provided a foundation for many types of medical treatment in areas that include but are not limited to cardiovascular diseases, diabetes, aging, obesity, and disuse atrophy. Employment opportunities are expanding and increase with experience and level of education.

Exercise physiologists are trained to evaluate people in the areas of cardiovascular fitness, muscular strength and endurance, flexibility, neuromuscular integration, and body composition. They are also trained to provide exercise programs based on the results of these evaluations that are designed to increase the functional capacity of the participants.

Exercise physiologists work with athletes, patients, and healthy participants in the areas of disease prevention in wellness programs or rehabilitation in hospital settings. The bachelor of science program is a preparatory program for graduate school. Graduates of this program continue their studies in exercise physiology, physical therapy, medicine, or other health-related careers. Graduates of the master of science or doctoral program find employment in corporate wellness, hospital rehabilitation, higher education, or other research settings. Graduates of our Ph.D. program have obtained postdoctoral positions in prestigious universities and medical schools. Additionally, they may be employed in a wide variety of private, community, state, and national agencies. Exercise physiology is an evolving field that is becoming increasingly important with the integration of preventive medicine into the healthcare system. Employment opportunities are expanding and increasing with experience and level of education.

## Faculty

### Professor

- Stephen E. Alway - PhD  
Sarcopenia, muscle wasting, diabetes and muscle injury

### Associate professors

- John M. Hollander - PhD  
Cardiovascular research in Diabetes
- Guyton W. Hornsby Jr. - PhD  
Diabetes and depression
- Randall W. Bryner - EdD  
Diabetes, exercise, and cancer

### 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
- Jean L. McCrory - PhD  
Biomechanics in obesity and pregnancy
- I. Mark Olfert - PhD  
COPD, vascular function, angiogenesis
- David A. Donley - MS  
Obesity, vascular function
- Emidio Pistilli - PhD  
Muscular dystrophy, muscle injury, cytokines
- Sergiy Yakovenko - PhD  
Neuromuscular integration of movement

### Adjunct associate professors

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

## Bachelor of Science

The Bachelor of Science program in Exercise Physiology meets the knowledge, skill, and aptitude (KSA) requirements for students to be eligible to take the American College of Sports Medicine Health and Fitness National Examination and the National Strength and Conditioning Association Certified Strength and Conditioning Specialist Examination. The bachelor of science is also an excellent preparatory program for graduate or professional school. Graduates continue their education in areas such as exercise physiology, physical therapy, dentistry, pharmacy, occupational therapy, or medicine. The

program is designed to provide students with a background in basic science and exercise physiology as well as courses in nutrition, athletic training, personal fitness, first aid and emergency care, and business.

## Admission

Students must meet the minimum requirements for WVU for admission to the program. All coursework completed prior to transfer to the exercise physiology program requires at least a 2.75 cumulative grade point average and a grade of C or better in all required courses.

## Program Requirements

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

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

CHPR 172	First Aid and Emergency Care	2
PSYC 241	Intro to Human Development	3
ATTR 121	Sport Injury Control/Managment	3
ATTR 219	Gross Anatomy	3
EXPH 240	Medical Terminology	1
EXPH 100	Orientation:Exercise Physlgy 1	1
EXPH 101	Intro-Exercise Physiology	1
EXPH 364	Kinesiology	3
EXPH 369	Strength/Conditioning Methods	4
EXPH 370	Writing for Exercise Science	3
EXPH 393	SPTP:Physiology of Ex Phys 1	3
EXPH 393A	SPTP:Physiology-Ex Phys Lab 1	1
EXPH 393B	SPTP: Physiology of Ex Phys 2	3
EXPH 393C	SPTP:Physiology-Ex Phys Lab 2	1
EXPH 491	Professional Field Experience	4
EXPH 475	Industry Orgnztm-Excrcise Physio	3
EXPH 496	Senior Thesis:Capstone	3
PHYS 101	Introductory Physics	4
PHYS 102	Introductory Physics	4
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 231	Organic Chemistry:Brief Course	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory (ONLY IN HEALTH PROFESSIONS TRACK)	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory (ONLY IN HEALTH PROFESSIONS TRACK)	4
BIOL 101 & BIOL 103	General Biology and General Biology Laboratory **	4
BIOL 102 & BIOL 104	General Biology and General Biology Laboratory **	4
PSIO 241 or PSIO 441	Elementary Physiology Mechanisms Body Function	4
HN&F 171	Introduction to Nutrition	3
STAT 211 or ECON 225	Elemntry Statistical Inference Elemntry Busness/Economcs Stat	3
MATH 128	Plane Trigonometry	3
MATH 126B	College Algebra 4-Day	3
Suggested Electives		
BIOL 219	The Living Cell	
BIOC 339	Intro To Biochemistry	

Total Hours

94

- \* MATH 129, MATH 155, or MATH 150 may be substituted for MATH126A or MATH 126B and MATH 128.
- \*\* BIOL 115 and BIOL 117 may be substituted for of BIOL 101–104. BIOL 115 can also be taken with any other four credit biology class that is for science majors and also contains a laboratory.

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

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

## Exercise Physiology Curriculum Plan

### First Year

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

### Second Year

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

### Third Year

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

### Fourth Year

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

Total credit hours: 128

## Health Professions Emphasis Curriculum Plan

### First Year

Fall	Hours Spring	Hours
EXPH 100	1 EXPH 101	1
ENGL 101	3 MATH 128	3

CHEM 115	4 BIOL 117	4
BIOL 115	4 CHEM 116	4
MATH 126C	3 ATTR 219	3
	GEC Objectives	1-2
	<b>15</b>	<b>16-17</b>
<b>Second Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
ENGL 102	3 PHYS 102	4
ATTR 121	3 CHEM 234 & CHEM 236	4
EXPH 364	3 EXPH 240	1
CHEM 233 & CHEM 235	4 PSIO 241	4
PHYS 101	4 GEC Objectives	3
	<b>17</b>	<b>16</b>
<b>Third Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
CHPR 172	2 HN&F 171	3
PSYC 241	3 STAT 211	3
BIOC 339	4 EXPH 369	4
EXPH 393	3 EXPH 370	3
EXPH 393A	1 EXPH 393B	3
Elective Science (e.g. BIOL 219)	4 EXPH 393C	1
	<b>17</b>	<b>17</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
EXPH 460	3 EXPH 475	3
EXPH 496	3 Elective	3
Elective Science	4 EXPH 491	4
GEC Objective	3 Elective Science (e.g. BIOL 410)	4
Elective	3 GEC Objective	3
	<b>16</b>	<b>17</b>

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Total credit hours: 131-132

## Master of Science

The master of science program in exercise physiology prepares students for careers in adult fitness, hospital or corporate-based wellness programs, or cardiac rehabilitation. This is a two-year program. We have a clinical track and thesis track. Clinical track students take coursework, obtain experience in various medical settings (e.g., cath lab, bariatric surgery etc.), and work with populations with varied health problems (heart disease, diabetes, metabolic syndrome, arthritis, etc.). The thesis track is also a two-year program, and it is designed for students who wish to engage in an intensive research training experience in preparation for further training in a Ph.D., M.D., or similar postgraduate program.

Students specialize by completing a clinical internship or a research thesis.

## CLINICAL TRACK COURSES

A minimum GPA of 3.0 is required in all courses

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

EXPH 670	Lab Techniques & Methods 2	3
EXPH 671	Stress Testing	3
EXPH 672	Professional Field Placement	1-18
EXPH 673	Exercise Prescription	3
EXPH 680	Adv Clinicl Exercise Physiolyg	3
EXPH 691	ADTP:Exercise Prescriptn	1-6
EXPH 691A	Advanced Topics	1-6

EXPH 691B	Advanced Topics	1-6
EXPH 691C	ADTP:Aquatic Therapy-Pool Mang	1-6
EXPH 691D	ADTP:Aquatic Thrpy Application	1-6
EXPH 691E	Advanced Topics	1-6
EXPH 691F	ADTP:Nutrition for EXPH	1-6
EXPH 696	Graduate Seminar	1
EXPH 693C	Special Topics	1-6
EXPH 693D	Special Topics	1-6
PSIO 743	Fundamentals of Physiology	5
STAT 511	Statistical Methods 1	3

## THESIS TRACK COURSES

A minimum GPA of 3.0 is required in all courses

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

EXPH 697	Research	1-15
EXPH 698	Thesis	1-6
EXPH 786	Musculoskeletal Biology	3
EXPH 799	Graduate Colloquium	1-6
EXPH 787	Cardiopulmonary Physiology	3
EXPH 693D	Special Topics	1-6
PSIO 743	Fundamentals of Physiology	5
AGBI 514	Animal Biotechnology	4
STAT 511	Statistical Methods 1	3
EXPH 567	Exercise Physiology 2	4

The graduate program in exercise physiology fosters a high degree of collaboration among faculty with interests in clinical medicine and basic research.

The faculty in exercise physiology have research expertise in exercise-induced adaptations and pathological tissue remodeling associated with aging, diabetes, and cardiovascular disease. Current areas of inquiry include the following:

- Aging and sarcopenia in skeletal muscle
- Muscle stem cells
- Mitochondria dysfunction and pathophysiological mechanisms of diabetic cardiomyopathy
- The Metabolic Syndrome and right-left heart function
- Immunology/cytokine/myokine responses of muscle to exercise and disease
- Reactive oxygen species development in cardiac and skeletal muscles with aging and diabetes
- Biomechanical and motor control for gait in stroke or spinal cord injury
- Regulation of ion channels in vascular smooth muscle in cardiovascular disease
- Microvascular dysfunction with the metabolic syndrome
- Cardiac and skeletal muscle growth and function
- Physiologic basis of lung disease
- Exercise-induced angiogenesis
- Extracellular matrix regulation and gene expression
- Stem cell biology and mechanical signal and tissue regeneration

Our Ph.D. program is intended to give exceptional students knowledge in basic medical and scientific areas to prepare them for careers as effective and knowledgeable researchers and teachers in the broad field of exercise physiology/kinesiology. In the Division of Exercise Physiology, these goals are achieved by several means. Formal coursework in the sub-disciplines of exercise physiology, physiology, biochemistry, molecular biology, pharmacology and neuroscience provides the student with the opportunity to develop a solid foundation in basic subject matter of medical sciences that can be applied to aspects of exercise and disease. The student's knowledge base will be further strengthened by participation in elective courses offered within the division, selected courses offered by other departments within the School of Medicine, and by departments in other colleges of West Virginia University.

### Ph.D. students are expected to:

- Take an array of courses in exercise physiology, physiology, biochemistry, molecular biology, and pharmacology

- Conduct independent research, analyze and interpret the data, and defend the finding's conclusions
- Learn the process of writing and submitting grants
- Present and discuss their research findings at national and international scientific meetings
- Develop and improve teaching skills
- Submit their dissertation research for publication prior to graduation

The Division of Exercise Physiology actively engages in both basic science and clinically-based research, with an emphasis on cardiovascular disease, aging, obesity, and diabetes.

### Required Research Participation

Because the doctorate is a research degree, students will be expected to be involved in research from the beginning of their programs. Doctoral students will participate in three research rotations with faculty in exercise physiology during the first two semesters of enrollment. Students are expected to choose a dissertation chair and a dissertation committee by the end of the first year of enrollment. Students should work with their dissertation advisor to design appropriate pilot studies and with that data identify a dissertation project and appropriate research questions/hypothesis to be tested by the proposed research. All approved research projects must be hypothesis-based, and whenever possible, the research questions should address mechanistic questions that explain biological phenomenon relevant to exercise physiology.

Research is conducted throughout the doctoral program with a goal of having at least three manuscripts published or submitted to a journal for peer review before graduation. Students should strive to present their research findings at a minimum of one national/international meeting annually beginning no later than the second year of enrollment in the doctoral program. A minimum of one peer-reviewed manuscript that is derived from the student's dissertation research must be published before graduation.

### SAMPLE CURRICULUM

Students will follow the first year integrated curriculum that is common to all Ph.D. students in basic biomedical sciences. Students will begin the curriculum program in year two. Students should complete the requirements for the comprehensive examination by the end of the year. Students should take one of (or both) EXPH 786 and EXPH 787. Students should sign up for EXPH 799 every fall and spring semester that they are enrolled in the program. The majority of the hours should be spent on research after year two.

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

## Immunology and Microbial Pathogenesis

jbarnett@hsc.wvu.edu

### Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

Faculty members and students explore diverse areas of inquiry related to the medical implications of microbes and the human body's response to them.

### Current Research Areas

- Immunology
- Effects of man-made pesticides and herbicides on the immune system
- Effects of heavy metals on the immune system
- Biochemistry of inflammatory cytokines
- Immune response in bacterial and viral diseases
- Regulation of signal transduction in immune responses
- Molecular aspects of cell signaling as it relates to cancer chemotherapy and cell growth
- Peptide and DNA vaccines for contraception
- Microbiology
- Physiology of pathogenic microbes
- Microbial genetics

- Mechanisms of bacterial pathogenesis
- Chemotaxis and motility
- Interactions between microbes and their hosts
- Molecular mimicry and structure-function relationship of bacterial virulence factors
- Microbial biofilms

The major purpose of graduate education in the program is research training. The basic philosophy of the program is that students acquire a strong foundation in the basic concepts of immunology and microbial pathogenesis and have flexibility in choosing advanced coursework in their specific areas of interest. A major emphasis of the graduate program is extensive laboratory research in microbiology, immunology, microbial pathogenesis, and cell biology. Each student will complete an original, in-depth research investigation. The overall aim of the program is to produce students capable of designing and doing independent research and teaching.

## Program Requirements

Every student must take the required courses in the first year common core curriculum. Once students acquire a strong foundation in the core biomedical concepts, we offer flexibility in choosing advanced coursework in specific areas of interest. The remainder of the coursework is selected by the student and the Advisory Committee. Enrollment in MICB 796 Graduate Seminar and MICB 785 Immunol Micro Journal Club is required each semester that the student is in residence. All full-time students in this graduate program are required to participate in teaching at least one semester a year for two years (MICB 790 Teaching Practicum).

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## Faculty

### Graduate Program Director

- Dr. John Barnett

## 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 Departmental Chairperson at 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/ResOff/PhDPrograms/Biomedical-Sciences/pages/Graduate-Programs/Immunology-Microbial-Pathogenesis>.

## Medical Laboratory Science

### Degree Offered

- Bachelor of Science in Medical Laboratory Science

### The Degree Program

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

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

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

## Nature of Program

Students are admitted into either the clinical laboratory science area of emphasis or the histotechnology area of emphasis of the medical laboratory science bachelor of science program after completing two years of pre-requisite courses in an accredited college or university. The undergraduate curriculum includes sixty-one semester hours of pre-requisite courses (pre-medical laboratory science curriculum) and may be completed at any regionally accredited institution of higher education. As students complete the pre-requisite courses, they apply to the medical laboratory science area(s) of emphasis.

Since the last two years are professional in nature, students must be enrolled in the WVU School of Medicine for the entire period. The junior year (the first year of the professional curriculum) includes core and area-specific courses to introduce the student to the medical sciences and to prepare for the senior year curriculum. During the senior year (the second year of the professional curriculum), the student receives both didactic instruction and practical experience. Students receive practical experience at one or more of the affiliated hospital laboratories including:

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

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

The WVU medical laboratory science area of emphasis in clinical laboratory science program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, and (773) 714-8880. The medical laboratory science area of emphasis in histotechnology is a new program to WVU and is currently applying to NAACLS for accreditation and has reached the level of Serious Applicant Status. Graduates of the clinical laboratory science program and the histotechnology program are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

## Other Programs

An articulation program is available for certified medical laboratory technicians (clinical laboratory technicians) who want to complete the requirements for a degree in medical laboratory science. Further information may be obtained by contacting the Medical Laboratory Science Division Office.

A part-time curriculum is available. Part-time students must meet the same admission requirements and application deadlines as full-time students. For further information, contact the Medical Laboratory Science Division Office.

## Admission to the Pre-Medical Laboratory Science Major

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

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

## Admission to the Medical Laboratory Science Area of Emphasis in Clinical Laboratory Science or Histotechnology

### Required courses for direct admit students

PATH 100	Medical Laboratory Science	1
PATH 101	Medical Laboratory Science 2	1
PATH 200	Medical Terminology	3

PATH 201	Basic Medical Lab Science	1
Total Hours		6

## Traditional

Pre-medical laboratory science students apply for admission into the junior year (first year in the MLS area of emphasis) before the second semester of the sophomore year in college. Fulfillment of the pre-medical laboratory science curriculum does not assure admittance into either the clinical laboratory science or the histotechnology area of emphasis. A competitive admission process is used to select students for the professional programs. Requirements for admission to the areas of emphasis in clinical laboratory science and histotechnology include course requirements, grade point average, a personal interview, and letters of recommendation.

The course requirements (pre-requisites) are:

<b>English (One of the following)</b>		3-6
ENGL 101 & ENGL 102	Composition And Rhetoric and Composition And Rhetoric	
ENGL 103	Accelerated Academic Writing	
<b>Biology</b>		
BIOL 101	General Biology	3
BIOL 102	General Biology	3
BIOL 103	General Biology Laboratory	1
BIOL 104	General Biology Laboratory	1
<b>Chemistry</b>		
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 231	Organic Chemistry: Brief Course *	4
<b>Mathematics (One of the following):</b>		3
MATH 126A	College Algebra 5-Day	
MATH 126B	College Algebra 4-Day	
MATH 126C	College Algebra 3-Day	
<b>Statistics</b>		
STAT 211	Elementary Statistical Inference	3
or ECON 225	Elementary Business/Economics Stat	
<b>GEC</b>		
Credits to satisfy objectives three through nine		22-23
Total Hours		51-55

\* Students who do not complete CHEM 231 Organic Chemistry: Brief Course must complete organic chemistry I and II (eight hours) which includes aliphatic and aromatic compounds with laboratory.

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

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

Admission of international students is in compliance with WVU regulations. At least one science course (chemistry or biology) must be completed at a regionally accredited institution of higher education in the United States.

## Application Procedure

Each year the Division of Medical Laboratory Science selects a limited number of students from the applications received for admission to the area of emphasis in clinical laboratory science and the area of emphasis in histotechnology. Application forms for admission to the Division of Medical Laboratory Science's areas of emphasis are available after December 1.

Office of the Assistant Director of Admissions

WVU Health Sciences Center  
 P.O. Box 9815  
 Morgantown, WV 26506-9815  
 or from the WVU Office of Admissions website: [http://adm.wvu.edu/home/health\\_sciences\\_students](http://adm.wvu.edu/home/health_sciences_students)

The application fee is \$30 for residents and \$60 for non-residents. The priority date for returning complete application packets is February 15. The deadline is March 1 if the student expects to enter the program the following fall semester. If the class is not filled by those applications, the deadline may be extended until as late as the first business day in August.

## Faculty

### Professor and MLS Division Director

- Martha J. Lake - Ed.D., MT(ASCP)  
 Professor and Medical Laboratory Science Division Director

### HTL Program Director

- Kimberly Feaster - BS, HTL(ASCP)QIHC

### Associate Professor and CLS Medical Director

- Peter L. Perrotta - M.D.

### Assistant Professor and HLT Medical Director

- Ryan H. Livengood - M.D.

## Pre-Medical Laboratory Sciences Curriculum Plan:

### First Year

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

### Second Year

Fall	Hours Spring	Hours
Electives *	9 CHEM 231	4
ENGL 102	<sup>3</sup> Electives *	9
STAT 211 or ECON 225	3 PATH 201	1
PATH 200 ***	3	
	<b>18</b>	<b>14</b>

Total credit hours: 62

\* General Education Curriculum courses to satisfy objectives three through nine.

\*\* PATH 100 and PATH 101 are required for Direct Admit students and highly recommended for Pre-Medical Laboratory Science students.

\*\*\* PATH 200 and PATH 201 are required for direct admit students and optional for pre-medical laboratory science students.

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

MICB 323	Medical Microbiology/Lab	5
PATH 300	Introduction to Pathology	3
PATH 303	Clinical Lab Applications	2
PATH 320	Basic Clinical Biochemistry	3
PATH 380	Introduction to Immunology	1
PATH 381	Rsrch/Educational Methodology	2
PATH 465	Medical Laboratory Management	2
PATH 475	Medical Relevance	3
PSIO 441	Mechanisms Body Function	4
Total Hours		25

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

PATH 340	Introduction to Hematology	3
PATH 329	Clinical Chemistry 1	1
PATH 310	Clinical Laboratory Mycology	1
PATH 470	Clinical Microscopy	1
PATH 472	Urinalysis and Body Fluids Lab	1
PATH 440	Clinical Hematology	3
PATH 460	Clinical Laboratory Instrumentation	2
PATH 450	Clinical Microbiology	3
PATH 420	Immunology and Blood Banking	3
PATH 430	Clinical Chemistry 2	3
PATH 480	Clinical Immunology	2
PATH 401	Phlebotomy	1
PATH 421	Immunochemistry/Blood Bank Lab	3
PATH 431	Clinical Chemistry Laboratory	3
PATH 441	Clinical Hematology Laboratory	3
PATH 451	Clinical Microbiology Lab	3
PATH 481	Clinical Immunology Laboratory	1
Total Hours		37

**Required Courses for Histotechnology Area of Emphasis**

NBAN 205	Introduction to Human Anatomy	3
NBAN 206	Human Anatomy Laboratory	1-3
PATH 304	Histotechnology Microanatomy	3
PATH 200	Medical Terminology	3
PATH 305	Staining Techniques 1	4
PATH 306	Histotechnology 1	3
PATH 405	Staining Techniques 2	4
PATH 406	Histotechnology 2	3
PATH 407	Histology Laboratory	8
PATH 408	Histotechnologist Practicum	10
Total Hours		42-44

**Fourth Year (Medical Laboratory Science 2)**

Students receive didactic and clinical instruction during the fourth (senior) year. The senior year includes summer, fall, and spring semesters. Any competencies not completed must be made up by the end of the school year (mid-May) or graduation may be delayed.

## Graduation Requirements

### Junior Year

Students must maintain a minimum grade point average of 2.0 for each semester to advance to the senior year. Failure to maintain at least a 2.0 GPA may result in probation or suspension. The Academic and Professional Standards Committee must recommend any student for advancement to the senior year. A satisfactory GPA does not assure advancement.

### Senior Year

A student must maintain a minimum grade point average of 2.0 for each semester of the senior year. Graduation requires satisfactory completion of all academic work and the recommendation of the faculty of the School of Medicine. All first degree students are required to complete a total of 125 semester hours for the BS in MLS degree.

Graduation is not dependent upon passing a national certification examination.

## Medicine

### Degrees Offered

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

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: six semester hours
- Biological sciences (with lab): eight semester hours
- Inorganic chemistry (with lab): eight semester hours
- Organic chemistry (with lab): eight semester hours
- Physics (with lab): eight semester hours
- Social or behavioral sciences: six semester hours

*Biochemistry and Cellular and Molecular Biology* are strongly recommended. A total of ninety 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>.

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 the following:

1. Students begin clinical experiences early in their first year of medical school.
2. The basic science disciplines have been integrated.
3. Incoming medical students are required to lease a laptop computer to use in the curriculum that incorporates information and academic technology in the delivery of instruction.

With these principles in mind, the old semester (college-like) schedule of the independent discipline-based courses, for example, physiology, gross anatomy, biochemistry, neurobiology, microanatomy, epidemiology, and psychiatry has been replaced.

### First Year

Medical students' first year is a thirty-eight-week academic year divided into three blocks (sixteen weeks, fifteen weeks, and seven weeks). There are approximately twenty-four scheduled instructional contact hours per week. Each block contains three courses: a basic science multidisciplinary course, public health (epidemiology, biostatistics, and preventive medicine) in the fall, and physical diagnosis and clinical integration (large group alternating every other week with small groups). While physical diagnosis and clinical integration runs throughout the year, the basic science component changes each block. The first block (sixteen weeks) contains a multidisciplinary run course: human function (physiology, biochemistry, and genetics.). Second block (fifteen weeks) consists of human structure (gross anatomy, embryology, and microanatomy: large group and laboratory). Third block (seven weeks) consists of multidisciplinary neuroscience (ten hours large group, laboratory, and small group). A weekly problem-based learning group is maintained throughout the first year.

### Second Year

Medical students' second academic year is thirty-four weeks. The schedules of course material from Microbiology and Immunology, Pathology, Pharmacology, and Physical Diagnosis and Clinical Integration-two courses are integrated by organ system. Each course maintains its autonomy with respect to assessment of student performance. This integrated, yet independent, approach assists students in finding remediation courses if they experience academic difficulty in any one particular discipline. In addition to the integration of the schedule of these four courses, there is an additional course, Behavioral Science and Psychopathology, in the fall and Health Care Ethics in the spring. There are approximately twenty-six scheduled instructional contact hours per week.

### Clinical Years

The last two years of study take place in the clinics, hospitals, and community settings where students have the opportunity to help diagnose and treat patients under supervision of the faculty and staff. All students will serve a significant portion of the clinical years training at an off-campus or rural site.

### Third Year

In the third year, the student must spend a designated period of time in each of the major clinical disciplines: internal medicine, surgery, pediatrics, obstetrics and gynecology, psychiatry and neurology, and family medicine. 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 five months of the senior year are elective at approved teaching sites.

A catalog is available online that lists the approved electives and selection guidelines at <http://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.

null

## Neuroscience

aberrebi@hsc.wvu.edu

### Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

The interdepartmental neuroscience graduate program is committed to training the next generation of researchers and educators. Successful completion of degree requirements is based on research and scholarly achievement. Students will have opportunities to experience and acquire the skills needed for successful careers as independent scientists, including critical thinking, problem solving, and leadership. Research experiences include evaluating scientific literature, identifying critical scientific issues, experimental design, grant and manuscript writing, publication of scientific papers, and presentations at national meetings. Students with career interests in teaching will have the opportunity to gain experience in innovative teaching methods and techniques, including problem-based learning, computer-assisted learning, and integrated teaching approaches. The program faculty's expertise spans all neuroscience sub-disciplines, including structural, cellular, molecular, and developmental. After completion of core coursework, students conduct an original research project culminating in a doctoral dissertation.

### Current research areas include the following:

*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.

## Faculty

### Graduate Program Director

- Dr. Albert Berrebi

### 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.

## Division of 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 fifty to fifty-five hours of prerequisite courses, which in most instances will take two years to fulfill.

### The Profession of Occupational Therapy

Occupational therapy is a health 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, Suite 200, Bethesda, M.D. 20814-3449. ACOTE's phone number, c/o AOTA, is (301) 652-AOTA. The OT program at WVU was initially awarded accreditation in 1998 and awarded re-accreditation in 2003. The next scheduled onsite visit for accreditation will be in 2013. ACOTE information may be accessed at [www.acoteonline.org](http://www.acoteonline.org) (<http://www.acoteonline.org>).

Graduates of the program are able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy Inc. (NBCOT). For more information, NBCOT can be contacted at (301) 990-7979 or at <http://www.nbcot.org/>. After successful completion of this exam, the individual will be an occupational therapist, registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note: A felony conviction may impact a graduate's ability to take the NBCOT examination and/or obtain a state license. For further information on NBCOT's Character Review Program, interested parties can obtain information from that board or their website.

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

ENGL 101	Composition And Rhetoric	3
ENGL 102	Composition And Rhetoric	3
PSYC 101	Introduction to Psychology	3
PSYC 241	Intro to Human Development	3
PSYC 281	Intro to Abnormal Psychology	3
SOCA 101	Introduction to Sociology	3
or SOCA 105	Introduction to Anthropology	3
BIOL 101 & BIOL 103	General Biology and General Biology Laboratory	4
BIOL 102 & BIOL 104	General Biology and General Biology Laboratory	4
PHYS 101	Introductory Physics *	4
PSIO 241	Elementary Physiology *	4

or PSIO 441	Mechanisms Body Function	
STAT 211	Elemntry Statistical Inference *	3
COMM 100	Principles-Human Communication	1
COMM 102	Human Comm-Interprsnl Context	2
OTH 201	Medical Terminology for OT	1

\* 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) are not covered by the above. Students/applicants must complete all of the WVU General Education and all OT Prerequisite requirements (by June 1) prior to starting the OT Program.

(See the WVU Undergraduate Catalog)

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

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

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

## Admission Standards

Normally, students apply to the program during their second year of college. They must have a minimum of fifty to fifty-five hours of college credit which includes the prerequisites listed previously. Students who already have a degree in another field are also eligible to apply. All applicants must meet the following criteria:

- Minimum GPA of 3.0, including overall GPA and prerequisite GPA, is normally required (a higher GPA may be necessary given the competitive nature of the program).
- Minimum of sixty 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 required.
- **IMPORTANT NOTE:** Those students applying to the OT Program in the November 15, 2013 through February 15, 2014 application period will not be considered in the application review process if they are taking more than ten credit hours of OT prerequisite coursework in the 2014 Spring semester. For example, applicants may take one four-credit-hour OT prerequisite course plus two three-credit-hour OT prerequisite courses which total ten credits of OT prerequisite coursework. On the other hand, applicants may not be taking any combination of OT prerequisite courses which totals more than ten credit hours; for example, an applicant taking two four-credit-hour OT prerequisite courses plus one three-credit-hour OT prerequisite course would be taking a total of eleven credit-hours of OT prerequisites in the Spring 2014 semester and would not be considered for admission into the OT Program. This requirement does not apply to courses which are not OT prerequisite courses; students may take as many non-OT prerequisite courses as they choose. Students are strongly urged to contact the Division of OT for clarification or if they have any questions on this requirement.
- For those students applying in the November 15, 2014 through February 15, 2015 application period, all but a maximum of two OT prerequisite courses must be fully completed by close of the application period (typically February 15). Thus, applicants who are taking three or more OT prerequisite courses in the Spring 2015 semester will not be considered for acceptance into the OT Program. Applicants must plan on taking no more than two OT prerequisite courses in the 2015 Spring semester prior to the 2015 summer start of the Program for which they are applying. This requirement does not apply to WVU non-OT prerequisite general education (GEC) course requirements. Note: Courses with a required lab, including those courses that have labs with a separate course number, may be considered one course for purposes of this requirement, i.e., a course plus its lab equal one course. Students are strongly urged to contact the Division of OT for clarification or if they have any questions on this requirement.

Application forms are available online on the program homepage at [www.hsc.wvu.edu/som/ot](http://www.hsc.wvu.edu/som/ot). Questions regarding application materials may be directed to The Division of OT at (304) 293-8828 or to the OT Program Academic Advisor at (304) 293-1690. Application materials are traditionally available November 15 through February 15. The deadline for submission of application materials is typically February 15. The official deadline will be posted on the occupational therapy website and printed in the admissions packet.

Course information for the master of occupational therapy degree can be found on the following website: <http://www.hsc.wvu.edu/som/ot>.

## What to Expect

Like many professional programs, the curriculum in the entry-level master's occupational therapy program is fairly fixed and intense. The first professional year, which begins in the summer, will include courses in basic sciences relevant to the profession and practice of occupational therapy and introductory professional courses. The second and third professional years will deal more specifically with training in occupational therapy theory and practice as administered across a wide variety of settings. The professional curriculum includes two off-campus, full-time clinical experiences known as Level II Fieldwork. Students are financially responsible for transportation, housing, and meal expenses related to clinical assignments. Students in the program are required to participate in the School of Medicine's laptop computer purchase lease-to-own program, which provides each student with a state-of-the-art computer that contains course and program-relevant software.

Students in the OT Program must complete all didactic coursework and all fieldwork within a period of five years after commencing the occupational therapy program. Furthermore, all Level II Fieldwork must be completed within eighteen months following completion of academic coursework while remaining within the five-year time frame.

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## Faculty

### O.T.R./L.

- Randy P. McCombie - Ph.D.  
Chair

## Occupational Therapy Curriculum Plan

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

### Undergraduate Requirements

OTH 300	Essentials of Clinical Anatomy	4
OTH 301	Professional Foundations	3
OTH 303	Functnl Movmnt Across Lifespan	2
OTH 304	Phys Impairment & Function 1	4
OTH 306	Kinesiologic Foundations	4
OTH 307	Neurobiologic Foundations	4
OTH 308	Evaluation Procedures	3
OTH 321	Developmental Life Tasks	3
OTH 360	Research Methods in OT	3
OTH 384	Level 1 Fieldwork 1	1,2
OTH 386	Level 1 Fieldwork 3	1,2
OTH 401	Physical Impairment/Fxn 2	4
OTH 405	Upper Extremity Rehabilitation	4
OTH 408	Tests/Measures-Occupatnl Thrpy	3
OTH 416	Professional Decision-Making	2
OTH 417	Occupationl Therapy-Geriatrics	3
OTH 419	Professional Values	3
OTH 430	Occupatnl Therapy-Mental Hlth	3
OTH 432	OT Interventions-Mental Health	3
OTH 435	Therapeutic Activity	3
OTH 440	Cognition and Perception in OT	2
OTH 480	Current Topics-Occupatnl Thrpy (3 Separate Classes)	1-3
OTH 493A	Special Topics	1-6
OTH 493E	Special Topics	1-6
OTH 497	Research:Capstone (2 classes (YrII Fall, Yr II Spr))	2
OTH 310	Critical Reasoning in OT	3
OTH 387	Level 1 Fieldwork 4	1,2
OTH 493G	SPTP:Qualitative Research-OT	1-6
OTH 493H	SPTP:Perf: Infancy thru Adoles	1-6
OTH 493I	SPTP:Anatomy/Kinesiology-OT	1-6

OTH 493J	SPTP:Principles-Occ Science	1-6
Total Hours		75-110

**Graduate Courses**

OTH 500	Health Care Issues in OT	3
OTH 501	Management for OT Practice	4
OTH 503	Occupational Therapy-Pediatrics	3
OTH 520	OT in the Work Environment	3
OTH 540	Level 2 Fieldwork 1	1-6
OTH 550	Education in OT Practice	3
OTH 551	OT in Prevention & Wellness	3
OTH 570	Advanced Theory in OT	3
OTH 594	Sem: Professional Development	1
OTH 640	Level 2 Fieldwork 2	1-6
OTH 697	Research ((Yr III Fall 2 credits, Spr 2 credits))	2-4
Total Hours		27-39

The following Plan of Study is based on two years of college prerequisite work, described elsewhere, followed by three years of OT Coursework.

**Second Year**

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

**Third Year**

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

**Fourth Year**

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

**Fifth Year**

Summer	Hours Fall	Hours Spring	Hours
OTH 540	1-6 OTH 500	3 Weeks 1-4	
	OTH 503	3 OTH 501	4
	OTH 520	3 OTH 550	3
	OTH 551	3 OTH 594	1
	OTH 570	3 OTH 697	2

OTH 697	2 Weeks 5-16	
	OTH 640	6
1-6	17	16

Total credit hours: 107-117

## Program Time Frame

Students must complete all didactic coursework and Level II Fieldworks within a period of five years after commencing the occupational therapy program. Furthermore, all Level II Fieldwork must be completed within eighteen months following completion of academic coursework while remaining within the five-year time frame.

## Pathologists Assistant

pa-info@hsc.wvu.edu

Cheryl Germain, MHS, PA (ASCP), *Program Director*

Justin Falcon, MHS, PA (ASCP), *Clinical Coordinator*

Jen Iacobucci, *Program Specialist*

## Degree Offered

- Master of Health Science

## The Profession

A pathologists' assistant is a healthcare professional who is qualified through academic and practical training to provide services in anatomic pathology under the direction of a qualified pathologist. Pathologists' assistants serve as physician-extenders in the same manner as physicians' assistants. The addition of pathologists' assistants to the pathology team can reduce cost, increase revenue, and improve workflow in the anatomic pathology lab. In practice, pathologists' assistants (PAs) are responsible for the processing of the surgical pathology specimen from receipt to dissection and description to submission of tissue to histology. In autopsy practice, the PA is involved in reviewing the medical record of the decedent, evisceration, dissection, and selection of tissue for submission to histology as well as formulation of a preliminary anatomic diagnosis and autopsy report under the direction of a pathologist. Many PAs are involved in laboratory management, teaching at the university-level, training of residents and medical students, forensic investigation, or research.

## Nature of Program

The graduate program for pathologists' assistants began in January 2008 and is administered by the School of Medicine. Students are admitted into the Master of Health Science program after earning a baccalaureate degree from a regionally accredited college or university. Students with a cumulative grade point average of 3.25 or higher in the B.S. degree program in Medical Laboratory Science at West Virginia University may be provisionally admitted directly into the pathologists' assistant program at the end of their junior year.

This program is a twenty-four month master's-level program that prepares graduates as allied health professionals for careers as pathologists' assistants. During the second year, the student receives both didactic instruction and practical experience. Students receive practical experience at several of the program's affiliated medical laboratories including the following:

- Ruby Memorial/West Virginia University Hospital and Medical Examiner's Office, Morgantown, WV
- Allegheny General Hospital, Pittsburgh, PA
- UPMC Health System including Magee-Womens Hospital, UPMC Presbyterian, UPMC Shadyside and Children's Hospital, Pittsburgh, PA
- University of Pittsburgh Health Sciences Tissue Bank at UPMC Shadyside, Pittsburgh, PA
- Thomas Memorial Hospital, Charleston, WV
- St. Francis Hospital, South Charleston, WV
- St. Clair Hospital, Upper St. Clair, PA

The WVU pathologists' assistant program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Avenue, Suite 670, Chicago, IL 60631-3415, (773) 714-8880.

Graduates are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

## Admission to the Pathologists' Assistant Program

All students seeking admission to the Master of Health Science, Pathologists' Assistant program must meet the following admissions requirements:

- Hold an earned baccalaureate degree from a regionally accredited institution of higher education
- Successfully complete the specific prerequisite coursework in mathematics and sciences
- A GPA (cumulative and pre-requisite courses) of at least 3.0 on a 4.0 scale is preferred
- Submit two letters of recommendation (electronic submission only as part of the application process)
- Complete a shadowing experience with a certified PA in Pathology or have equivalent work experience
- Complete an interview with the Admissions Committee
- Submit an electronic admissions packet including the application form, personal statement, essential functions form, shadowing statement, and official transcripts from all colleges and universities attended (Paper admissions application forms are not accepted, except for Direct Admit candidates from the WVU MLS programs.)

## Requirement

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

## Shadowing or Work Experience

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

## Admissions Classifications

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

- Direct Admit: a limited number of students completing the bachelor of science program in medical laboratory science 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, applications will be submitted in the application period which extends from January 1 to May 31 of the senior year. Admission is contingent upon satisfactory completion of the baccalaureate degree.

## Performance Standards

Students are required to maintain a semester GPA of 3.0 to progress in the first and second year of the professional program.

## Application Procedure

Each year, the pathologists' assistant program selects a limited number of students from the applications received for admission. Applications for admission to the program are available between January 1 and May 31 for the class beginning the following January. The application fee is sixty dollars. Each applicant must arrange for transcripts to be sent directly from all undergraduate institutions attended to the Office of Admissions. When the application is complete, the file is sent to the Pathologists' Assistant Admissions Committee. A complete admissions packet contains the following: completed application form and personal statement, official transcripts, two references\*\*, and the essential functions form. Please note that the Office of Admissions does not handle reference letters. Each application requires two letters of reference (one from a professor and one from a laboratory professional with whom you have worked). An interview will be granted to qualified applicants after a review of the application packets.

## Pathologists' Assistant Program Essential Functions

In accordance with Section 304 of the 1973 Vocational Rehabilitation Act, the West Virginia University Pathologists' Assistant program has adopted minimum technical standards for assessment of all applicants.

Because the master's degree in health science/pathologists' assistant signifies that the holder has obtained minimum competencies in all areas of the anatomic pathology laboratories, it follows that graduates must have the knowledge and skills to function in a wide variety of laboratory situations and to perform a wide variety of procedures.

1. Candidates for the master's degree in health science/pathologists' assistant must have somatic sensation (sense of touch) and the functional use of the senses of vision and hearing.
  2. Candidates' diagnostic skills will also be lessened without the functional use of the sense of equilibrium, smell, and taste.
  3. Additionally, they must have sufficient motor function to permit them to carry out the activities described in the sections that follow.
  4. They must be able to consistently, quickly, and accurately integrate all information received by whatever sense(s) employed, and they must have the intellectual ability to learn, integrate, analyze, and synthesize data.
  5. A candidate for the master's degree in health science/pathologists' assistant must have abilities and skills which include observation, communication, motor, conceptual, integrative, quantitative, behavioral, and social. Technological compensation can be made for some disabilities in certain areas, but a candidate should be able to perform in a reasonably independent manner. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation.
- *Observation:* The candidate must be able to observe demonstrations, procedures, and instruments in the basic sciences and clinical courses. Observation necessitates the functional use of the sense of vision and somatic sensation. It is enhanced by the functional use of the sense of smell.
  - *Communication:* A candidate should be able to speak, hear, and observe people in order to elicit information and perceive nonverbal communications. A candidate must be able to communicate effectively and efficiently in oral and written form with members of the health care team.
  - *Motor:* Candidates should have sufficient motor function to perform laboratory procedures. This action requires the coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.
  - *Intellectual—conceptual, integrative, and quantitative abilities:* These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem-solving requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand spatial relationships of structures.
  - *Behavioral and Social Attributes:* A candidate must possess the emotional health required for full utilization of his/her judgment, the prompt completion of all responsibilities, and the development of mature, sensitive relationships with patients and coworkers.

Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that should be assessed during admissions and education process. In its evaluation of applicants to the West Virginia University Pathologists' Assistant program, the Admissions Committee will approach each applicant with the following questions in mind.

When an applicant does not meet a non-academic standard as defined above, and when this would, in the professional judgment of the committee, not satisfy the pathologists' assistant objectives for the student in performing laboratory procedures, education, and research, such opinion will be documented by the Admissions Committee.

The questions are not designed to disqualify an applicant but rather to give the Admissions Committee more complete information about an applicant's ability to meet the following nonacademic standards:

1. Is the candidate able to observe demonstrations and perform procedures in the basic sciences and clinical courses?
2. Is the candidate able to analyze, synthesize, solve problems, and make judgments about results obtained on patient specimens?
3. Does the candidate have sufficient use of the senses of vision, hearing, and somatic sensation necessary to perform the indicated laboratory procedures?
4. Can the candidate reasonably be expected to communicate the results of laboratory tests to other members of the healthcare team with accuracy, clarity, and efficiency?
5. Can the candidate reasonably be expected to learn and perform laboratory tests and operate instruments?
6. Can the candidate reasonably be expected to display good judgment in the analysis of procedure results?
7. Can the candidate reasonably be expected to accept criticism and respond by appropriate modification of behavior?
8. Can the candidate reasonably be expected to possess the perseverance, diligence, and consistency to complete the pathologists' assistant program and to become a practicing pathologists' assistant?

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## 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

- Michelle Costas - MHS, P.A.(ASCP)
- Carie Coffindaffer - MHS, P.A. (ASCP)

## Curriculum

### First Year

Fall	Hours Spring	Hours Summer	Hours
PATH 610	1 PATH 603	6 PATH 801	6,12
MICB 702	5 PATH 625	4	
PSIO 743	5 PATH 728	5	
PATH 620	2 FIS 493B	3	
PATH 465	2		
PATH 605	2		
	<b>17</b>	<b>18</b>	<b>6-12</b>

### Second Year

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

Total credit hours: 70-76

## 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.

## Division of Physical Therapy

### Degree Offered

- Doctor of Physical Therapy (D.P.T.)

### Nature of Program

The WVU Division of Physical Therapy was established in 1970 under the auspices of the School of Medicine to help meet the need for physical therapists in West Virginia. The program became an entry-level doctoral degree program in Fall 2005. The program is accredited by the Commission on Accreditation in Physical Therapy Education, a specialized body recognized by the Council on Postsecondary Accreditation. The most recent accreditation was awarded in November of 2011 for ten years. Forty full-time students are admitted 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 upon completion of the program which entitles the graduate to apply for examination for state licensure. A license to practice physical therapy is required by all states.

### The Profession of Physical Therapy

Physical therapy is a hands-on health care profession that promotes optimal health and function through the application of scientific principles to prevent, identify, assess, correct, or alleviate acute or prolonged movement dysfunction. The goal of physical therapy is to help individuals fully participate in all societal roles according to their capabilities.

Demand for physical therapy services is expected to continue over the next ten years. The demand for physical therapists in all practice settings is affected by such factors as an aging population and increased emphasis on a healthy, active lifestyle. The professional organization represents therapists on healthcare issues and is working hard to assure that physical therapy will continue to be a favorable career choice.

Physical therapists are respected members of the healthcare team. They work with other healthcare providers such as physicians, occupational therapists, rehabilitation nurses, psychologists, social workers, dentists, podiatrists, and speech pathologists and audiologists. Physical therapists work in hospitals, private physical therapy offices, community health centers, corporate or industrial health centers, sports facilities, research institutions, rehabilitation centers, nursing homes, home health agencies, schools, pediatric centers, and colleges and universities.

Some physical therapists work as employees in these settings, while others are self-employed as owners or partners in private practices. Settings, employment arrangements, career responsibilities, and career opportunities depend on the interests and skills of each practitioner.

## The Admissions Process

Courses recommended for high school students in preparation for the preparatory and professional physical therapy program include, but are not limited to, biological sciences (e.g. anatomy, advanced biology, physiology, etc.), chemistry, algebra/trigonometry and/or pre-calculus, physics, and social sciences. Computer literacy is highly recommended.

Because individualized instruction in laboratories and clinics is an essential component of the professional physical therapy program, enrollment must be limited. The physical therapy program selects forty students per year for entrance into the professional phase of the program. All students who wish to enter the program must apply for admission, must have a bachelor's degree, and have completed or be enrolled in the prerequisite coursework detailed below. These courses are available at most colleges.

The following requirements must be met to apply to the WVU Division of Physical Therapy:

- Applicant must have a minimum **cumulative GPA of 3.0**. Applicant must have a minimum **prerequisite science GPA of 3.0** which includes two general biology courses, two chemistry courses, two physics courses, statistics, anatomy, and human physiology.
- Applicants must have a minimum of **sixty hours of clinical volunteer** or work experience obtained from two different physical therapy settings. Though these hours may be obtained during high school and college, some volunteer hours obtained during the junior or senior college years is strongly recommended.
- Applicants must submit **three letters of recommendation**. Two letters must be from physical therapists with whom the student has worked or volunteered. These letters must be from licensed physical therapists; the Admissions Committee will not consider letters from non-physical therapists or relatives. The third letter must be from a professor in their undergraduate major.

The form for the letters of recommendation is available with the electronic application.

- Applicant must take the Graduate Record Examination (GRE). No minimum score is required. Please note the **Institution Code** for reporting is **7639**, which is different from the code used for other programs at WVU. Using this code will result in your official scores being sent to PTCAS, who will verify your scores and send them to WVUPT.
- Applicant must have a **minimum grade of C** in each prerequisite course.
- Applicant must have completed or be enrolled in the required courses listed below:

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

\* The anatomy courses included in the DPT curriculum are extremely rigorous. Students should seek out the highest level anatomy course(s) available. The minimum prerequisite is a three-credit-hour course in human anatomy, ideally with a laboratory. A two-semester, eight-credit sequence of combined human anatomy and physiology may be accepted; however, comparative and animal anatomy does not count towards this pre-requisite.

\*\* Human physiology course with laboratory is preferred. A two-semester, eight-credit sequence of combined human anatomy and physiology may be accepted; however, animal or biology will not count towards this pre-requisite.

It is recommended that prerequisite courses in human anatomy and human physiology be completed within two years prior to admission.

WVU maintains an online Course Equivalency System (CES) ([http://admissions.wvu.edu/admissions/university-requirements/transfer\\_equivalency](http://admissions.wvu.edu/admissions/university-requirements/transfer_equivalency)) that lists course equivalencies at many institutions in the state/region.

Applicants who complete any of their prerequisites outside of WVU should check the CES to see if each prerequisite course transfers directly to WVU as the required WVU course. If your undergraduate institution is not listed in the CES, or if you have taken prerequisite courses that transfer in as open credit or not equivalent, you must submit a photocopy of the catalog description of the courses in question. Upon receiving your application, the Admissions Committee may request that you submit a copy of the course syllabus for further review.

## Baccalaureate Preparation

Applicants must have earned a baccalaureate degree or plan on completing a baccalaureate degree by May of the year of entering the program. Students may apply with a number of different baccalaureate degrees; however, they must complete the prerequisites for the physical therapy program as described no later than the spring semester of the year of application.

Students who want careers in healthcare may find that physical therapy fulfills their goals. A recommended baccalaureate preparation is in the field of exercise physiology. At WVU, exercise physiology majors will be able to obtain all of the prerequisites listed above during their course of study. Another common baccalaureate major may be biology. As discussed above, these are merely suggestions and students can apply from any institution of higher education with any degree background as long as they meet the aforementioned prerequisites.

## Additional Information and Updates

For updates, be sure to periodically check the WVU Division of Physical Therapy website at <http://www.hsc.wvu.edu/som/pt>. You may also contact the Program Manager for the Physical Therapy Program, Brenda Wolfe, at [bwolfe@hsc.wvu.edu](mailto:bwolfe@hsc.wvu.edu).

## Applications

The physical therapy program participates in the national electronic physical therapy standard application system, known as PTCAS (Physical Therapist Centralized Application Service). The website for PTCAS is <http://www.ptcas.org>. Typically, PTCAS opens for applications in mid-July. 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 thirty-five days of the deadline. Please check the program website frequently for any updates on deadlines or the admissions process. These are often adjusted on an annual basis.

## Faculty

### Chair

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

### Professors

- John J. Petronis - PT, MS (WVU)  
Orthopedic Physical Therapy
- Bill Stauber - PhD  
Electrotherapy, Muscle Physiology
- Anne Swisher - PT, PhD  
Cardiopulmonary PT, Oncology

### Associate professors

- Duane Scott Davis - PT, PhD OCS (WVU)  
Orthopedic Physical Therapy
- Mia Erickson - PT, EdD, CHT, ATL (WVU)  
Education, Professional Roles, Hand Therapy
- Dina Jones - PT, PhD  
Public Health, Arthritic disease
- Corrie Mancinelli - PT, PhD (WVU)  
Anatomy and Orthopedic Physical Therapy
- Ralph Utzman - PT, MPH (WVU)  
Health Policy, Professional Roles

### Assistant professors

- 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

## Physical Therapy (PT)

Course information for the doctor of physical therapy degree can be found on the following website: <http://www.hsc.wvu.edu/som/pt>.

### Physical Therapy Curriculum

Note: This is subject to change without notice.

PT 705	Intro to Evidence Based PT	2
PT 706	Advanced Clinical Anatomy	5
PT 711	Professional Roles 1	3
PT 713	Lifespan Functional Movement	2
PT 714	Clinical Sciences 1	4
PT 715	Evidence Based PT 1	2
PT 716	Kinesiology Foundations	4
PT 718	Evaluation Procedures	3
PT 720	Clinical Education 1	1
PT 723	Developmental Life Tasks	3
PT 724	Exercise Foundations	3
PT 725	Evidence-Based Physical Therapy 2	3
PT 727	Neurobiologic Foundations	4
PT 728	Physical Therapy Procedures 1	4
PT 730	Clinical Education Symposium 1	1
PT 732	Physical Therapeutic Agents 1	2
PT 733	Cardiopulmonary PT	3
PT 734	Clinical Sciences 2	2
PT 738	Physical Therapy Procedures	3
PT 740	Clinical Education 2	1
PT 741	Professional Roles 2	4
PT 742	Physical Therapy Agents 2	2
PT 743	Geriatric Physical Therapy 1	2
PT 744	Clinical Sciences 3	2
PT 745	Evidence Based PT 3	2
PT 746	Orthopedic Physical Therapy 1	5
PT 754	Clinical Sciences 4	3
PT 755	Evidence Based PT 4	2
PT 756	Orthopedic Physical Therapy 2	3
PT 757	Neurologic Physical Therapy	3
PT 760	Clinical Education 3	8
PT 761	Professional Roles 3	3
PT 762	Health Care Issues in PT	2
PT 763	Pediatric Physical Therapy	3
PT 765	Evidence-Based PT 5	1
PT 767	Neurologic Physical Therapy 2	2
PT 768	Prosthetics and Orthotics 1	3
PT 770	Clinical Education Symposium 3	2
PT 771	Survey of Niche PT Practice	2

PT 780	Clinical Education 4	8
PT 795	Independent Study	1-6
PT 797	Research	1-15
Total Hours		119-138

**First Year**

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

**Second Year**

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

**Third Year**

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

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Total credit hours: 121

**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.

# Health Sciences School of Nursing

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## Degrees Offered

- Bachelor of Science in Nursing
- Master of Science in Nursing
- Doctor of Nursing Practice
- Doctor of Philosophy in Nursing

## Introduction

The mission of the WVU School of Nursing is to lead in improving health in West Virginia and broader society through excellence in student-centered educational programs, research and scholarship, the compassionate practice of nursing, and service to the public and the profession. This mission is responsive to changing healthcare needs and emerging national and state changes in technology and healthcare delivery and is enhanced by a supportive and open environment. The faculty's educational effort is directed at providing high quality, student-centered programs of instruction at all levels which prepare superb professional nurses to meet basic healthcare needs; advance practiced nurses to address complex health needs; and enable doctorally educated nurses to advance nursing knowledge through research, to assist in the formulation of policies to improve health care, and to serve as faculty in higher degree programs. Unique characteristics of the state mandate that the healthcare needs of rural populations and vulnerable groups be a major focus of education, research, and service, including faculty practice.

The School of Nursing offers undergraduate, graduate, and post-master's programs of study. The baccalaureate program (B.S.N.) 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 B.S./B.A. to B.S.N. program is available for the college graduate seeking a B.S.N.

The master of science in nursing (M.S.N.) prepares graduates for advanced practice roles in rural primary health care. These roles include family nurse practitioner, pediatric nurse practitioner, neonatal nurse practitioner, geriatric nurse practitioner, women's health nurse practitioner, and nursing leadership.

Post-graduate nurse practitioner certification programs in these role specialties are available for those who already have an M.S.N. The RN to M.S.N. program also has these role specialties available.

The doctor of nursing practice (DNP) prepares advanced practice nurses who will practice at the highest level of professional nursing and will advance the application of nursing knowledge for the purpose of improving healthcare for diverse populations.

The doctor of philosophy in nursing (Ph.D.) prepares nurse scholars/educators for roles in teaching, service, and research in nursing. The program prepares graduates who will continue unique nursing experience through 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](http://adm.wvu.edu/home/cost_of_attendance). Special fees and deposits are also required. Students enrolling at other sites pay the fees shown in the catalog for that site. Fees are subject to change without notice. Students' expenses vary according to the course of study and individual needs. Information concerning financial assistance, application forms, and the Free Application for Federal Student Aid (FAFSA) form may be obtained from the financial aid website at <http://www.hsc.wvu.edu/fin/> or by contacting the HSC Financial Aid Office, PO Box 6004, Morgantown, WV 26506-6004; telephone (304) 293-5242 (toll free) or 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://nursing.hsc.wvu.edu/Employment/Home/Scholarship-Opportunities>.

## Additional Information

Visit the School of Nursing website at <http://www.hsc.wvu.edu/son>. Call the WVU school of Nursing Office of Student Services at 1-866-WVUNURS or (304) 293-1386. Write to WVU School of Nursing at PO Box 9600, Morgantown, WV 26506-9600

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## Faculty

### Dean

- Georgia L. Narsavage - PhD (U. of PA)  
Professor

### Associate Dean for Research and PhD Program

- 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 Professor

- K. Joy Buck - PHD (U. Va)
- Pamela Deiriggi - PHD (U. of Tx.)  
Coordinator PNP Track
- Barbara Kupchak - PHD (U. of Tx.)
- Susan New#eld - PHD (U. of Tx.)
- Catherine V. Nolan - EDD (WVU)  
Director - Evaluation
- Kari Sand-Jecklin - EDD (WVU)

### Assistant Professor

- Dottie Oakes - MSN (Duke U.)

Director - Clinical Services

- 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)
- 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)  
Director - LRC

### **Clinical Assistant Professor**

- Emily Brinker Barnes - DNP (WVU)
- Sandra 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)
- Danielle McGinnis - MSN (WVU)
- Joanne E. Watson - MSN (U. of Va.)
- Diana L. McCarty - MSN (WVU)

### **Lecturers**

- 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 Petite - MSN (WVU)
- Teresa D. Ritchie - MSN (WVU)
- April Shay - BSN (WVU)
- Natalie Sypolt
- Kara Terhune - MSN (Wilkes U.)
- Sharon Thralls - MSN (Waynesburg U.)

- Kimberly Wallace - BSN (WVU)
- Ashley Wilson - MSN (WVU)

### **Clinical Instructor**

- 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.)
- Barbara Nunley - PHD (U. of Ky.)
- Alvita Nathaniel - PHD (WVU)  
Coordinator FNP Track
- 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 Professor

- Joy Henson Penticuff - PHD (Case Western Reserve)
- Gretchin Spreitzer - PhD

## Adjunct Assistant Professor

- 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. Atassi - MSN (Marshall U.)
- Jacquelyn P. Bauer - MSN (WVU)
- Maribeth Beckner - MSN (WVU)
- Charlotte Bennett - MSN (WVU)
- Eleanor K. Berg - MSN (WVU)
- Murrta C. Bolinger - (U. of Va.)
- Lucinda M. Brown - MSN (U. of Ky.)
- Karen Campbell - MSN (Vanderbilt U.)
- Lena Antimonova Cerbone - MSN (Yale SoN)
- Susan Collins - MSN (Duke U.)
- Jill Cochran - MSN (WVU)
- Pamela S. Courtney - MSN (WVU)
- Erin Craffey
- Peggy L. Cramer - MSN (Marshall U.)
- Brenda Daugherty - MSN (WVU)
- Toni Dichiaccio
- Karen L. Fahey - MSN (WVU)
- Deborah Falconi
- Mary Friel 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 Durback 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.)

### **Professor Emeritus**

- 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)

- Jane A. Shrewsbury - MN ED (U. of Pitt.)
- Patricia Simoni - EDD (WVU)
- Jacqueline Stemple - EDD (WVU)
- Fredona Stenger - MSN (Boston U.)

### **Assistant Professor Emeritus**

- Ann Cleveland - EDD (WVU)
- Suzanne Gross - PHD (U of Tx.)
- Kathleen Marsland - MS (U. Colo.)

## **Bachelor of Nursing**

### **Nature of Program**

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

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

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

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

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

### **Accreditation**

Initial accreditation was received with graduation of the first class in 1964. The baccalaureate program in nursing is fully accredited by the Commission on Collegiate Nursing Education, a national accrediting agency.

### **Fees, Expenses, Housing, Transportation, and Immunization**

Students enrolling at the Morgantown campus pay fees which are detailed at [http://adm.wvu.edu/home/cost\\_of\\_attendance](http://adm.wvu.edu/home/cost_of_attendance). Special fees and deposits are also required. Students enrolling at other sites pay the fees shown in the catalog for that site. Fees are subject to change without notice. Students' expenses vary according to the course of the study and individual needs. Information concerning financial assistance, application forms, and the Free Application for Federal Student Aid (FAFSA) form may be obtained from the financial aid website <http://www.hsc.wvu.edu/fin/> or by contacting the HSC Financial Aid Office PO Box 6004, Morgantown, WV 26506-6004; telephone (304) 293-5242 or (toll free) 1-866-WVUNURS.

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 are required for all health sciences students.

## Criminal Background Checks

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

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

## Curriculum Requirements

### Academic Standards and Graduation Requirements

To be in good academic standing, students must:

- Maintain a cumulative grade point average of 3.0 or better in all college work attempted
- Pass all nursing courses and pre- or co-requisite non-nursing courses with a grade of C or better

A student who receives a grade of D, F, or W in a required nursing course or pre- or co-requisite non-nursing course may repeat that course once and must earn a grade of C or better when the course is repeated. Students who repeat a nursing course or a pre- or co-requisite non-nursing course and earn a grade of D, F, or W will be dismissed from the school. A student may repeat only one nursing course. Students who do not maintain a cumulative GPA of 3.0 or better will be placed on probation for one semester. Students on probation who do not raise their cumulative GPA to 3.0 or better after one semester will be dismissed from the School of Nursing. Nursing courses and pre- and co-requisite courses in which students earn a grade of D, F, or W must be repeated prior to the student's progression to the next course(s) in the nursing sequence. Nursing courses must be repeated in the next fall or spring semester that the course is offered. Any general education course that is not a pre- or co-requisite of nursing courses and in which a grade of D or F has been earned must be repeated prior to graduation if it is to be counted toward graduation requirements. The baccalaureate of science in nursing degree is conferred upon completion of 128 hours and all required courses.

### First-Year Basic Student Curriculum

All basic students admitted to the school complete a common curriculum in the freshman year designed to provide the foundation for success in subsequent nursing courses. The curriculum for the basic BSN program is currently in the process of revision. Please see the School of Nursing website for details on the updated [curriculum](#).

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

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

#### First Year

Fall	Hours Spring	Hours
CHEM 111 or 115	4 CHEM 112 or 116	4
BIOL 102 or 115	3-4 NBAN 107	4
BIOL 104	1 ENGL 101	3
NSG 100	2 STAT 211	3
PSYC 101	3 Select one of the following:	3
Select one of the following:	3 SOCA 101	
MATH 126A	SOCA 105	
MATH 126B		
MATH 126C		
WVUE 191	1	
	<b>17-18</b>	<b>17</b>

#### Second Year

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

**Third Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
NSG course - Alterations in Adult Health 1	6 NSG course - Alterations in Adult Health 2	6
NSG course - Pharmacology	3 NSG course - Child and Adolescent Health	4
NSG course - Women's Health Across the Lifespan	4 NSG course - Ethics and Health Care Policy	3
GEC Objective	3 GEC Objective	3
	<b>16</b>	<b>16</b>

**Fourth Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
NSG course - Alterations in Mental Health	4 NSG course - Care of the Critically Ill Patient	4
NSG course - Nursing in Complex Community Systems	7 NSG course - Leadership in Complex System	7
Nursing Elective	2 NSG course - Preparation for Licensure	1
GEC Objective	3 GEC Objective	3
	<b>16</b>	<b>15</b>

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Total credit hours: 128-129

**The B.S./B.A. to BSN Curriculum**

The curriculum for the B.S./B.A. to BSN program is currently in the process of revision. Please see the School of Nursing website for details on the updated [curriculum](#).

**Suggested Plan of Study for BS/BA to BSN****First Semester**

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

**Second Semester**

<b>Summer</b>	<b>Hours</b>
NSG course - Alterations in Adult Health 1	6
NSG course - Pharmacology	3
NSG course - Women's Health Across the Lifespan	4
	<b>13</b>

**Third Semester**

<b>Fall</b>	<b>Hours</b>
NSG course - Alterations in Adult Health 2	6
NSG course - Child and Adolescent Health	4
NSG course - Ethics and Health Care Policy	3

**13****Fourth Semester**

<b>Spring</b>	<b>Hours</b>
NSG course - Alterations in Mental Health	4

NSG course - Nursing  
in Complex Community  
Systems 7

11

#### Fifth Semester

Summer	Hours
NSG course - Care of the Critically Ill Patient	4
NSG course - Leadership in Complex Systems	7
NSG course - Preparation for Licensure	1
	12

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Total credit hours: 64

## RN to BSN Curriculum

The curriculum for the RN to BSN program is currently in the process of revision. Please see the School of Nursing website for details on the updated [curriculum](#).

## Doctor of Nursing Practice Online Program

### Program Description

The School of Nursing offers a program of study leading to the doctor of nursing practice (DNP) degree. Courses are offered via web-based modalities in real time. Courses are scheduled in the late afternoon at times convenient for working students and may require that students attend special sessions in Morgantown or Charleston. Dates of the special sessions are made available in advance so that students can plan their schedules in order to attend.

The DNP program offers a curriculum that allows students to enroll on a part-time basis. Graduate students are strongly recommended to limit their credit load if they are also involved in full-time work. Students employed in full-time work should enroll for no more than six hours of doctoral level coursework in any one term. Throughout the curriculum, students are guided in the processes of self-development aimed at pursuing excellence in scholarly and professional endeavors.

At the completion of the program, the Doctor of Nursing Practice (DNP) graduate will be able to practice at the highest professional level to:

1. Use science-based theories and concepts to:
  1. Determine the nature and significance of health and healthcare delivery phenomena
  2. Describe actions and advance strategies to improve healthcare delivery
  3. Develop, deliver, and evaluate theory-based healthcare
2. Demonstrate organizational and systems leadership that emphasizes the primacy of clinical work, continually improving health outcomes, and ensuring patient safety
3. Use analytical methods and research to develop best practices and practice guidelines and to facilitate the evaluation of systems of care that will improve patient outcomes
4. Use information systems and technology-based resources that support clinical and administrative decision-making, care systems, nurse-sensitive outcomes, and quality improvement
5. Assume a leadership role in the development of healthcare policy
6. Establish, participate, and lead interprofessional teams
7. Utilize a strong conceptual foundation in clinical prevention and population health
8. Base practice on biophysical, psychosocial, sociopolitical, cultural, economic, and nursing science and ethics
9. Develop, implement, and evaluate practice and care delivery models, which are politically and culturally appropriate

### Admissions Criteria

1. Satisfy WVU requirements for admission to graduate study
2. Have a cumulative grade-point average of 3.0 or higher on a 4.0 scale on the M.S.N. degree
3. Have a current, unrestricted RN license in at least one state
4. Hold the degree of master of science in nursing from a school of nursing program accredited by CCNE or NLNAC

5. Hold advanced practice certification in an area recognized for announcement of Advanced Practice by the WV Board of Examiners for Registered Professional Nurses
6. A competitive **Graduate Record Exam (GRE)** Competitive GRE scores in previous years have included:
  - PRIOR TO** August, 2011, a minimum score of 400 each on the verbal and quantitative, a total of the two sections of 1000, and an analytical writing score of 4.0.
  - AFTER** August, 2011, a minimum score of 150 on the verbal section, 142 on the quantitative section, a total of the two sections of 300, and an analytical writing score of 4.0.)

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 should be completed by February 1. The beginning sequence of courses in the DNP program starts in the summer semester only. Applicants to the DNP program need to complete the following steps in order to be considered for admission:

Complete two application forms as indicated below and return to the appropriate offices by the deadline.

1. Application for Admission to Graduate Studies (available at: <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/>) submitted electronically
3. Request an official transcript of records from each college or university attended. Transcripts should be sent directly to WVU Health Science Center, Office of Admissions, P.O. Box 9815, Morgantown, WV 26506-9815.
4. Three letters of reference should address the applicant's expertise in the advanced practice of nursing and likelihood for success in doctoral work. One letter should be from a former professor of the applicant.
5. Submit a current curriculum vitae and evidence of national certification

For more information, visit the website at <http://www.hsc.wvu.edu/son/>, write to West Virginia University School of Nursing, P.O. Box 9600, Morgantown, WV 26506-9600; or call (304) 293-1386.

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

## Nursing Core Courses for Doctor of Nursing Practice

NSG course - Health Research Statistics 1	3
NSG course - Health Promotion of the Population	3
NSG course - DNP Role Seminar	1
NSG course - Evidence Based Practice	3
NSG course - Theory of Practice	3
NSG course - Health Care Informatics	3
NSG course - Focused Study	3
NSG course - Health Care Leadership	3
NSG course - Health Policy/Resource Management	3
NSG course - Clinical Project	3
NSG course - Clinical Immersion	1-6
NSG course DNP Role Application	1
NSG 763	DNP Capstone
	1-6
Total Hours	31-41

## Doctor of Philosophy

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 of 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 the following:  
 WVU School of Nursing, Student Services Office  
 P.O. Box 9600  
 Morgantown, WV 26506-9600
2. Request an official transcript of records from each college or university attended. Transcripts and records should be sent directly to the following:  
 WVU Health Science Center Office of Admissions  
 P.O. Box 9815  
 Morgantown, WV 26506-981
3. Send three letters of recommendation directly to the following:  
 WVU School of Nursing Student Services Office  
 P.O. Box 9600  
 Morgantown, WV 26506-9600  
 Letters should address the applicant's expertise in 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.

## Master of Nursing

### M.S.N. 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 working students and may require that students attend special sessions in Morgantown or Charleston. Dates of the special sessions are made available in advance so that students can plan their schedules in order to attend.

The master's program offers a curriculum that allows students to enroll on a part-time or full-time basis. Graduate students are strongly recommended to limit their credit load if they are also involved in full-time work. Students employed in full-time work should enroll for no more than six hours of master's-level coursework in any one term. Throughout the curriculum, students are guided in the process of self-development aimed at pursuing excellence in scholarly and professional endeavors. The program allows flexibility within the basic curricular structure through the individualization of learning experiences. The pattern and duration of the student's study plan is determined in consultation with a faculty advisor and is based upon the student's background and goals. The forty-four credit program can be completed in five semesters (including a summer session) of full-time study. The average full-time load is nine to twelve credit hours per semester. Part-time options are also available.

Graduates meet all requirements to sit for the national certification examination in their major area of family nurse practitioner, pediatric nurse practitioner, neonatal nurse practitioner, women's health nurse practitioner, or nursing leadership. They are prepared to offer care at the advanced practice level to select populations and are able to perform all activities encompassed in the traditional scope of practice.

Goals of the Master's Program:

1. Synthesize theories and research findings and broad-based perspectives for application in the advanced practice of nursing
2. Utilize systematic inquiry and refined analytical skills in the provision of health care services
3. Create a relationship with clients that builds and maintains a supportive and caring partnership
4. Articulate viewpoints and positions in order to improve the quality of healthcare delivery and outcomes of successful care
5. Consult and collaborate in interdisciplinary and interagency endeavors to advance culturally sensitive healthcare to clients, groups, and communities
6. Integrate prior and current learning as a basis for growth and accountability in enacting the role of the advanced practice nurse

## Application Process

The application process should be completed by February 1. The beginning sequence of courses in the 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, or call (304) 293-1386.

## Admission Criteria

1. Satisfy WVU requirements for admission to graduate study
2. Have a cumulative GPA of 3.0 or higher on a 4.0 scale on all college work attempted
3. If taken before August, 2011, a minimum score of 350 each on the verbal and quantitative, with a minimum total of the two sections of 800, and an analytical writing score of 3.0.  
If taken after August, 2011, a minimum score of 143 on the verbal section, 138 on the quantitative section, a minimum total of the two sections of 286, and an analytical writing score of 3.0.

OR a minimum Miller Analogies Test score of 400.

4. Have a current, unrestricted RN license in at least one state
5. Hold a bachelor of science degree in nursing from a school accredited by NLNAC or CCNE (A bachelor of science degree in nursing is mandatory.)
6. Have completed three credits of undergraduate statistics acceptable for transfer with a grade of C or better
7. Have completed a health assessment course, including physical examination skills, with a grade of B or better that is acceptable for transfer
8. Submit three letters of reference
9. Submit a typewritten essay describing professional goals (limited to two type-written, double-spaced pages) (A bachelor of science degree in nursing is mandatory.)

Applicants may be considered for provisional admission on an individual basis. The specific provisions which must be met for progression to regular status will be noted in the admission letter.

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

## Curriculum Requirements

### Core Courses - Master's Degree

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

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

### FNP Courses

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

### Pediatric NP Courses

NSG 631	Advanced Pharmacotherapeutics	3
NSG 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		22

### Neonatal NP Courses

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

NSG 666	Neonatal Practicum 2	5
Total Hours		28

**Women's Health NP Courses**

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

**Leadership Courses**

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

**Post-Master's Certificate Program**

The post-master's certificate program requires a minimum of nineteen credit hours. The program prepares master's prepared nurses to sit for the national certification examination in the selected area of focus (family nurse practitioner, pediatric nurse practitioner, neonatal nurse practitioner, women's health nurse practitioner, and nursing leadership). To be considered for admission, the applicant must have a master's degree in nursing from a program accredited by NLNAC or CCNE with a minimum cumulative GPA of 3.0 or better and an unrestricted RN license in at least one state. Students in the post-master's certificate program must maintain a 3.0 GPA and receive satisfactory clinical ratings to progress. Each student's program will be individualized based on educational and experiential background. For those interested in a Nurse Practitioner Post-MSN certificate, prerequisites to registration for the required clinical courses in the program are evidence of competence in advanced pathophysiology, advanced pharmacotherapeutics, and health promotion.

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

The required courses for post-master's certification are as follows:

**Required Courses for Post Master's Family Nurse Practitioner**

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

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

NSG 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**

NSG 654	Neonatal Pathophysiology	4
NSG 655	Neonatal Health Promotion	2
NSG 663	Neonatal Assessment/Care 1	5

NSG 664	Neonatal Care 2	4
NSG 665	Neonatal Practicum 1	5
NSG 666	Neonatal Practicum 2	5
Total Hours		25

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

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

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

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

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

# Health Sciences School of Pharmacy

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## Degrees Offered

- Doctor of Pharmacy (Pharm.D.)
- M.S., Ph.D. in Pharmaceutical and Pharmacological Sciences

## Introduction

The mission of the West Virginia University School of Pharmacy is to improve the health and well-being of West Virginians and society at large by educating students and practitioners to provide optimal pharmaceutical care; conducting vital research that advances scientific knowledge, pharmacy practice, and economic development; and providing direct and supportive services to patients, the community, and the profession.

Pharmacy was first offered at West Virginia University as a department in the School of Medicine in 1914. The College of Pharmacy emerged as a separate entity in 1936 and became the School of Pharmacy in 1958. In 1960, the School of Pharmacy changed from a four-year to a five-year program and in 1998 to a six-year program. The doctor of pharmacy (Pharm.D.) program comprises four years of professional study preceded by a minimum of two years of pre-pharmacy study in an accredited U.S. college of arts and sciences.

Most pharmacy graduates enter practice in community or institutional pharmacies; however, positions are also available in various government agencies, the pharmaceutical industry, long-term care, nuclear pharmacy, and home health-care organizations. Pharmacists are eligible for commissions in the armed forces and the U.S. Public Health Service. Pharmacists also may prepare for careers in teaching and research through graduate study.

The WVU School of Pharmacy also offers M.S. and Ph.D. programs in the pharmaceutical and pharmacological sciences and health outcomes research.

## Accreditation

The School of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education. The Council is composed of members from the American Pharmacists Association, the National Association of Boards of Pharmacy, the American Association of Colleges of Pharmacy, and the American Council on Education.

The School of Pharmacy holds membership in the American Association of Colleges of Pharmacy, whose objective is to promote the interests of pharmaceutical education.

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## Faculty

### Dean

- Patricia A. Chase - Ph.D. (U Colorado)

### Associate Dean for Academic Affairs and Educational Innovation

- Mary K. Stamatakis - Pharm.D. (OSU)

### Assistant Dean for Student Services

- W. Clarke Ridgway - B.S. (WVU)

### Associate Dean for Research and Graduate Programs

- Rae R. Matsumoto - Ph.D. (Brown)

## Professors

- Marie A. Abate - Pharm.D. (U Michigan)  
Department of Clinical Pharmacy, Director, West Virginia Center for Drug and Health Information
- Patrick S. Callery - Ph.D. (U California)  
Department of Basic Pharmaceutical Sciences
- Mary E. Davis - Ph.D. (MSU)  
Pharmacology
- David P. Elliott - Pharm.D. (U Texas)  
Department of Clinical Pharmacy, Associate Chair for the Charleston Division
- Peter Gannett - Ph.D. (U Wisconsin)  
Medicinal Chemistry, Department of Basic Pharmaceutical Sciences, Associate Chair
- S. Suresh Madhavan - Ph.D. (Purdue)  
Chair, Pharmaceutical Systems and Policy

- Rae R. Matsumoto - Ph.D. (Brown)  
Associate Dean for Research and Graduate Programs
- S. Jamal Mustafa - Ph.D. (Lucknow U)
- William P. Petros - Pharm.D. (PCPS)
- Charles D. Ponte - Pharm.D. (U Utah)  
Department of Clinical Pharmacy and Family Medicine
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Pharmaceutics
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Pharmaceutical Systems and Policy
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Medicinal Chemistry
- Gerald M. Higa - Pharm.D. (U Pacific)  
Clinical Pharmacy and Oncology
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Basic Pharmaceutical Sciences
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Pharmaceutical Systems and Policy
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Department of Clinical Pharmacy
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Department of Clinical Pharmacy. Associate Dean for Academic Affairs and Educational Innovation
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Basic Pharmaceutical Sciences
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Basic Pharmaceutical Sciences

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Department of Clinical Pharmacy
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- Joseph Nyachae - Ed.D. (WVU)  
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Basic Pharmaceutical Sciences

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Clinical Pharmacy, Pharmaceutical Systems and Policy
- Fred L. King - Ph.D. (U Virginia)
- Giovanni Piedimonte - M.D. (U Rome)
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Basic Pharmaceutical Sciences
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- Bruce Biundo - Pharm.D.
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- Cyndee Atha - B.S.
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- Mark D. Moran - B.S. (WVU)
- John D. Morgan - B.S. (WVU)
- Kimberly S. Moss - B.S. (WVU)
- John I. Mourat - B.S. (WVU)
- Carolyn Mundhal - B.S.
- John Nally - B.S. (WVU)
- Stephen E. Neal - B.S. (WVU)
- Susan Nicholson - B.S. (WVU)
- Lisa Nord - B.S.
- Chuck Okel - B.S. (WVU)
- Glen Palmer - B.S. (Albany)
- Kevin R. Parker - B.S. (WVU)
- Corleen Patterson - B.S. (WVU)
- Mary Frances Patton - B.S. (WVU)
- Thomas G. Patton - B.S. (WVU)
- Janet Perdieu - B.S. (WVU)
- Gregory J. Plas - B.S. (OSU)
- Robert Podbesek - B.S. (WVU)
- Ronald Posey - B.S. (WVU)
- William Presley - B.S. (WVU)
- John Putorek - B.S. (WVU)
- Timothy Rakas - B.S. (PITT)
- Brenda Rappold - B.S. (WVU)
- Diane Redick - B.S. (WVU)
- Karen L. Reed - B.S. (WVU)
- Kenneth R. Reed - B.S. (WVU)
- William R. Renner - B.S. (WVU)
- Matthew E. Rhoten - B.S. (DUQ)
- Robert Rice - B.S. (WVU)
- Jeffrey Richards - B.S. (DUQ)
- Renee Riley - B.S. (WVU)
- Josh Rimany - B.S. (U of Connecticut)
- Dianna L. Ringer - B.S. (WVU)
- Tim Robbins - B.S. (WVU)
- Mark Robinson - B.S. (WVU)
- Daniel A. Rock Jr. - B.S. (WVU)
- Gina Rohal - B.S. (WVU)
- Rhonda M. Rose - B.S. (WVU)
- Jim Rovegno - B.S.
- Julie Rumbach-Austin - M.B.A. (WVWC)
- Joshua Russell - B.S.
- James W. Scarborough - B.S. (WVU)
- Nicholas J. Scrivo - B.S. (WVU)

- Ronald J. Selders - B.S. (WVU)
- Kevin Shafer - B.S. (WVU)
- Nikki Shay - B.S. (WVU)
- Paul Sheets - B.S. (WVU)
- Erica Shelton - Pharm.D. (WVU)
- Stephen Shrewsbury - B.S. (WVU)
- Stephanie Shrider - B.S. (ONU)
- Karl W. Sommer - B.S. (WVU)
- Charles Sommercorn - B.S. (U Illinois)
- John Sonnenday - B.S.
- Alice Sowada - B.S. (U Wyoming)
- Brian Spiker - B.S. (WVU)
- Georgia Spinks - B.S.
- Tom H. Stanley - B.S. (WVU)
- Thomas Stewart - B.S. (WVU)
- Kendra Stewart - B.S. (WVU)
- Brent Stillion - B.S. (WVU)
- Leslie Stone - B.S.
- S. Renee Straight - B.S. (WVU)
- Eric Strother - B.S. (WVU)
- Charles R. Swisher - B.S. (WVU)
- Brenda R. Talbott - B.S. (WVU)
- Robert H. Taylor - B.S. (WVU)
- Teresa Thompson - B.S. (WVU)
- Stephen E. Toompas - B.S. (WVU)
- Lou Toth - B.S. (PITT)
- Randy Trumbule - B.S. (WVU)
- Mitch Vickers - B.S. (WVU)
- Michael Wagoner - B.S. (WVU)
- Scott Wanstreet - B.S. (WVU)
- Carrie A. Warman - B.S. (WVU)
- Christine Waugh - B.S. (WVU)
- Bridgette Weaver - B.S. (WVU)
- David R. Weekley - B.S. (WVU)
- Devonna West - B.S. (WVU)
- Kathleen White - B.S. (ONU)
- Randy Williams - B.S. (WVU)
- Jennifer L. Williams - B.S.
- David Yoakum - B.S. (WVU)
- Dennis C. Young - B.S.
- Kathy M. Yount - B.S. (Purdue)
- James Zawacki - B.S. (PCPS)

## Pre-Pharmacy

### Pre-Pharmacy Curriculum Requirements

WVUE 191	First Year Seminar	1
Select one of the following		3-6
ENGL 101 & ENGL 102	Composition And Rhetoric and Composition And Rhetoric	
ENGL 103	Accelerated Academic Writing	
Select one of the following:		3-8

MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
ECON 201	Principles of Microeconomics	3
SPA 270	Effective Public Speaking	3
BIOL 115	Principles of Biology *	4
BIOL 117	Introductory Physiology	4
CHEM 115	Fundamentals of Chemistry	4
CHEM 116	Fundamentals of Chemistry	4
CHEM 233	Organic Chemistry	3
CHEM 234	Organic Chemistry	3
CHEM 235	Organic Chemistry Laboratory	1
CHEM 236	Organic Chemistry Laboratory	1
PHYS 101 & PHYS 102	Introductory Physics and Introductory Physics **	8
Select one of the following:		
STAT 211	Elementary Statistical Inference	
ECON 225	Elementary Business/Economics Stat	
<b>Microbiology options:</b>		3-4
MICB 200	Medical Microbiology (Microbiology options:)	
AEM 341	General Microbiology	
AEM 401	Environmental Microbiology	
Total Hours		48-57

\* BIOL 101, BIOL 102, BIOL 103, and BIOL 104 may be taken in place of BIOL 115. BIOL 115 is preferred.

\*\* PHYS 111 and PHYS 112 may be taken in place of PHYS 101 and PHYS 102, and in some cases PHYS 111 and PHYS 102 may count toward the Physics requirement.

\*\*\* Electives must be designed to satisfy the University General Education Curriculum (GEC) requirements. (See "General Education Curriculum" for a listing of specific courses.)

In addition, it is recommended that applicants take undergraduate courses in cellular biology and biochemistry.

Admissions are competitive. It should be noted that applicants with overall or prerequisite GPAs below 3.0 are not admitted. Criteria used to evaluate candidates include academic performance, as measured by the grade point averages (GPA) for all the above-noted prerequisite courses and the cumulative GPA achieved in all prior college-level coursework, Pharmacy College Admissions Test (PCAT) scores (including a written essay), a personal interview, and letters of recommendation. All prerequisite courses must be taken at a U.S. accredited institution of higher education and completed with a grade of C or better. Priority is given to qualified West Virginia residents, applicants who have performed the majority of their prerequisite course work in a WV college or university, and applicants who have already earned a bachelors degree. Careful consideration is given to those personal qualifications which bear upon the fitness of applicants for the study and practice of the profession of pharmacy.

All applicants must first file an initial electronic application with the Pharmacy College Application Service (PharmCAS). Instructions for completing the application are found on the PharmCAS website: <http://www.pharmacas.org/>. Application deadlines are subject to change; check PharmCAS, the School of Pharmacy webpage at <http://pharmacy.hsc.wvu.edu> or contact the school to verify current deadlines. Supplemental applications specific to the WVU School of Pharmacy will then be sent to selected candidates deemed qualified by the Committee on Admissions. A \$50 application fee must accompany the supplemental application.

Each applicant who is recommended for acceptance is required to deposit \$200 (if WV resident) or \$400 (if non-WV resident) before his or her name is added to the official list of those accepted by the School of Pharmacy. If the applicant enrolls, this sum is applied to the first-semester tuition. If the applicant fails to enroll, this deposit is forfeited.

With enrollment in the School of Pharmacy, all students must comply with the immunization and diagnostic procedures required by the WVU Board of Governors, WVU, the WVU Robert C. Byrd Health Sciences Center, and the School of Pharmacy.

Complete information may be obtained from:

Office of Student Services, School of Pharmacy  
Robert C. Byrd Health Sciences Center  
P.O. Box 9500

Morgantown, WV 26506-9500

or from:

Office of Admissions  
Robert C. Byrd Health Sciences Center  
P.O. Box 9815  
Morgantown, WV 26506-9815

## Pharmacy College Admission Test

Completion of the Pharmacy College Admission Test is a requirement for admission to the school. It is recommended that the student take this test in the summer or fall before making application for admission. Information concerning time and place of the test can be obtained from a pre-pharmacy advisor, the School of Pharmacy, or by writing:

PsychCorp  
PSE Customer Relations-PCAT  
19500 Bulverde Road  
San Antonio, TX 78259  
1-800-622-3231 or (210) 339-8710  
Fax 1-888-211-8276 or 210-339-8711  
or <http://www.PCATweb.info>

## Personal Interview

The Committee on Admissions requires a personal interview with selected candidates who qualify for a supplemental application. The Committee on Admissions will determine which applicants are to receive the supplemental application. Interviews are held during the spring semester at the Robert C. Byrd Health Sciences Center in Morgantown.

## Recommendations on Academic Performance

Two academic recommendations are required and must be provided by course instructors in any two of the pre-pharmacy science areas: biology, chemistry, math, and physics. The third recommendation may be provided by a course instructor of the student's choice, an advisor, pharmacist, health professional, or employer.

## Admission to Advanced Standing

If space is available, students from other accredited schools of pharmacy may be admitted, provided they meet the prerequisite course requirements of the WVU School of Pharmacy, have at least a 2.5 professional grade point average, are in good academic and professional standing at the school of origin, and are eligible for continuation toward a degree in pharmacy at the school initially attended. Grades of D in professional courses cannot be transferred.

## Conditions Following Acceptance of Admission

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

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

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

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

## Academic and Technical Standards

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

# PharmD

## Pharm.D. Admission

All students seeking enrollment in the School of Pharmacy must comply with regulations appearing in this catalog and the *WVU Undergraduate Catalog*. Students preparing for the study of pharmacy may satisfy the course work requirements for entrance into the School of Pharmacy Pharm.D. program by successfully completing the courses (or their equivalents) listed under the Pre-Pharmacy section.

## Academic and Technical Standards

In accordance with section 504 of the Rehabilitative Act of 1973 (PL 93-112) and incorporating the guidelines of the Americans with Disabilities Act (ADA PL 101-336) enacted by Congress in 1990, the West Virginia University School of Pharmacy has adopted minimal technical standards for the assessment of admission, scholastic advancement, and graduation for its professional degree (doctor of pharmacy) program.

Because the doctor of pharmacy (Pharm.D.) degree signifies that the holder is a pharmacist prepared for entry into the practice of pharmacy, it follows that graduates must have the knowledge, skills, and demeanor to function in a broad variety of clinical situations and to conduct a wide spectrum of pharmaceutical care activities.

Candidates for admission into, progression through, and graduation from the Pharm.D. program must have the functional use of the senses of vision and hearing. Candidates' pharmaceutical skills will also be lessened without the functional use of the senses of equilibrium, smell, and taste. Additionally, they must have sufficient motor function to permit them to carry out the activities described in the sections that follow. They must be able to consistently, quickly, and accurately integrate all information received by whatever sense(s) employed, and they must have the intellectual ability to learn, integrate, analyze, and synthesize data.

A candidate for the Pharm.D. degree must have abilities and skills of five varieties including:

- observation
- communication
- motor
- conceptual, integrative and quantitative
- behavioral and social

Technological compensation can be made for some handicaps in certain of these areas, but a candidate should be able to perform in a reasonably independent manner. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation. For details, see the Technical Standards document published online at <http://pharmacy.hsc.wvu.edu/student-services/Description-of-the-Professional-Program>.

## Student Course Load

Students in the doctor of pharmacy program are expected to register for all required classes in a semester unless directed not to do so by the Committee on Academic and Professional Standards or the Office of Student Services. Full-time students in the School of Pharmacy may not register for less than nine credit hours during any semester without written approval of the Committee on Academic and Professional Standards or the Office of Student Services. For an exception, a letter of petition must be submitted to the Committee on Academic and Professional Standards through the School of Pharmacy's Office of Student Services.

## Promotion and Graduation Requirements

### Evaluation of Student Progress

Promotion of a student in the doctor of pharmacy program is evaluated in two major areas: successful completion of all required work and appropriate adherence to the professional standards of the School of Pharmacy.

The following information is only a brief outline of the School of Pharmacy policies and procedures. Detailed requirements and policies for evaluation of student progress and graduation can be found in the *Policy on Academic and Professional Standards Governing the Doctor of Pharmacy Degree Program at West Virginia University School of Pharmacy* and may be viewed on the School of Pharmacy website. Copies are available at the Office of Student Services. The Committee on Academic and Professional Standards administers all promotion and academic penalty rules.

### Academic Coursework Review

The Committee on Academic and Professional Standards of the School of Pharmacy reviews the performance of each student in every course at the end of each academic period and makes recommendations to the dean.

If a student has been found to have a marginal performance in any course as indicated by a grade less than a C or a semester GPA less than 2.5, probation will be recommended. Students on probation are not eligible to hold office in student organizations. Students on probation are expected

to be present for all of their classes and laboratories. If a student fails to complete any required remedial actions or meet the specified performance requirements during the probationary period, academic suspension or dismissal may be recommended.

If a student has been found to have an unsatisfactory performance as indicated by a grade of F in any course, two or more grades less than a C in a semester, three or more grades less than C in a year, or an accumulation of narrative evaluations that indicate an academic deficiency or inadequate integration of curricular content, suspension or dismissal from the school may be recommended. In selected circumstances, the committee may recommend remedial work or repetition of all or a portion of the curriculum. Exceptions may be made only on recommendation of the committee.

After academic dismissal, a student may apply for readmission to the School of Pharmacy. Readmission of a student is the prerogative of the dean following a recommendation by the Committee on Academic and Professional Standards.

## Grading Policy

Courses in the doctor of pharmacy degree program are graded either as A (excellent), B (good), C (fair), D (marginal), F (failing), I (incomplete), or on a (P) pass/(F) fail basis. Grades may be accompanied by a narrative report on the student's progress, noting any factors requiring remedial work or counseling. It is customary that all experiential courses are accompanied by a narrative evaluation. Narrative evaluations are kept in the student's file in the Office of Student Services.

The grade of incomplete (I) is given when the instructor believes that the work is unavoidably incomplete. If the grade of I is not removed by the satisfactory completion of the work before the end of the next semester in which the student is in residence, it becomes a failure (F) unless special permission to postpone the work is obtained from the Committee on Academic and Professional Standards. It is the responsibility of the student to consult the instructor about the means and schedule for completing incomplete courses. A contract specifying what work must be completed and when should be drawn up by the instructor and signed by the instructor and student.

## Professional Standards Review

In view of public and professional responsibilities, the faculty of each of the professional schools of WVU has the authority to recommend to the president of the University the removal of any student from its rolls whenever, by formal decision reduced to writing, the faculty finds that the student is unfit to meet the qualifications and responsibilities of the profession. Further information is provided in The Policy on Academic and Professional Standards Governing the Doctor of Pharmacy Degree at West Virginia University School of Pharmacy, which is available at the School of Pharmacy Office of Student Services.

## Requirements for Degree

The awarding of a doctor of pharmacy degree to a student is approved by the dean of the School of Pharmacy after receipt of recommendations from the Academic and Professional Standards Committee. Candidates must meet the following criteria:

1. Meet the academic and professional standards, criteria, and requirements outlined in The Policy on Academic and Professional Standards Governing the Doctor of Pharmacy Degree at West Virginia University School of Pharmacy, which is available at the School of Pharmacy Office of Student Services and on the school's website
2. Satisfactorily complete all of the required coursework in a timely fashion, which normally will not exceed five years from the date of initial enrollment into the professional program
3. Pay all fees
4. Complete the last year's work in residence in this school
5. Be present at the commencement exercises unless excused by the dean of the School of Pharmacy in writing
6. Satisfactorily complete the required number of experiential rotations and demonstrate the attainment of minimum competencies
7. Complete 100 hours of volunteer community service.

## Special Requirements

The Board of Pharmacy requires 1,500 clock hours of internship experience for licensure in West Virginia. Students are required to obtain an Intern Certificate from the West Virginia Board of Pharmacy in order to accrue intern hours. Any hours worked before becoming a registered intern will not apply toward meeting the WV board requirements. Students must have a valid Intern Certificate throughout their entire experiential years of the Pharm.D. program. The certificate must be maintained until completion of the entire internship. The Board of Pharmacy holds final authority over internship rules and regulations. Up to 800 hours of the total of 1,500 required by the WV Board of Pharmacy may be obtained via the WVU School of Pharmacy experiential program.

Students in the Pharm.D. program will perform one two-week block of experiential rotations at the conclusion of both the first and second years of the professional curriculum and eight, five-week rotations during the Advanced Pharmacy Practice Experience (APPE) year of the program. Two of the eight blocks performed in the fourth year of the curriculum must be performed in designated rural sites. Site placement and sequencing will occur in the semesters prior to the experiential activities. Students may incur additional housing and/or travel costs when taking part in the experiential rotations. Opportunity will be provided for students to prioritize their site selection; however, ultimate authority for site selection will be maintained by the School of Pharmacy. All didactic coursework (required and elective) must be successfully completed prior to beginning the fourth-year APPE experiential rotations.

## Legal Requirements and Reciprocity

To qualify for examination for licensure by the West Virginia Board of Pharmacy, the applicant must be 18 years of age or older and of good moral character. Further, the applicant must be a graduate of an accredited school of pharmacy and must meet the internship requirements set by the West Virginia Board of Pharmacy.

Interns must be registered with the West Virginia Board of Pharmacy and must be enrolled in or a graduate of an accredited school of pharmacy to gain experience acceptable for the internship requirement. Details may be obtained from the Office of Student Services. School of Pharmacy graduates are eligible for examination to practice pharmacy in any state. Graduates who successfully pass the West Virginia Board of Pharmacy examination are privileged to reciprocate with 49 other states, the District of Columbia, and Puerto Rico provided they meet the licensure requirements of these states.

## Course Changes

A student who seeks exemption from one or more professional courses based upon previous academic experience must submit a written petition to the Committee on Academic and Professional Standards. Only courses taken through an accredited school of pharmacy or medicine will be considered for possible substitution.

### Program Course List:

BIOC 531	General Biochemistry	4
NBAN 301	Principles of Human Anatomy	3,4
PCOL 743	Pharmacology 1	3
PCOL 744	Pharmacology 2	3
PSIO 743	Fundamentals of Physiology	5
PHAR 700	Pharmacy as a Profession	1
PHAR 701	Pharmaceutical Care Lab 1	2
PHAR 702	Pharmaceutics 1	3
PHAR 703	Pharmacy Practice Experience 1	1
PHAR 708	Pharmaceutics 2	3
PHAR 709	Immunology/Biotechnology	2
PHAR 710	Pharmacy Practice Experience 2	1
PHAR 711	Chemical Properties of Drugs	2
PHAR 712	Pharmaceutical Care Lab 2	2
PHAR 737	Disease Prevent Health Promo	2
PHAR 714	Intro Community Rotation	2
PHAR 715	Pharmacotherapeutics 1	4
PHAR 716	Chemistry of Drug Action 1	3
PHAR 717	Pharmacy Practice Experience 3	1
PHAR 719	Pharmacy Practice Experience 4	1
PHAR 720	Patient Health Education	2
PHAR 723	Pharmaceutical Care Lab 3	1
PHAR 724	Pharmaceutical Care Lab 4	2
PHAR 725	Pharmacotherapeutics 2	4
PHAR 726	Chemistry of Drug Action 2	2
PHAR 727	Medical Literature Evaluation	2
PHAR 728	Pharmacy Management	2
PHAR 729	Intro Institutional Rotation	2
PHAR 730	Pharmacotherapeutics 3	4
PHAR 731	Biopharm & Pharmacokinetics	3
PHAR 732	Non-Prescription Drugs	3
PHAR 733	Pharmacy Systems	2
PHAR 734	Pharmacy Law and Ethics	3
PHAR 735	Pharmaceutical Care Lab 5	1
PHAR 736	Pharmaceutical Care Lab 6	1
PHAR 738	Outcomes Assessment/Quality Imprv	2
PHAR 739	Therapeutic Patient Monitoring	3
PHAR 740	Pharmacotherapeutics 4	4

PHAR 741	Clinical Pharmacokinetics	3
PHAR 742	Pharmacy Practice Experience 5	1
PHAR 746	Pharmacy Practice Experience 6	1
Electives		8-13
Total Hours		104-110

**Entry-Level Pharm.D. Professional Curriculum****First Year**

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

**Second Year**

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

**Third Year**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
PHAR 730	4 PHAR 734	3
PHAR 731	3 PHAR 736	1
PHAR 732	3 PHAR 738	2
PHAR 733	2 PHAR 739	3
PHAR 735	1 PHAR 740	4
PHAR 742	1 PHAR 741	3
Elective *	2-3 PHAR 746	1
	Elective *	0-2
	<b>16-17</b>	<b>17-19</b>

**Fourth Year**

<b>Spring</b>	<b>Hours</b>
Advanced Experiential Components (Students rotate through one-month experiences)	
Community Practice (one rotation)	
Institutional Practice (one rotation)	
Acute Care (one or two rotations)	

Ambulatory Care (one or  
two rotations)  
Electives (three  
rotations)  
Total advanced  
experiential (eight  
rotations)\*\*

**0**

Total credit hours: 104-110

- \* Prior to beginning the experiential rotations, each student enrolled in the School of Pharmacy professional program must complete a minimum of ten credit hours of school of pharmacy elective courses or from a list of approved professionally-related electives as part of the pharmacy curriculum. Electives must be completed during the first three years of the four-year professional program. Beyond the required ten credit hours, the student may take any other electives. No course taken prior to admission into the School of Pharmacy may be used nor repeated to meet the elective requirements of the professional curriculum, and no reduction in elective requirements will be allowed for courses completed or degrees earned prior to enrollment in the program.
- \*\* Fourth-year students will be required to complete two rotations in the summer session, three in the fall semester, and three in the spring semester.

The University S/U and P/F policies will be followed. Only selected professionally-related courses or additional free electives (in excess of the ten hours of required electives) may be taken on a satisfactory/unsatisfactory basis. No more than three credit hours of PHAR 749 Pharmaceutical Investigations will be permitted to count toward fulfillment of the pharmacy elective requirements.

## Pharmaceutical and Pharmacological Sciences

Dr. Rae Matsumoto, Graduate Program Director  
rmatsumoto@hsc.wvu.edu

Dr. Jason Huber, Graduate Pathway Director, Pharmaceutical and Pharmacological Sciences  
jhuber@hsc.wvu.edu

Dr. Suresh Madhavan, Graduate Pathway Director, Health Outcomes  
smadhavan@hsc.wvu.edu

### Degrees Offered

- Doctor of Philosophy
- Joint Doctor of Medicine and Doctor of Philosophy

Research interests are complementary to the focus of each of the two pathways in the program: pharmaceutical and pharmacological sciences, and health outcomes. Key areas of research interest and expertise in the pharmaceutical and pharmacological sciences pathway include: pharmaceutical sciences, pharmacology, cancer, neuroscience, nanoscience, and toxicology. Key areas of research interest and expertise in the health outcomes pathway include: health outcomes, health disparities, health services, health quality, pharmacoeconomics, pharmacoepidemiology, patient reported outcomes, and health behavior.

### Graduate Program Pharmaceutical and Pharmacological Science

The School of Pharmacy offers a doctor of philosophy (Ph.D.) degree in pharmaceutical and pharmacological sciences with two pathways aimed at training competent researchers and educators: health outcomes research, and pharmaceutical and pharmacological sciences. Both pathways in the graduate program provide interdisciplinary, research-oriented curricula designed to develop the interests, capabilities, and potential of the individual student.

### Admission Requirements

Applicants for admission into the graduate program must satisfy the WVU and Health Sciences Center general requirements for admission as a graduate student. The applicant must possess a baccalaureate degree, background in a suitable area of study, an overall grade point average of at least 3.0, and the aptitude and interest for graduate work in pharmaceutical and pharmacological sciences or health outcomes research to be admitted. Graduate Record Examination (GRE) scores in the verbal, quantitative, and analytic essay portions are required from all students planning on entering the graduate program. TOEFL scores are generally required of international students from countries where English is not the primary language.

## Academic Standards

No credits are acceptable toward a graduate degree with a grade lower than a C. A graduate student is expected to have a cumulative grade point average of at least 3.0 in all graduate courses to continue in the program and to qualify for a Ph.D. degree.

## Master of Science

The school of pharmacy offers programs of graduate study leading to the degree of master of science in two program pathways: health outcomes research, and pharmaceutical and pharmacological sciences.

### Requirements for M.S. Degree

To be eligible for the M.S. degree, students must complete a minimum of 30 hours of graduate credit, of which no more than six credit hours may be for thesis research. Upon completion of the coursework and research requirements and after submission of the thesis, an oral examination will be administered by the appointed examination committee. For more specific information, contact the associate dean for research and graduate programs:

Dr. Rae Matsumoto  
Associate Dean for Research and Graduate Programs  
WVU School of Pharmacy  
2037 Health Sciences Center North  
P.O. Box 9500  
Morgantown, WV 26506-9500  
Telephone: (304) 293-1450  
email: [rmatsumoto@hsc.wvu.edu](mailto:rmatsumoto@hsc.wvu.edu)

## Doctor of Philosophy (Ph.D.)

The School of Pharmacy offers programs of study leading to the doctor of philosophy (Ph.D.) degree in the pharmaceutical and pharmacological sciences via two pathways: health outcomes research, and pharmaceutical and pharmacological sciences. Specialty areas of study include: pharmacology, drug metabolism, cancer cell biology, nanotechnology, health outcomes, epidemiology, and policy research.

### Requirements for Ph.D. Degree

Students enrolling in the health outcomes pathway are admitted directly into the School of Pharmacy. To obtain specific application and admission information about the Ph.D. program pathway in health outcomes research, please visit: <http://pharmacy.hsc.wvu.edu/org/Pathways/Health-Outcomes-Pathway>.

Students planning on enrolling in the pharmaceutical and pharmacological sciences pathway are admitted through the health sciences center interdisciplinary graduate program in biomedical science, through which they complete the first year of study. During the first year, students take a required set of courses and rotate through the laboratories of potential research mentors. At the end of the first year, students may formally enroll in the pharmaceutical and pharmacological sciences graduate program and select a research advisor.

For each pathway in the graduate program, upon completion of the second year of study, students must submit a formal plan of study and a research plan that is approved by their Ph.D. committee. Progress is expected to continue with guidance from the student's research committee. Final admission to candidacy requires satisfactory performance on written and oral qualifying examinations as well as a dissertation proposal defense. Subsequent to admission to candidacy, a substantial part of the program is devoted to an original research project which culminates in a first-authored publication and dissertation. To be recommended for a Ph.D., the dissertation must be satisfactorily completed and defended at an oral examination.

For more specific information, please contact the associate dean for research and graduate programs:

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