

Natural Science: AS Degree

The Associate in Science Degree in Natural Science is an interdisciplinary degree program that focuses on the scientific study of the natural world with an emphasis in either life science or physical science. The program comprises core courses in chemistry and biology or chemistry and physics, a college-level mathematics requirement, and additional elective courses in biology or physical sciences. To fulfill the requirements for this degree, students will complete the required courses and work with a counselor to determine the appropriate pattern of general education courses based on the student's individual educational goals.

Program Learning Outcomes:

Outcome 1: Communicate chemical and physical processes at the molecular level and how they relate to the macroscopic environment. (Life Science and Physical Sciences emphasis).

Outcome 2: Demonstrate a proficiency of knowledge in molecular biology and genetics. (Life Science emphasis).

Outcome 3: Solve quantitative problems while demonstrating a thorough understanding of physical laws. (Physical Sciences emphasis).

The Natural Science AS has a Life Science Emphasis and a Physical Science Emphasis. Select One of the Following Options:

Option 1: Life Science Emphasis

Units

Chemistry - one course in general chemistry for science majors.

CHEM 120 General Chemistry 1 5

Biology - one course in general biology for science majors.

BIOL 120 General Biology 4

Mathematics - one course in calculus or two courses in precalculus.

MATH 120 Calculus I 5

or

MATH 106 College Algebra 5

and MATH 108 Trigonometry 3

Elective courses to complete a minimum of 18 units.

BIOL 218 Human Anatomy 5

BIOL 219 Human Physiology 5

BIOL 220 General Microbiology 5

BIOL 240 General Zoology 5

BIOL 241 General Botany 5

CHEM 121 General Chemistry 2 5

PHYS 120 General Physics 1 4

PHYS 140 Physics for Scientists & Engineers 1 4

Option 2: Physical Sciences Emphasis

Units

Chemistry - one course in general chemistry for science majors.

CHEM 120 General Chemistry 1 5

Physics - one course in general physics or physics for science majors.

PHYS 120 General Physics 1 4

PHYS 140 Physics for Scientists & Engineers 1 4

Mathematics - one course in calculus or two courses in precalculus.

MATH 120 Calculus I 5

or

MATH 106 College Algebra 5

and MATH 108 Trigonometry 3

Elective courses to complete minimum of 18 units.

CHEM 121 General Chemistry 2 5

CHEM 240 Organic Chemistry 1 4

CHEM 241 Organic Chemistry 2 4

PHYS 121 General Physics 2 4

PHYS 240 Physics for Scientists & Engineers 2 4

PHYS 241 Physics for Scientists & Engineers 3 4

BIOL 110 Survey of Biology 4

BIOL 120 General Biology 4

GEOL 110 Physical Geology 3

and GEOL 111 Physical Geology Laboratory 1

Total units for the major

18 - 22

Total units

60