## THE REED-YORKE HEALTH PROFESSIONS ADVISING OFFICE



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## **DENTAL SCHOOL**

These recommended prerequisites are based on high frequency requirements at a majority of US dental schools. Individual school requirements vary. You should refer to the Official Guide to Dental Schools by the ADEA 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 course!

Course	U of MD Course	<u>Credits</u>
Biology I	BSCI 170/171 (formerly105)	4
Biology II	BSCI 160/161 (formerly106)	4
1-3 add'l BSCI at 200-400 level	see suggestions below	4-12
Chemistry I	CHEM 131 & 132 (lab)	4
	Or CHEM 135/136 (lab)	
Organic Chemistry I	CHEM 231 & 232 (lab)	4
Organic Chemistry II	CHEM 241 & 242 (lab)	4
Chemistry II	CHEM 271 & 272 (lab)	4
Physics I	PHYS 121, 131,141 or 161/271	*** 4
Physics II	PHYS 122, 132,142 or 260/261	4
Biochemistry	BCHM 463 or 461 and 462	3/6
College algebra/Statistics**	varies school to schoo	J 3/6
English Composition*	ENGL 101	3
Advanced Composition	ENGL 390-398	3
Liberal Arts	Open	6

<sup>\*</sup> SAT exemption does not count as a course. Two ENGL courses are still required.

Math 141→ Physics 161

Physics 260 & 261 (Following Semester)

Dental 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-dent 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/predentistry/apandibcredit

(Continued on next page)

<sup>\*\*</sup> Dental schools, with few exceptions (eg. Harvard, BU) do not require calculus. However, proficiency in math and even calculus may improve performance in BCHM, which is a requirement.

<sup>\*\*\*</sup>Engineering Majors are required to take the following:

## 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 dental school easier. In addition, dental schools have widely varying requirements and one or more of these may actually be specifically required at some schools. Check the ADEA guide.

Course	U of MD Course	Credits
Genetics	BSCI 222	4
Microbiology	BSCI 223 or 283	4
Cell Biology & Physiology	BSCI 330	4
Mammalian Physiology/Lab	BSCI 440/441	4/2

COURSE NUMBERS ARE SUBJECT TO CHANGE. UPDATED Summer 2019