

PALOMAR COLLEGE  
COURSE OUTLINE OF RECORD FOR  
DEGREE CREDIT COURSE

X  Transfer course     X  A.A. Degree applicable course

(check all that apply)

**COURSE NUMBER AND TITLE:** GEOLOGY 100 - Basic Geology

**UNIT VALUE:** 3

**MINIMUM NUMBER OF SEMESTER HOURS:** 48

**BASIC SKILLS REQUIREMENTS:**  
Appropriate language skills

**ENTRANCE REQUIREMENTS:**

**PREREQUISITE:** None

**COREQUISITE:** None

**RECOMMENDED PREPARATION:** None

**SCOPE OF COURSE:**

Principles of physical geology. Plate tectonics, rocks and minerals, weathering, mass-wasting, surface and ground water, wind, waves and currents, glaciation, mountain building, volcanoes and other igneous activity, deformation and resulting structures, earthquakes, Earth's interior, geologic time, and earth resources.

**SPECIFIC COURSE OBJECTIVES:**

The successful student will be able to describe the origin of the terrestrial processes that shape the physical environment. This includes but is not limited to:

1. describing the various mineral groups and rock families
2. analyzing a landscape in terms of its agents of generation.
3. analyzing the inter-relationships of the tectonic processes of the Earth in terms of their effects on rock structure, seismic activity and plate tectonic motion

**CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:**

- PART I. Minerals & Rocks  
Introduction, Earth's origin  
Mineralogy  
Volcanoes & igneous rocks  
Weathering and soils  
Sedimentary & metamorphic rocks
- PART II. Surficial Geologic Processes  
Mass wasting  
Fluvial erosion  
Desert processes

Karst/groundwater/hydrocarbons  
Glaciers  
Shorelines & sea floor  
PART III. Tectonic Processes  
Structural Geology  
Earthquakes & Earth's interior  
Geologic time  
Global tectonics I  
Global tectonics II

**REQUIRED READING:**

Plummer, Charles C. & McGeary, David. Physical Geology. 7th edition. Dubuque, IA: William C. Brown Publishers, 1996.

Spear, Steven, and Pesavento, James. Physical Geology Study Guide. Most recent edition. Lake Geneva, WI: Paladin House Publishers.

**SUGGESTED READING:**

Burns, Diane M. Geology of San Diego County. San Diego: Sunbelt Publishing, 1997.

**REQUIRED WRITING:**

A short, typed, grammatically correct paper of one page length will be required.

**OUTSIDE ASSIGNMENTS:**

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short term classes.

A three day field trip to view geologic phenomena will be offered each semester. Those not attending must complete a written assignment of one page. Students are expected to spend at least 6 hours per week in researching the written assignment, reading the text, studying lecture notes and other assignments. There are 3 problem assignments, 2 of which require use of the Internet.

**INSTRUCTIONAL METHODOLOGY:**

The dominant structured mode is lecture. This approach is supplemented by video tapes, films and numerous slides. Optional field trip is offered.

**Check all that apply:**

- lecture  
 laboratory  
 lecture-laboratory  
 directed study

**This course may be offered as a telecourse and meets Title 5 regulations 55370, 55372, 55376, and 55378. Yes No X**

- telecourse  
 mediated instruction  
 computer assisted instruction

**GRADING POLICY AND STANDARDS** (include methods for determining whether the stated objectives have been met by students):

A student's grade is mostly based on his/her performance on three or four objective examinations of equal weight at 100 points each. Field trip attendance and optional 10 page term paper (100 substitute points) will provide additional data for grade determination.

**IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?**

YES \_\_\_ NO X Number of times course may be taken for credit 1.

If yes, identify specific provision of Division 2 section(s) 55761-55763 and 58161 which qualifies course as repeatable.

**CONTACT PERSON:**

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