



Biology

- **BIOLOGY 171:** Introductory Biology Lecture (Ecology and Evolution)
- **BIOLOGY 172:** Introductory Biology Lecture (Molecular, Cellular, and Developmental)
- **BIOLOGY 173:** Introductory Biology Lab
- If you have A.P. or I.B. credit for Introductory Biology (BIOLOGY 195), you should take BIOLOGY 173 with at least two biology lectures and one additional lab course

General Chemistry

- Health professions schools typically require one year of inorganic chemistry and one year of organic chemistry (with lab experience). You will likely begin with general chemistry (I):
 - **CHEM 130:** Macroscopic Investigations & Reaction Principles & **CHEM 125 and 126:** General and Inorganic Chemistry: Laboratory
- The last term of general chemistry (II) includes:
 - **CHEM 230:** Physical Chemical Principles and Applications — OR — **CHEM 260:** Chemical Principle
- If you wish to take additional coursework in General Chemistry, consider **CHEM 245/246/247:** Biomedical Analytical Chemistry

Organic Chemistry

- If you have A.P. credit or a high score on the chemistry and math placement exams, you may begin with organic chemistry (I):
 - **CHEM 215:** Structure and Reactivity II & **CHEM 216:** Synthesis and Characterization of Organic Compounds Laboratory
 - **CHEM 210:** Structure and Reactivity & **CHEM 211:** Investigation Laboratory (1)
- The last term of general chemistry (II) includes:
 - **CHEM 230:** Physical Chemical Principles and Applications — OR — **CHEM 260:** Chemical Principle

* If you do not have A.P. credit, but you place directly into organic chemistry and therefore choose not to take CHEM 130, CHEM 125, and CHEM 126, you are entitled to a chemistry placement letter. Request this letter from your pre-health advisors at the time of application to health professions programs. Some schools may not accept this letter and instead will insist on courses taken on a college campus. It is also the case that some schools will not accept A.P. credit for chemistry. If you need or wish to take additional coursework in general chemistry, consider CHEM 245/246/247 (Biomedical Analytical Chemistry).

Microbiology

- **BIOLOGY 207:** Microbiology lecture with lab included
- **MICRBIOL 301/350:** Microbiology lecture and Microbiology lab

Physics

- Most schools require two academic terms (two lectures and two labs) of physics. There are two versions of Physics I and Physics II taught on the U-M campus. It is important that you choose the physics sequence required by your academic program and your target professional school, some of which specify the calculus sequence. (Check with your academic advisor to be sure.)
- **PHYSICS 140 and 141:** General Physics I: Mechanics, Sound, and Heat (4); and Lab (1)
— OR —
- **PHYSICS 135 and 136:** Physics for the Life Sciences I (4) and Lab (1)
— OR —
- **PHYSICS 160 and 161:** Honors Physics I (4) and Honors Mechanics Lab (1)

— AND —
- **PHYSICS 240/241:** General Physics II (4) and Elementary Laboratory II (1) calculus-based
— OR —

- **PHYSICS 235/236:** Physics for the Life Sciences II (4) and Elementary Laboratory II (1) calculus-based
— OR —
- **PHYSICS 260/261:** Honors Physics II (4) and Honors E&M Lab (1) calculus-based

Biochemistry

- Many health professions programs require a lecture in biochemistry. In addition, biochemistry content is emphasized on standardized tests such as the MCAT, DAT, PCAT. Three introductory biochemistry lectures are taught at the University of Michigan, any one of which will satisfy a requirement for biochemistry. Your selection should also take into account the specifications listed by your major/academic program if this requires biochemistry.
 - **CHEM 351:** Fundamentals of Biochemistry
 - **MCDB 310:** Introductory Biochemistry
 - **BIOLCHEM 415:** Introductory Biochemistry

English/Writing

- Medical and other health professional schools value effective writing skills and comprehensive reading skills. Two courses are frequently required, but requirements are school specific, so be sure to investigate your target programs.
- Some schools are flexible and will be satisfied with writing courses from departments other than the English department, such as the courses that satisfy the LSA First-Year Writing Requirement or the Upper Level Writing Requirement. However, this is not a guarantee, and to be safe, we recommend that at least one of these courses should be English composition (e.g., ENGLISH 124 or 125). The second course might be another composition or English literature course, provided there is substantial writing required by the literature course. A very small number of schools require two terms of English composition.
 - **ENGLISH 124**
 - OR —
 - **ENGLISH 125:** English Composition

Mathematics & Statistics

- Requirements for mathematics/statistics coursework vary significantly from school to school. Some schools may not require any form of mathematics. A small handful of health professions programs have a requirement for a course in calculus, and others have a non-specific requirement, such as six credit hours of college level mathematics. Most, if not all, health professions programs see value in (and might require) basic preparation in statistics. Given this variety, it is important to check your target programs and talk with an advisor before deciding.
- Note also that the courses you take on this campus might require mathematics. For example, a course in calculus (Math 115) is an advisory prerequisite for the Physics for the Life Sciences sequence (Physics 135, 136, 235, 236).

Non-Science Subjects

- As you prepare for a career in the health professions, you will benefit from an exploration of health and illness as social, cultural, and political processes. Among other things, such coursework will help you understand your decision more clearly and in the process will likely help you prepare to write a thoughtful application essay and respond well to some interview questions.
- Before you register for classes, use the keyword “health” on the LSA course guide to view your options. Here are a few suggestions:
 - **AMCULT 331:** Health in America
 - **ANTHCUL 344:** Medical Anthropology
 - **HISTORY 234:** History of Medicine in the Western World from the 18th Century to the Present
 - **PUBHLTH 200:** Introduction to Public Health
 - **PUBHLTH 300:** Behavioral and Social Foundations for the Health Professions (non-LSA credit)
 - **SOC 475:** Introduction to Medical Sociology
 - **SOC 302:** Health and Society: An Introduction to Sociology
 - **WOMENSTD 220:** Perspectives in Women’s Health
 - **WOMENSTD 300:** Perspectives in Men’s Health

For more information: <https://lsa.umich.edu/advising/plan-your-path/pre-health/pre-health-academics/choosing-courses.html>