

Premed/Prehealth Advising:

Typical courses required for entry to a medical or health-related program

Preparing for medical or health-related graduate study needs to start early in your Rensselaer career, to be sure you have the courses most schools require for admission.

Students considering a career in the health professions generally must meet the following course requirements:

- Two semesters of introductory biology plus lab
- Two semesters of general chemistry plus lab
- Two semesters of organic chemistry plus lab
- Two semesters of physics plus lab
- Two semesters of English

At Rensselaer, English is taught by the Department of Communication and Media. Courses listed as LITR-, COMM-, or WRIT- generally are considered English courses. Students majoring in areas other than Biology may need to work the science courses into their curriculum but should be able to include the English requirement within their Humanities, Arts and Social Sciences Core requirements. Likewise, judicious use of your basic HASS Core requirements may allow inclusion of General Psychology and Sociology (needed for the MCAT). Please check with your departmental academic advisor and with ALAC for further information about curriculum and courses in the School of Humanities, Arts and Social Sciences appropriate for application to health graduate programs.

Medical school specific information

The MCAT examination (format and scoring) changed beginning with the 2015-2016 application cycle. Additional courses will be necessary in order to be prepared for the new examination. Most medical schools list these classes as recommended but several have specifically required Biochemistry. If a course is listed as recommended at your preferred schools, you should consider it as required in case standards change, and to have wider options in school choice. These courses include:

- One semester of Biochemistry (i.e. BCBP/BIOL 4760)
- One semester of General Psychology
- One semester of Sociology
- One semester of Critical Thinking (i.e. PHIL 2100)
- One semester of neurobiology (i.e. BIOL 4100, COGS-4300, others available)

The Medical College Admissions Test (MCAT) will cover the four areas of study listed below:

- Biological and Biochemical Foundations of Living Systems
- Chemical and Physical Foundations of Biological Systems
- Psychological, Social, and Biological Foundations of Behavior
- Critical Analysis and Reasoning Skills

For a complete description of the competencies and the areas covered by each section of the exam, we recommend the following website: <https://students-residents.aamc.org/applying-medical-school/article/whats-mcat-exam/>. Begin here for help with your planning and not just your preparation for the MCAT.

All courses required can be taken at Rensselaer in many different majors, however, the addition of three or more courses will impact particularly engineering majors and possibly those students doing dual majors as there is less elective space to allow for the additional courses. The MCAT is based upon this information therefore it is suggested that you complete these courses before taking the MCAT.



A useful aid in looking at medical schools is a searchable data base called Medical School Admission Requirements or MSAR for short (\$28 for 12 month access). Information for this guide can be found at <https://students-residents.aamc.org/applying-medical-school/applying-medical-school-process/deciding-where-apply/medical-school-admission-requirements/>. Why is this important before you actually begin to choose your medical school? It helps you plan your program of study for medical schools. Information for each medical school and their premedical requirements are available on this online database along with other information about the specific school. It is not as simple as it used to be. Some medical schools do not require English just competency in English. Some require Biochemistry and others highly recommend it. None require psychology or sociology but most recommend it. Most do not mention neurobiology but the MCAT covers information in this area as well as in sociology and psychology. Some medical schools will not allow AP credit to be used for premed courses and some highly discourage or state outright that premed courses taken at community colleges will not be accepted. Some schools allow online courses and others do not. Making your academic plan is more difficult than ever.

Another service from ALAC, your Advising & Learning Assistance Center