

# COURSE REQUIREMENTS AND D-PLANNING DOCUMENT

## FOR STUDENTS INTERESTED IN MEDICAL (MD, DO), DENTAL, OR VETERINARY SCHOOL

(For other health professions, please check with an advisor for more information)

**We encourage you to meet with a Pre-Health Assistant Dean early on, and again at least once or twice per year to confirm that you are taking appropriate courses in a timeline that works for you and supports your goals.**

At Dartmouth, the following courses are considered adequate preparation by medical and dental schools, although veterinary schools have additional course requirements. **Texas schools in particular require more biology credits than most other medical schools. For more information, [please see our website](#).**

The following courses also prepare you for the required admissions exams (MCAT, DAT, etc.) and should be completed before taking those exams. **To obtain information about specific schools, refer to their websites, as these are often changed without notice.** Other health professions, such as physician assistants, nursing, and physical therapists (PT) have similar but different requirements, which your Pre-Health Deans can discuss with you.

There are several ways to navigate the following courses. **Work with your Pre-Health Dean to help you determine a plan that best fits you.** We can also help you shift your plan if you have new information about your goals or other academic and co-curricular commitments.

“Going straight through,” (i.e., starting medical school in the summer after you graduate) means completing all the coursework required to prepare for the MCAT and taking the MCAT by the end of your Junior spring. The application itself is a **unique, year-long process** that begins in the summer. Due to the time it takes to develop all the academic and extracurricular preparation, 90% of Dartmouth students plan to apply at the end of their senior year, the year after, or even beyond. Applicants will either have a job or other meaningful experience while going through the application process. HPP continues to work with alumni after graduation.

In general, medical schools and MCAT prep require the following courses or the equivalent (in Dartmouth terms). Below is the list that will satisfy admissions requirements for nearly all medical schools and prepare you to excel on the MCAT. These prerequisites are identical for osteopathic medical schools (DO). Veterinary and dental schools have the same prerequisites but with a few particular additions. Please check with a Pre-Health Assistant Dean. **As you move along your pre-health journey and start considering which schools you are applying to, we also highly recommend checking each school's course requirement list to confirm if any additional unique prerequisites are required.**

**AP Credit–Placement Credit:** AP or Placement Credit for Math, Chemistry, or Physics departments for certain courses (e.g. Math 3 or 8, Stats, Chem 5, or Physics 3) will fulfill med/dental/vet schools' requirements. If you placed out of both a calculus and stats course, you should still take a college level math (an option is to give up one of the credits, i.e., stats, and take a course here, or take an upper-level course). The same for Physics. If you place out of both Phys 3 and 4, you should still take a college level

physics course. (to note: at this time, all schools we know of accept the AP or Placement credits but when you make your school list you'll still need to note if anything has changed).

**Additional Science Courses:** If your grades in these courses are good and your schedule is filled with courses necessary for your major, you do not need to go beyond these unless an individual school of your choice has additional requirements for admission. If your record does not clearly establish competency in sciences, you should include more upper-level science courses. That said, taking courses in, for instance, biology just because you are interested is valued by medical schools, and demonstrates a genuine interest in science. **Please discuss this with your pre-health advisors.**

**Navigating The Courses:** You will each have different levels of experience coming into these courses. Some may have had an extensive background in the sciences and some less. Learning is an evolving process. With this understanding, most students will find themselves learning new study strategies and approaches to learning in general. Speak to your faculty, pre-health advisors, a teaching science fellow, the Academic Skills Center, upper-class peers, and/or someone in your class who might have a skill they can share. You may need to put in an amount of time that is new to you—that is very normal. Sustain that mindset and you will see your skills, understanding, and outcomes develop and thrive.

Course Subject	Medical School Requirement	Dartmouth Courses/Recommendations	Notes on Dartmouth Courses
English/Writing	2 terms	Writing 5 (or Writing 2-3) AND First-Year Seminar, or Humanities 1 and 2	More courses that emphasize strong reading, synthesis, writing, and analytical skills are highly valued.
Mathematics	2 terms	Math 3 or equivalent and Statistics (1 of the classes listed below should suffice): <ul style="list-style-type: none"> <li>• PSYCH 10</li> <li>• SOCY 10</li> <li>• BIOL 29</li> <li>• MATH 10</li> <li>• ECON 10</li> <li>• GOV 10</li> <li>• QSS 15</li> </ul>	Calculus is a prerequisite for courses in biology, chemistry, and physics at Dartmouth  MATH 3 or the equivalent is completely sufficient for pre-health. If invited to a higher-level math course only take it if you love math or need it to fulfill major/minor requirements.  If you have credit for calculus from the Entrance Placement exam, you should still take at least one math course at the college level (statistics would suffice).
Biology	2 terms with lab	Foundation lab courses: <ul style="list-style-type: none"> <li>• BIOL 12</li> <li>• BIOL 13</li> <li>• BIOL 14</li> <li>• BIOL 16</li> </ul>	3 terms recommended for MCAT prep (BIOL 12, 13, 14)  <b>See the description above on BIOL 11 as a starting point before</b>

			<b>jumping into foundation coursework</b>
<b>General (Inorganic) Chemistry</b>	2 terms with labs	CHEM 5 and CHEM 6; or CHEM 11 (Gives equivalent credit for both CHEM 5 and 6)	<p>MATH 3 (or MATH 1 &amp; 3) is a pre-requisite</p> <p>With a more advanced background, one might be exempt from one or both classes (through AP/IB-type credit or the Placement Exam). You <b>SHOULD</b> still take at least one general chemistry course at the college level.</p> <p>Because there are several pre-health chemistry prerequisites please discuss your sequencing with a pre-health advisor to help develop a working strategy that's tailored to you.</p>
<b>Organic Chemistry</b>	2 terms with labs	CHEM 51 and CHEM 52	Ideally, take in sequence but not required.
<b>Biochemistry</b>	1 term (lab optional)	BIO 40 (no lab) OR CHEM 41 (with lab)	<p>BIOL 40 requires CHEM 51 &amp; 52 AND BIO 12 as prerequisites (a lab is not required for pre-health).</p> <p>CHEM 41 requires CHEM 51 &amp; 52 as prerequisites.</p> <p>Either is rigorous but neither course is more rigorous than the other. You can speak to an HPP advisor to consider which option to choose.</p>
<b>Physics</b>	2 terms with labs	PHYS 3 and PHYS 4; or PHYS 13 and PHYS 14; or PHYS 15 and 16 (Honors)	<p>Calculus (MATH 3 or exemption) is a pre-requisite for PHYS 3 &amp; 4</p> <p>Physics 3 and 4 are completely sufficient as pre-health prerequisites. Physics 13 and 14 would be necessary for a major in Physics or Engineering and preferred for Chemistry—or if you just love Physics. Physics 15, 16 is an honors level.</p> <p>If exempt from both 3 &amp; 4 one should still take a college-level physics course.</p>

<b>Social Sciences</b>	Up to 2 terms	PSYCH 1 (or PSYCH 6) and SOCY 1 (or SOCY 2) recommended for MCAT prep	<p>Many med schools recommend having at least a Psych or Socy class. The MCAT contains a Psychology and Sociology section that makes up 25% of the total score. It is important to familiarize yourself with these materials by either taking these courses <b>or</b> having a plan to study them on your own.</p> <p>PSYCH 1-Recommended (by the Psychology dept as the closest match to the material on MCAT).</p> <p>PSYCH 6-Though it provides some useful material for the MCAT it should be complemented with self-study on further psychology content for MCAT preparation.</p> <p>SOCY 1 has the closest match to competencies on the MCAT but any of the other health-related SOCY courses will offer a strong sociological context that self-study can complement.</p>
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