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 information specific to those interests)

We encourage you to meet with a Pre-Health Advisor 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. We are here to help you navigate your pre-health d-planning, course selection, and course navigation!

At Dartmouth, the following courses fulfill the prerequisite science preparation required by nearly all medical schools. These prerequisite courses prepare you for the required standardized exams (MCAT, DAT, etc.) and should be completed before taking those exams. Other health professions, such as physician assistants, nursing, and physical therapists (PT), have similar but different requirements, which your Pre-Health Advisor can discuss with you.

- **If you are interested in dental or veterinary medicine,** there are a few additional course requirements.
- **IMPORTANT NOTE: Texas schools require more biology credits than most other medical or dental schools. For more information, please see our website.**

There are multiple ways to individualize your pre-health course planning to your evolving academic and personal goals.

- **Work with your Pre-Health Advisors** to help you determine plans that best fit a successful timeline for you!
- We can also help you shift your plan if you have new information about your goals or other academic and co-curricular commitments. **Learn more about timelines and gap years on the HPP website.**

Below is the list of courses at Dartmouth 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).
- Again, please see above info above, regarding Texas Med/Dental/Vet schools.
- Veterinary and dental schools have the same prerequisites but with a few particular additions.
- As you move along your pre-health journey and start considering which schools you are applying to, we highly recommend checking each school's course requirement list to confirm if any additional unique prerequisites are required.
- Please check with a Pre-Health Advisor to ensure your course selections and d-plan align with your goals!

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. However, if you placed out of both a calculus and stats course, you should still take a college-level math course (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. 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:

- Regardless of your major, fulfilling the pre-health prerequisites successfully is sufficient, though med/vet/dental schools certainly appreciate a demonstration of a genuine interest in science if you choose to take 1 or 2 extra courses.
- If you do need to enhance the grades of your science prerequisites, then it is important to consider taking more upper-level science courses. Slow, steady progress will always be more important than speed! Most importantly, keep a mindset of growth and learning through your classes and utilize academic support to continue to create successful strategies! **Your Pre-health Advisors would be glad to discuss this with you.**

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/or math, 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.

Converting Dartmouth "quarters/terms" to semesters:

- Dartmouth terms/quarters will translate as "semesters" when it comes to prerequisites. Therefore, if you see a med school requirement of "2 semesters of gen chem or 3 quarters," **please know that two terms/quarters at Dartmouth is the equivalent of 2 semesters for health professions schools!**

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): • PSYCH 10 • SOCY 10 • BIOL 10 • MATH 10 • ECON 10 • GOV 10 • QSS 15	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: • BIOL 12 • BIOL 13 • BIOL 14 • BIOL 16	3 terms recommended for MCAT prep (BIOL 12, 13, 14) **To learn about BIOL 11 as a starting point before jumping into foundation coursework, please see our Getting Started in Biology and General Chemistry Document.**
General (Inorganic) Chemistry	2 terms with labs	CHEM 5 and CHEM 6; or CHEM 11 (Gives equivalent credit for both CHEM 5 and 6)	MATH 3 (or MATH 1 & 3) is a prerequisite, With a more advanced background, one might be exempt from one or both classes (through AP/IB-type credit or the Placement Exam). You SHOULD still take at least one general chemistry course at the college level. 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.
Organic Chemistry	2 terms with labs	CHEM 51 and CHEM 52	Ideally, take in sequence but not required.
Biochemistry	1 term (lab optional)	BIO 40 (no lab) OR CHEM 41 (with lab)	BIOL 40 requires CHEM 51 & 52 AND BIO 12 as prerequisites (a lab is not required for pre-health). CHEM 41 requires CHEM 51 & 52 as prerequisites. Neither course is more rigorous than the other. You can speak to an HPP advisor to consider which option to choose.

Physics	2 terms with labs	PHYS 3 and PHYS 4; or PHYS 13 and PHYS 14; or PHYS 15 and 16 (Honors)	Calculus (MATH 3 or exemption) is a prerequisite for PHYS 3 & 4. Physics 3 and 4 are typical/ 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 and 16 are at an honors level. If exempt from both 3 & 4, one should still take a college-level physics course.
Social Sciences	Up to 2 terms	PSYCH 1 (or PSYCH 6) and SOCY 1 (or SOCY 2) recommended for MCAT prep	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 **or** having a plan to study them on your own. PSYCH 1-Recommended (by the Psychology dept as the closest match to the material on the MCAT). 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. 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.