

UNIVERSITY OF NEVADA, Reno - Department of Geography

Physical Geography (GEOG 103)
Fall 2009 Syllabus

Dr. Franco Biondi

Course Description:

Geography studies Earth, its features and its inhabitants, and is much more than a compilation of place names. This course will introduce students to the physical properties of our planet, including its form and motion. We will then focus on four major natural systems: atmosphere, oceans, landforms, and ecosystems. An emphasis will be placed on understanding patterns and processes, often with a global perspective. Lectures will include a presentation of the main factors that can explain the diversity of landscapes on Earth, together with simple exercises to sharpen your analytical skills. Four laboratory experiences will provide students with hands-on information on class subjects.

On a broader level, my hope is that you will gain a better, scientific understanding of the physical environment so that you may become an informed observer of the world around you. The textbook is an excellent source of background information, and additional class material will be distributed during lectures.

Core Curriculum:

The class satisfies the Core Curriculum Natural Sciences – Group B requirement, as follows:

1. Students will gain a practical understanding of the scientific method. Four substantial laboratory experiences are included in the class schedule. Laboratory sessions involve gathering and analyzing data, drawing conclusions, and making inferences.
2. The course stresses the analysis of data by means of appropriate mathematical techniques at or beyond the core mathematics level.
3. The class incorporates current scientific topics as well as classical examples relevant to today's world.
4. The course requires a critical review of current scientific literature (such as articles from journals) outside the textbook.
5. Each course emphasizes critical writing at all appropriate points, e.g. laboratory reports, reviews of journal articles, and examinations.
6. **Pre-requisite:** Completion of the Core Curriculum Mathematics requirement.
7. **Co-requisite:** MATH 127 R or MATH 128 or MATH 176 or MATH 181.

Lecture Hours and Location: Tu & Th, 11:00 – 12:15, in 215 Mackay Science Hall.

Office Hours: Fr, 10:00 – noon or by appointment. Please come and see me to talk about any questions you might have on the class. I am here for you.

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Course Materials:

- **Textbook (required):** Christopherson, R.W. 2009. *Elemental Geosystems*, 6th Edition, Prentice Hall, New Jersey.
Available at the Campus Bookstore (three-hole punch format to reduce cost).
- Additional material may be distributed as class handouts or posted on the class web site.

Teaching Assistants (TAs) and Laboratory Experiences: SEE LAB SYLLABUS

Web site: Selected class material, grades, etc., will be available through UNR's WebCampus system - see details below.

Special Needs:

Students who require special classroom or exam accommodations because of a documented disability need to contact the instructor at the beginning of the semester. The Department of Geography is committed to equal opportunity in education for all students, and University policy states that it is the responsibility of students with documented disabilities to contact instructors during the first week of each semester to discuss appropriate accommodations to ensure equity in grading, classroom experiences, and outside assignments.

Grading:

By enrolling in this class, a student agrees to become familiar with the contents of the syllabus and requirements of the course, including the laboratory requirements, the grading system, dates for tests, frequency of quizzes, due dates, and consequences of missing tests or being late for an assignment.

Students will be graded according to their score on two Exams, ten Quizzes, a Writing assignment, Participation, and four Laboratory sessions. All tests count, so make sure you take all of them. Grades will be available on the class WebCT site.

- *Exams* are a combination of multiple-choice, fill-in, true/false, and short essay/exercise questions. There will be two exams during the semester, and the second exam will cover class materials presented since the first exam. There is no final exam because your final test will be the revised version of the writing assignment (see below).
- *Quizzes* include 5 questions, and should take no longer than 5 minutes. Each Quiz covers material presented since the previous test (either Exam or Quiz). The combined weight of all quizzes is equivalent to that of an exam. If you miss a Quiz without a valid justification, you will receive a 0, which will count towards your final grade.
- *Writing Assignment*, which is required by the core curriculum, will consist of a report on Lab 2. You will be first asked to write a draft, which will then be critically read by the instructors and peers. Attending the review session, and turning in the draft, will count for 10 points. Another grade will then be assigned to the revised version of your paper, which will account for 40 additional points. The final version of the paper should be no longer than three typewritten pages (500-1000 words), and will be due on the last class meeting. Additional instructions will be provided later in the semester.
- *Laboratory Experiences* are required for all students enrolled in Geography 103, regardless of their status with respect to the Core Curriculum. This is stated in the University Catalog, and there can be no exceptions. Laboratory grades will be based on written assignments, plus attendance and participation. Missing a lab session without a valid justification (see Rules of Conduct below) means losing all 20 points for that lab. Save all laboratory materials to document your attendance.

- *Participation*: this involves attending lectures, and answering questions posed in class. Points will also be taken out for coming to class and (1) using a cell phone, (2) being late, (3) reading a newspaper or other materials not related to class, (4) listening to a digital device (remove those earpieces before entering!).
- There is *no extra credit* work. There is ample opportunity to demonstrate your desire for a good grade through the regular assignments.

Grading Breakdown:

Exams (2 x 100)	200
Quizzes (10 x 10)	100
Laboratory experiences (4 x 20)	80
Writing assignment (10 + 40)	50
Oral presentation (25)	25
Participation (20)	20
TOTAL	475

Final letter grades may have a plus or minus according to the following scheme:

A = 93% or higher;	B- = 80-82.9 %;	D+ = 67-69.9 %;
A- = 90-92.9%;	C+ = 77-79.9 %;	D = 63-66.9 %;
B+ = 87-89.9 %;	C = 73-76.9 %;	D- = 60-62.9 %;
B = 83-86.9 %;	C- = 70-72.9 %;	F = < 60 %.

Each student will be able to monitor his/her grades through the class WebCT site. Students are encouraged to regularly check their grades. The instructor and TAs assume that, unless a student informs them, the posted grades are correct.

How to succeed in this class:

- ✓ Read the assigned sections of the textbook both before and after class.
- ✓ Ask questions.
- ✓ Be aware of test dates, and prepare in advance.
- ✓ Think carefully about your writing exercise.
- ✓ Practice your oral presentation.
- ✓ COME TO LECTURES AND LABS!

Rules of Conduct (*the tough stuff*):

- **Attendance.** Attendance is required to both lectures and labs. Keep in mind that your grade will improve if you come to class and take notes. Each lecture builds on the previous one, therefore it is important to keep up with the material. Also, talking with other students during a lecture disturbs the entire class, and will not be tolerated. If you need to know something, ask your instructor during or after class.
- **Tardiness.** BE ON TIME. Coming late or leaving early is a sign of disrespect to everybody else in the classroom. If you have a schedule conflict, please come and talk to me *in advance* – we probably can work out a solution.
- **Digital Devices.** No digital devices are admitted in class. Therefore, you cannot (1) use a cell phone, (2) tap on your laptop, (3) listen to music (remove those earpieces before entering!).

- **Exams and Quizzes.** All exams and quizzes are closed book, closed notes. It is YOUR responsibility to be on time for these tests, and to contact me before the test if you cannot attend. Students who arrive after the first person has completed the test will automatically receive a zero on that exam or quiz. Make-up examinations will be given only with an MD's note requesting permission in the case of illness, or a death certificate in the case of a family death. Medical excuses are invalid if turned in after the exam/quiz has been graded.
- **Test tips:** When asked to explain or discuss material in the homework, quizzes, and examinations, you should provide an answer in the form of sentences and paragraphs that detail what you are thinking. A list is not an explanation or discussion. Scientific writing needs to be very precise. If you are not doing well in class, contact the instructor as soon as possible. I will do everything possible to help you improve your grade, but waiting until mid-semester or later is typically too late.
- **Late Assignments:** Assignments are due when stated — late projects will be marked down at a rate of 10% of the grade per day. Unless otherwise noted, assignments are due by the beginning of class. Given the nature of the course and examination materials, there are no scheduled make-up exams.
- **Academic Dishonesty:** Academic dishonesty is against university policy as well as the system community standards. Academic dishonesty includes, but is not limited to, the following:
 1. *Plagiarism:* defined as submitting the language, ideas, thoughts or work of another as one's own. If you need to reference other people's work, give appropriate credit using quotes for exact wording, and always provide complete references.
 2. *Cheating:* defined as (1) obtaining or providing unauthorized information during an examination through verbal, visual or unauthorized use of books, notes, text and other materials; (2) obtaining or providing information concerning all or part of an examination prior to that examination; (3) taking an examination for another student, or arranging for another person to take an exam in one's place; (4) altering or changing test answers after submittal for grading, grades after grades have been awarded, or other academic records once these are official.

Sanctions for academic dishonesty may include the following: (1) canceling the student's enrollment in the class without a grade; (2) filing a final grade of "F"; (3) awarding a failing mark on the test or paper in question; (4) requiring the student to retake the test or resubmit the paper. For additional details on academic standards, please consult the University Catalog.

Class web site

The class web site is located on UNR's WebCampus system. In order to log onto the class web site you will need to:

1. Go to <https://webct.unr.edu/>
2. A window will come up asking for your Username and Password
 ***** *These are the same as your UNR NetID and Password* *****

(Your UNR NetID and Password need to be activated **before** trying to access the class web site).

After logging, you will be directed to a main page, which contains a link to all your WebCT courses. For this class, the web site will be used to post any updates to the calendar, the article to be used for the writing assignment, and your grades. Please remember to hit the "Reload" button of your web browser to view the most recent changes.

Skills required and/or developed for this course

This class requires and/or improves students' skills in the following areas:

- **Writing** (ability to write a complete, well constructed essay or paper using correct vocabulary, grammar, spelling, and punctuation)
- **Verbal Presentation** (ability to make oral presentations to a group in a clear, understandable, professional manner) – LABORATORY SESSIONS ONLY
- **Visual communication** (ability to understand and interpret graphics, posters and presentations that communicate ideas visually, through design, layout, color, symbols and graphic representation)
- **Comprehensive Reading** (reading for the main ideas in a manuscript and the ability to articulate these ideas in written annotation)
- **Library research** (ability to use appropriate search methods to find books, articles, maps, photographs, digital data, and other educational materials)
- **Field and/or lab work** (answer questions through the collection and analysis of data collected in the field or in the lab) – LABORATORY SESSIONS ONLY
- **Computing** (basic file management, printing, email, web search, and use of basic software programs including word processing and spreadsheets)
- **Quantitative analysis** (skills solving problems requiring numerical tools, manipulation of data, and simple models)
- **Qualitative analysis** (skills interpreting information in the form of observations, texts, and dialogue)
- **Accountability, efficiency, precision, and accuracy** (development of professional skills including punctuality, meeting deadlines, working efficiently alone and in groups, selecting appropriate methods for work and achieving accuracy in results)
- **Memorizing** (remembering facts, ideas or methods so they can be repeated in the same or equivalent form)
- **Analyzing** (investigating in depth the basic elements of an idea, experience or theory, such as a particular case or situation, and consider its components)
- **Synthesizing** (summarizing and organizing ideas, information or experiences into new, more complex interpretations and relationships)
- **Judgment** (making informed decisions about the value of knowledge, arguments or methods, such as examining how others have gathered and interpreted data, then assessing the soundness of their conclusions)
- **Applications** (applying theories or concepts to practical problems or in new situations)
- **Spatial analysis** (interpreting patterns of distribution and recognizing phenomena and processes as they occur in space)
- **Perception and geography** (assessing relationships between the experiences and perceptions of individuals/groups and the transformation of places and landscapes)
- **Regional understandings** (evaluating the organization of space into regions based upon understandings of physical and social environments)
- **Cultural interpretations of place and landscape** (observing the influence of culture and society in the transformation of places and landscapes)
- **Physical geographic analysis** (recognizing environmental processes and their spatial patterns as they are associated with changes in landscapes, climatic change, water regimes, and biotic interactions)
- **Human-environment interactions** (examining dynamics between social actions and the interpretations, use, quality, and change of physical environments)

Calendar (order of topics may change as class progresses):

Aug 25	Tu	Course framework and organization. The scientific method	Chapter 1
Aug 27	Th	Measuring and mapping the Earth	Chapter 1
Sep 1	Tu	Quiz # 1 Earth-Sun geometry. Seasonal variations	Chapter 2
Sep 3	Th	The atmosphere. The ozone "hole"	Chapter 2
Sep 8	Tu	Quiz # 2 Temperature differences around the globe and their controlling factors	Chapter 3
Sep 10	Th	The greenhouse effect. Global carbon cycle.	Chapters 7 & 16
Sept 14-17		Week of Lab 1	
Sep 15	Tu	Quiz # 3 Air motion. Large-scale winds. Global circulation	Chapter 4
Sep 17	Th	Oceanic circulation. Upwelling. ENSO	Chapter 4
Sep 22	Tu	Decadal climate modes: PDO, NAO	
Sep 24	Th	Exam review	
Sep 29	Tu	Exam # 1	
Oct 1	Th	Violent weather: hurricanes and tornadoes	Chapter 5
Oct 6	Tu	Humidity. Fog types. Cloud types	Chapter 5
Oct 10-13		Week of Lab 2	
Oct 8	Th	Quiz # 4 Violent weather: thunderstorms and lightning	Chapter 5
Oct 13	Tu	Lifting mechanisms. Atmospheric stability	Chapter 5
Oct 15	Th	Quiz # 5 Precipitation Mid-semester grade summary	Chapter 5
Oct 20	Tu	Weather maps. Mid-latitude cyclones	Chapter 5
Oct 22	Th	Quiz # 6 Climate diagrams. Climates of the world	Chapter 7
Oct 27	Tu	Climate of Nevada Writing exercise (Report on Lab 2) - First Draft ASSIGNED	Chapter 7
Oct 29	Th	Geologic time. Earth's interior. Rock types and geologic maps	Chapter 8
Nov 2-5		Week of Lab 3	
Nov 3	Tu	Quiz # 7 Continental drift, seafloor spreading, plate tectonics	Chapter 8
Nov 5	Th	Earthquakes	Chapter 9
Nov 10	Tu	Quiz # 8 Volcanoes	Chapter 9
Nov 12	Th	Writing exercise (Report on Lab 2) – First Draft DUE Critical review	
Nov 17	Tu	Exam review	
Nov 19	Th	Exam # 2	
Nov 24	Tu	Glacial cycles. Glacial landforms	Chapter 14
Nov 26	Th	THANKSGIVING – NO CLASSES	
Nov 30-Dec 3		Week of Lab 4	
Dec 1	Tu	Quiz # 9 Biomes, ecoregions, and ecosystems. Wildfire	Chapter 16
Dec 3	Th	Biodiversity. Species-area relationship	Chapter 16
Dec 8	Tu	Quiz # 10 Past environments in the Lake Tahoe Basin	
Dec 10	Th	Writing exercise (Report on Lab 2) – Final Draft DUE	