GPH 111: Introduction to Physical Geography **Fall 2006**
Sections: 2706 & 2707
Instructor: Lynn Newman **Office:** 05-137 **Phone:** (623) 845-3877

Class Meetings: Lecture: MWF 10:00 - 10:50 am **HU 112**
Lab: W 12:30 - 3:15 pm **HU 112**
Office Hours: MWF 11:00am - 12:00 pm, MW after lab by appointment
email: **lynn.newman@gcmail.maricopa.edu** (← the best way to reach me!)
Instructor's Website: **http://staff.gc.maricopa.edu/~lnewman/**

COURSE DESCRIPTION and OBJECTIVES

Physical geography is a field that examines the processes, forms, and spatial components of systems that operate at and near the earth's surface, including the atmosphere, hydrosphere, lithosphere and biosphere. The objectives of GPH 111 are (1) to introduce the major environmental systems at and near the earth's surface and to explore their processes and forms, (2) to define the relationship between these natural systems and human society that deals with them as resources and hazards, and (3) through laboratory exercises introduce the student to geographic techniques and scientific methods. It is hoped that this course will provide the student with information to form wise decisions for managing the environment, as well as a heightened awareness of the beauty and function of natural systems. GPH 111 is a general survey course and assumes no previous background. It is a four credit laboratory science class which is transferable to the state university system. A single grade for lecture and lab will be awarded.

REQUIRED MATERIALS

1) Tom L. McKnight and Darrel Hess, 2005: *Physical Geography: A Landscape Appreciation*. Eighth Edition. Prentice Hall Publishers (website: http://wps.prenhall.com/esm_mcknight_physgeo_8)
2) Jeffery, C.F., S. Emrick, L.E. Newman, J.A. Shaffer, and A. Gaugert, 2006: *Physical Geography Lab Manual*, Seventh Edition, Fall 2006.

COURSE STRUCTURE and REQUIREMENTS

This course consists of lectures supplemented by textbook readings and an accompanying lab. I will be lecturing for the duration of every class meeting during which you should take notes. You will be expected to have read chapters assigned in the course outline before each class meeting. Assignments average approximately 40 pages per week. Additionally, the instructor reserves the right to assign short outside readings when pertinent to the topic of discussion. On occasion, the *lecture portion of the course will extend into the lab time*. The labs scheduled for these periods will generally be shorter and can be completed within the remaining time. Additionally, during lab it may be necessary that I lecture on the material in the lab to aid in your comprehension of the procedures or mathematical techniques that are required for the exercise. Some exams during the semester may be administered at the high-tech center as online exams. You will be notified when these exams are to be taken and where to go to take them.

ATTENDANCE POLICY

- Attendance is required and you are expected to be on time. Your attendance is a factor in your final grade. You are permitted a maximum of **two (2) lecture absences and one (1) lab absence**.
- ***More than two lecture absences*** will result in the *loss of 3 points for each instance*.
- Official absences (as described in the Student Handbook) will not be docked any points.
- ***More than one lab absence*** will result in your being withdrawn from the course with a failing (Y) grade.
- **Tardiness and leaving early** are strongly discouraged as they represent disruptions to the classroom learning environment. Therefore, if you are not in class when the sign-in sheet is passed around or leave class early, you will be *docked 1.5 points for each instance.*
- When circumstances compel a student to be either absent or late, it is expected that the instructor will be notified in advance (via email or phone).
- I will **not** loan or make available my lecture notes nor do I repeat lectures. If it is necessary that you miss a lecture, please borrow the notes from a fellow student.

WITHDRAWAL POLICY

Please refer to the current catalog for withdrawal policies, procedures and dates. If you do not follow the correct procedure for withdrawing, you will receive an "F", which can only be removed by retaking the course. It is your responsibility to drop the course if you intend to do so. Do not rely on the instructor to drop you from the class.

LAB

The lab manual is required and should always be brought to class. Sometimes the lab exercise for the day is changed so bring the entire manual. You must also bring a calculator (not a cell phone calculator or pda calculator), ruler, #2 pencil w/eraser, and textbook to each lab. No work will be graded that is not completed neatly and in pencil. Lab is a collaborative learning process and group work and the exchange of ideas is encouraged. No late work will be accepted for credit. One (1) absence will be allowed. Failure to complete two (2) or more exercises will result in a failing grade in the course regardless of what your grades are in lecture.

GRADES

Grades will be determined by 5 midterm exams, a GEOCOMP exam, a final examination, numerous lab quizzes (you will be able to drop the lab quiz with the lowest score), lab exercises, and attendance. I will make every attempt to maintain grades on MIDAS, however, I reserve the right to not use MIDAS and to bring grades to class periodically during the semester to keep you informed as to your progress in the course. The scale below will determine student grades. The distribution on the right does **not** employ a curve.

			Letter Grade
Lab Exercises/Quizzes:	150 points		
Midterm I	50 points		
Midterm II	50 points	630-700 points	A
Midterm III	100 points	560-629 points	B
Midterm IV	100 points	490-559 points	C
Midterm V	100 points	420-489 points	D
GEOCOMP Exam	50 points	less than 420 points	F
Cumulative Final Exam	150 points		
TOTAL	**700 points**		

Exams and/or quizzes will consist of a combination of questions including any of the following types: matching, multiple choice, math problems, identification, or short essay questions. No cellphone or pda calculators allowed during exams or quizzes. These must be secured in your bookbag or under your chair. SCANTRON FORMS ARE REQUIRED for each lecture examination (not the lab quizzes). The final exam is comprehensive.

Lab quizzes and exercises cannot be made up and only one midterm may be rescheduled for credit. You must contact me in advance if you know you are going to miss an exam and also provide me with a written note or doctor's note explaining the absence. For in-class exams with scantron and pencil, the missed examination must be completed *not later than six calendar days* following the original examination date. The make-up exam area in the Center for Learning is no longer open on Fridays so you will have until 7:30 pm on Thursdays (when they close) to complete the exam. Online exams will have a time period in which to complete the exam or it will not count. Do not miss the final exam. No makeup will be given. No incomplete grades will be given for the course except under extraordinary conditions.

GEOCOMP EXAMINATION

The GEOCOMP Exam is a comprehensive examination designed to assess each student's mastery of key competencies in the course. The exam will be administered during Week 16 of the course. **There will be no makeup for this examination. This exam is an extra credit exam worth 50 points toward the final course grade.** There are few other provisions for extra credit in this course.

TUTORING and OTHER ASSISTANCE

Tutors: Tutors may be available for students who require additional instruction in this course at the Center of Learning (CL). Information concerning scheduling of tutors can be obtained in the Center for Learning (CL).
Web sites: Both the text author and the instructor maintain web sites to assist students in the understanding of concepts presented in this course and enhance the study of geography in general. The following are web site addresses that may be helpful:
Textbook site: http://wps.prenhall.com/esm_mcknight_physgeo_8 or from link on my site.
Instructor's site: **http://staff.gc.maricopa.edu/~lnewman/**
Study Guides: Study guides for all examinations will be published on the instructor's web site. They will **not** be handed out in class.

WANT MORE PRACTICE WITH CONCEPTS and SOME EXTRA CREDIT?: go to the textbook link above or the link on my site, select the chapter you are interested in and take the practice quizzes and reviews. I will accept the following three reviews for extra credit – you may do all three for each chapter that we are working on … just hit the links for:
"Multiple-Choice Quiz", *"True-False"* and *"Thinking Spatially"*.

Email the results to me (directly from the site to **lynn.newman@gcmail.maricopa.edu**), I'll give you **½ point extra credit for each one (not each question)**. That means 1.5 pts extra credit per chapter. Keep track of which ones you have sent me so that you send each one only one time! As an insurance policy, print out the results to show me just in case I don't receive your email. Email or hard copy proof of completion, no exceptions.

****Extra credit will only be given for the chapters that we are currently working on (up to Midterm day)**. After the midterm, no credit will be given. In other words, you can't wait until the end of the semester and then do all of the chapters from the entire semester.

CLASSROOM ETIQUETTE and ACADEMIC MISCONDUCT

All students are expected to assist in the maintenance of a learning conductive environment in the classroom.

- **TURN OFF CELLULAR PHONES**, pagers and alarm watches at the beginning of class.
- Do not read newspapers/magazines or do other class work during lecture/lab
- Refrain from conversations on topics other than class material while the instructor or your classmates are speaking
- The use of personal stereo equipment during class is forbidden.
- **Cheating and plagiarism will be treated as academic misconduct** and will be dealt with as described in the Student Handbook
- Students are expected to expected to enter quietly when late or departing early
- Display courtesy towards each other

Students continually and habitually violating these rules are subject to dismissal from the class, which will result in an "F" grade for the course.

RECORDING LECTURES

Recording of lectures is not normally allowed. The instructor will consider special cases where recording is necessary or helpful to the student's successful acquisition of course material. Requests must be submitted in writing to the instructor no later than the end of the first week of class.

DISABLED STUDENT RESOURCES

Every reasonable effort will be made to accommodate students with limitations due to disability, including learning disabilities. Students who require special assistance and/or accommodations should consult the instructor. The Disabled Student Resources Center (623-845-3080), located in TDS-100 can be of assistance.

COURSE OUTLINE

Note: I reserve the right to deviate from the course outline if it becomes necessary. You will be notified ahead of time if there are any changes to exam contents.

Week of August 21
Lecture: Introduction, Shape of the Earth, Earth Grid, Earth-Sun Relationships
Text: Ch. 1, Ch. 2
Lab: **A** - The International System of Units (SI), Statistics, Graphs and Isopleth Analysis

Week of August 28
Lecture: Earth-Sun cont., Earth's Atmosphere, Solar Radiation
Text: Ch. 1, Ch. 3, Ch. 4
Lab: **C** - Geographic Grid and Time

Monday, September 4 – Labor Day – No classes

September 6
Lecture: Solar Radiation cont., Energy Transfer & Balance
Text: Ch. 4, Ch. 9 (pp. 251-252 only)
Lab: **B** - Earth-Sun Relationships

September 8 – MIDTERM I – Ch. 1, Ch. 2 (pp. 31-42), Ch. 3 (pp. 57-63). Take by computer? – I'll let you know.

Week of September 11
Lecture: Temperature
Text: Ch. 4
Lab: **D** – Introduction to Geographic Tools – Atlases

Week of September 18
Lecture: Atmospheric Pressure, Global Atmospheric Circulation, Winds
Text: Ch. 5
Lab: **G**- Atmosphere and Climate Lab I - Temperature portion

September 25, 27
Lecture: Atmospheric Moisture, Clouds & Precipitation, Lapse Rates
Text: Ch. 6,
Lab: **G** - Atmosphere and Climate Lab I - Pressure portion

September 29 - MIDTERM II - Ch. 3 (pp. 58, 64-end), Ch. 4, Ch. 9 (pp. 251-252). Take by computer? – I'll let you know.

Week of October 2
Lecture: Lapse Rates cont., Air Masses and Fronts, Mid-latitude cyclones
Text: Ch. 7
Lab: **H** - Atmosphere and Climate Lab II – Psychrometer portion + Humidity handout

October 9, 11
Lecture: Mid-latitude cyclones cont., Storms/Severe Weather
Text: Ch. 7
Lab: **H** - Atmosphere and Climate Lab II - Stability and Precipitation portion

October 13 - MIDTERM III - Ch. 5 and 6. Take by computer? – I'll let you know.

Week of October 16
Lecture: Storms/ Severe Weather cont., Climate Classification/Biomes
Text: Ch. 8, Ch. 11 (pp. 304-308, Major biomes 317-330)
Lab: **I** - Atmosphere and Climate III - Air Masses, Fronts and Storms

Week of October 23
Lecture: Earth's Internal Processes, Earth Materials, Plate Tectonics
Text: Ch. 13, Ch. 14
Lab: **J** – World Climate Zones

October 30, November 1
Lecture: Plate Tectonics (cont.), Vulcanism
Text: Ch. 14
Lab: **E** - Introduction to Topographic Maps

November 3 - MIDTERM IV – Ch. 7, Ch. 8, part of Ch. 11.

November 6, 8
Lecture: Crustal Deformation, Earthquakes, Weathering
Text: Ch. 14, Ch. 15
Lab: **M** - Plate Tectonics, Volcanoes and Diastrophism

Friday, November 10 – Veterans Day – No Class

Week of November 13
Lecture: Mass Wasting, Karst Topography
Text: Ch. 15, Ch. 17 (pp. 491-496)
Lab: **F** - Contour Lines and Contour Profiles

November 20, 22
Lecture: Fluvial Processes
Text: Ch. 16
Lab: **R** - Earth Materials

Friday, November 24 – Thanksgiving Holiday – No Class

November 27, 29
Lecture: Fluvial cont., Glaciers and Glacial Landforms
Text: Ch. 16, Ch. 19
Lab: **N** - Fluvial Processes and Landscapes

Dec. 1 - MIDTERM V - Ch. 13, 14, and 15.

Week of December 4
Lecture: Glaciers Continued
Text: Ch. 19
Lab: **GEOCOMP EXAM (Ch. 1 - 16)**

FINAL EXAM:
Wednesday, December 13 - Cumulative Final Exam - ***10:00 - 11:50 am***
Exam stresses Ch. 16, 19, with an additional cumulative section

Official Course Description: MCCCD Approval: 03/28/95

GPH111 19956-99999	LEC	4 Credit(s)	3 Period(s)
	LAB	0 Credit(s)	3 Period(s)

Introduction to Physical Geography

Spatial and functional relationships among climates, landforms, soils, water, and plants. Prerequisites: None.

MCCCD Official Course Competencies:

GPH111 19956-99999 Introduction to Physical Geography

1. Use the metric system. (I)
2. Describe the face and form of the earth and its place in the solar system. (II - IV)
3. Locate places on the earth using the geographic grid system and the United States Land Survey grid. (V)
4. Read topographic maps using map symbols. (VI)
5. Explain the relationship between the earth and sun in regard to the length of days, seasons, time, and solar energy. (VII)
6. Make time zone calculations. (VII)
7. Identify basic landform types, and explain the basic geologic theory behind the development of landforms. (VIII)
8. Describe the classification of minerals and rocks, and identify common rocks. (VIII)
9. Describe geologic hazards such as floodplains, mass wasting zones, volcanic areas, etc. (VIII)
10. Describe the basic weather elements. (IX)
11. List the basic weather controls, and appraise the effects of these controls on the weather elements. (IX)
12. Display on a map the geographic pattern of temperature, pressure, wind, precipitation, and storms. (IX)
13. Describe major storm types. (IX)
14. Explain the climatic controls. (X)
15. Describe the classification of world climates. (X)
16. Display the world climate pattern on a world map. (X)
17. Display the world vegetation pattern on a world map, and describe the relationship between climate and vegetation. (X)
18. Describe soil problems and the relationship between climate and soils. (X)