

## ACADEMIC PLANNING GUIDE FOR STUDENTS INTERESTED IN MEDICINE

*The requirements for admission to medical schools are determined by the individual medical schools. Listed here are the typical requirements and equivalent Stanford courses that fulfill those requirements. Please refer to the Medical School Admissions Requirements (MSAR) guide on the AAMC website ([www.aamc.org](http://www.aamc.org)) and/or with each medical school for the specific requirements of all U.S. and Canadian medical schools.*

COMPETENCY	NATIONAL RECOMMENDATIONS	STANFORD COURSE(S)
<b>Chemistry</b>	2 years coursework with lab work  (to include general chemistry, organic chemistry, and biochemistry)	Chem 31A + 31B <b>OR</b> Chem 31X  <b>AND</b>  Chem 33 + 35 + 141 + 143 <b>OR</b> Chem 33 + 35 + <i>130*</i> /131+ 171 + 181 (please see NOTES section)
<b>Biology</b>	1 year coursework	<u>Biology</u> : Biology 82 + 83 + 84 + 86 <b>OR</b> <u>Human Biology</u> : HumBio 2A + 3A + 4A
	Labs	Two of the following laboratory courses: <i>Biology 45, Biology 46 (or 47), BioE44, BioE51, Surgery 101, Biology 174</i>
<b>Physics</b>	1 year coursework with lab work	Physics 21/22 + 23/24 + 25/26 <b>OR</b> Physics 41/42 + 43/44 + 45/46 <b>OR</b> Physics 61/62 + 63/64 + 65/67
<b>English</b>	1 year (should include writing skills)	PWR Course Requirements <b>AND</b> Additional one-quarter elective course
<b>Math</b>	1 year coursework to include Statistics	Math 19 + 20 + 21 (please see NOTES section) <b>OR</b> either 51 or CME 100 <b>AND</b> : any statistics course
<b>Also Recommended:</b> Psychology 1		

\*Course numbers in *italics* are labs. Please see reverse for more details about how to choose courses.

## PROPER SEQUENCING OF COURSES:

Since the pre-medical curriculum is a component of a student's education at Stanford, not a major, students can explore a wide variety of academic areas and majors according to their area of interest. When courses are taken often depends on when the student plans to enter medical school. Taking a year off before medical school is often a healthy alternative and allows students much more flexibility in scheduling their pre-medical courses. It also further allows students to explore diverse curricular programs, such as studying abroad, becoming involved in research projects, etc., over their full four years at Stanford.

It usually takes a year to complete the entire application process. Currently, the Medical College Admissions Test (MCAT) is offered multiple times during the year. Most science courses listed on the previous page should be completed (with exception of the labs) before taking the MCAT. Medical schools prefer the early exams so that the scores are available by mid-June.

## PLEASE NOTE:

- Medical schools are not consistent with how they view **AP credit**. We recommend that you take an additional course at the university level even if you have the AP units in math or physics. Please refer to the Medical School Admissions Requirements (MSAR) guide on the AAMC website ([www.aamc.org](http://www.aamc.org)) and/or with each medical school for the specific requirements of all U.S. and Canadian medical schools. Medical schools expect these required courses to be taken **for a letter grade**.
- Math requirements for medical schools vary widely. We recommend that you complete at least the equivalent of one semester of calculus (Math 20 + 21), since the Math 20-series is a required pre-requisite for the Chem 141/143 biochemistry sequence. In addition, students should take at least one course in statistics.
- The chemistry sequence at Stanford is unique, and the courses are not easily matched to those at other colleges and universities, especially if you are trying to match quarter classes to semester classes. Please consult a pre-health advisor before deciding to complete chemistry requirements elsewhere.
- Many schools are now requiring or highly recommending biochemistry, and the MCAT also includes biochemistry concepts. There are multiple ways to satisfy biochemistry through coursework and it is imperative that pre-med students check with their major departments on how best to complete the Chemistry sequences if their major requires Chemistry courses.
- Advanced coursework in biology (such as molecular biology and genetics) is highly recommended by many medical schools.
- Please exercise caution if switching from the Biology foundation courses to the Human Biology core, or vice versa. If you combine course curricula, you risk missing material that might be covered on the MCAT.