## THE REED-YORKE HEALTH PROFESSIONS ADVISING OFFICE



COLLEGE OF COMPUTER, MATHEMATICAL, & NATURAL SCIENCES

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## **MEDICAL SCHOOL**

These prerequisites are based on high frequency requirements at a majority of US medical schools. Individual school requirements may vary. You should refer to the Medical School Admission Requirements (MSAR) for specific program requirements. These are professional school requirements and should not be confused with academic major requirements. To count towards medical school, you must earn a C or better in these courses!

## **REQUIRED COURSES**

Course	U of MD Course	<u>Credits</u>
Biology I Genetics Cell Biology & Physiology Chemistry I	BSCI 170/171 (formerly105) BSCI 222 BSCI 330 CHEM 131 & 132 (lab) Or Chem 135/136 (lab)	4 4 4 4
Organic Chemistry I     Organic Chemistry II     Chemistry II     Biochemistry     Physics I     Physics II     Calculus I*	CHEM 231 & 232 (lab) CHEM 241 & 242 (lab) CHEM 271 & 272 (lab) BCHM 463 or 461 PHYS 121, 131, 141 or 161/27 PHYS 122, 132,142 or 260/26 MATH 136, 120 or 140 (former 220 or 130)	1 4
<ul><li>English Composition</li><li>Advanced Composition</li><li>Liberal Arts</li><li>(PSYC100 &amp; SOCY100 Recommendation)</li></ul>	ENGL 101 <sup>°</sup> ENGL 390-398 Open	3 3 6

## STRONGLY RECOMMENDED COURSES

These courses are often taken some time during the first year of professional school. Challenge yourself early and get introduced to the subject matter. This may help make your transition into the first year of medical school easier. In addition, students tend to perform better on the MCAT with some additional exposure to biology, beyond the minimum required by the medical schools.

Course U of MD Course		Credits
Calculus II or STAT	any STAT required for major will count; BIOM 301 or STAT 464 are common for this	3-4
Microbiology	BSCI 223 or 283	4
Mammalian Physiology	BSCI440 (JR/SR only)	4
Intro to Psychology	PSYC100	3
Intro to Sociology	SOCY100	3

<sup>\*</sup> Be sure to take the MATH and PHYS courses required by your academic major. Engineering Majors are required to take the following:

Math 141→ Physics 161 Physics 260 &261 (Following Semester)

Medical schools require two semesters of Physics with a lab. Students who have completed the first or the first two courses in the engineering sequence and decide to complete pre-med requirements have the following two options:

- Students who have completed PHYS 161, 260, and 261 can take PHYS 270/271 and complete that sequence, which would result in students completing more than minimally required by medical schools;
- 2. PHYS161 is the first course in a three-semester sequence of courses intended for engineering majors and does not include a lab; the labs for this sequence are included with the second and third courses. Some pre-med students only take the first two courses (PHYS161 and PHYS260/261) in this sequence and need to complete an additional lab to satisfy a pre-med requirement. PHYS261 is a mechanics lab, normally taken concurrently with the PHYS260 lecture course. Students who don't need to take the third course in this sequence (PHYS270/271) may take PHYS271 as a stand-alone lab course to satisfy the pre-med physics requirement. PHYS271 is an electricity and magnetism lab

and is the most appropriate lab to take in this situation.

Students who take PHYS161 but take PHYS132 or 142 instead of continuing with the second course in the engineering major sequence should take PHYS261 to compete the additional physics lab requirement. PHYS132 and PHYS142 include the lab as part of the course. The labs for these courses are electricity and magnetism labs. So in this situation, the student would be missing a mechanics lab and should take PHYS261.

In a nutshell:

Option I: PHYS161, PHYS260, PHYS261, and PHYS271 Option II: PHYS161, PHYS132 or 142, and PHYS261.

AP courses: See our website: http://www.prehealth.umd.edu/premedicine/apscores

COURSE NUMBERS ARE SUBJECT TO CHANGE. UPDATED Summer 2019