

ACADEMIC PROGRAMS

The academic program of study at Lynchburg College consists of three elements: general education designed to give students breadth of knowledge in the liberal arts; a major field of study comprising one-third to one-half of the program and designed to provide in-depth knowledge in a single academic area; and electives which complete the remainder of the course of study. The academic majors offered lead to a bachelor of arts or a bachelor of science degree.

General Education at Lynchburg College

One of the principal goals of liberal education is to prepare students for intellectually fulfilling and productive lives. To achieve this goal, the College requires that every student, regardless of major, satisfy General Education requirements, which, taken as a whole, help students understand and appreciate certain broad subject areas that have long been associated with learning in liberal arts settings. In addition, General Education courses develop certain traits and abilities in students that enable them to succeed in whatever fields of endeavor they select after graduation. Finally, General Education courses instill in students an understanding of their own responsibility for continual intellectual development and a lifelong desire to continue building on the concepts learned in courses. Each of these factors is integral in assisting our students to become more productive citizens in an increasingly inter-related global society. The courses and other educational experiences in the General Education Program reflect our beliefs that:

*General education liberates us. It frees us from the constraints of ignorance, unwarranted assumptions, and short-sightedness by developing our reasoning skills, our breadth of knowledge, and our ability to consider issues from multiple perspectives. General education equips us to understand our world and to pursue meaningful lives.**

- * This statement includes portions of the Association of American Colleges and Universities' 'Statement on Liberal Learning,' published in 1999.

The General Education Program curriculum embodies these beliefs and reflects the commitment of the faculty to ensure that students who graduate from Lynchburg College will be able to demonstrate the following:

- **Knowledge of various cultural, linguistic, and intellectual contexts and traditions** (Knowledge of the events, achievements, movements, and insights of the past is essential to an understanding to an understanding of the present and future, as is knowledge of

social structures and interactions and their many variations in the context of an increasingly globally interdependent society.);

- **Recognition of the value of achievements of imagination and creativity** (Informed appreciation of accomplishments in the arts and literature enriches lives, illuminates cultures, stimulates reflection, and inspires joy and beauty.);
- **Scientific and quantitative reasoning, including the ability to apply generally accepted processes of mathematical and scientific inquiry in addressing multidimensional problems/issues** (Scientific and mathematical knowledge gives us ways of understanding our world, our place in it, and our relationships to it.);
- **Ability to address problems/issues that require the integration of ideas from multiple sources and disciplines** (Integrating ideas from a wide range of sources and disciplines gives us ways to formulate coherent responses to life's challenges.);
- **Abilities for reading, oral and written communication, qualitative reasoning, technological applications, critical thinking and effective information retrieval, evaluation and use, all of which are essential for effective learning** (Certain abilities are essential for effective learning, working, and understanding, and they contribute to and develop from a wide range of intellectual activities.)

GENERAL EDUCATION REQUIREMENTS

			Hours
WRITTEN COMPOSITION (two courses required)			6
ENGL	111	Composition I	
ENGL	112	Composition I	
FINE ARTS (one course required)			3
ART	110	Introduction to Visual Art	
ART	118	Ceramics I	
ART	122	Sculpture I	
ART	156	Drawing I	
ART	162	Painting I	
ART	166	Photography I	
FILM	229	Introduction to Film	
MUSC	100	Music Appreciation	
MUSC	102	World Music and Culture	
THEA	101	Introduction to Theatre Arts	
THEA	102	Introduction to Technical Theatre and Design	
THEA	120	Introduction to Dance	
THEA	131	Fundamentals of Acting	
FOREIGN LANGUAGE (one course required)*			3
FREN	201	Intermediate French	
GRMN	201	Intermediate German	
LATN	201	Intermediate Latin	
SPAN	201	Intermediate Spanish	
HISTORY (two courses required)			6
HIST	101	History of Civilization	
HIST	102	History of Civilization	
LABORATORY SCIENCE (two courses required)			8
BIOL	111-111L	Organisms, Ecology, and Evolution and Lab	
BIOL	112-112L	Cells: Genetic and Molecular Perspectives and Lab	
CHEM	103-105L	Fundamentals of Chemistry and Lab	
CHEM	104-106L	Fundamentals of Chemistry and Lab	
CHEM	127	Chemistry of Life	
ENVS	101-101L	Earth and Environmental Science I and Lab	
ENVS	102-102L	Earth and Environmental Science II and Lab	
PHYS	141	College Physics	
PHYS	142	College Physics	
PHYS	161	General Physics I	
PHYS	162	General Physics II	
PHYS	181	Solar System Astronomy	
PHYS	182	Stellar Astronomy	
PSYC	103-105L	General Psychology and Lab	
PSYC	104-106L	General Psychology and Lab	
SCIE	101	Principles of Science I	
SCIE	102	Principles of Science II	

			Hours
LITERATURE (one course required)			3
ENGL	201	Literature Culture I	
ENGL	202	Literature Culture II	
FREN	207	French Literature in Translation I	
FREN	208	French Literature in Translation II	
SPAN	208	Contemporary and Hispanic Literature in English Translation	
THEA	211	Dramatic Literature I: Classical Greece to Renaissance	
THEA	212	Dramatic Literature II: Seventeenth Century to Present	
MATHEMATICS (one course required)			3
MATH	103	Calculus I	
MATH	106	Liberal Arts Math	
ORAL COMMUNICATION (one course required)			3
COMM	101	Argumentation and Practical Reasoning	
THEA	123	Voice and Diction	
PHILOSOPHY (one course required)			3
PHIL	200	Introduction to Philosophy	
PHIL	204	Introduction to Ethics	
RELIGIOUS STUDIES (one course required)			3
RELG	201	Hebrew Bible/Old Testament	
RELG	202	New Testament	
RELG	205	Religions of Asia	
RELG	206	Judaism, Christianity, and Islam	
SOCIAL SCIENCE (two courses required)			6
ECON	100	Economic Perspectives	
ECON	201	Principles of Economics-Micro	
ECON	202	Principles of Economics-Macro	
INTL	101	Global Politics in the New Millennium	
POLI	110	Contemporary Political Problems	
POLI	111	Quest for Justice I	
POLI	112	Quest for Justice II	
SOCI	100	American Generations	
SOCI	201	Introduction to Sociology	
SOCI	221	Cultural Anthropology	
WELLNESS (one course required)			2
HLTH	102	Life Choices for Health and Wellness	
HPE	102	Concepts for Exercise and Lifetime Wellness	
SENIOR SYMPOSIUM (one course required)			2
G S	435	Senior Symposium	
G S	436	Senior Symposium	
<i>Total Hours Required</i>			<hr style="width: 100%; border: 0.5px solid black;"/> 51

* The foreign language requirement may be waived if a student whose primary language is not English can demonstrate acceptable written and spoken proficiency in his/her native language to members of the foreign language faculty.

Lynchburg College Symposium Readings Program (LCSR)

The Lynchburg College Symposium Readings (LCSR) Program is an innovative approach to the integration of selections from the great books to supplement regular class material and to provide elements of integration, depth, and broad perspectives within the context of regular courses. While acquainting the student with great works from a variety of world traditions, LCSR encourages critical thinking by engaging students in a variety of oral and written activities organized around the readings.

An "LCSR course" is a regular Lynchburg College course in which at least 20 percent of the student's grade is based on written and oral communication related to reading assignments from the ten-volume set, Lynchburg College Symposium Readings. LCSR courses may be General Education, major, or elective courses and may be taken as a freshman, sophomore, junior, and senior.

"Great books" are defined as works that have made an impact on more than one generation and have a general appeal for different levels of understanding and circumstances. They provide: (1) a continuing source of ideas and perspectives that will encourage involvement with great issues facing humankind; and (2) a common core of understanding of and appreciation for the traditions and values of Western and non-Western peoples drawn from outstanding examples of the ideas of these other traditions.

Major Programs

A major is a program of study pursued through a purposefully structured curriculum drawn from courses in a discipline, field of study, or area of application. At least one-third of a major's requirements are satisfied by completion of courses beyond the elementary level. The curriculum for a major is designed to pursue a set of clearly described goals devised by the program faculty offering the major. Emphases within the major have distinct goals met through a set of courses specific to each emphasis. These courses comprise a substantial part, at least one-fourth, of the total credits required for completion of a major with an emphasis.

Work in a major provides the dimension of depth for the liberally educated person and encourages the student to gain the special insights that a particular discipline has to offer. It also affords a beginning specialization for advanced study and/or professional preparation. Each student chooses a major field consistent with personal interests and educational goals and must meet the specific course requirements listed for that major.

To declare or change a major, a student must process a Change or Declaration of Major form available in the Office of Academic Advising. The signature of the School dean is required.

Major programs, with the exception of certain professional programs, may not exceed a total of sixty-two semester hours including prerequisite courses, with no more than forty-eight semester hours required in any one discipline, including prerequisite courses and courses taken to meet General Education requirements. No more than fifteen hours of General Education

courses may be counted in a single major; a maximum of eighteen hours (nine from each discipline) may be counted in a joint major.

A minimum of 50 percent of the hours applicable to the major must be earned at Lynchburg College; for joint majors, half the hours in each major discipline must be taken at Lynchburg College. A student must have a minimum quality point average of 2.00 on courses taken in the major.

Double majors may be earned by completing all course requirements listed for both majors. A minimum of twenty-four hours in the second major must be unique to that major and not applied to the first major.

No course may be used to satisfy more than two different programs (not including General Education). Up to six hours of course credit used to satisfy the major requirements may also be used to satisfy minor requirements.

Minor Programs

Minor fields of concentration are optional for programs and students. If chosen, the minor will be designated on the student's academic record. To declare or change a minor, a student must process a Change or Declaration of Minor form available through the Office of Academic Advising or the School office. During the last semester of enrollment in the minor, the student submits a Minor Certification form to the Registrar's Office. The appropriate School dean must approve it.

A minor consists of fifteen or more semester hours in conceptually related courses. Courses counted in the minor may not be taken on a pass/ fail basis. No course will apply toward two different minor programs. General Education requirements may be included in the minor. A minimum of 50 percent of the hours applicable to the minor must be earned at Lynchburg College. A student must have a minimum quality point average of 2.00 for minor courses taken at Lynchburg College in the minor area and for all courses which apply to the minor. No course may be used to satisfy more than two different programs (not including General Education). Up to six hours of course credit used to satisfy the major requirements may also be used to satisfy minor requirements.

MAJOR FIELDS OF CONCENTRATION

Majors	Degrees	School
Accounting	BA	Business and Economics
Art	BA	Communication and the Arts
Emphases: Graphic Design or Studio Art		
Athletic Training	BS	Health Sciences and Human Performance
Biology	BS	Sciences
Biomedical Science	BS	Sciences
Business Administration	BA	Business and Economics
Chemistry	BA	Sciences
Chemistry	BS	Sciences
Communication Studies	BA	Communication and the Arts
Emphases: Communication and Social Influence or Electronics Media or Public Relations/Journalism		
Computer Science	BS	Sciences
Economics	BA	Business and Economics
Emphases: Financial or General		
Engineering		Dual Program with ODU or UVA
English	BA	Humanities and Social Sciences
Emphases: Literature or Writing		
Environmental Science	BS	Sciences
Exercise Physiology	BS	Health Sciences and Human Performance
French	BA	Humanities and Social Sciences
Emphases: General or Global Commerce		
Health and Physical Education	BS	Health Sciences and Human Performance
Health Promotion	BS	Health Sciences and Human Performance
History	BA	Humanities and Social Sciences
Emphases: American or European		
Human Development and Learning	BS	Education and Human Development
Emphases: Elementary Education or Special Education		
International Relations	BA	Humanities and Social Sciences
Management	BA	Business and Economics
Marketing	BA	Business and Economics
Mathematics	BS	Sciences
Music	BA	Communication and the Arts
Emphases: Instrumental Education or Performance or Theory/Composition or Vocal Education		
Nursing	BS	Health Sciences and Human Performance
Philosophy	BA	Humanities and Social Sciences
Philosophy-Political Science	BA	Humanities and Social Sciences
Philosophy-Religious Studies	BA	Humanities and Social Sciences
Physics	BS	Sciences
Political Science	BA	Humanities and Social Sciences
Psychology	BS	Sciences
Religious Studies	BA	Humanities and Social Sciences
Sociology	BA	Humanities and Social Sciences
Emphases: Criminology or General		
Spanish	BA	Humanities and Social Sciences
Emphases: General or Global Commerce		
Sport Management	BA	Health Sciences and Human Performance
Theatre	BA	Communication and the Arts

MINOR FIELDS OF CONCENTRATION

Minors

Biology
 Business
 Chemistry
 Coaching
 Computer Science
 Computer Science Applications
 Communication and Social Influence
 Criminology
 Economics
 Electronic Media
 English: Literature Minor
 English: Writing Minor
 Environmental Science
 French
 Gender Studies
 Gerontology
 Graphic Design
 History
 Human Development and Learning
 International Relations
 Journalism
 Mathematics
 Medieval and Renaissance Studies
 Museum Studies
 Music
 Music for Children
 Music History
 Music Performance
 Outdoor Recreation
 Philosophy
 Political Science
 Psychology
 Public Relations/Journalism
 Religious Studies
 Secondary Education
 Sociology
 Spanish
 Special Education
 Speech Communication
 Sport Management
 Sports Medicine
 Studio Art
 Theatre

School

Sciences
 Business and Economics
 Sciences
 Health Sciences and Human Performance
 Sciences
 Sciences
 Communication and the Arts
 Humanities and Social Sciences
 Business and Economics
 Communication and the Arts
 Humanities and Social Sciences
 Humanities and Social Sciences
 Sciences
 Humanities and Social Sciences
 Humanities and Social Sciences
 Humanities and Social Sciences
 Communication and the Arts
 Humanities and Social Sciences
 Education and Human Development
 Humanities and Social Sciences
 Communication and the Arts
 Sciences
 Humanities and Social Sciences
 Communication and the Arts
 Communication and the Arts
 Communication and the Arts
 Communication and the Arts
 Communication and the Arts
 Health Sciences and Human Performance
 Humanities and Social Sciences
 Humanities and Social Sciences
 Sciences
 Communicatin and the Arts
 Humanities and Social Sciences
 Education and Human Development
 Humanities and Social Sciences
 Humanities and Social Sciences
 Humanities and Social Sciences
 Education and Human Development
 Communication and the Arts
 Health Sciences and Human Performance
 Health Sciences and Human Performance
 Communication and the Arts
 Communication and the Arts

GENERAL STUDIES

Dr. Nancy I. Whitman, Associate Dean of the College

General Studies courses are offerings of general interest.

HONORS PROGRAM

Dr. Edward DeClair, Director

Dr. Katherine Gray, Assistant Director

Dr. Nancy Cowden, Assistant Director

The Lynchburg College Westover Honors Program, which includes a variety of curricular and co-curricular features, is open to approximately twenty students in each class. To be considered as a candidate for the program, students must have ranked in the top 10 percent of their high school graduating class, received superior admission test scores, completed advanced placement courses, and participated in a variety of extra-curricular activities. Students already enrolled at the College may apply to the program if their academic performance is outstanding.

The purpose of the Westover Honors Program is to attract, stimulate, challenge, and fulfill academically gifted students. The Program offers an innovative approach to general education and prepares students to excel in a world characterized by widespread and rapid change. The program offers a challenging curriculum that promotes intellectual curiosity and independent thought and places strong emphasis on creative problem solving and critical thinking.

The Westover Honors Program is a learning community that provides formal and informal opportunities for interaction of individuals with shared values and vision. The program seeks to foster an environment of trust and mutual respect that encourages the free exchange of ideas and the willingness to take risks. Westover Honors Program students (called “Fellows”) complete a special general education curriculum of fifty-three hours.

As freshmen and sophomores, Westover students enroll in a series of interdisciplinary seminars in humanities, fine arts, science, social science, and mathematics. These seminars explore specific topics in detail, with an emphasis on primary readings and in-class discussions. As juniors and seniors, Westover students enroll in special colloquia and work closely with advisors in their major fields on independent research projects. (See course listings under HONORS.)

The program also offers a variety of enrichment experiences including speakers, films, and trips. Freshmen Westover Fellows live in a special residence hall area to facilitate group learning and community.

Students interested in applying for the program should contact the Office of Enrollment Services or the Westover Honors Program director.

Westover Fellows' General Education requirements include:			Hours
HONR	100	Freshman Seminar: The Honors Experience	1
HONR	103	Advanced English Composition	3
HONR	111	Humanities Seminar	3
HONR	112	Humanities Seminar	3
HONR	121	Mathematics Seminar	3
HONR	131	Social Science Seminar	3
HONR	211	Humanities Seminar	3
HONR	212	Humanities Seminar	3
HONR	221	Fine Arts Seminar	3
HONR	233	Science Seminar	4
HONR	234	Science Seminar	4
FORL		Intermediate Foreign Language (201)	3
HPE	102	Concepts for Exercise and Lifetime Fitness	2

			Hours
Fifteen hours from:			15
HONR	341, 342, 343, 344, 345, 346	Honors Colloquia	3-12
HONR	435-436, with	Honors Symposium	0-6
G S	435-436		
HONR	451-452	Senior Honors Project	<u>3-6</u>
<i>Total Hours Required</i>			53

The suggested program for the first two years for Westover Fellows is outlined below. It includes:

		<u>FALL</u>		<u>SPRING</u>	
Freshman:	HONR	100	1 hr	HONR	112 3 hrs
	HONR	103	3 hrs	HONR	131 3 hrs
	HONR	111	3 hrs	Major/Elect	10 hrs
	HONR	121	3 hrs		
	FORL	201	3 hrs		
	HPE	102	1 hr		
	Major/Elect		3 hrs		
Sophomore:	HONR	211	3 hrs	HONR	212 3 hrs
	HONR	233	4 hrs	HONR	221 3 hrs
	Major/Elect		10 hrs	HONR	234 4 hrs
				Major/Elect	9 hrs

In the junior and senior years, Westover Fellows concentrate on their majors, but they must take a total of fifteen hours in Westover Honors courses. NOTE: 300-level honors courses are open on a space available basis to non-Westover students on the Dean's List, with consent of the instructor and approval of the program director.

PROFESSIONAL AND PRE-PROFESSIONAL CURRICULA

In addition to declaring a major and a minor, students who plan careers in the professional fields below should also declare their pre-professional intent at the time of admission or early in their academic careers. Students will be assigned an advisor who is familiar with the appropriate pre-professional program and who will advise about the major, course selection, and other requirements for admission to the appropriate professional program.

Guidelines for entrance to professional and pre-professional programs are given below. Once students have narrowed the choice of professional or technical schools, they should obtain specific entrance requirements for those schools.

Pre-Art Therapy

Advisor: Mr. Pumphrey

The requirements for admission to graduate programs in art therapy vary. Students enrolled in a preparatory B.A. degree program should pursue the studio art major and a psychology minor. As part of the art major, at least six hours must be taken in two-dimensional studio courses and six hours in three-dimensional studio courses. The psychology minor must include PSYC 241 Developmental Psychology and PSYC 308 Abnormal Psychology. An internship is strongly recommended.

Students contemplating graduate training in art therapy are advised to review the website of the National Art Therapy Association for information about this field and contact prospective graduate schools for information relative to their entry requirements. Portfolios of artwork demonstrating competency may be required.

Pre-Forestry and Wildlife

Advisor: Dr. Perault

Students planning careers in forestry, wildlife management, or conservation may study four years at Lynchburg College in a program that will prepare them for graduate work in these fields. Transfers to schools offering special work in these fields are possible after one or more years at Lynchburg College. Required or recommended courses include biology, chemistry, physics, mathematics, and economics.

Pre-Law

Advisors Dr. Akubue-Brice, Dr. Dawson, Ms. Koring, Dr. Manian, Dr. McCabe, Dean Normyle, Mr. Robert, Ms. Rothermel, Dr. Roux, Dr. Stump, Dr. Tiner

For admission to law school, the Association of American Law Schools recommends substantial work in courses that require logical thought, rigorous analysis of texts, effective writing and speaking, and understanding of human institutions and values. Courses in communication, economics, English, history, philosophy, political science, and the sciences are suggested.

Students interested in attending law school upon graduation should declare pre-law as a pre-professional interest by the end of the sophomore year and be assigned an advisor by contacting the Academic Advising Center. For assistance with course selection and applications to law school, students should meet with their pre-law advisor prior to the senior year. Materials are available from the Career Development Center. The pre-law advisors are readily available to help students learn more about law schools and the legal profession.

Pre-Library Science

Advisor: Mr. Millson-Martula

Students interested in pursuing a master's degree in library and information science should include a wide range of subjects in their undergraduate education.

Pre-Ministerial–Church Related Occupation Program

Advisors: Rev. Azdell and Dr. Price

Through its Advisory Committee on Pre-Ministerial Education (composed of the faculty of the religious studies program and the dean of religious life/College chaplain), Lynchburg College exercises a cooperative role with related church officials in supervising the pre-seminary education of students preparing for a ministerial vocation.

The Committee has an active advising capacity to Church-Related Occupation Program (CROP) students regarding their interest in the ministry, and students having such interests should make their intentions known as early as possible to the dean of religious life/College chaplain or to Dr. Price. The Committee seeks to assist each student with defining a special program of pre-seminary study.

The Committee appoints qualified students in supervised field education (“Apprentices-in-Ministry” and interns in religious studies). This field experience may entail service with church congregations, church-related agencies, or other service agencies. Eligibility for appointments is determined by the following minimum guidelines:

“Apprentices-in-Ministry” must:

1. be in good standing with College discipline boards and officers;
2. have at least a 2.25 cumulative quality point average; and
3. have successfully completed at least six semester credit hours of introductory courses in religious studies or a related field of study, with approval of the Committee; complete RELG 260 (for church settings) or RELG 261 (for non-congregational ministry settings).

Persons desiring to serve in churches or other agencies should seek to qualify and to apply for appointment as “Apprentices-in-Ministry.” They will be eligible to receive college credit in religious studies 260-263 *Pre-Ministerial Practicum* upon satisfactory completion of the duties required by their appointments.

An alternate form of supervised field experience in religious studies is the internship in religious studies, open to a limited number of students who meet all the above requirements and the academic internship requirements listed below. Internships in religious studies are arranged individually with the supervision of the Advisory Committee on Pre-Ministerial Education. Prerequisites for RELG 399 *Internship in Religious Studies* are as follows:

1. juniors and seniors with a minimum QPA of 2.25;
2. approval of the Advisory Committee on Pre-Ministerial Education;
3. completion of an Academic Internship Contract obtained from the Career Development Center. Refer to the section on “Internships” in this chapter for additional information about internship procedures; and
4. complete RELG 260 (for church settings) or RELG 261 (for non-congregational ministry settings).

Because literary study is central to the work of the minister, persons interested in preparing for professional service in the clergy should elect a rich program of language study. Pre-Seminarians are strongly advised to consult with members of the religious studies program about language requirements.

Pre-Museum Studies

Advisor: Ms. Rothermel

Students interested in attending graduate school and beginning a career in museums should declare a minor in museum studies by the beginning of the junior year. The requirements for admission to graduate programs in museum studies include a discipline-specific emphasis; majors in art, history, communication studies, business, education, and the sciences are encouraged. The career opportunities in the museum field are extensive, and the American Association of Museums has a primary goal of leading the efforts to maintain professional standards by improving the quality of museum programs and operations, and training of personnel.

Health Profession Fields

Students planning to enter professional school in the healing arts should declare this interest as early as possible to obtain adequate advising.

A faculty advisory committee is in place to assist pre-health students in preparing schedules that meet

the admission prerequisites, major requirements, and general education requirements. The School of Sciences biomedical science major website provides a comprehensive pre-health sciences advisory manual. The committee will also prepare composite evaluation letters for those professional schools that require this format.

Students should select a major carefully; a high QPA must be maintained for the student to be a competitive applicant. Non-science majors are acceptable as long as the student has met the science requirements of the chosen field. A suggested first-year schedule for pre-health students follows:

Fall	Spring
BIOL 111, 111L	BIOL 112, 112L
or	or
CHEM 103, 105L	CHEM 104, 106L
ENGL 111 ENGL 112	
HIST 101	HIST 102
MATH 102 or 103	MATH 103 (if not taken in the fall)
General Education Elective	General Education Elective

Pre-medical, pre-dental, pre-optometry, and pre-pharmacy students must have completed the biology, chemistry, and physics requirements listed in the pre-medical section by the end of the third year to be prepared for the MCAT, DAT, OAT, and PCAT tests.

Pre-Dental

Contact faculty: Dr. Jablonski, Dr. Reeve

Pre-dental students normally complete an undergraduate degree and a program similar to pre-medical students before entering dental school. Students should be familiar with the individual requirements of the dental schools, but generally the requirements are similar to medical schools. Students must have some experience in the field of dentistry through volunteer work or an internship. Students apply to dental school between junior and senior years through a centralized service. The Dental Admission Test is also required.

In addition to the general requirements, students desiring the bachelor of science (B.S.) degree should complete courses in vertebrate anatomy, microbiology, biochemistry, and cell and molecular biology.

Pre-Medical (M.D., D.O., P.A.)

Contact faculty: Dr. Jablonski, Dr. Reeve

Pre-medical students must complete an undergraduate degree before entering medical school. Admission is extremely competitive, so students should use all learning resources necessary to ensure that their QPA remains very high. Students also must have significant volunteer, internship, or paid experience in the health field before applying. Students apply to allopathic and osteopathic medical school between junior and senior years through a centralized service. The Medical College Admission Test, given in April or August, is also required.

The GRE is required for physician's assistant programs.

In addition to the general admission prerequisites listed below, biochemistry is strongly recommended. Other suggested upper-level science electives include cell biology and vertebrate anatomy and physiology. One year of biology, two years of chemistry, and one year of physics must be completed by the end of the third year.

Required courses	Hours
BIOL 111, 112, 111L, 112L 8	
CHEM 103, 104, 105L, 106L	8
CHEM 251, 252, 253L, 254L	8
ENGL 111, 112	6
PHYS 161, 162 or 141, 142	8

Pre-Optometry

Contact faculty: Dr. Jablonski, Dr. Reeve

The requirements for admission to the schools and colleges of optometry vary. All optometry schools require at least three years of undergraduate coursework that must include the courses listed above for medical school. The majority of students accepted to optometry schools have earned a bachelor's degree. Students should investigate the program requirements of the schools to which they wish to apply for additional admissions prerequisites. Additional courses required by some schools include psychology, social science, microbiology, anatomy, and statistics. The Optometry Admission Test is required.

Pre-Pharmacy

Contact faculty: Dr. Jablonski, Dr. Reeve

The amount of undergraduate pre-professional study accepted as transfer credit by a school of pharmacy varies. Many programs are phasing out the bachelor's degree in pharmacy in favor of a graduate-level program for which an undergraduate degree is required. Students should consult the pharmacy schools of choice to plan the undergraduate program. The minimum requirements are similar to medical school. Other requirements often include microbiology, statistics, and economics.

Pre-Physical Therapy, Pre-Occupational Therapy

Contact faculty: Dr. Reeve

A major in one of the sciences or health and physical education with appropriate electives is normally chosen. The admission prerequisites for physical therapy and occupational therapy vary at different schools, but generally include one year of biology, chemistry, and physics with additional math and science electives, including anatomy and physiology, other biology electives, psychology, calculus, and statistics. Admission is extremely competitive, so careful and early planning is necessary for the successful candidate; students should strive for a high QPA.

Pre-Veterinary Medicine

Contact faculty: Dr. Jablonski, Dr. Reeve

Due to keen competition for available positions, the variation in entrance requirements, and the limited choices of schools, careful and early planning must be a part of a student's preparation for and application to veterinary school. Veterinary schools require at least the number of courses required by medical schools but often include additional upper-level biology electives and bio-chemistry.