Course Title: PHYSICAL GEOGRAPHY

Instructor: Wm Toner, 534-4945 (Voice Mail)

Course Description

This course features investigations into the natural systems of the earth and their relationship to human activities. It includes examinations of the earth's energy, water, and nutrient balances, and how these balances influence and are influenced by human activities. Soils, climates, hydrology, tectonic activity, landforms, vegetation will all be examined from a global as well as a regional and local perspective. Emphasis in this course will be placed on an understanding of the various natural systems and how they relate to the built environment.

Competencies

1. Identify and define the earth's energy, water, and nutrient balances.

2. Identify and define principal landforms and landform making processes.

3. Demonstrate an understanding of some of the complex ways that urbanization has effected energy, water, and nutrient balances.

4. Demonstrate understanding of global weather factors and patterns.

5. Identify soil textures, formation processes, and soil classification schemes.

6. Understand and define concepts in biogeography.

7. Show competence in place name geography including the location and name of the world's nations.

Text


Topics and Assignments
Week 1: Introduction to the course. The use of maps and aerial imagery. Read: Strahler, Chapter 1, Appendix I, II.

Week 2: Earth atmosphere, ocean, and radiation balance; Heat and Cold in the Life Layer; Atmospheric Moisture
Read: Strahler, Chapter 2,3, 4.
Library: Research lecture and tour.
Place Name: Continents and Oceans

Read: Strahler, Chapter 5,6, 7.
Semester Paper: Topic Due.
Place Name: South America

Week 4: Field Trip, Thorn Creek Nature Preserve

Week 5: Global Vegetation and Soils.
Read: Strahler, Chapter 8,9
Lab: Cloud Inventory
Place Name: North America

Week 6: Earth Materials and Plate Tectonics.
Read: Strahler, Chapter 10,11.
Semester Paper: Bibliography Due.

Week 7: Volcanic Landforms, Weathering and Mass Wasting, Hydrology.
Read: Strahler, Chapters 12, 13, 14.
Place Name: Africa

Week 8: Mid-Term Examination

Week 9: Fluvial Landforms and Landforms and Rock Structure.
Read: Strahler, Chapters 15, 16
Place Name: Australia

Week 10: Landforms of waves and wind.
Read: Strahler, Chapters 17.
Semester Paper: Outline due.

Week 11: Glacial Landforms.
Read: Strahler Chapters 18.
Place Name: Europe

Week 12: Soils.
Lab: The Use of Soil Surveys
Semester Paper: First Draft Due.
Week 13: Physical Geography and Philosophic Thought
Place Name: Asia

Week 14: Final Examination

Evaluation

Students will be evaluated on:

1. Attendance at all class meetings and participation in classroom discussion;
2. Completion of the semester paper;
3. Completion of lab assignments;
4. Final and mid-term examinations.
5. Place Name Geography

Grades

Class meetings and participation: 20%
Semester Paper: 25%
Lab Assignments and Place Name: 25%
Final and Midterm Examination: 30%

A: 93 - 100
B: 83 - 92
C: 82 - 70
D: 69 - 60
F: <60

Notes

1. Semester Paper: The paper is designed for you to demonstrate research, writing, and analytic skills as well as conceptual understanding of some facet of physical geography. It is also designed such that there will be continuous interaction between students and teacher throughout the length of the paper up to and including a final draft. This is to insure that the paper meets minimum standards and to provide a mechanism for continuous critique of student work.

You may select any topic related to physical geography provided it is approved. Be certain to select a topic that you can deal with in a semester—that is, pick a topic that is do-able in 15 weeks. As a rule of thumb, if there are volumes and volumes already written on your topic, the topic is too large. If there are a few articles and reports, it is probably the right size. If you can, through your own research, add to the understanding of a topic, all the better. In any event, consider your topic carefully and discuss it, in class and out of class. In writing your paper, you must give credit where credit is due by using extensive citations. Plagiarism (taking words or ideas from others without giving them credit) is a failing offense. You will receive a special handout on the proper use and form of citations.
2. Examinations: Exams will include questions on identifications, definitions, and your understanding of various concepts discussed in the text and in class. Your exams may also include an essay question. Much of the material is best understood and explained in a graphic format and graphic skills will be helpful on exams—in this course a good picture may be worth at least 1000 words!!

3. Labs: Periodically you will receive lab assignments. These are designed to give you a working knowledge of various aspects of physical geography.

4. Place Name Geography: In the past few years it has become evident that ignorance of place name geography is widespread and perhaps growing—Arizona is not the capital of Phoenix, British Columbia is not in South America, and the USSR and Russia are not interchangeable terms!

Thus, there will be a series of quizzes on place name geography in which students are expected to identify the name and location of the nations of the world. Preparation for these quizzes is best accomplished by studying the maps of Goode's World Atlas for names and locations and then tracing the outline on a separate sheet and finally filling in the names.

5. Readings: The following texts are excellent samplers of material in physical geography. You may find it helpful to page through several of these to discover the broad scope of topics available for your paper. The list of references (Strahler 488) at the end of our text may also be useful.


