

## AS Biological Sciences

A major in Biological Sciences is a preparation for advanced academic work, for careers in civil service, industry, or teaching; as a background for professional training in such fields as biological science education, biotechnology, nursing, public health, environmental health, pre-medicine and all related areas of biology. Natural resources are among the most important assets of man and the wise use of renewable resources is basic to development in the economic, social and political areas. The basic pre-professional requirements necessary to transfer are offered in the Biological Sciences, Physical Sciences, and Mathematics Departments.

### Career Opportunities

Degree recipients in Biological Sciences are prepared for careers in civil service, industry, or teaching; and are prepared for professional training in such fields as biological science education, biotechnology, nursing, public health, environmental health, biological or biomedical research, pre-medicine and all related areas of biology.

### Program Learning Outcomes

Students completing this program will be able to:

1. Use the Scientific Method to investigate biological questions and critically evaluate and effectively communicate scientific data.
2. Recognize and explain the evolutionary connections between biological structures and their function and between organisms and their environment.
3. Critically evaluate biological information and examine its significance and impact on society and the environment.

### AS Degree Requirements

#### Major: Core and Selective Requirements

##### Complete Core Courses, 20 units

##### Units

BIOL 225	Biology Of Organisms	5 units
BIOL 230	Cell and Molecular Biology	5 units
CHEM 210	General Chemistry I	5 units
CHEM 220	General Chemistry II	5 units

##### Selective Courses, choose a minimum of 16 units from the following:

##### Units

BIOL 130	Human Biology	3 units
BIOL 132	Human Biology Laboratory	1 unit
BIOL 240	General Microbiology	4 units

BIOL 250	Human Anatomy	4 units
BIOL 260	Human Physiology	5 units
BIOL 310	Nutrition	3 units
CHEM 231	Organic Chemistry I	5 units
CHEM 232	Organic Chemistry II	5 units
MATH 200	Elementary Probability and Statistics	4 units
MATH 251	Analytical Geometry and Calculus I	5 units
<b>AND</b>		
MATH 252	Analytical Geometry and Calculus II	5 units
MATH 253	Analytic Geometry and Calculus III	5 units
PHYS 210	General Physics I	4 units
<b>AND</b>		
PHYS 220	General Physics II	4 units
<b>OR</b>		
PHYS 250	Physics with Calculus I	4 units
<b>AND</b>		
PHYS 260	Physics with Calculus II	4 units
PHYS 270	Physics with Calculus III	4 units

**And required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.**

