Science Education Courses (Teaching and Learning) (SIED)

SIED Courses

This is a list of courses with the subject code SIED. For more information, see Teaching and Learning (College of Education) in the catalog.

SIED:3001 Introduction to Museum Studies 3 s.h.
Overview of museum history, function, philosophy, collection, and curatorial practices; governance and funding issues; exhibition evaluation and audience studies; examples from Stanley Museum of Art, Museum of Natural History, Old Capitol Museum, and Medical Museum. GE: Social Sciences. Same as ANTH:3001, EDTL:3001, MUSM:3001.

SIED:4102 Societal and Educational Applications of Earth Science and Environmental arr.
Major ideas and principles of earth and environmental sciences; emphasis on common applications in today's world.

SIED:4103 Societal and Educational Applications of Biological Sciences arr.
Basic conceptual themes of biology, how they have been derived; emphasis on a current social issue related to biology.

SIED:4105 Societal and Educational Applications of Physical Sciences arr.
Major ideas of physics and how they have been derived; emphasis on how such ideas affect modern society.

SIED:4106 Societal and Educational Applications of Chemical Concepts arr.
Principles of chemistry as applied in industry, communication, daily living.

SIED:4110 Exploring the Geology, Mining History, and Environmental Issues of the Colorado Rockies 3-4 s.h.
Basic concepts of physical geology, historical, and environmental geology of the Rocky Mountains in context of mineral exploration, mining, and environment; collection of a teaching suite of basic igneous, sedimentary, and metamorphic rocks and rock forming minerals; scientific/educational photography, field inquiry, and curriculum development projects; students spend 10 days probing the mountains of Colorado for clues to its geologic past including mountains, seas, and volcanic activity; knowledge is tested in the field along with connecting the geology of Colorado with future teaching employment locations.

SIED:4115 Directed Study arr.

SIED:4135 The Nature of Science 3-4 s.h.
Ideas on understanding and ways of thinking that are essential in a world shaped by science, technology, engineering, and mathematics; focus on increasing science literacy by examining the nature of science; comparison of characteristics specific to individual science disciplines; identification of great episodes and debates in history of science and habits that are essential for science literacy; scope and sequence of content and process skills for K-12 curriculum, instruction, and assessment.