GENERAL SCIENCE, MINOR - TEACHING

Middle Childhood/Early Adolescence (Code 120-403)

The MCEA science minor prepares students to teach a breadth of science areas in Grades 1-8. A minimum of 24 semester credits is required to fulfill the science minor. To prepare to teach in Grades 1-8, courses in certain science areas are required.

For advising, contact the Education Studies Department.

Required of all MCEA students:

- BIOL 105  General Biology or BIOL 151  Biology of Humans

**AND one of the following:**

- CHEM 103  General Chemistry I
- GEOL 106  Earth Science
- GEOL 110  Physical Geology
- PHYS 100  Physical Science

**Total: 7-8 credits (1 biological & 1 physical science lab science)**

Remaining 16-17 credits must include the science area not taken from the MCEA required science courses (i.e. physical or earth/space) but is not limited to the courses listed above. MCEA science minor students should complete a course in physical, life, and earth/space sciences. Therefore, remaining credits may be taken from any of the science areas listed below. A variety of science areas is recommended to increase breadth of science knowledge.

Select courses from the following:

**Biology**

- BIOL 130  Human Sexual Biology
- BIOL 151  Biology of Humans
- BIOL 180  Environmental Biology and Conservation
- BIOL 181  Environmental Biology and Conservation Lab
- BIOL 195  Plants and Society
- BIOL 196  Human Nutrition
- BIOL 214  Human Anatomy and Physiology I
- BIOL 311  General Entomology

**Chemistry**

- CHEM 100  Chemistry: Issues and Answers
- CHEM 103  General Chemistry I
- CHEM 104  General Chemistry II
- CHEM 115  Chemical Principles
- CHEM 121  Elementary Chemical Education
- CHEM 127  Chemistry and Climate
- CHEM 150  Survey of Biochemistry
- CHEM 191  Current Topics in Chemistry
- CHEM 304  Environmental Chemistry
- CHEM 399  Independent Study - Juniors

**Geology**

- GEOL 102  Oceanography
- GEOL 106  Earth Science

- GEOL 115  Environmental Geology
- GEOL 122  The Future of Global Energy
- GEOL 201  Geology of Our National Parks and Monuments
- GEOL 301  Earth Resources
- GEOL 303  Rocky Mountain Field Studies
- GEOL 308  Water Resources
- GEOL 312  Mineralogy and Petrology I

**Geography**

- GEOG 104  The Physical Environment
- GEOG 178  Conservation of the Environment
- GEOG 304  Introduction to Geomorphology
- GEOG 340  Climatology
- GEOG 361  Environmental Hazards

**Physics**

- PHYS 100  Physical Science
- PHYS 115  Survey of Astronomy
- PHYS 205  Physics of Renewable Energy
- PHYS 211  General Physics
- PHYS 212  General Physics
- PHYS 226  Astronomy-Solar System
- PHYS 229  Astronomy-Stars and Galaxies
- PHYS 308  Science of Musical Sound
- PHYS 315  The Mysterious Universe

**Environmental Public Health**

- ENPH 110  Introduction to Environmental Health
- ENPH 150  Disease Detectives: Epidemics and Data

**Environmental Studies**

- ENV 101  Sustainability Basics and Beyond
- ENV 140  Water Problems, Water Solutions
- ENV 291  Special Topics - Environmental Studies

1 Only one of GEOG 178 or BIOL 180 may be included in the minor.

This minor is restricted to students in the College of Education and Human Sciences: Education Studies: Option A and leads to licensure to teach General Science in Middle Childhood through Early Adolescence classrooms.