

# **GEOG 141: The Natural Environment**

## **Fall 2020**

**Instructor:** Mark Fonstad

**Email:** fonstad@uoregon.edu (Office: 107F Condon, Phone: 541-346-4208, but I'm unlikely to use these)

**Office Hours:** Thursdays 2:00 -- 3:00pm or by appointment

**Lecture:** Tuesday & Thursday, 12:15 – 1:45pm – **All Lectures are Remote this term**

### **Lab Instructors and Weekly Lab Sections (All Labs are Remote this term):**

**Alison Deak:** Thursdays 8:00-9:00, 9:30-10:30, 2:00-3:00

Email: adeak@uoregon.edu

Office Hours: Thursdays 3:00-4:00

**Nicole Merrill:** Tuesdays 2:00-3:00, 3:30-4:30, Wednesdays 9:30-10:30

Email: nmerrill@uoregon.edu

Office Hours: Thursdays 10:00-11:00

**Dakota Whitman:** Wednesdays 11:00-12:00, 12:30-1:30, 2:00-3:00

Email: dwhitman@uoregon.edu

Office Hours: Mondays 1:00-2:00

### **Course Philosophy**

1. Nobody signed up for this. Not for the sickness, not for the social distancing, not for the sudden end of our collective lives together on campus and outside observing the world.
2. The humane option is the best option. We are going to prioritize supporting each other as humans. We are going to prioritize simple solutions that make sense as best as we can. We are going to prioritize sharing experiences and communicating clearly. We will work to make this experience as stress-free as possible.
3. We obviously cannot just do the same thing online. Some experiences are no longer possible. Some objectives are no longer possible. Some expectations are no longer possible. But there is still a great deal we can all learn and use for improving ourselves. We are going to learn through communication and through directed play.
4. We will remain flexible and adjust to the situation. Nobody knows where this is going and what we'll need to adapt. Everybody needs support and understanding in this unprecedented moment.

### **Objectives of the course**

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 the solid earth, meteorology and climatology, biogeography, and geomorphology. Students will understand the important properties of maps and students will use maps and digital mapping tools to explore spatial patterns on earth. 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). 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 to actual locations on earth. In biogeography, students will be able to explain why climates produce major biome types on earth. In geomorphology and hydrology, 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, and be able to create and explain the patterns in longitudinal profiles of rivers.

## Required materials

1. Clearly as this class is now fully remote, you'll need a computer from which you can participate in Zoom-based lectures and labs, and from which you can use our class Canvas site. Both lectures and labs will be Zoom-based and will be recorded so that you can participate asynchronously if you choose, though we strongly urge synchronous participation.
2. There is no required textbook for this class. My intent for this term is to use lightly-edited lecture transcripts and class figures as the textbook, which will be made available in our class Canvas site. For those who would find secondary readings useful for many of the class topics, I have placed links to various online textbook readings next to each lecture in our class schedule at the end of this syllabus. The online secondary readings are from the following sites: (a) <https://slcc.pressbooks.pub/physicalgeography/> and (b) [http://www.earthonlinemedia.com/ebooks/tpe\\_3e/contents.html](http://www.earthonlinemedia.com/ebooks/tpe_3e/contents.html). Exams will be based specifically on lecture materials, not from these secondary readings.
3. **Laboratory Instructions.** These will be made available to you via Canvas. We expect you to review them before the lab section.
4. **Google Earth Pro** desktop application, version 6 or higher (free software). Don't use the browser version – actually download the standalone software.
5. Additional and supplementary materials will be made available on [canvas.uoregon.edu](https://canvas.uoregon.edu).

## Grading

Two fieldwork exercises (10% of total), Two exams (50% of total), Weekly laboratories (20% of total), and Weekly quizzes (20% of total). You must receive a passing grade in lab in order to pass the class. The final grade scale is as follows: A+: >98; A: 92-98; A-: 90-92; B+: 88-90; B: 82-88; B-: 80-82; C+: 78-80; C: 72-78; C-: 70-72%; D+: 68-70; D: 62-68; D-: 60-62; F: <60. Grades will be posted on Canvas along with any announcements. I reserve the right to offer extra credit, but you should not expect it or ask for it. If you have questions about your overall grade(s), please make an appointment with me or with your lab instructor to discuss your concerns.

### Fieldwork exercises (10% of total grade)

It is challenging to get large classes outside, but the ability to look around and understand what is going on is an important component of this course and to your capacity to interpret the world. The two fieldwork exercises will not be very time consuming, but will require you to get out look around. They will be posted in Canvas.

### Exams (50% of total grade)

There will be two tests, Exam 1 (25%) and Exam 2 (25%). Exams will be done through our class Canvas site unless we decide there is a better way to do them. Students who miss a test without a documented excuse will receive a score of ZERO for that test. Makeups for missed exams will require a documented excuse (medical, emergency, etc.). Except in the case of true emergencies, you must contact me prior to the exam if you are going to miss it; otherwise you will receive a grade of zero. University policy requires students take the final exam on the scheduled final exam date/time.

### Labs (20% of total grade)

The weekly one hour labs are major part of this course. There are nine lab weeks, but we will drop your lowest-scoring week before calculating the total lab grades. The labs provide you with the opportunity to apply some of the concepts you have learned in class and in readings, to learn about aspects of the course material in more depth, and to ask questions about points that interest or confuse you. You may choose to do the labs synchronously or asynchronously, though we strongly urge you to do them synchronously, so that you have the opportunity to ask your instructor questions in real time. Late labs are not graded. **Labs begin during week 1.**

You will most likely not finish the lab during the lab period, so you may have to put in some time outside the 50-minute period to complete the lab. It is to your advantage to read through the lab before the lab session. This will allow you to ask questions about any parts that cannot be finished during the lab period.

You will enter your lab answers and submit them by computer via Canvas. Labs are due by 11:59pm six days after the lab (e.g. Wednesday labs are due on the following Tuesday at 11:59pm); otherwise you will receive a grade of zero for the lab. Your lowest lab grade of the quarter will not be included in the final tally. Cheating on labs will not be tolerated and will be reported to the Student Judicial Affairs Office.

### **Quizzes (20% of total grade)**

In addition to the weekly one-hour labs online, there is also a weekly online quiz based on materials discussed in lab sections. For each quiz, you will get three attempts to take the quiz, and Canvas will record the score from the attempt at which you did the best. Your lowest quiz grade of the quarter will not be included in the final tally. Cheating on labs will not be tolerated and will be reported to the Student Judicial Affairs Office.

### **Participation**

While synchronous attendance at lecture and labs is not mandatory, you are **strongly** encouraged to attend every lecture and lab in order to gain the knowledge crucial for understanding the course material and for doing well on course exams.

During lectures and labs please be respectful of everyone's learning experience. This includes:

- Have your audio muted unless your instructors say otherwise. Whether your video is on or off is up to you.
- If you have questions during a lecture, type it into the Zoom chat box, so that either one of the instructors can answer it.
- Zoom-bombing, should it occur and found to be from a registered student, will lead to formal action by the University of Oregon.

### **Contacting us**

The fastest way to contact us is via email. When asking questions about the policies of the class, remember that the assignments, exam dates, as well as policies on late/make-up work are clearly stated in this syllabus. We may not be able to be contacted on evenings, weekends, and holidays.

### **Academic Dishonesty**

We will not tolerate cheating or academic misconduct/dishonesty in my courses; examples of these behaviors include (but are not limited to):

- Plagiarism (passing off the work of another as that of your own)
- Copying answers from your classmates during exams/activities
- Any other actions that might give you an unfair advantage over your classmates.

All cases of academic dishonesty/misconduct will be referred immediately to the Student Judicial Affairs Office. The penalties for engaging in academic dishonesty and/or misconduct can range from a grade of "F" for an assignment to an automatic failure of the course. Please consult the university policy at <https://dos.uoregon.edu/social-misconduct>

### **Late/Make-Up Work**

Late labs and quizzes will not be accepted and make-up work will not be assigned, except in extreme circumstances and where you have documentation (i.e. doctor's note). If you must miss a lab section or exam due to illness or other unavoidable circumstances, you MUST notify the instructor prior to missing if possible.

### **Disability Services Notice**

I work hard to ensure a quality learning experience for all students. If you need specific accommodations to get the most out of this class, please let me know by (1) informing me of your particular needs, and (2) providing the appropriate documentation from the campus learning services office. 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. You are responsible for understanding and following these policies as well. I reserve the right to make changes to this syllabus. You will receive verbal and written notification of major changes to course policies, procedures and content.

## **Tentative Class Schedule:**

### **WEEK 1**

Lectures:

Sep 29 (Tues): Introduction, The World Made Map

Oct 1 (Thurs): The Restless Earth

Lab 1: Map Skills

Secondary Readings: Ritter -- Chap 1, 14, 15

### **WEEK 2**

Oct 6 (Tues): The Earth's Deep Time

Oct 8 (Thurs): The Planet Water

Lab 2: Solid Earth

Secondary Readings: Ritter – Chap. 14, 15, 7

### **WEEK 3**

Oct 13 (Tues): Lung Nectar

Oct 15 (Thurs): More Light!

Lab 3: Temperature & Humidity

Secondary Readings: Ritter – Chap. 3, 4, 5

### **WEEK 4**

Oct 20 (Tues): The Endless Wind

Oct 22 (Thurs): The Boundless Ocean

Lab 4: Earth-sun relations and seasons

Secondary Readings: Ritter – Chap. 6, Dastrup -- part VII

### **WEEK 5**

Oct 27 (Tues): The Calm Before the Storm

Oct 29 (Thurs): MIDTERM

Lab 5: Global Circulation

Secondary Readings: Ritter – Chap. 7, 8

**WEEK 6**

Nov 3 (Tues): A World of Many Climates

Nov 5 (Thurs): Overheated

Lab 6: Global Climates

Secondary Readings: Dastrup – part X

**WEEK 7**

Nov 10 (Tues): Creation and Destruction

Nov 12 (Thurs): Cycles of Nature

Lab 7: Climate Change

Secondary Readings: Dastrup – parts V.1, V.2

**WEEK 8**

Nov 17 (Tues): Mountains and Rivers without End

Nov 19 (Thurs): The Sands of Time

Lab 8: Weathering and Mass Movements

Secondary Readings: Ritter – Chap. 17, 18, 20

**WEEK 9**

Nov 24 (Tues): Frozen

Nov 26 (Thurs) – NO CLASS; THANKSGIVING BREAK

Lab 9: No Labs

Secondary Readings: Ritter – Chap. 19

**WEEK 10**

Dec 1 (Tues): The Life of Earth

Dec 3 (Thurs): The Great Ecosystem

Lab 10: Rivers

Secondary Readings: Ritter – Chap. 12, 13

**Dec 9 (Wed): 8am-10am – FINAL EXAM**