

CERTIFICATE IN BIOLOGICAL LABORATORY TECHNICIAN

This certificate will prepare students with the practical skills needed to successfully compete for careers in academic, government and biotech or biopharmaceutical industry labs as biological laboratory technicians. Students who complete the certificate will gain proficiency in a wide range of hands-on lab techniques and research routines in the context of modern biological research. This certificate is primarily intended for students pursuing a BA or BS in Biology; students in other undergraduate majors should consult with their advisor regarding prerequisite and co-requisite course requirements for specific 3000-4000 level laboratory courses in the certificate.

For the Biological Laboratory Technician Certificate at least 12 hours from the following list of courses are required. 6 credits (2 semesters) of Undergraduate research in a research laboratory setting are required and the remaining six credits can be chosen from the other listed courses.

Code	Title	Hours
BIOL 4910	Undergraduate Research	6
or BIOL 4950	Internship In Biology	
Six credits of laboratory coursework chosen from the following		6
BIOL 3910	Research Project Laboratory and clinical significance	
BIOL 3020	Molecular Genetics Laboratory	
BIOL 3040	Cell Biology Laboratory	
BIOL 4040	Microbiology Laboratory	
BIOL 4060	Immunology Laboratory	
BIOL 3100	Developmental Biology Laboratory	
Total Hours		12

BIOL 3910 requires a student to have completed BIOL 2170 and BIOL 2180, all the other formal 3000-4000 laboratory courses in the certificate require an associated lecture course as co-requisite:
 BIOL 3020 requires enrollment in or previous completion of BIOL 3010
 BIOL 3040 requires enrollment in or previous completion of BIOL 3030
 BIOL 4040 requires enrollment in or previous completion of BIOL 4030
 BIOL 4060 requires enrollment in or previous completion of BIOL 4050
 BIOL 3100 requires enrollment in or previous completion of BIOL 3090

- Students will demonstrate a thorough understanding of fundamental laboratory techniques employed in laboratories studying a range of biological subjects including cell, molecular, and developmental biology, microbiology, and immunology.
- PLO 2. Students will demonstrate the ability to generate and analyze data generated in biological laboratories.
- PLO 3. Students will act effectively as a member of a team.
- PLO 4. Students will understand and comply with ethical behavior in coursework, research, and the use of biological information.