**GEOG 4L Course Outline as of Fall 2024**

# CATALOG INFORMATION

Dept and Nbr: GEOG 4L Title: PHYSICAL GEOGRAPHY LAB
Full Title: Physical Geography Lab
Last Reviewed: 9/12/2022

| Units | | Course Hours per Week | | Nbr of Weeks | Course Hours Total | |
|---|---|---|---|---|---|---|
| Maximum | 1.00 | Lecture Scheduled | 0 | 17.5 | Lecture Scheduled | 0 |
| Minimum | 1.00 | Lab Scheduled | 3.00 | 6 | Lab Scheduled | 52.50 |
| | | Contact DHR | 0 | | Contact DHR | 0 |
| | | Contact Total | 3.00 | | Contact Total | 52.50 |
| | | Non-contact DHR | 0 | | Non-contact DHR | 0 |

Total Out of Class Hours: 0.00 Total Student Learning Hours: 52.50

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|---|---|
| Title 5 Category: | AA Degree Applicable |
| Grading: | Grade or P/NP |
| Repeatability: | 00 - Two Repeats if Grade was D, F, NC, or NP |
| Also Listed As: | |
| Formerly: | |

**Catalog Description:**
In this course, students will perform hands-on lab activities exploring Earth/Sun relationships, weather, climate, vegetation, rocks, plate tectonics, and landforms. Emphasis is placed on analysis and interpretation of maps, and the spatial distribution of Earth's features. This class is the lab component to Introduction to Physical Geography (GEOG 4). Field trip(s) may be required.

**Prerequisites/Corequisites:**
Course Completion or Current Enrollment in GEOG 4

**Recommended Preparation:**

**Limits on Enrollment:**

**Schedule of Classes Information:**
Description: In this course, students will perform hands-on lab activities exploring Earth/Sun relationships, weather, climate, vegetation, rocks, plate tectonics, and landforms. Emphasis is placed on analysis and interpretation of maps, and the spatial distribution of Earth's features. This class is the lab component to Introduction to Physical Geography (GEOG 4). Field trip(s)

may be required. (Grade or P/NP)
Prerequisites/Corequisites: Course Completion or Current Enrollment in GEOG 4
Recommended:
Limits on Enrollment:
Transfer Credit: CSU;UC.
Repeatability: Two Repeats if Grade was D, F, NC, or NP

## ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

| | | | | | |
|---|---|---|---|---|---|
| **AS Degree:** | **Area** | | | Effective: | Inactive: |
| **CSU GE:** | **Transfer Area** | | | Effective: | Inactive: |
| | B3 | Laboratory Activity | | Fall 2024 | |
| **IGETC:** | **Transfer Area** | | | Effective: | Inactive: |
| | 5C | Fulfills Lab Requirement | | Fall 2024 | |
| **CSU Transfer:** | Transferable | Effective: | Fall 2024 | Inactive: | |
| **UC Transfer:** | Transferable | Effective: | Fall 2024 | Inactive: | |

**CID:**

**Certificate/Major Applicable:**
Major Applicable Course

## COURSE CONTENT

**Student Learning Outcomes:**
At the conclusion of this course, the student should be able to:
1. Use, analyze and interpret maps.
2. Examine the dynamic relationship between the Earth and Sun and demonstrate how this relationship affects the Earth's system.
3. Identify Earth's physical features, analyze and experiment with the processes that shape them and interpret their spatial distribution.
4. Apply fundamental geographic concepts and techniques.

**Objectives:**
At the conclusion of this course, the student should be able to:
1. Use geographic tools and apply geographic techniques to scientific questions.
2. Locate places and features on Earth using latitude and longitude.
3. Use maps to interpret the geographic distribution of features on Earth’s surface.
4. Draw and interpret isolines.
5. Use data to explain Earth/Sun relationships and Earth’s seasonality.
6. Conduct experiments and analyze data related to temperature, humidity, and other weather elements.
7. Graph and interpret climate data.
8. Use climate data to classify climates.
9. Differentiate between climate classifications and biomes.
10. Identify common rock types.
11. Analyze Earth’s physical features and the processes that form them using maps and other data.

**Topics and Scope:**

Topics will include, but are not limited to:
I. Science, the Scientific Method and Geography as a Science
II. Geographic Grid: Latitude and Longitude
III. Map Analysis and Interpretation
IV. Earth/Sun Relationships
  A. Seasons and seasonality
  B. Earth's energy budget
V. Key Weather Elements
  A. Temperature
  B. Atmospheric pressure and wind
  C. Atmospheric moisture
  D. Weather systems
VI. Climate, Climate Change, and Biogeography
  A. Climate classification
  B. Global climate change
  C. Biogeography
VII. Earth Processes and Physical Features
  A. Rock cycle
  B. Plate tectonic theory
  C. Folding, faulting, and earthquakes
  D. Weathering, mass wasting, and surface processes

Additional topics may include:
VIII. Water Resources
IX. Soils

**Assignment:**

1. Text reading (5-20 pages per week)
2. In-class lab assignments (5-20) such as:
3. Exams and/or quizzes (3-20)

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

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| In-class lab assignments | Writing<br>0 - 10% |

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

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| In-class lab assignments | Problem solving<br>30 - 60% |

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

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| None | Skill Demonstrations<br>0 - 0% |

**Exams:** All forms of formal testing, other than skill performance exams.

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|---|---|
| Exams and/or quizzes | Exams<br>30 - 60% |

**Other:** Includes any assessment tools that do not logically fit into the above categories.

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|---|---|
| Participation | Other Category<br>0 - 10% |

**Representative Textbooks and Materials:**
Applied Physical Geography: Geosystems in the Laboratory. 10th ed. Christopherson, Robert W., Cunha, Stephen, Thomsen, Charles E., and Birkeland, Ginger H.. Pearson. 2018 (classic)
Physical Geography Laboratory Manual. 13th ed. Hess, Darrel. Pearson. 2022