

# Pre-Pharmacy Program Advice

Pharmacy schools (PharmD programs) require a strong foundation in the sciences, as well as key courses in math, communication, and the humanities. While specific prerequisites vary somewhat between schools, most follow a common core of requirements. If you are a biology major at CSU, you can meet all or most of these requirements while also fulfilling your degree, but you must work closely with your advisor to select the appropriate courses.

## Core Prerequisite Courses

1. Biology
  - a. Principles of Biology I & II with labs (BIOL 1107K and 1108K)
  - b. Microbiology with lab (often BIOL 2260K or as a senior elective)
  - c. Human Anatomy & Physiology I and II with labs (BIOL 2251K and 2252K)
  - d. Cell Biology (BIOL 3215K) and Genetics (BIOL 3216K) are recommended, even if not strictly required.
2. Chemistry
  - a. General Chemistry I & II with labs (CHEM 1211/1211L and 1212/1212L)
  - b. Organic Chemistry I & II with labs (CHEM 3111/3311 and 3112/3312)
  - c. Biochemistry (many programs require one semester, often without lab) (CHEM 3141)
3. Mathematics
  - a. Calculus I (some schools will accept Pre-Calculus, but Calculus is safest) (MATH 1131)
  - b. Statistics (strongly recommended, and sometimes required) (STAT 1401)
4. Physics
  - a. One year of Physics with lab (precalculus-based is sufficient for most pharmacy programs) (PHYS 1111/1311 and 1112/1312)
5. English & Communication
  - a. English Composition I & II (ENGL 1101 & 1102)
  - b. Public Speaking or Oral Communication (often required or strongly encouraged) (COMM 1100 or 1110)
6. Social & Behavioral Sciences
  - a. Introductory Psychology (PSYC 1101)
  - b. Introductory Sociology (SOCI 1101)  
*(Many pharmacy schools require one or both to demonstrate preparation for patient interaction and cultural competence.)*
7. Other Recommended Courses
  - a. Economics (microeconomics is sometimes listed as a prerequisite) (ECON 2106)
  - b. Medical Terminology (helpful but not always required) (KINS 2106)