PREMEDICAL PROGRAM

Premedical Program
Pre-Health Professions Programs (https://catalog.washcoll.edu/catalog/professional-programs/)

The Premedical Program is designed for students interested in pursuing a career as a physician, dentist, optometrist, or podiatrist. The Premedical Program assists students with pre-professional planning and applications to the health professions schools that grant degrees in allopathic medicine (MD), osteopathic medicine (DO), dentistry (DDS, DMD), and optometry (OD), podiatry (DPM). Premedicine is not a major. Most premedical students major in one or more of the Natural Sciences, but any major or minor offered by the College may be pursued. (Students in the Early Acceptance Program with Lake Erie College of Osteopathic Medicine – see below – must carry a major in a physical science.)

Premedical Committee members include Professors Elizabeth Yost, Ph.D. (Director & Chair; Sociology and Public Health), Kathleen Verville, Ph.D. (Biology), Anne Marteel-Parrish, Ph.D., (Chemistry), Daniel Kochli, Ph.D. (Psychology), Shaun Ramsey (Mathematics and Computer Science), and Matthew McCabe, Ph.D. (Philosophy), as well as Phil Ticknor (Coordinator of Pre-Health Professions Programs)

Students interested in the Premedical Program should notify the Director of the Premedical Program and the Coordinator of Pre-Health Professions Programs of their interest in considering a career in medicine and consult with them and/or other members of the committee early and consistently throughout their undergraduate studies.

The culmination of the Premedical Program is the Premedical Committee process, through which a student requests a Committee Letter (a comprehensive letter of evaluation submitted with their application) from the committee. It is the responsibility of students seeking a Committee Letter to complete a Premedical File and go through the committee process. It is strongly recommended that any student planning to apply to medical, dental, optometry, or podiatry schools go through the committee process and request a committee letter.

Course Selection

In addition to the courses required for the chosen major and for graduation from Washington College, students will need to take additional courses that are most often required for admission to medical, dental, optometry, and podiatry schools and those courses needed to provide an academic background for admissions tests. Many of these courses also satisfy some of the requirements of various majors, especially majors in the Natural Sciences, and some satisfy college distribution requirements.

Because some of the courses needed for admission for medical, dental, optometry, or podiatry schools have one or more prerequisites – and because students wishing to go through the committee process must have already completed (or be currently taking) all prerequisite courses – students should begin to map their future coursework during their first academic advising meeting. The timing of the chemistry courses is especially important.

The courses required for professional school admission can vary based on the type of program and from school to school, but there are specific courses typically required to go through the committee process (p. 2).

Students wishing to go through the committee process must have an undergraduate cumulative grade-point average of 3.0 or better and no grade lower than a C in any of the required Natural Science or Math courses. These are considered minimum qualifications for the process and do not guarantee a specific recommendation level from the committee, nor do they guarantee that the student is a viable candidate for admission to medical, dental, optometry, or podiatry school.

Given the variation in required courses from program to program and school to school (some schools have additional requirements; some have fewer requirements; some recommend certain courses), students should consult the appropriate websites for each area of medicine (aamc.org, aacom.org, aacpm.org, adea.org, opted.org) and for individual schools.

Those students who plan to attend a health professions program in the academic year following graduation from Washington College (without one or more gap years) must be aware that the hierarchical nature of the chemistry courses needed for admission to professional schools requires them to take CHE 120/CHE 140 in the first year, CHE 220/CHE 240 in the second year, and Biochemistry (BIO 409/CHE 309) in the fall of the third year. While there may be ways to complete the Chemistry sequence by beginning Chemistry one semester late, students who elect not to take Chemistry at all in the first year will normally not be able to apply to medical school without taking a gap year.

The chemistry courses CHE 120/CHE 140 and CHE 220/CHE 240 are the equivalent of Organic Chemistry and General Chemistry respectively.

Students may fulfill the physics requirement by taking either the algebra-based physics course [PHY 101 & PHY 102] or the calculus-based physics course [PHY 111 & PHY 112]. Those students planning a major in Physics or a major in Chemistry with ACS certification need to take the calculus-based physics sequence (PHY 111/PHY 112), as PHY 101/PHY 102 will not satisfy the requirements for their major.

Students planning to enter programs that require the MCAT (allopathic medicine, osteopathic medicine, many podiatric medicine programs) should consider fulfilling the social science distribution requirements with General Psychology (PSY 111/PSY 112) and Introduction to Sociology (SOC 101).

Note that many programs require or recommend additional biology courses beyond General Biology. Students who do not major in one of the sciences should take more than the minimum required science classes to ensure a competitive application.

Students with Advanced Placement credit in required premedical courses should seek advice from the Premedical Committee, as some professional schools do not accept AP credit for required courses. Those schools typically ask students either to retake the course at a four-year college or to take additional upper-level courses in the discipline(s) in which the AP credit was received.

Those students planning to study abroad should seek advice about coursework planning and should take required science premedical courses in the United States.

Courses required for medical school admission should not be taken Pass/Fail. In addition, professional schools normally impose minimum grade requirements on required courses. Most commonly, grades of C minus and below are not accepted.

Additional Information

The appropriate test (MCAT, DAT, OAT, GRE) should be taken before applying to professional school. Advice about which test is required for particular programs, when to take these tests, and how to prepare for them should be sought from the Premedical Committee. Along with a strong GPA, strong test scores are important for a successful application to these highly competitive programs.

Although much of the information above pertains to academic requirements, students should be aware of the importance of factors such as communication skills, ability to work in a team, cultural competence, community service, campus involvement, leadership, character, and experience in and knowledge of medicine.

Students who do not have U.S. citizenship or permanent residency should seek out early advice about career planning and be aware that it is very difficult (although not impossible) for non-U.S. citizens/permanent residents to gain entry into U.S. medical schools and to finance their medical education.

Code	Title	Credits	Notes
BIO 111 & BIO 112	General Biology I with Lab and General Biology II with Lab [4]		_____
BIO 409/CHE 309	Biochemistry with Lab		_____
PHY 101 & PHY 102	College Physics I with Lab and College Physics II with Lab [1]		_____
or PHY 111 & PHY 112	General Physics I with Lab and General Physics II with Lab		_____
MAT 111	Differential Calculus		_____
or MAT 106 & MAT 107	Stretch Differential Calculus I and Stretch Differential Calculus II		_____
MAT 109	Statistical Inference & Data Analysis I [2]		_____
or PSY 209	Statistics & Research Design I with Lab		_____
Two ENG Courses (ENG 101 recommended)			_____
Social Science courses (see additional information below) [3]			_____
Humanities Course			_____

1 May fulfill the Physics requirement with either the algebra-based physics course (PHY 101, PHY 102) or the calculus-based physics course (PHY 111, PHY 112).
Those students planning a major in Physics or a major in Chemistry with ACS certification need to take the calculus-based physics sequence (PHY 111, PHY 112), as PHY 101/PHY 102 will not satisfy the requirements for their major.

2 Math requirements can vary depending on the program, but MAT 109 Statistical Inference & Data Analysis I is strongly recommended. (Knowledge of statistics for the MCAT can also be gained from PSY 209 Statistics & Research Design I with Lab, PSY 309 Statistics & Research Design II With Lab

3 Students planning to enter programs that require the MCAT (allopathic medicine, osteopathic medicine, many podiatric medicine programs) should consider fulfilling the social science distribution requirements with PSY 111 General Psychology, PSY 112 General Psychology and SOC 101 Intro to Sociology.

4 Many programs require or recommend additional biology courses beyond General Biology. Students who do not major in one of the sciences should take more than the minimum required science classes to ensure a competitive application

Early Acceptance Program with Lake Erie College of Osteopathic Medicine (LECOM) for Medical and Dental School

Washington College is an affiliate school for the Lake Erie College of Osteopathic Medicine (LECOM) Early Acceptance Program (EAP) for medical school and dental school. Interested students apply to the program through LECOM in their senior year of high school or in their first or second years of study at Washington College (so long as they have accumulated no more than 65 undergraduate credits).

Students applying for the program while in high school or with fewer than 30 undergraduate credit hours must have an unweighted high school grade-point average of 3.5 or better as well as either an SAT composite score of at least 1240 or an ACT composite score of at least 26. Students applying for the program with between 30 and 65 undergraduate credits must have a cumulative undergraduate grade-point average of 3.4 or better and a cumulative undergraduate science grade-point average of 3.2 or better as well as either an SAT composite score of at least 1240 or an ACT composite score of at least 26. Interviews with LECOM are required of all eligible applicants to determine selection. Successful applicants will be granted conditional acceptance to LECOM for matriculation in the fall following their graduation for Washington College.

Those students selected by LECOM for the EAP for medical school are exempted from taking the MCAT. All students selected by LECOM for the EAP for dental school are still required to take the DAT and must achieve an academic average score of at least 18 and scores of 17 or better on each individual section.

Students in LECOM's EAP are *required to major in a physical science* and fulfill all the requirements for that major in addition to the course requirements for the program and Washington College's general distribution requirements.

Like many medical schools, LECOM will not accept Advanced Placement courses in place of the physical science requirements. LECOM will accept AP courses for their English and Behavioral Sciences requirements. All required courses must be taken at Washington College in order to maintain the EAP. Students failing any course – even those not required for the EAP – will be removed from the program. Beginning with their first semester, students in the EAP must maintain an overall grade-point average of 3.4 or better and a science grade-point average of 3.2 or better.

Note that the courses required for the LECOM EAP differ from our general Premedical Program requirements. Our general Premedical Program requirements are based on the most common requirements for schools across the country, so students should consider taking those courses (or have a plan in place to take them in their final four semesters) required by our Premedical Program but not required by LECOM's EAP in the event they decide to withdraw from the EAP or have their acceptance withdrawn.

Full requirements and regulations of LECOM's EAP are available from LECOM as well as from the Director of the Premedical Program and the Coordinator of Pre-Health Professions Programs.

LECOM's EAP for Medical school

Code	Title	Credits	Notes
Students in LECOM's EAP for medical school must complete the following courses at Washington College, earning a "C" or better in each course:			_____
Two courses, totaling at least six credits, in English			_____
One course in Physics (typically PHY 101 or PHY 111)			_____
Two courses, totaling at least six credits, in Behavioral Science (typically Psychology/Sociology)			_____
Two courses in Biology, including two labs			_____
Two courses in General Chemistry, including two labs (typically CHE 220 and CHE 240)			_____
Two courses in Organic Chemistry, including two labs (typically CHE 120 and CHE 140)			_____
BIO 409/CHE 309	Biochemistry with Lab		_____
BIO 209	Genetics with Lab		_____
The following courses are not required by LECOM but are strongly recommended for their Medical EAP.			_____
BIO 203	Microbiology with Lab		_____
BIO 205	Cell & Molecular Biology with Lab		_____
BIO 301	Integrative Human Anatomy with Lab		_____
BIO 404	Immunology with Lab		_____
BIO 424	Integrative Human Physiology with Lab		_____

LECOM's EAP for Dental School

Code	Title	Credits	Notes
Students in LECOM's EAP for dental school must complete the following courses at Washington College, earning a "C" or better in each course:			_____
Two courses, totaling at least six credits, in English (typically including ENG 101)			_____
Two courses in Biology, including two labs			_____

Two courses in General Chemistry, including two labs (typically CHE 220 and CHE 240)		_____
Two courses in Organic Chemistry, including two labs (typically CHE 120 and CHE 140)		_____
BIO 409/CHE 309	Biochemistry with Lab	_____
The following courses are not required by LECOM but are strongly recommended for their Dental EAP		_____
One course in Physics (typically PHY 101 or PHY 111)		_____
BIO 203	Microbiology with Lab	_____
BIO 205	Cell & Molecular Biology with Lab	_____
BIO 209	Genetics with Lab	_____
BIO 301	Integrative Human Anatomy with Lab	_____
BIO 404	Immunology with Lab	_____
BIO 424	Integrative Human Physiology with Lab	_____