BUTTE COLLEGE
COURSE OUTLINE

I. **CATALOG DESCRIPTION**

GEOG 3 - Physical Geography Lab **1 Unit(s)**

Prerequisite(s): GEOG 2, or concurrent enrollment in GEOG 2
Recommended Prep: Reading Level V; English Level IV; Math Level III
Transfer Status: CSU/UC
51 hours Lab

This course is design to provide supplemental exercises in topics covered in Physical Geography lecture. Lab experience will include map analysis and interpretation, weather prognostication, landform processes and evolution, tectonics, biogeography, and habitat analysis. (C-ID GEOG 111).

II. **OBJECTIVES**

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

A. Applications and activities related to the size, shape, and movements of the Earth in space and their importance to environmental patterns and processes.
B. Applications and activities related to the atmospheric, geomorphological, and biotic processes that shape the Earth's surface environments.
C. Applications and activities related to the global distribution of the world's major climates, ecosystems, and physiographic (landform) features.
D. Applications and activities related to basic concepts of physical geography in the analysis of real-world variations in environmental patterns.
E. Applications and activities related to the scientific method and practical experience using the tools and concepts of physical geography.

III. **COURSE CONTENT**

A. **Unit Titles/Suggested Time Schedule**

Lab

Topics	Hours
1. Overview of the size, shape, and movements of the Earth in space and their importance to environmental patterns and processes a. Map interpretation b. Landform interpretation c. Earth-Sun relationships	10.00
2. Overview of the atmospheric, geomorphological, and biotic processes that shape the Earth's surface environments a. Map interpretation b. Geographic grid c. Landform interpretation d. Common rock identification	10.00
3. Overview of the global distribution of the world's major climates, ecosystems, and physiographic (landform) features a. Map interpretation b. Landform interpretation c. Biogeography d. Plate Tectonics	10.00

4. Overview of the basic concepts of physical geography in the analysis of real-world variations in environmental patterns a. Landform interpretation b. Earth-Sun relationships c. Weather and climate	10.00
5. Overview of the scientific method and practical experience using the tools and concepts of physical geography a. Map interpretation b. Geographic grid c. Landform interpretation d. Common rock identification e. Plate Tectonics	11.00
Total Hours	51.00

IV. METHODS OF INSTRUCTION

A. Lecture
B. Demonstrations
C. Laboratory projects

V. METHODS OF EVALUATION

A. Quizzes
B. Graded laboratory projects
C. Laboratory exams

VI. EXAMPLES OF ASSIGNMENTS

A. Reading Assignments
   1. Read the portion of the lab manual pertaining to longitude as used in global mapping. Be prepared to demonstrate in our lab how this construct works for global map making and for purposes of navigation and marking time changes.
   2. Read the article in your lab manual that focuses on zonation. Be prepared to identify specific elevation zones based on photographs presented in our lab session.

B. Writing Assignments
   1. Write a synthesis of your lab notes with attention to our unit on quadrangle maps. How are these maps useful? What are their limitations?
   2. Write a short (250 words) summary of our lab exercise that dealt with calculating triangulation. Include some discussion of remote sensing and how remote imagery can overcome problems associated with triangulation (i.e. dealing with imagery distortion).

C. Out-of-Class Assignments
   1. Visit the geography lab at CSU Chico. Find out how they generate maps that are subsequently used by local geophysicists. Share this information with your colleagues in our lab.
   2. Attend the annual meetings of physical geographers being held this year at CSU Chico. Pick a presentation that deals with local water conservation issues. Be prepared to discuss your selected presentation when you return to our lab.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

A. McKnight. Physical Geography - Lab Manual. 9th Edition. Pearson, 2008.

Materials Other Than Textbooks:

A. Espenshade, Edward B. Goode's World Atlas, 2008.

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