FORM VERSION: 5/95
DATE REVISED: 10/2/99

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: GEOG115 - Natural Disasters and Environmental Hazards

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: Examination and analysis of natural disasters and environmental hazards including earthquakes, volcanic activity, landslides, atmospheric pollution, water pollution, flooding, waste disposal, global climate change, and medical geology and geography.

SPECIFIC COURSE OBJECTIVES: Successful students will be able to:

1. Evaluate critical environmental problems that exist today and analyze the causes and potential effects of these problems.
2. Evaluate the interrelationship that exists between people and their environment and critically analyze how people both impact and are impacted by natural disasters and environmental hazards.
3. Analyze the role of the scientific method as the process which helps develop some degree of understanding, prediction, and mitigation of these natural disasters and environmental hazards.
4. Compare and contrast the roles of scientific disciplines such as geology, meteorology, geography, chemistry, and biology in providing integrated research and analysis of natural and human-induced natural disasters and environmental hazards.
5. Compare and contrast the responses of developed versus lesser developed economies to various kinds of natural disasters and environmental hazards.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

Basic Concepts in Environmental Science
Earth Materials
Plate Tectonics
Earthquakes and Associated Hazards
Volcanoes and Associated Hazards

Environmental Problems of Soils
Flooding
Landslides
Hazards in the Coastal Zone
Water Resources
Water Pollution and Treatment
Waste Disposal and Management
Geologic and Geographic Aspects of Environmental Health
Mineral Extraction and Subsequent Impacts
Energy Resources and Their Environmental Impacts
Hazards of a Changing Climate
Air Pollution
Evaluation of Environmental Impacts
Land Use Planning

REQUIRED READING: One of the following Texts:

Keller, Edward A. Environmental Geology 8th ed. Upper Saddle River, NJ: Prentice-Hall, Inc., 2000.

Montgomery, Carla W. Environmental Geology 5th ed. San Francisco: McGraw-Hill, 2000.

Pipkin, Bernard W. and D. D. Trent, Geology and the Environment 2nd ed. Belmont, CA: Wadsworth Publishing Company, 1997.

SUGGESTED READING:

Current or recent journal and newspaper articles dealing with the subjects covered by this course.

REQUIRED WRITING:

Two article reviews on subjects covered in this class will be required. The minimum length of each review will be two pages.

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. Preparations outside of class will include reading assignments from the text, review of notes from lecture material, and completion of the article reviews.

INSTRUCTIONAL METHODOLOGY:

Lecture format with frequent use of visual aids. Also, subject matter lends itself to class discussions.

Check all that apply:

_X__ lecture
____ laboratory
____ lecture-laboratory combination
____ directed study

This course may be offered as a distance education course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.
Yes _____ No __X__

If yes, check all that apply. (See guidelines for preparation for definitions.)
____ telecourse
____ mediated instruction
____ computer assisted instruction

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):
Students are evaluated by taking 3 exams (100 pts.) and a final exam (100 pts.). In addition, the 2 article reviews will be worth 20 pts. each. The grading scale will be by percentage as follows:

A = 90 - 100
B = 80 - 89
C = 65 - 79
D = 55 - 64
F = 0 - 54

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 Title 5 Division 2 section(s) 55761-55763 and 58161 which qualifies course as repeatable:

CONTACT PERSON: Douglas B. Key

COURSE OUTLINE

GEOG115 - Natural Disasters and Environmental Hazards

TEXT: Keller, Edward A. Environmental Geology. 7th ed.

Week	Subject	Chapter
1	Fundamental Concepts in Environmental Science	1
2	Earth Materials and Processes	2
3	Soils and Environment	3
4	An Overview of Natural Hazards	4
	Rivers and Flooding	5
5	Landslides	6
6	Earthquakes	7
7	Volcanic Activity	8
8	Coastal Hazards	9
9	Water: Process, Supply, and Use	10
10	Water Pollution and Treatment	11
11	Waste Management	12
12	Earth Science Aspects of Environmental Health	13
	Mineral Resources and Environment	14
13	Energy and Environment	15
14	Global Change	16
15	Air Pollution	17
16	Landscape Evaluation/Land Use	18

SIGNATURES ON FILE