

## Geography 103 Geography of the World's Environments

**Course Description:** Geography, the description of the earth, is more than just place names. It is the study of places and processes and why certain regions have particular landscapes. Physical Geography focuses on the three basic physical systems of the earth: the Atmosphere, the Lithosphere, and the Biosphere. The first part of this course examines the atmosphere through the study of Climatology and Meteorology. The second part of the course examines the Lithosphere through the study of Geomorphology, the science of landforms. The final section examines the Biosphere through the study of Biogeography, the distribution of plants and animals. Since this class satisfies the requirement for Natural Sciences, it will emphasize the scientific method. We will use simple mathematics and statistics. The goal of this class is to provide you with a better understanding of the science of geography. Lectures focus on the physical processes that interact to create the diversity of landscapes found on earth. The tools you obtain in this class will help you understand the physical environment and allow you to be an informed observer of the landscape. Ideally, they should also make road trips more interesting!

### Schedule

Lectures: TuTh 9:30-10:45 A.M. in 215 Mackay Science Hall.

Laboratory: Four two-hour laboratory sessions as scheduled

**Office Hours:** TuTh 11:30-12:30 P.M. in IGT-Mathewson Knowledge Center – I will hang out on the 1<sup>st</sup> floor in the foyer near Peet's in a comfortable chair. Visiting with me and the TAs during office hours is the best way for us to get to know you and an excellent way for you to do well in the class by getting your questions answered. Or you can make an appointment, 325 Mackay Science Hall. Ph 784-6346, email: smensing@unr.edu.

**Required Textbook:** Elemental Geosystems 6th edition (2010). Christopherson, **A clicker is required**

### Course Grade

By enrolling in this class, you agree to make yourself 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 quizzes or tests and handing work in late.

Your grade will be calculated from a total of 300 points. The points possible for each test or assignment are listed below. Each student **must take every test**; however, the lowest score of Tests 1, 2 & 3 will be dropped. **If you miss Test 1, 2 or 3 and receive a 0, this will not be considered the low grade to drop.** The final is mandatory and the grade received for the final cannot be dropped.

There will be quizzes regularly. The total of the quizzes is equivalent to a midterm, so attending classes and taking quizzes is an excellent way to improve your grade.

**Laboratory sections are a mandatory requirement of natural science core courses. There are only four labs. If you miss 50% of the laboratory sections (2 labs) this will result in failing the course.**

Laboratory sections/lab reports	80 points	
Participation	20 points	
Quizzes (10 worth 5 points each)	50 points	
Test 1	50 points	
Test 2	50 points	
Test 3	50 points	
Final examination (Test 4)	<u>50 points</u>	
	-50 points	(Minus 50 points for dropping lowest of Tests 1, 2 & 3)
<b>Total</b>	<b>300 points</b>	

Final grades are based on a percentage of points earned, using a plus and minus grading system: As a guide, the minimum percentage of total points for each grade will be A (93-100%); A- (90-92.9%); B+ (87-89.9%); B (83-86.9%); B- (80-82.9%); C+ (77-79.9%); C (73-76.9%); C- (70-72.9%); D+ (67-69.9%); D (60-66.9%); below 60% is an F. When

determining the final grades, I will consider how well students have done in general. For example, if no students received 90% of the total points, I will consider lowering the cutoff rates accordingly, such that the cutoff for an A- would be 89% or 88% etc. Under NO circumstances will I raise these percentages such that 91% is required for an A- grade.

There is no extra credit work. Final grades are determined based on the work outlined in the syllabus. Please don't ask to do extra work. There are ample opportunities to earn a good grade through the regularly assigned work.

You can easily calculate your course grade throughout the semester to see how you are doing. For example, half-way through the course you will have taken two tests (50 points each), 5 quizzes (5 points each) and accomplished two labs (10 points each) for a total of 145 points. If your combined point total for each of these tests and labs equals 125 points, your percentage would be  $(125/145)*100$  or 86% - for a grade of B. We recommend you keep track as you go.

Grades will be entered on the WebCampus website and we encourage you to regularly check your grades to make sure they have been correctly entered. We assume that if you do not inform us otherwise, the posted grades are correct.

We recommend that you keep all work handed back to you during the semester in case there is a discrepancy between what you received for a grade and what we recorded in our grade sheet. In questions of discrepancies, we will trust the graded work.

**Laboratory sections:** All students in Geography 103, regardless of their status with respect to the Core Curriculum, are required to attend four laboratory sections. This is stated in the University Catalog. Laboratory grades will be based on written lab reports. The core curriculum requires a writing component. Laboratory reports will fulfill that requirement. Attendance at lab sections is mandatory to receive credit **As stated above, if you miss 50% of the lab experiences (2 labs) you will Fail the course.** There are only two acceptable excuses for missing a laboratory section: 1. Medical emergency - with documentation; or 2. University business, with documentation presented to the TA *prior* to your lab time. Save all your materials to document your laboratory attendance if necessary.

**Clickers:** I use clickers in this class because I have found it very helpful in knowing whether the class is understanding the material or not. No points are assessed for answering questions correctly or incorrectly. The clickers are only for our mutual benefit to better assess your understanding. I will use these nearly every day in class, so please do not forget to bring it. We will also use the clickers on exam days for answering multiple choice questions.

**Participation:** Participation is attending and answering questions posed in class with your clicker. 20 points will be given for participation. These points are automatically given to you when you use your clicker. There are 25 lecture days scheduled, so you will receive 1 point per day and we will not count 5 days. **You are responsible for remembering to bring your clicker to each class period.**

**Quizzes:** There will be 10 quizzes. Quizzes can be given on any day and are worth 5 points each. The quizzes are designed to encourage you to read the material before coming to class. The combined score of all the quizzes is equivalent to a midterm grade. This is an excellent mechanism for you to both stay on top of the course material and improve your overall grade. Alternatively, if don't attend class it will be difficult to receive a high grade in this class.

**Examinations:** Tests will consist of multiple choice, map questions, and short answer/essay questions. The schedule of examinations is listed below. Each exam is worth 50 points. Multiple choice questions will be answered using your clicker so remember to bring it. There are only two acceptable excuses for missing a test: 1. Medical emergency - with documentation; or 2. University business, with documentation presented to Dr. Mensing prior to the test.

**IF YOU REQUIRE YOUR TEST TO BE ADMINISTERED OUTSIDE OF THE CLASSROOM AT STUDENT SERVICES, WE WILL HAPPILY ACCOMMODATE YOUR NEEDS. YOU WILL NEED TO BRING US THE APPROPRIATE FORMS FROM THE TESTING CENTER.**

**Any student with a disability needing academic adjustments or accommodations is requested to speak with me or contact the Disability Resource Center (Thompson Building, Suite 101), as soon as possible to arrange for appropriate accommodations.**

**Natural sciences core curriculum:** This course is part of the natural sciences core curriculum and is designed to meet the following university guidelines:

1. Students use the scientific method. Each natural science course must include a minimum of four (4) meaningful laboratory experiences. These must involve gathering and analyzing data, drawing conclusions, and making inferences.
2. A significant part of each course is the application of appropriate mathematical techniques (at or beyond the core mathematics level) to the analysis of data.
3. The course includes current scientific topics as well as classical examples relevant to today's world.
4. The course requires a critical review of current scientific literature outside the textbook.
5. Each course emphasizes critical writing at all appropriate points, e.g. laboratory analysis reports, reviews of journal and periodical articles, term papers, and examinations.

## SCHEDULE OF CLASS TOPICS, TESTS, AND READING

Date	Topic	Reading
<b>Part 1. Earth's Climate</b>		
Aug. 30	Course introduction: Scientific method	Ch. 1
Sept. 1	Measuring and mapping the earth	
6	Earth/Sun relations / Seasonality	Ch. 2
8	The atmosphere	
13	Global temperature, Greenhouse effect	Ch. 3
15	Land and water heating differences	Ch. 5 pgs. 147-150
20	Atmospheric pressure gradients	Ch. 4
22	<b>Test #1</b>	
<b>Part 2. Earth's Weather</b>		
27	Atmospheric pressure gradients cont'd	Ch. 4
29	Global atmospheric circulation	
Oct. 4	Humidity and adiabatic processes	Ch. 5
6	Adiabatic processes and worksheet	
11	Clouds and rain processes / Air masses / Storms	
13	Global climate patterns	Ch. 7
18	Global climate change	
20	<b>Test #2</b>	
<b>Part 3. Earth's Physical Landscape</b>		
25	Geologic time Rocks and minerals	Ch. 8
27	Plate tectonics and earth history	
Nov. 1	Plate tectonics - processes	
3	Folding & Faulting	Ch. 9
8	Volcanoes processes	
10	Volcanoes landforms	
15	Weathering and Erosion	Ch. 10 pg. 340-347
17	<b>Test #3</b>	
22	Movie day - Critiquing science in popular culture - <b>VOLCANO</b>	
24	<b>Thanksgiving Holiday</b>	
<b>Part 4. Glaciers, Paleoecology and Biogeography</b>		
29	Glacial cycles	Ch. 14
Dec. 1	Glacial processes	
6	Glacial Landforms	
8	Biomes vs. Wallace's realms	Ch. 16 pg. 552-572
13	Geography of domestication and crop plants	
15	<b>FINAL EXAM (Test #4) THURSDAY DEC. 15<sup>th</sup> 10:15 – 12:15 A.M. IN THIS ROOM</b>	