

# NATURAL SCIENCE

## Contact Information

### Division

Sciences and Mathematics

### Dean

Randy Lehr

### Associate Dean

Karen Warburton

### Division Office

V 211, Rocklin Campus

## Overview

Courses from the following departments are included in the interdisciplinary Natural Science associate degree:

- Agriculture
- Anthropology
- Astronomy
- Biological Sciences
- Chemistry
- Earth Science
- Environmental Studies and Sustainability
- Geography
- Mathematics
- Physics
- Psychology

## Degrees/Certificates

### Natural Science

#### AA or AS Degree

The Natural Science degree is designed for students who are pursuing transfer majors in the Natural Sciences, including Astronomy, Biological Science, Chemistry, Geography, Geology, Physics and related disciplines. In all cases, students should consult with a counselor for more information on university admission and transfer requirements. Students must fulfill the following major requirements with grades of "C" or better, complete a minimum of 60 degree-applicable semester units (12 of which must be completed at Sierra College) with a grade point average of at least 2.0 and complete one of the following three general education patterns:

- Sierra College Associate Degree Requirements (<http://catalog.sierracollege.edu/archive/2019-2020/student-resources/general-education/associate-degree-requirements>);
- California State University General Education Breadth (<http://catalog.sierracollege.edu/archive/2019-2020/student-resources/general-education/california-state-university-general-education-breadth-requirements>) pattern;
- Intersegmental General Education Transfer Curriculum (IGETC) (<http://catalog.sierracollege.edu/archive/2019-2020/student-resources/general-education/california-state-university-general-education-breadth-requirements>).

### Required Courses

Code	Title	Units
<b>Select 18 units from the following:</b>		
AGRI 0198	Food, Society and the Environment	
AGRI 0221	Introduction to Soil Science	
ANTH 0001	Biological Anthropology	
ANTH 0001L	Biological Anthropology Laboratory	
ANTH 0010	Introduction to Forensic Anthropology	
ASTR 0002	Introduction to Planetary Systems	
ASTR 0005	Introduction to Stars, Galaxies, and the Universe	
ASTR 0007	Life in the Universe	
ASTR 0010	Elementary Astronomy	
ASTR 0011	Observational Astronomy	
ASTR 0014	Astrophotography and Imaging	
ASTR 0025	Frontiers in Astronomy	
BIOL 0001	General Biology	
BIOL 0002	Botany	
BIOL 0003	General Zoology	
BIOL 0004	Microbiology	
BIOL 0005	Human Anatomy	
BIOL 0006	Human Physiology	
BIOL 0007A	Human Anatomy I	
BIOL 0007B	Human Anatomy II	
BIOL 0008A	Microbiology I	
BIOL 0008B	Microbiology II	
BIOL 0010	Introduction to Biology	
BIOL 0011	Concepts of Biology	
BIOL 0014	Natural History, Ecology and Conservation (also ESS 0014)	
BIOL 0015	Marine Biology	
BIOL 0021	Introduction to Plant Science (also AGRI 0156)	
BIOL 0024	Wildland Trees and Shrubs (Dendrology)	
BIOL 0033	Introduction to Zoology	
BIOL 0055	General Human Anatomy and Physiology	
BIOL 0056	Biology: A Human Perspective	
BIOL 0056L	Biology: A Human Perspective Laboratory	
CHEM 0001A	General Chemistry I	
CHEM 0001B	General Chemistry II	
CHEM 0002A	Introduction to Chemistry I	
CHEM 0002B	Introduction to Chemistry II	
CHEM 0003A	General Chemistry I - Part 1	
CHEM 0003B	General Chemistry I - Part 2	
CHEM 0005	Chemistry - Quantitative Analysis	
CHEM 0012A	Organic Chemistry I	
CHEM 0012B	Organic Chemistry II	
ESCI 0001	Physical Geology	
ESCI 0001L	Physical Geology Laboratory	
ESCI 0002	California Geology	

ESCI 0003	Historical Geology
ESCI 0003L	Historical Geology Laboratory
ESCI 0010	Introduction to Earth Science
ESCI 0010L	Introduction to Earth Science Laboratory
ESCI 0015	Introduction to Oceanography
ESCI 0015L	Introduction to Oceanography Laboratory
ESS 0001	The Environment and the Human Impact
ESS 0007	Energy, Environment, and Climate (Also ESCI 0007)
ESS 0008	California Water
ESS 0010	Conservation of Natural Resources
GEOG 0001	Physical Geography
GEOG 0001L	Physical Geography Laboratory
GEOG 0004	Weather and Climate
MATH 0012	College Algebra
MATH 0013	Elementary Statistics
MATH 0016A	Calculus for Social and Life Sciences
MATH 0016B	Calculus for Social and Life Sciences
MATH 0027	Trigonometry
MATH 0029	Pre-Calculus Mathematics
MATH 0030	Analytical Geometry and Calculus I
MATH 0031	Analytical Geometry and Calculus II
MATH 0032	Analytical Geometry and Calculus III
MATH 0033	Differential Equations and Linear Algebra
MATH 0042	Business Calculus
PHYS 0010	Basic Concepts in Physics
PHYS 0010L	Basic Concepts in Physics Laboratory
PHYS 0105 & 0105L	General Physics I and General Physics I Laboratory
PHYS 0110 & 0110L	General Physics II and General Physics II Laboratory
PHYS 0205 & 0205L	Principles of Physics: Mechanics and Principles of Physics Laboratory: Mechanics
PHYS 0210 & 0210L	Principles of Physics: Electricity and Magnetism and Principles of Physics Laboratory: Electricity and Magnetism
PHYS 0215 & 0215L	Principles of Physics: Heat, Waves and Modern Physics and Principles of Physics Laboratory: Heat, Waves and Modern Physics
PSYC 0140	Introduction to Biopsychology
PSYC 0140L	Biopsychology Laboratory

Total Units

18