GETTING STARTED WITH BIOLOGY & GENERAL CHEMISTRY AT DARTMOUTH

BIOLOGY

Determining Where to Start with Biology: To help students determine if they are sufficiently prepared to enter a foundation (lab) course directly, the biology department has established an online self-assessment exam for students. This self-assessment is a helpful way to determine your biology starting point, the <u>Biology Placement/Advisory Test</u> is available on the <u>New Student Orientation Canvas Site</u>.

To gain clarity about your best starting point for biology courses at Dartmouth, students should check the <u>Biology Department's website</u>. We also recommend having a conversation with a Pre-Health Dean or undergraduate dean about taking BIOL 11 before enrolling in the foundation courses. There is a BIOL 11 course offered every term. BIOL 11 has no labs, focuses on problem-solving in biology, and prepares students to take the required laboratory-based courses.

BIOL 11 (various topics offered – check ORC): This course focuses on problem-solving in biology and prepares students to take the required lab-based foundation courses. BIO MAJORS: if taken BEFORE any foundation courses, BIO 11 WILL COUNT towards your major.

BIOL 9 is another possible starting point. It will be offered during the Spring 2026 term. BIOL 9 is a hands-on class that focuses on laboratory experiments and interpretation.

The Foundation Lab Courses: While any foundation course would "count" as a medical school prerequisite, to best prepare for the MCAT and medical/dental/veterinary school, we highly recommend taking BIOL 12, BIOL 13, AND BIOL 14, even though taking two foundations fulfills the pre-requisite.

Dartmouth's biology foundation courses can be taken in ANY order.

- BIOL 12: Cell Structure and Function
- o BIOL 13: Gene Expression and Inheritance
- BIOL 14: Human Physiology
- o BIOL 16: Ecology

Other courses in Biology

- For Dental and Veterinary school: Microbiology and Anatomy are additional requirements.
- Texas Medical and Dental schools require more biology credit than most other med/dental schools.

GENERAL CHEMISTRY

General Chemistry: An introduction to the fundamental concepts of chemistry and their application to real-world problems in a college-level general chemistry curriculum is important preparation for several majors and a component of the pre-health (medical/dental/veterinary) curriculum.

At Dartmouth the General Chemistry curriculum consists of: Chem 5 and Chem 6 or Chem 11 (completion of which also provides credit-on-entrance (CR) for Chem 5). Chem5 and Chem6 are the standard track through general chemistry. Chem 11 is a one-term general chemistry course designed specifically for students with significant prior exposure to chemistry.

Prepare for your general chemistry course with the General Chemistry Canvas review site before starting your General Chemistry course, especially if it has been a while since you took a chemistry course or if you did not have the opportunity to do so during high school. It is also helpful to review before taking a placement exam if it's been a while since you learned the material. This will help you hit the ground running in our short, fast-paced terms.

Which general chemistry track (Chem 5 and Chem 6 or Chem 11) should I complete?

- ➤ If you took the Chemistry AP exam and scored a 4 or 5 (or 6 or 7 on the IB Chemistry exam or A on the British A-level Chemistry exam), you have demonstrated a significant understanding of general chemistry principles. You will automatically receive credit-onentrance (CR) for Chem 5 and be placed into Chem 11.
- > Students with significant prior exposure to chemistry who are interested in taking Chem 11 and who do not have the AP, IB or A-level scores listed above must take the Chemistry Placement test. The results from this test will guide your placement into the general chemistry curriculum.
 - The Chemistry Placement test is now live! You can find it on the New Student Orientation Canvas site.
 - o If you are placed into Chem 11 as your starting point, upon completing this course you will also receive credit-on-entrance (CR) for Chem 5, if you do not already have this credit, thus completing the General Chemistry sequence.
- ➤ Students who did not take AP, IB or A-level Chemistry or who do not have these AP/IB/A-level scores and who do not complete the Chemistry Placement test must enroll in Chem 5 as their first chemistry course. These students will complete the Chem 5 and Chem 6 sequence.

Important note about prerequisites

- Math 3 (first term of calculus) is a pre-requisite for Chem 5 and Chem 11 and **must** be taken first.
 - o If you receive credit-on-entrance (CR) for Math 3, you have the necessary math pre-requisite to take Chem 5 or Chem 11.

- Math 3 cannot be taken concurrently with Chem 5 or Chem 11. If you do not have credit for Math 3 and want to take general chemistry in your first year at Dartmouth, you will need to complete Math 3 during the fall term.
- Math 3 is sufficient mathematics for the pre-health curriculum. However, if you are considering a STEM major (e.g., Chemistry, Physics, Computer Science, Engineering), additional math will be required.