

COURSE OUTLINE

Revision: M. Von Der Ahe, April 2008

DEPARTMENT: Academic Programs

CURRICULUM: The Natural World

COURSE TITLE: Geology of the National Parks and Monuments

COURSE NUMBER: GEOL& 115

TYPE OF COURSE: Academic Transfer
Special Requirement Met: None

AREA(S) OF KNOWLEDGE: The Physical Universe

COURSE LENGTH: 1 quarter

CREDIT HOURS: 5

LECTURE HOURS: 33

LAB HOURS: 44

CLASS SIZE: 30

PREREQUISITES: None

COURSE DESCRIPTION:

Study of the geology and geologic history of selected national parks and selected national monuments, in the context of the geologic history of North America, the Pacific Basin and the Atlantic Ocean. Labs deal primarily with field maps. At least two field trips are required.

GEOL& 115 Geology of the National Parks and Monuments
April 2008

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Human Relations – Use social skills to work in groups effectively
2. Critical Thinking and Problem Solving – Think critically in evaluating information, solving problems and making decisions.
3. Technology – Select and use appropriate technological tools for personal, academic and career tasks.
4. Communication – Read and listen actively to learn and communicate
5. Personal Responsibility – Be motivated and able to continue learning and adapt to change. Manage personal health and safety. Be aware of civic and environmental issues.

GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

1. Be acquainted with the scientific method and give experience in applying this method to the reconstruction of the geologic history of much of North America as recorded in the rock and fossil records of our national parks and monuments.
2. Demonstrate scientific observation and skills through the examination of rocks and mineral, optional field trips, and use a variety of geologic and topographic maps.
3. Formulate clear, concise and pertinent answers to factual questions.

TOPICAL OUTLINE:

- I. The rock cycle
- II. Plate tectonics and rock formation
- III. Volcanoes and other dramatic geologic features and hazards
- IV. Weathering and erosion
- V. National Parks and Monuments of the desert southwest
- VI. National Parks and Monuments of the mountain west (including Alaska and Pacific Coast)
- VII. Emphasis on the Pacific Northwest region
- VIII. National parks of Hawaii
- IX. National parks and Monuments of the Appalachians, east coast and continental interior
- X. Brief introduction to dramatic geologic features around the world
- XI. Hands-on introduction to rocks and minerals
- XII. Interpretation of topographic and geologic maps.

GEOL& 115 Geology of the National Parks and Monuments
April 2008

TOPICAL OUTLINE: (CONT.)

Total hours	77
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GEOL& 115

GEO& 115 Geology of the National Parks and Monuments
 April 2008

SLO #	Included in Course Objective Number	SSCC Student Learning Outcomes
SLO 1.1	1, 2, 3	Communication - Read and listen actively
SLO 1.2	1, 2, 3	Communication - Speak and write effectively
SLO 2.1	2	Computation - Use mathematical operations
SLO 2.2	2	Computation - Apply quantitative skills
SLO 2.3		Computation - Identify, interpret, and utilize higher level mathematical and cognitive skills
SLO 3.1	2	Human Relations - Use social interactive skills to work in groups effectively
SLO 3.2		Human Relations - Recognize the diversity of cultural influences and values
SLO 4.1	1, 2, 3	Critical Thinking and Problem Solving -
SLO 5.1	1, 2	Technology - Select and use appropriate technological tools
SLO 6.1	1, 2, 3	Personal Responsibility - Be motivated and able to continue learning and adapt to change
SLO 6.2		Personal Responsibility - Value one's own skills, abilities, ideas and art
SLO 6.3		Personal Responsibility - Take pride in one's work
SLO 6.4		Personal Responsibility - Manage personal health and safety
SLO 6.5		Personal Responsibility - Be aware of civic and environmental issues
SLO 7.1	1, 2, 3	Information Literacy - Access and evaluate information
SLO 7.2	1, 2, 3	Information Literacy - Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society

PREPARED BY: M. Von Der Ahe
 DATE: April 2008