

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS
NEW COURSE PROPOSAL

PROGRAM AREA Environmental Science and Resource Management

1. Catalog Description of the Course

GEOL 121. PHYSICAL GEOLOGY (4)

Three hours of lecture per week and one three-hour lab per week.

This course examines the basic composition of the Earth and the dynamic forces which have altered the Earth's surface through time, including sedimentation, erosion, volcanism, earthquakes, plate tectonics, and mountain-building. Students will understand the immense processes affecting their environment. GenEd: B1

2. Mode of Instruction.

	Units	Hours per Unit	Benchmark Enrollment
Lecture	<u>3</u>	<u>1</u>	<u>20</u>
Seminar	<u> </u>	<u> </u>	<u> </u>
Laboratory	<u>1</u>	<u>3</u>	<u>20</u>
Activity	<u> </u>	<u> </u>	<u> </u>

3. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements/)

Justification: This is a required course in Environmental Science and Resource Management major. The course also contributes to the Liberal Studies options. This introductory course provides the student with a basic understanding of the forces affecting the Earth's surface.

Learning Objectives. Upon completion of course, the student will be able to:

- Explain the geological forces creating the landscape;
- Interpret how geological strata are created and later modified by natural forces;
- Predict the ongoing geological processes affecting the Earth.

4. Is this a General Education Course **YES** **~~NO~~**
If Yes, indicate GE category:

A (English Language, Communication, Critical Thinking)	
B (Mathematics & Sciences)	X
C (Fine Arts, Literature, Languages & Cultures)	
D (Social Perspectives)	
E (Human Psychological and Physiological Perspectives)	

5. Course Content in Outline Form.

Introduction;What is geology?
Plate Tectonics;Minerals
Igneuous Rocks;Plutons & Volcanoes
Weathering and Soil;Soils
Sedimentary Rocks;Metamorphic Rocks
Geological Time;Earthquakes
Ocean Basins;Geologic Structures
Mass Wasting;Streams & Lakes
Groundwater;Deserts
Glaciers;Coastlines
Geological Resources;
Geological Evolution of N. America;Review

6. References. [Provide 3 - 5 references on which this course is based and/or support it.]

Thompson, Graham R.,and Jonathan Turk, 1998, *Introduction to Physical Geology*. Saunders College Publishing.
Mazzullo, Jim, 1997, *Investigations into Physical Geology: A Laboratory Manual*. Saunders College Publishing
Thompson, Graham R.,and Jonathan Turk, 1997, *Modern Physical Geology*. Saunders College Publishing.

7. List Faculty Qualified to Teach This Course.

NEWCRSFR 9/30/02

8. Frequency.

a. Projected semesters to be offered: Fall X Spring _____ Summer _____

9. New Resources Required.

A survey of lab facilities and library resources will need to be conducted to determine additional resource needs. These resource needs are anticipated to be minimal.

10. Consultation.

Attach consultation sheet from all program areas, Library, and others (if necessary)

11. If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

Proposer of Course

Date