

Science, General

Science

Program Description

This program is designed to provide students with a basic science background, preparing them to move into a curriculum at a four-year institution leading to a degree in such fields as chemistry, biology, physics, geology, or health sciences. This program is a path for immediate entry into science-based technology careers.

Associate in Science Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including a minimum of 18 units in the major, the general education requirements, and electives. The major consists of courses selected from the lists below and must include twelve (12) units in courses with laboratory work and at least one course in each of the areas Biological Science and Physical Science. All courses for this major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes

Students who complete the Science, General Associate Degree will be able to:

1. Demonstrate analytical and/or conceptual problem solving skills.
2. Carry out experiments and critically assess their data.
3. Learn the role of hypotheses, measurement and analysis in the development of scientific theory as evidence by laboratory reports.
4. Learn how to write a laboratory report or give an oral presentation.

REQUIRED COURSES Units

12 units of Laboratory Courses*

Minimum one course from Biological Science

Minimum one course from Physical Science

Total Units Minimum of 18

Biological Science

BIO 002* Principles of Cell and Molecular Biology	5
BIO 003* Evolution, Ecology, & Biodiversity	5
BIO 004* Human Anatomy	5
BIO 005* Introductory Physiology	5
BIO 012 Environmental Science	3
BIO 012L* Environmental Science Laboratory	1.5
BIO 014 Principles of Microbiology	4
BIO 015* Introduction to Biology	4
BIO 016 Introduction to Human Biology	3
BIO 016L* Human Biology Laboratory	1.5
BIO 018 Biology of Sex	3
BIO 019 * Marine Biology	4
ANTH 001 Physical Anthropology	3

Physical Science

ASTR 010 General Astronomy	3
ASTR 020* Astronomy Laboratory	1
ASTR 030 The Solar System	3
ASTR 040 Stars, Galaxies, and Cosmology	3
CHEM 001* General Chemistry	5
CHEM 002* General Chemistry	5
CHEM 003* Organic Chemistry I	5
CHEM 004* Organic Chemistry II	5
CHEM 010* Intermediate Chemistry	4
CHEM 011* Basic Organic Chemistry and Biochemistry	4
CHEM 051 Chemistry for the Health Sciences	5
GEOG 001 Physical Geography	3
GEOG 001L* Physical Geography Laboratory	1
GEOL 001 Physical Geology	3
GEOL 002* Geology Laboratory	1
GEOL 005 Geology of California	3
PHSC 012* Introduction to Principles of Physical Science	4
PHYS 002* General Physics (Non-calculus)	5
PHYS 004* General Physics (Non-calculus)	5
PHYS 006* Physics for Science and Engineering	5
PHYS 007* Physics for Science and Engineering	5
PHYS 008* Physics for Science and Engineering	5
PHYS 010 Descriptive Physics	3