

# BIOLOGICAL TECHNOLOGY – LABORATORY SKILLS – CERTIFICATE OF ACHIEVEMENT

Top Code:

0430.00

The Biological Technology - Laboratory Skills program at Pasadena City College prepares students to work in entry level positions in the field of biotechnology. Emphasis is placed on program participants developing competencies for working in a laboratory environment, including; performing basic and advanced laboratory techniques; collecting, documenting, and analyzing data; and participating in short-term independent projects. The core curriculum comprises instruction and hands-on training in general laboratory skills, advanced DNA and protein techniques, and mammalian cell culture procedures. Courses are taught in a working laboratory setting which allows students to also learn employability skills as they work. Performance evaluations include assessment of documentation and laboratory skills as well as workplace competencies.

## Prerequisites

BIOL 110 INTRODUCTION TO BIOTECHNOLOGY

Potential career opportunities available after earning a Certificate of Achievement - Laboratory Skills are available in the following areas: biomedical industry, academic research institutes, pharmaceutical companies, agricultural and food science laboratories, and genetic engineering facilities. Occupations include: chemical technicians; instrumentation/calibration technicians; inspectors, testers, sorters, samplers, and weighers.

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

## Program Outcomes

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

## Requirement for the Certificate of Achievement

| Code                    | Title                                       | Units |
|-------------------------|---|-------|
| <b>Required Courses</b> |   |       |
| BIOL 102A               | BIOLOGICAL TECHNOLOGY – BASIC TECHNIQUES    | 3     |
| BIOL 102B               | BIOLOGICAL TECHNOLOGY – ADVANCED TECHNIQUES | 3     |

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|---|--|-----------|
| BIOL 102C                               | BIOLOGICAL TECHNOLOGY – CELL CULTURE TECHNIQUES                    | 3         |
| BIOL 102D                               | BIOLOGICAL TECHNOLOGY - LABORATORY INTERNSHIP                      | 3         |
| BIOL 039<br>or BIOL 011<br>or BIOL 011H | MODERN HUMAN GENETICS<br>GENERAL BIOLOGY<br>HONORS GENERAL BIOLOGY | 4         |
| <b>Total Units</b>                      |  | <b>16</b> |

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