GEO 1050

Division: Natural Science and Mathematics
Department: Geology
Course: GEO 1050
Title: Geology of the National Parks of Utah
Catalog Description:

This class is the study of specific areas in the field. The students will also be introduced to some of the basic skills required of a field geologist. The course will consist of a few short meetings and a three or four day field trip. This class is designed for majors and others interested. The field trip is required. This class may be repeated up to four times.

General Education Requirements: N/A
Semesters Offered: Summer
Credit/Time Requirement: Credit: 2; Lecture: 0; Lab: 0
Clock/Hour Requirements: 0
Offered for Non-Credit: No
Prerequisites: ENGL 1010

Justification:

This course is an elective course that will provide students and others interested with an opportunity to more fully appreciate and understand the geology of and therefore the natural beauty and legacy of the National Parks in Utah.

Student Learning Outcomes:

Upon successful completion of this course a student will be able to:

- describe the geology and geologic history of national parks of the area studied
- explain the geologic processes at work in the area and the landforms they have created
- demonstrate the ability to use some common field techniques
- demonstrate accepted methods for writing geologic field reports

Content:

Field trips to selected national parks to learn the geology of each area. Specifically:

- identifying common rocks and understanding their formation
- identifying the stratigraphy of each park and correlating rocks from one area to the other
- discussion of fossils found in each area and identification of these in the field
- understanding the age of different stratigraphiclayers in each park
- interpreting the landforms in each area both tectonic and erosional causes
- identifying any geologic structures present in an area
- understanding the geologic history of each park

General Education Outcomes:

2) Write clearly, informatively, and persuasively.
The main portion of the student s grade will be a field report summarizing the geology of each national park. Feedback will be given for initial and final drafts on both writing and research.

7) Apply scientific reasoning to a variety of contexts.
Students are taught the basics of of geology and asked to apply these principles to understanding the national parks visited. Feedback is given in the field and on quizzes and final paper

Key Performance Indicators:

- The students will be given quizzes while in the field. They will need to demonstrate their understanding of the geology of each park by writing a paper that includes a field report and some research on the area. The students' grades will be based on the paper, attendance, quizzes and participation.

Representative Text and/or Supplies:

- Ann Harris and Esther Tuttle, *Sherwood Tuttle Geology of the National Parks,*current edition.
- Other readings will be recommended from various sources.

Optimum Class Size: 8
Maximum Class Size: 10

Signatures:

I hereby submit this course syllabus:

Renee Faatz, , Associate Professor

I hereby find this course consistent with the goals and resources of the Geology Department:

Renee Faatz, , Associate Professor, Chair

I hereby find this course consistent with the goals and resources of the Natural Science and Mathematics Division:

Dan Black, EdD, Associate Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)