Degree Applicable

Glendale Community College
March 2013

COURSE OUTLINE

Geography 111 (C-ID Number: GEOG 111)
Physical Geography Lab (C-ID Title: Physical Geography, Laboratory)

I. Catalog Statement

GEOG 111 is the laboratory course for Physical Geography. The course provides supplemental laboratory exercises in topics covered in the lecture course related to the atmosphere, hydrosphere, biosphere and lithosphere. The laboratory experience includes the observation and interpretation of weather data, statistical analysis of climate data, map analysis and interpretation, analysis of earth materials and landform processes, plate tectonics, and biogeography. Local trips are required to conduct lab activities in the field.

Total Lab Units: 1.0
Total Course Units: 1.0

Total Lab Hours: 48.0
Total Faculty Contact Hours: 48

Prerequisite or Co-requisite: Completion of, or concurrent enrollment in, Geography 101.
Recommended Preparation: ~~Elementary Algebra~~ MATH 141, MATH 146, or two units of MATH 246

II. Course Entry Expectations

Skill Level Ranges: Reading 5, Writing 5, Listening/Speaking 5, Math 4.

Prior to enrolling in the course, the student should be able to:
1. understand college-level reading selections;
2. take college-level lecture notes and follow complex oral directions;
3. learn material by participating in class discussions and lectures;
~~5.~~4. perform basic mathematical functions and operations of addition, subtraction, multiplication, and division of signed numbers as well as solve simple equations;
~~5. solve linear equations and inequalities, factor polynomials by trial and error as well as grouping, work with square roots and integral exponents;~~
~~6.~~5. ~~communicate learning, conceptual understanding and critical~~ analysis skills through writing research papers, essay exams, or other types of writing assignments.

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III. Course Exit Standards

Upon successful completion of the required coursework, the student will be able to demonstrate critical thinking skills, an understanding of, and an ability to perform:

1. lab activities related to the size, shape, and movements of the Earth in space and their importance to environmental patterns and processes;
2. lab activities related to the atmospheric, geomorphological, and biotic processes that shape the Earth's surface environments;
3. lab activities related to the global distribution of the world's major climates, ecosystems, and physiographic (landform) features;
4. lab activities related to the scientific method, scientific measurement, and practical experience using the tools and concepts of physical geography; and
5. lab and field-based lab activities related to the collection, analysis and interpretation of geographic data and the creation of geographic tables, graphs and maps.

IV. <u>Course Content</u> **Total Faculty Contact Hours = 48 hours**

A. Earth measurement, representation and motions 12 hours
   1. Scientific method, measurements, graphs, charts and basic conversions.
   2. Atlases, globes and maps.
   3. Latitude, longitude, and time zones.
   4. Earth-sun relationships and seasonality.

B. The Atmosphere 12 hours
   1. Temperature, radiation and related weather instruments.
   2. Air pressure, winds, and related weather instruments.
   3. Humidity and related weather instruments.
   4. Weather measurement, weather maps and interpretation.
   5. Climate data interpretation and climate regions.

C. Natural Vegetation and Biomes 3 hours

D. The Hydrosphere 3 hours

E. The Lithosphere 6 hours
   1. Rock, sediment and soil classification
   2. Landform identification.
   3. Plate tectonics
   4. Vulcanism, folding, and faulting

F. Map Reading and Map Making Skills 6 hours
   1. Compass and Global Positioning System (GPS)
   2. Map interpretation including geologic, topographic, and land-use maps.
   3. Interpreting data from 3-dimensional maps and aerial photographs.
   4. Terrain profiling and creating contour maps.

G. Field techniques: Observations, measurement, analysis and presentation 6 hours

V. Methods of Instruction

The following methods of instruction may be used in the course:
1. lecture-discussion;
2. small group laboratory demonstrations and assignments;
3. multimedia presentations;
4. student projects and presentations;
5. directed lab activities in the field.

VI. Out of Class Assignments

The following out of class assignments may be used in the course:
1. creating content in preparation for in-class group presentations;
2. data collection for required reports (e.g., collecting weekly weather data);
3. research and writing assignment addressing a topic relative to the course content;
4. online laboratory lesson completed with Moodle or other approved LMS.

VII. Methods of Evaluation

The following methods of evaluation may be used in the course:
1. laboratory exercises (e.g., humidity lab);
2. written research reports (e.g., weather data manual);
3. quizzes (e.g., unit quiz);
4. mid-term exams;
5. final exam.

VIII. Textbook(s)

Hess, Darrel. *Physical Geography Laboratory Manual*. Upper Saddle River: Prentice Hall, 2011. Print.
13th Grade Textbook Reading Level. ISBN: 0321678362

IX. Student Learning Outcomes

Upon successful completion of the required coursework in Physical Geography Lab, the student will be able to demonstrate critical thinking skills, an understanding of, and an ability to perform lab activities related to:
1. earth geometry and motions in space and their importance to environmental patterns and processes;
2. the atmospheric, geomorphological, and biotic processes that shape the Earth's surface environments;

3. the global distribution of the world's major climates, ecosystems, and physiographic (landform) features;
4. the scientific method, scientific measurement, and practical experience using the tools and concepts of physical geography; and
5. the collection, interpretation, analysis of geographic data and the creation of basic geographic tables, graphs and maps.

Justification

Geography 111 is a required course for the Associate in Arts for Transfer degree in Geography. This course is related to the college goal of continuing the development of AA and AS-T degrees. The Geography AA-T degree is accepted by the California State Universities to which our students most frequently transfer.