EARTH SCIENCE

Faculty

Thelma S. Berquó

The earth science courses fulfill the broadening Core requirements of prospective science teachers and serve as elective offerings.

Programs Offered

Minor

- Earth Science Minor (https://catalog.concordiacollege.edu/arts-sciences/earth-science/earth-science-minor/)

Courses

ESC 104 / PHYS 104 - Introductory Astronomy: Solar System, 4 credits.
This course is an introduction to our solar system designed for students in all disciplines. Topics include: light and telescopes, a historical overview of astronomy, a study of the components of the solar system and a discussion of the formation of the solar system. Past, present and future space exploration missions are also covered. Three class periods and one laboratory/observing period each week.
Frequency: *Every Year - First Semester*
Core designations: Natural Science N

ESC 106 / PHYS 106 - Introductory Astronomy: Stars, Nebulae and Cosmology, 4 credits.
This course is an introduction to the universe beyond our solar system designed for students in all disciplines. Topics include: light and telescopes, the appearance of the sky, negotiating star maps, the physical nature of stars and their formations and life cycles, clusters of stars, gas clouds, and laboratory/observing period each week. (Introductory Astronomy: ESC 104 - The Solar System is not a prerequisite.)
Frequency: *Every Year - Second Semester*
Core designations: Natural Science N

ESC 250 - Pre-May Seminar, 1 credits.
An introduction to the fundamentals of three earth sciences: astronomy, geology and meteorology. Designed to provide a background for students on the earth science May Seminar.
Frequency: *Not offered on a Regular Basis*

ESC 300 - May Seminar, 4 credits.
Frequency: *May Seminar*

ESC 302 - Geology, 4 credits.
A study of the structure of the earth, its dynamic nature, the processes of its formation and the forces changing it. A brief introduction to historical geology and regional geomorphology is included. Laboratory sessions will emphasize the study and identification of rocks and minerals, interpretation of land forms and geological maps, a lapidary project, and a survey of the fossil record. A field trip to western North Dakota, eastern Montana and the Black Hills region of South Dakota is an integral part of this course. Three class periods and one laboratory each week.
Frequency: *Every Year - Second Semester*
Core designations: Natural Science N

ESC 380 - Special Topics, 0-4 credits.
Courses covering various topics of interest in this particular discipline are offered regularly. Contact department or program chair for more information.
Frequency: *Not offered on a Regular Basis*
Repeatable: Yes

ESC 390 - Academic Internship, 1-8 credits.
Frequency: *Every Semester*
Repeatable: Yes

ESC 480 - Independent Study, 1-4 credits.
This course provides an opportunity for individual students to conduct in-depth study of a particular topic under the supervision of a faculty member. Contact the department or program chair for more information.
Frequency: *Every Semester*
Repeatable: Yes

ESC 487 - Directed Research, 1-4 credits.
This course provides an opportunity for individual students to conduct research in a specific area of study, completed under the direction of a faculty mentor. Specific expectations of the research experience to be determined by the faculty. Repeatable for credit. Prerequisite: consent of instructor.
Frequency: *Not offered on a Regular Basis*
Repeatable: Yes