

# GENERAL STUDIES: NATURAL SCIENCE EMPHASIS, ASSOCIATE IN SCIENCE

This degree provides an opportunity for students to earn an Associate in Science (AS) degree in a comprehensive area of study. It is intended for the student who is not currently preparing to transfer to a university. A minimum of 60 semester units must be completed with an overall Grade Point Average (GPA) of 2.0 or better in all degree-applicable units. Only courses numbered 1-299 may be applied toward this associate degree. Natural Sciences increase students' awareness of the world of natural phenomena and the ability humans have to understand how the world functions by using the scientific methods to investigate and judge phenomena and humankind's various roles in nature.

## Learning Outcomes

Upon successful completion of the program, students will be able to:

- Analyze and evaluate complex issues or problems, draw reasoned conclusions and/or generate solutions, and effectively communicate their results.
- Use the scientific method to investigate phenomena in the natural world and use concepts, experiments, and/or theory to explain them.

## Associate in Science Degree Major Requirements

Code	Title	Units
<b>Required Core</b>		
Select 18 units from at least two disciplines of the following:		18
ANAT 1	Human Anatomy with Cadaver Lab	
ANAT 5	Human Biology	
ANTH 2	Introduction to Biological Anthropology	
ANTH 2L	Biological Anthropology Laboratory	
ASTR 10	Introduction to Astronomy	
ASTR 10L	Introduction to Astronomy Laboratory	
BIOL 10	Principles of Biology	
BIOL 13	Marine Biology	
BIOL 21	Concepts in Biology I: Cells, Genetics and Organisms	
BIOL 22	Concepts in Biology II: Diversity, Ecology, and Evolution	
BIOL 25	Applied Microbiology Lecture	
BIOL 26	Applied Microbiology Laboratory	
BIOL 31	Introduction to Environmental Science	
BIOL 32	Environmental Science Laboratory	
CHEM 1A	General Chemistry I	
CHEM 1B	General Chemistry II	
CHEM 2	Fundamental Chemistry	
CHEM 10	Everyday Chemistry	
CHEM 12A	Organic Chemistry I	
CHEM 12B	Organic Chemistry II	
CHEM 30A	Introductory Chemistry for Health Sciences	

CHEM 30B	Organic and Biological Chemistry for Health Sciences	
ENGR 9	The Science of Robotics	
GEOL 2	Physical Geology	
GEOL 2L	Physical Geology Laboratory	
GEOL 3	Historical Geology	
GEOL 3L	Historical Geology Lab	
GEOL 12	Earth Ocean Climate: Introduction to Earth Science	
GEOL 12L	Earth Ocean Climate: Introduction to Earth Science Lab	
HORT 53	Soil Science and Management	
NUTF 10	Food Science	
NUTF 10L	Food Science and Safety Laboratory	
OCEN 2	Introductory Oceanography	
OCEN 2L	Introductory Oceanography Lab	
PHYS 2A	General Physics I	
PHYS 2B	General Physics II	
PHYS 3A	Science and Engineering Physics I	
PHYS 3B	Science and Engineering Physics II	
PHYS 3C	Science and Engineering Physics III	
PHYS 10	Introduction to Physics	
PHYS 12	Integrated Physics and Chemistry	
PHSO 1	Human Physiology	
PHSO 2	Human Physiology Lab	
PSYC 38	Biological Psychology	
<b>TOTAL MAJOR UNITS</b>		<b>18</b>
<b>Additional Requirements</b>		<b>42</b>
Complete Competency Requirements, general education pattern (MPC General Education, CSU General Education, or IGETC), and electives, if needed, for a total of 60 degree-applicable units.		
<b>Total Units</b>		<b>60</b>

Please refer to the graduation requirements section of the Catalog for information about degree and certificate requirements including Reading and Writing, Mathematics, Information Competency, and General Education requirements.