



I. GENERAL COURSE INFORMATION

Subject and Number: Geography 6
Descriptive Title: Physical Geography Laboratory
Course Disciplines: Geography
Division: Natural Sciences

Catalog Description:

This course consists of laboratory exercises using the geographic grid and world time, earth-sun relationships, atmospheric processes and weather maps, climate classification, natural vegetation, and interpretation of landforms shown on topographic maps and aerial photographs.

Conditions of Enrollment:

Prerequisite: Geography 1 with a minimum grade of C or concurrent enrollment

Course Length:	X Full Term	Other (Specify number of weeks):
Hours Lecture:	0 hours per week	TBA
Hours Laboratory:	3.00 hours per week	TBA
Course Units:	1.00	

Grading Method: Letter
Credit Status: Associate Degree Credit

Transfer CSU: X Effective Date: Prior to July 1992
Transfer UC: X Effective Date: Prior to July 1992

General Education:

El Camino College:
 1 – Natural Sciences
 Term:

Other:

CSU GE:

B1 - Physical Science

Term:

Other: Approved

B3 - Laboratory Sciences

Term:

Other: Approved

IGETC:

5A - Physical Science, Lab only

Term: Fall 1991

Other:

II. OUTCOMES AND OBJECTIVES

A. COURSE STUDENT LEARNING OUTCOMES (The course student learning outcomes are listed below, along with a representative assessment method for each. Student learning outcomes are not subject to review, revision or approval by the College Curriculum Committee)

SLO #1 Basic Knowledge

Students can identify the salient features of the basic concepts of physical geography. (This includes the ability to recall the definitions of the specialized vocabulary of physical geography.)

B. Course Student Learning Objectives (The major learning objective for students enrolled in this course are listed below, along with a representative assessment method for each)

1. Interpret and use various types of maps found in an atlas.
Laboratory reports
2. Solve practical problems dealing with the geographic grid, world time zones, and earth-sun relationships.
Laboratory reports
3. Make calculations dealing with various weather elements and also interpret weather maps.
Laboratory reports
4. Analyze and classify climates and analyze natural vegetation regions of the world.
Laboratory reports
5. Interpret topographic maps and aerial photographs, with emphasis on landforms made by streams, glaciers, waves and currents, wind, tectonic activity and volcanism.
Laboratory reports

III. OUTLINE OF SUBJECT MATTER (Topics are detailed enough to enable a qualified instructor to determine the major areas that should be covered as well as ensure consistency from instructor to instructor and semester to semester.)

Lecture or Lab	Approximate Hours	Topic Number	Major Topic
Lab	3	I	The Geographic Grid A. Latitude & Parallels B. Longitude & Meridians C. Atlas use and map reading D. Antipodes
Lab	3	II	World Time A. Rotation & Longitude B. Time Zones C. International Date Line
Lab	3	III	Earth-Sun Relationships A. Seasons B. Length of Day and Night C. Latitude of the Sun D. Noon Sun Angle E. Sketching Sun Angles

Lab	7	IV	Atmospheric process and weather maps A. Global Wind Patterns B. Global Pressure Belts C. Fronts D. Weather Maps
Lab	7	V	Climate classification, natural vegetation A. Koppen Climate Classification B. California Climate C. Global Biomes D. California's Natural Vegetation
Lab	7	VI	Topographic maps and Map Scales A. Topographic map symbols B. Map Scales C. Bar Scale D. Verbal Scale E. Representative Fraction
Lab	3	VII	Topographic Maps & Contour Lines A. Elevation B. Gradient C. Topographic Profile D. Drawing Contour Lines
Lab	3	VIII	Rocks A. Igneous Rocks and Identification B. Sedimentary Rocks and Identification C. Metamorphic Rocks and Identification
Lab	3	IX	Plate tectonics A. Plates of the world B. Plate Boundaries C. Plate Movement D. California and Plate Tectonics
Lab	3	X	Volcanic landforms A. Types of Volcanoes B. Sketching Volcanoes from interpreting a topographic map C. Calculate the slope gradient of the different volcanoes
Lab	3	XI	Aerial Photographs and their interpretation A. Tropical Landscapes B. Desert Landscapes C. Mountain Landscapes D. Coastal Landscapes
Lab	3	XII	Landforms made by glaciers A. Type of Glaciers B. Alpine Glaciation and Erosional Landforms C. Alpine Glaciation and Depositional Landforms D. Interpreting Glacial Landforms from topographic maps
Lab	3	XIII	Coastal landforms A. Waves B. Erosion C. Sediment Transport

			D. Deposition
Lab	3	XIV	Field Study A. Local area to observe coastal landforms and processes
Total Lecture Hours	0		
Total Laboratory Hours	54		
Total Hours	54		

IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

A. PRIMARY METHOD OF EVALUATION:

Problem solving demonstrations (computational or non-computational)

B. TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION:

On the map distributed in class, interpolate elevations and draw the remaining contour lines at intervals of 20 feet. Draw lightly at first with pencil and when satisfied with the entire pattern strengthen the lines. Label the lines with their elevation.

C. COLLEGE-LEVEL CRITICAL THINKING ASSIGNMENTS:

1. Analyze a weather map for two consecutive days and interpret the map symbols for pressure, fronts, temperature, and wind. In a short essay forecast the weather conditions for the next day, based on the analysis of the previous two days.
2. In one or two sentences, analyze and interpret the contour lines on a topographic map (distributed in class) to determine how glaciers formed the landscape in the past and how the landscape appears presently.

D. OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:

Quizzes
Laboratory reports

V. INSTRUCTIONAL METHODS

Discussion
Alternate Site Activities
Laboratory
Lecture
Multimedia presentations
Other (please specify)
Computer exercises, Lab manual and atlas (diagrams, maps, and aerial photos), wall maps, and white board.

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instruction delivery shall provide access, full inclusion, and effective communication for students with disabilities.

VI. WORK OUTSIDE OF CLASS

Course is lab only - minimum required hours satisfied by scheduled lab time and estimated student hours outside of class per week is zero.

Estimated Independent Study Hours per Week: 0

VII. TEXTS AND MATERIALS**A. UP-TO-DATE REPRESENTATIVE TEXTBOOKS**

Darrel Hess. Physical Geography Laboratory Manual. 12th ed. Pearson Publishing, 2016.

B. ALTERNATIVE TEXTBOOKS**C. REQUIRED SUPPLEMENTARY READINGS****D. OTHER REQUIRED MATERIALS**

Calculator, ruler, a Physical Geography Textbook

VIII. CONDITIONS OF ENROLLMENT**A. Requisites (Course and Non-Course Prerequisites and Corequisites)**

Requisites	Category and Justification
Course Prerequisite Geography-1	Sequential

B. Requisite Skills

Requisite Skills
An understanding of atmospheric circulation (wind patterns, pressure belts) GEOG 1 - Compare and contrast the basic elements of weather and climate such as air temperature, air pressure, winds, clouds and precipitation, air masses and storms.
Knowledge and understanding of climate types of the world. GEOG 1 - Explain the interrelationships among the climate, natural vegetation, and soil of many natural environments.
Understanding of various landforms and features, such as volcanoes, glaciers, streams. GEOG 1 - Evaluate the erosional agents (water, ice, waves, and wind) and resulting landforms.

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification
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D. Recommended Skills

Recommended Skills

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact
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Course created by Jerry Brothen on 11/06/1985.

BOARD APPROVAL DATE:

LAST BOARD APPROVAL DATE: 05/18/2020

**Last Reviewed and/or Revised by: Matthew Ebiner
18315**

Date: 9/17/2019