



## CURRICULUM GUIDE 2021-2022

### BIOLOGY: GENERAL

Certificate of Accomplishment in Biology: General

#### INTEREST AREA: SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)

The certificate in General Biology indicates that students have successfully completed a regimen of introductory science courses including chemistry (inorganic and organic), mathematics or physics, and introductory college biology. All of these courses are transferable and constitute a part of the freshman/sophomore core courses for the bachelor's degree in biology at baccalaureate institutions. Students gain knowledge and laboratory skills in molecular and cell biology, metabolic processes, microscopy, genetics, DNA technology, microbiology, systematics, plant and animal physiology, and evolution and ecology. This certificate prepares students for a wide range of technical positions in private industry (biotechnology, pharmaceutical and medical supply, agricultural, environmental consulting firms, etc.) or in city, state, or federal agencies. This certificate is also ideal for students planning to pursue advanced studies in biology.

#### Requirements for Certificate of Accomplishment:

- Complete satisfactorily the courses listed for the particular certificate.
- Complete at least 50% of the required units at Ohlone College.
- Maintain a 2.0 grade point average.

#### Student Learning Outcomes

- Correctly operate common scientific laboratory equipment such as compound microscopes, pH meters, and spectrophotometers.
- Demonstrate an understanding of the scientific method by applying this approach to experimental situations and evaluating the meaning of experimental outcomes.

BIOL-101B*	Principles of Biology - Organisms and Systems	5
CHEM-112B	Organic Chemistry	5
Complete one of the following courses:		
MATH-101A	Calculus with Analytic Geometry OR	5
PHYS-121	Introduction to Physics II OR	(4)
PHYS-142	Optics, Heat, and Modern Physics	(4)
		14-15

\*BIOL-101B must be completed at Ohlone College.