



Pre-Clinical Laboratory Scientist (CLS)

Advising Sheet

Clinical Laboratory Scientists (CLS) work with pathologists, other physicians or scientists who specialize in clinical chemistry, microbiology, or other biological sciences. Together they detect, diagnose, and treat many patient diseases. A CLS is responsible for performing tests and developing data on a patient's blood tissues and body fluids. In addition to working in a clinical laboratory, jobs are available in departments of public health, industrial labs, pharmaceutical companies, the armed forces, the National Institutes of Health (NIH), and the World Health Organization (WHO). CLS licenses may be general (for all areas of the clinical lab) or specialized in one area (clinical chemistry, clinical microbiology, immunohematology, and toxicology). Requirements to become a nationally certified and CA licensed CLS include a bachelor's degree with courses pertinent to the clinical laboratory.

Common Pre-Clinical Laboratory Scientist Prerequisite Courses		
Biology	One semester is required	BIO 1210, BIO 2060
Advanced Biology	One semester is required	BIO 4650, BIO 4700, and BIO 4635
General Chemistry	One semester is required	CHM 1210/L, CHM 1220/L
Organic Chemistry	One semester is required	CHM 3140/L, CHM 3150/L
Advanced Chemistry	One semester is required	CHM 2210, CHM 3270/L
Physics	One semester is required	PHY 1210, PHY 1220, PHY 1510, PHY 1520
Mathematics	One or two semesters; statistics and/or Calculus is preferred	Math requirements vary widely between programs

Resources

- American Society of Clinical Laboratory Science - <https://ascls.org>
- American Society for Clinical Pathology – <https://www.ascp.org>
- American Association of Bioanalysts - <https://www.aab.org/>