Grambling State University
College of Arts and Sciences
Department of History
Fall 2016
Physical Geography
Geog 308, 3 credit hours

Instructor: Mrs. C. Asante-Ashong

Protecting The Heritage: Cultivating knowledgeable, skilled and compassionate Educators and Community Leaders in "The Place Where Everybody is Somebody."

Course Description

Physical Geography: GEOG 308 examines the earth as a complex system. A discussion of the inter-relationship existing between the atmosphere, hydrosphere, lithosphere and biosphere, and the processes and the phenomena therein will be included in this course.

Course Goals/Rationale

This Course will introduce students to the world wide impact of environmental events, synthesizing in many physical factors into a complete picture of earth system operations. It explains the spatial dimension of Earth's dynamic systems-its energy, air, water, weather, climate, tectonics, landforms, rocks, soils, plants, ecosystems and biomes.

Many of the topics covered in this course are related to Human Geography Data, data sources and search engines. The learning outcomes aligned with this course include the following that are linked to learning objectives linked to NGA CAE Specialty area in Human Geography. These learning objectives (VIII.3D4-VIII.3D11) are listed below.

- Describe potential sources of Human Geography data and information.
- Explain how to assess/evaluate Human Geography data sources.
- Explain the importance of assessment and how to source Human Geography information.
- Define the purpose of geospatial standards for Human Geography data creation and use.
- Describe how to transform data and information from unstructured to structured formats
- Comprehend the importance of metadata tagging for Human Geography datasets
- Describe basic IT terminology and concepts as it relates to Human Geography data, databases, and data stewardship.
- Explain the function of a data schema in the structuring of geospatial data.
- Describe how to attribute data to facilitate discovery and reuse.
- Describe how to create multiple Human Geography vector data sets within a GIS platform following a given data schema.

Course objectives and Program outcomes

Additional learning objectives include the student being able to:

- A. Demonstrate an understanding of Geography and Physical Geography in particular and the relationship between it and Human Geography through map interpretation, GJS, GPS and Remote Sensing.
- B. Describe the basic principles, methods, aims, materials and the elements of Physical Geography.
- C. Describe the processes and formation of landforms with respect the Earth-Atmosphere Interface
- D. Describe in detail how the spatial dimension of earth's dynamic systems operate especially with reference to its Systems and the four spheres
- **E.** Demonstrate a working knowledge of the regions according to the earth science, culture-environment and location traditions.
- F. Demonstrate an understanding of map interpretation, Geographic Information Systems, Global

Course Topics

- 1. Essentials of Geography
- 2. Solar energy to the Earth and the seasons
- 3. Earth's Modern Atmosphere
- 4. Atmosphere and Surface Energy Balances
- 5. Global Temperatures
- 6. Atmospheric and Oceanic Circulations
- 7. Water and Atmospheric Moisture
- 8. Weather
- 9. Water Resources
- 10. Global Climate Systems
- 11. The Dynamic Planet
- 12. Tectonics, Earthquakes and Volcanism
- 13. Weathering, Karst Landscapes and Mass Movement
- 14. River Systems
- 15. Oceans, Coastal Systems and Wind Processes
- 16. Glacial and Periglacial Landscapes
- 17. The Geography of Soils
- 18. Ecosystem Essentials
- 19. Terrestrial Biomes

Text Book: Christopherson, Robert W. (2016). Geosystems: An Introduction to Physical

Geography, 9th Edition, Pearson Education, ISBN: 970832 1926982

Atlas: Any Good World Atlas

Supplemental Textbooks

Aguado, E & Burt James (2014), <u>Understanding Weather and Climate</u>, 7th Edition Pearson

Arbogat, A.F. (2013), Discovering Physical Geography, 3rd Edition, John wiley & Sons

Additional Resources

Annals of the Association of American Geographers (Professional Journal)

The Arab World Geographer (Professional Journal)

The Geographical Review (Professional Journal)

The National Geographic Website: (http://www.nationalgeographic.com/education)

Atlapedia Online (http: www.atlapedia.com

Student Evaluation

The Student will be evaluated in the following manner:

- a. Tests/Quizzes
- b. Major examinations
- c. Reports
- d.. Library Assignments
- e. Special Assignments

The Final grade will be based on your performance on the following:

Class Attendance/ Participation (50 points)
Map Exercises/Projects (100 points)
Individual Presentations to the class (50 points)
Group Presentations to the class (50 points)
Quizzes (100 points)
Tests (100 points)
Mid-semester Examination (100 points)
Special Assignment (50 points)
Term Paper (100 points)
Final Examination (100 points)
Extra Credit (50 points)

Grading Scale:

A = 90 - 100% of Total Points D = 60 - 69% of Total Points B = 80 - 89% of Total Points F = 100% of Total Points F = 10

B = 719 -640 points C = 639 - 560 points D = 559 - 480 points F = 479 points and below