

ESS/GR 210: Physical Geography

Fall 2020

Course Overview: This is a course about the processes that shape our planet. We will study the Earth's climate, water cycle, landforms, and environment and learn about how these aspects of the planet interact with each other. Throughout the course, we will also consider how human activities affect these Earth processes. By the end of this course, you should be able to understand and analyze the basic features of the physical environment from local to global scale.

Class Times: Tuesday, Thursday 2:00-3:15 pm. Live streamed via Zoom (see Links on Canvas)

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Office Hours: Thursdays 3:30-4:20 pm through Zoom meetings

Teaching Assistant: Emily Blackaby

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Office Hours: Tuesdays 4-5pm and Fridays 1-2pm through Zoom meetings

Required Text: Elemental Geosystems, 9th edition, by Robert W. Christopherson and Ginger H. Birkeland, published by Pearson

- *Attendance and Class Participation:* You are responsible for attending all classes. If you miss class, you should make arrangements to get class notes from someone else. For full credit on your class participation grade, you should actively engage in all class activities and discussions.
- *Assignments:* All assignments are due by 2:00 pm on the due date specified. To avoid losing points on late assignments, you must request an extension at least 24 hours before the assignment is due.
- *Academic integrity:* You are responsible for adhering to all university policies on academic integrity (<https://resolutioncenter.colostate.edu/student-conduct-code/>).

Grading: Your grade will be based on your performance on exams, quizzes, assignments, and participation in class activities. The total course grade is distributed between the following categories:

Quizzes	20% (5 @ 4% each)
Assignments:	20% (4 @ 5% each)
Final Report:	10%
Exams:	50% (Exams 1&2 @15% each; Final Exam 20%)

Canvas: You are expected to have access to and regularly log in to Canvas (<http://info.canvas.colostate.edu/login.aspx>). Important class information will be posted, quizzes/exams will be given, and most assignments will be submitted there. Grades are also posted on Canvas. Note that posted grades will stand and any class-wide adjustments to final course scores are at the discretion of the instructor. The standard plus/minus system is used: A+, A, A-, B+, B, B-, C+, C, D, F.

Lecture, Assignment, Quizzes, and Exam Schedule:

Week	Dates	Topics (Subject to Change)
1	8/25	Introduction and Course Overview & Ch. 1: Essentials of Geography
	8/27	Ch. 1: Essentials of Geography, cont.
2	9/1	Ch. 1: Essentials of Geography, cont.
	9/3	Ch. 2: Solar Energy, Seasons, and the Atmosphere <i>Quiz 1, Assignment 1</i>
3	9/8	Ch. 2: Solar Energy, Seasons, and the Atmosphere, cont.
	9/10	Ch. 3: Atmospheric Energy and Global Temperatures <i>Quiz 1 Due, Assignment 1 Due</i>
4	9/15	Ch. 3: Atmospheric Energy and Global Temperatures, cont. <i>Quiz 2, Assignment 2</i>
	9/17	Ch. 4: Atmospheric and Oceanic Circulations
5	9/22	Ch. 5: Water and Atmospheric Moisture <i>Quiz 2 Due, Assignment 2 Due</i>
	9/24	Exam 1
6	9/29	Ch. 5: Water and Atmospheric Moisture, cont.
	10/1	Ground-Based Atmospheric Measurements
7	10/6	Ch. 6: Water Resources
	10/8	Ch. 7: Earth's Climatic Regions <i>Quiz 3</i>
8	10/13	Google Earth (Pro) introduction and application <i>Assignment 3</i>
	10/15	Ch. 8: Climate Change <i>Quiz 3 Due</i>
9	10/20	Ch. 9: The Dynamic Planet
	10/22	Ch. 10: Tectonics, Earthquakes, and Volcanism <i>Assignment 3 Due</i>

10	10/27	Ch. 11: Weathering, Karst Landscapes, and Mass Movement
	10/29	Ch. 12: River Systems
11	11/3	Exam 2
	11/5	Ch. 13: Oceans, Coastal Systems, and Wind Processes
12	11/10	Ch. 14: Glacial Landscapes and the Cryosphere <i>Assignment 4</i>
	11/12	Ch. 15: The Geography of Soils <i>Quiz 4</i>
13	11/17	Ch. 15: The Geography of Soils <i>Assignment 4 Due</i>
	11/19	Ch. 16: Ecosystem Essentials <i>Quiz 4 Due, Final Report Assigned</i>
14	11/24	Fall Break/University Holiday- No Classes
	11/26	
15	12/1	Ch. 16: Ecosystem Essentials
	12/3	Ch. 17: Biogeography and Terrestrial Biomes <i>Quiz 5</i>
16	12/8	Ch. 17: Biogeography and Terrestrial Biomes, cont. <i>Final Report Due</i>
	12/10	Special topics ----- Modeling from observations to simulations <i>Quiz 5 Due</i>

FINALS WEEK: Exam- December 17th, 2:00 pm to 4:00 pm

Exams: There will be two in-class exams and a final exam. Test format will generally include multiple choice, true/false, matching questions and short/long answer questions. The exams will contain recently covered and cumulative material.

Quizzes: Quizzes will be given throughout the semester to test your knowledge of the current material. 5 graded quizzes will be given on Canvas and will be available online for a week.

Other Materials: Any other readings and reference materials will be posted on Canvas and/or be available from the CSU library. The research librarian supporting this course is Jocelyn Boice. Contact her by email at jocelyn.boice@colostate.edu with questions or to set up an appointment for in-depth research help.