

Preliminary

# Geography 141: The Natural Environment (Summer 2016)

**Instructor:** Devin Lea ([dlea@uoregon.edu](mailto:dlea@uoregon.edu))

**Office:** Condon 105

**Online Office Hours:** TBA

**Graduate Teaching Fellows:**

TBA

**\*\* NOTE \*\***

This is an online course where all lectures, labs, quizzes, and other course material will be posted on Canvas and exams are administered by the University of Oregon Distance Education. You will receive emails from both me and distance education about setting up a verified exam proctor.

**Required Materials:**

- 1) *Physical Geography, 4<sup>th</sup> Edition* by de Blij, Muller, Burt, and Mason
- 2) Google Earth desktop application, version 6 or higher (this is free software you can download, and this software is also installed on Academic Workstation computers in campus libraries)
- 3) Other material will be made available on [canvas.uoregon.edu](http://canvas.uoregon.edu)

**Computer skills required for course:** This course will largely be administered through Canvas. In Canvas, you will need to know how to send a message, attach files and documents, and check that your email address is current. Please take time at the beginning of the course to familiarize yourself with Canvas and Google Earth if you are not already familiar.

**Course Objectives:**

1. Using readings, lectures, and laboratories to develop an understanding and appreciation of natural processes that occur every day or over every year. The basics of meteorology (study of the atmosphere and weather), climatology (longer-term trends in weather and its variation over the earth), biogeography (distribution of life on earth) and geomorphology (processes that shape the surface of the earth).
2. Students will understand the important properties of maps and students will use maps and digital mapping tools to explore spatial patterns on earth.
3. Topics in meteorology will range from why weather changes daily to the causes of global patterns of climate. Students will be able to interpret patterns, and explain causes, of maps of various weather elements (temperature, air pressure, humidity, wind).
4. In climatology, students will study the causes of seasonal patterns of temperature and rainfall in different locations on earth. Students will be able to link the causes of these seasonal patterns to patterns in atmospheric circulation, and the role of various other factors such as elevation and location within continents. Last, students will be able to roughly locate climatic data (presented as a graph) to actual locations on earth.
5. In biogeography, students will be able to explain why climates produce major biome types on earth, including the causes of the changes in vegetation in Oregon.
6. In geomorphology, students will understand the pathways of water from precipitation to ocean and atmosphere, and how rivers sculpt the surface of the earth. Students will be able to identify mass-wasting and glacial features from topographic maps.

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### **Timeline and time-management suggestions for this online course:**

The course will be run in two main modules. Module one will open at the beginning of class and will have all assignments required for completion before the midterm. Module two will open at the conclusion of week 4 and will have all assignments required for completion before the final exam. Thus you will generally work at your own pace and be expected to be completing all coursework in a timely manner.

### **Posting questions related to the course:**

If you have any questions arise while working on a weekly module, please post them in the respective week's discussion under the Discussion tab in our Canvas course page. This entails any questions related to labs, quizzes, lecture material, or other course material. Please post the questions in the Discussion tab so Jean, Oliver, or myself can answer the question for everyone to see, in case other people have the same question come up later. Please check the boards to see if your question has been asked and answered before posting.

My online office hours will be TBA. These are the times I will read and respond to your discussion question posts. If you want to meet with me in person, please email to schedule a meeting time. GTFs also have online office hours and will respond to lab-based questions posted on the canvas discussion boards during their listed online office hour times.

### **Assignments and Grading:**

Your class grade will be based on your two exams (40% of the total grade), quizzes (25% of total grade), lab assignments (25% of the total grade), and "in-class" participation (10% of the total). Grades are rounded to integers. Grades are not curved, but the grading scale reflects the breadth and depth of material covered. Lower grade boundaries are:

A+:>98; A:92; A-:88; B+:84; B:80; B-:76; C+:72; C:68; C-:64; D+:60; D:56; D-:52

**NOTE:** You must receive a passing grade in the lab section of the course in order to pass the class.

**Exams (40% of total grade):** There will be two exams, each worth 20% of your final grade. Except in the case of true emergencies, you must contact me prior to the exam if you are going to miss the test; otherwise you will receive a grade of zero.

Midterm and final exam will each be proctored over a two week time window (weeks 3 and 4 for the midterm, weeks 7 and 8 for the final exam). If you are on the UO campus, you will sign up for exam times with distance education. If you are off-campus, you must work with distance education and your proctor to establish a time to take the midterm and final exam during the available exam time period. Exams are approximately 75% based on multiple choice questions, and the remainder are fill-in-the-blank or short essay questions.

**Quizzes (20% of total grade):** There are 8 quizzes in the quarter, 1 per week. Quiz questions will come from lecture and readings for that week's material.

You will have 3 attempts per week for each quiz. You must finish each individual attempt within 60 minutes. You will be shown the correct answers after each attempt. Each time you make an attempt you will get different questions drawn randomly from a question pool, but each question number will provide a similar question conceptually on each of your three attempts. Your highest-scoring attempt will be used for your grade.

Note that **ALL** quiz scores will be included in your final grade.

**Labs (20% of total grade):** There are 8 labs in the quarter, 1 per week. You can open and modify the lab without submitting and Canvas will save your work, but you only get 1 submission.

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**Late submissions:** No late submissions for quizzes or labs are accepted.

**“In-class” participation (10% of the total grade):** You will answer questions related to the lectures and short readings. These questions are participation-based and are meant to help reiterate key class concepts or provide an opportunity to reflect on larger thought-provoking questions I want you to take away from this class.

### Academic Honesty:

Cheating, such as copying material from other students on tests or lab assignments will result in failing the test at a minimum and may require involvement from the Dean of Students. While we encourage you to talk about the lecture material and lab material outside of class, copying other's work is not allowed and electronic submission of the lab material makes detecting such cases less difficult. In serious cases, you will flunk the class or be expelled from the university.

### Disability Services Notice:

I want to ensure a quality learning experience to all students. If you need specific accommodations to obtain the most you can out of this class, please let me know by (1) either contacting me yourself or having campus learning services contact me about your particular needs, and (2) providing the appropriate documentation from campus learning services. I will make every effort to accommodate your needs, but you must notify me by the first week of class if you need special arrangements.

### Note:

I consider this syllabus a contract between myself and the students in this course. In writing this syllabus, I have obligated myself to follow the policies and procedures contained herein. By registering for this class, you are responsible for understanding and following these policies as well. I reserve the right to make changes to the syllabus. You will receive written notification if major changes to the course occur.

## Tentative Schedule (Subject to change)

Week	Dates	Topic (Lab Topic)	Units
1	6/20 – 6/26	Introduction; Geography Essentials and Planet Earth; Mapping Earth's surface and Earth-sun relationships; (Map skills)	1-4
2	6/27 – 7/03	Radiation and heat balance; the Greenhouse Effect; Composition and temperature of the Atmosphere; (Earth-Sun relationships)	5,6,19
3	7/04 – 7/10	Atmospheric pressure; winds; Coriolis force and geostrophic winds; Ocean currents; (Temperature)	7-10
4	7/11 – 7/15	Atmospheric moisture and weather (Humidity and Adiabatic Processes)	11-13
<b>Midterm Exam administered between 07/05 and 07/15</b>			
5	7/18 – 7/24	Climates, natural and human impacts on climate (Global climates)	15-19
6	7/25 – 7/31	The Biosphere (Global Biomes & Climate Change)	20,21,24,25
7	8/01 – 8/07	Plate movement, mountain formation, Earthquakes, Volcanoes, Weathering (Topographic maps + air photos)	30-33
8	8/08 – 8/12	Weathering, Mass Wasting, Groundwater, Rivers, Glaciers (Landforms & Mass Wasting)	35-41, 43-45
<b>Final Exam administered between 08/01 and 08/12</b>			