

# BIOLOGY (A.A.)

## ASSOCIATE OF ART

Biology studies the structures, functions, and origins of organisms. Upon completion of the Associate of Arts in Biology degree, students will have gained an understanding of the fundamental principles of biology and of the scientific process, and will be able to demonstrate the analytical, critical thinking, and communication skills needed for continuing academic achievement and professional success. The Associate of Arts in Biology degree is designed to give students a foundational degree to serve those students who wish to enter the workforce prepared with an associate degree. It may also be used as a basis for transfer to a four-year college or university, but students should consult with a counselor for guidance with their academic plan.

## Program Student Learning Outcomes

- Students apply scientific methodology and reasoning through experimentation, proper lab technique, observation, and review of scientific literature.
- Students describe the characteristics of major taxa, and compare and contrast their anatomical, physiological, and life-history characteristics.
- Students describe the mechanisms of evolution, evolution's relationship to the diversity of life and organization of taxa.
- Students evaluate ecological relationships at the population, community, and ecosystem level.
- Students identify and describe cell structures and processes including the flow of genetic information, genetic expression, and both classical and molecular genetics and inheritance.

## Program Requirements

Code Number	Course Title	Units
<b>Required Courses</b>		
BIOL 120	Introduction To Biological Science	4.0
BIOL 200	Principles of Biology	5.0
BIOL 201	Principles of Biology	5.0
CHEM 111	General Chemistry	5.0
CHEM 112	General Chemistry	5.0
Select one of the following two courses		
MATH 116	Calculus for Managerial, Biological and Social Sciences	4.0
or MATH 170	Analytic Geometry and Calculus I	
<b>Total Units</b>		<b>28</b>

## ASSOCIATE OF ARTS DEGREE REQUIREMENTS

Completion of a minimum of 60-semester units including

1. the courses listed above,
2. the AA degree general education requirements, and
3. a grade of "C" or better in all courses required by major.