

# BIOLOGICAL TECHNOLOGY – LABORATORY ASSISTANT – CERTIFICATE OF ACHIEVEMENT

Top Code:

0430.00

The curriculum prepares students to work in entry level positions in the field of biotechnology where a biology or chemistry degree is not required. This is an interdisciplinary program including courses and practical training in math, chemistry, biology, computer skills and English. This program prepares students using scans guidelines. Emphasis is on practical laboratory skills combined with training in quality assurance and quality control in a working laboratory setting. Students are kept informed on current advances in biotechnology by speakers from industry, internet assignments and tours of local biotech facilities.

This program offers classroom instruction plus supervised work experience in the biotechnology industry. Students must be willing to spend time working on long term projects and participating in outreach programs.

Students must be able to provide their own transportation in the final semester to an internship site. Employment opportunities include: biomedical industry, academic research labs, pharmaceuticals, agriculture, food science labs, genetic engineering labs.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Students who have previously completed coursework required for the laboratory assistant option and need only the BIOL 102A – BIOL 102D courses may take a “fast track” and complete the option in 1 year.

## Program Outcomes

- Understand, interpret and write laboratory documents, SOPs protocols and notebook documentation.
- Be able to use, maintain, calibrate and/or validate standard laboratory equipment.
- Be prepared for entry-level technician positions in the biological technology industry and in research laboratories with an emphasis in the medical environment.

## Requirements for the Certificate of Achievement

Code	Title	Units
<b>Semester I</b>		
Select one of the following:		4
BIOL 011	GENERAL BIOLOGY	
BIOL 011H	HONORS GENERAL BIOLOGY	
BIOL 039	MODERN HUMAN GENETICS	

BIOL 102A	BIOLOGICAL TECHNOLOGY - BASIC TECHNIQUES	3
CHEM 002A	CHEMISTRY - GENERAL, ORGANIC AND BIOCHEMISTRY I	4
ENGL 001A	READING AND COMPOSITION or ENGL 001AHONORS READING AND COMPOSITION	4
<b>Semester II</b>		
BIOL 102B	BIOLOGICAL TECHNOLOGY - ADVANCED TECHNIQUES	3
CHEM 002B	CHEMISTRY–GENERAL, ORGANIC AND BIOCHEMISTRY II	4
PHSC 002	SCIENTIFIC METHOD AS CRITICAL THINKING	3
<b>Semester III</b>		
MICR 002	MICROBIOLOGY	4
Select one of the following:		4
STAT 018	STATISTICS FOR BEHAVIORAL AND SOCIAL SCIENCES	
STAT 050	ELEMENTARY STATISTICS	
STAT 050H	HONORS ELEMENTARY STATISTICS	
<b>Semester IV</b>		
BIOL 102C	BIOLOGICAL TECHNOLOGY - CELL CULTURE TECHNIQUES	3
<b>Summer</b>		
BIOL 102D	BIOLOGICAL TECHNOLOGY - LABORATORY INTERNSHIP	3
<b>Total Units</b>		<b>39</b>

Visit the Program Mapper (<https://pasadena-city.programmapper.ws/academics/interest-clusters/35afad1b-8598-4ecf-a320-0ed4834a7df8/programs/b71fb458-7056-67a0-14a1-c2f9c7cbb484/>) for a suggested sequence of courses.

**This Certificate of Achievement is not eligible as a major for an Associate Degree.**