

Introduction to Physical Geography

Geography 1030

Welcome to *Geography 1030: Introduction to Physical Geography*. Throughout the next semester we will be examining the major earth systems that affect our planet. With a particular emphasis on the spatial distribution over the Earth's surface, this course is designed to acquaint students with the composition and processes of the biosphere, lithosphere, hydrosphere, and atmosphere. Working knowledge of the physical science, like climatology, meteorology, environmental science, are necessary as well. Because the focus of the course is on the physical forces of the planet, the overarching goal of this course is to give students the knowledge needed to understand the physical systems that have shaped our planet and how they will continue to affect life on Earth.

The course is divided into two parts, this lecture-based section focused on constructing students' functional knowledge of the course concepts related to physical geography, and a lab section with practical applications of the same content. The two sections are meant to complement one another to further expand students' knowledge of the course concepts.



Instructor Information

Instructor: Kyle Tredinnick, M.A.

Email: ktredinnick@unomaha.edu

Office Hours: Wednesday 10:30-11:30
via zoom (or by appointment)
[Join Here](#)

Phone: 402-554-2662 (Office phone
for Department of
Geography/Geology)

Course Meeting Time:
Tuesday/Thursday 4:00-5:15

Physical Geography Learning Outcomes:

Upon completion of the course students should be able to:

1. Demonstrate a broad understanding of the fundamental laws and principles of science and interrelationships among science and technology disciplines;
2. Demonstrate a broad understanding of various natural and/or physical phenomena that surround and influence our lives;
3. Describe how scientists approach and solve problems including an understanding of the basic components and limitations of the scientific method; and
4. Solve problems and draw conclusions based on scientific information and models, using critical thinking and qualitative and quantitative analysis of data and concepts in particular to distinguish reality from speculation.

Required Texts:

- Geosystems 10th Edition by Christopherson & Birkeland
- Physical Geography Laboratory Manual for McKnight's Physical Geography: A Landscape Appreciation (12th Edition)

Classroom Expectations

In-Person Attendance

Participation is vital to your success in this course. Materials will be covered in class that may not necessarily be present in the text. Though the course is lecture-based, discussions and the ability to ask questions will provide students with the ability to deepen your understanding of the course's concepts.

While in class please abide by the following considerations:

- If you need to use your phone, talk to another student, or use the bathroom please quietly excuse yourself to do so and return as soon as possible.
- Utilize your phone's ability to pause notifications (you can create a reoccurring calendar reminder and make the setting that your phone turns off notifications from specific applications during those times)

Virtual Attendance

As preferable as it might be, it is understood that students might not be able to attend every class in person due to the COVID-19 pandemic. Students who are unable to attend in-person are expected to still be present through Zoom.

Due to policies regarding COVID-19 it is understood that students may be out for weeks at a time. I plan on recording lectures and making those available to students who are ill or choose not to attend for legitimate medical reasons.

While attending virtually please abide from the following considerations:

- Please have your microphone muted unless you are needing to ask a question or contribute to the discussion
- Set yourself up in a distraction-free environment where you are able to focus on the course content
- Recognize that virtual attendance is not an "easier" and that it may require even more effort to remain focused and free from distractions. Plan accordingly
- Ask questions! Utilize the chat box or unmute yourself to interject for expanding or clarifying questions.

Course Grading and Structure

Grading Scale

98-100 (A+), 93-98 (A), 90-92 (A-), 87-89 (B+), 83-86 (B), 80-82 (B-), etc. < 59 (F)

Course Grading

Your course grade will be based on 1) lecture (~65%) and 2) laboratory (~35%).

Your grade for lecture will be based on:

Lecture Exam 1	50 points	(Chapters 1-4)
Lecture Exam 2	50 points	(Chapters 5-7,9-10, 19-20*)
Lecture Exam 3	50 points	(Chapters 8, 14, 16-17)
Lecture Exam 4 (final)	50 points	(Chapters 11-13, 15,18)
<u>Quizzes (Canvas)</u>	<u>100 points</u>	
Total for lecture	300 points	

Please consult your laboratory syllabus regarding points and grading in that section of the course. (Laboratory typically consists of about 200 points)

Please contact me with questions regarding your grade via email to set up a time to discuss your scores via zoom.

Exams

Each end of unit examination will be comprised of multiple choice and true/false questions related to materials from the lectures, readings, and discussions from the chapters. Though not a focus of the course, place locations are integral to the study of geography and students should expect to read and interpret maps and geographic information.

Exams will cover:

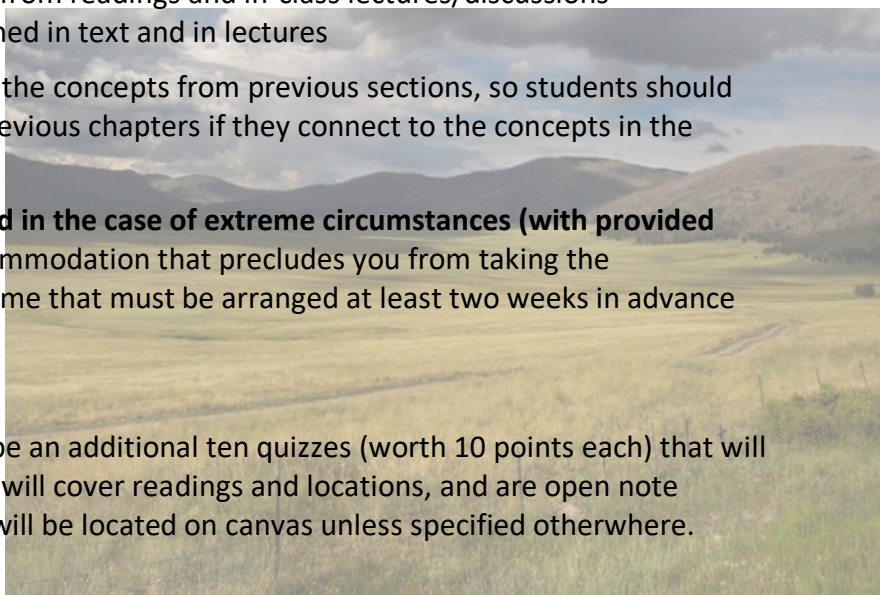
- Key vocabulary and concepts from readings and in-class lectures/discussions
- Geographic locations mentioned in text and in lectures

The course is designed to build upon the concepts from previous sections, so students should expect to see questions related to previous chapters if they connect to the concepts in the chapters being covered.

Make up exam may only be arranged in the case of extreme circumstances (with provided documentation). If you have an accommodation that precludes you from taking the examination during the designated time that must be arranged at least two weeks in advance of the arranged exam time.

Quizzes

Throughout the semester there will be an additional ten quizzes (worth 10 points each) that will be assigned through canvas. Quizzes will cover readings and locations, and are open note unless otherwise indicated. Quizzes will be located on canvas unless specified elsewhere.

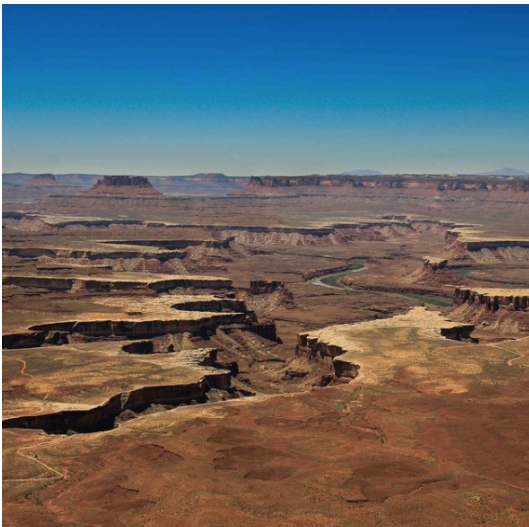


Course Policies

Academic Integrity

The University takes the issue of academic integrity very seriously in the maintenance of a fair and equitable learning community. Any students found to be in violation of the Academic Integrity policy will be subject to academic and disciplinary sanctions. Violations include plagiarism, copying or cheating on exams and assignment, fabrication or misrepresentation of work's originality, or any of the other infractions outlined in the [University's Academic Integrity standards](#).

Violations will result in an automatic zero on the given examination or assignment. Repeated offense may result in dismissal (with a grade of F) from the course and potentially further referral to UNO administration.



Accessibility Services

Reasonable accommodations are provided for students who are registered with Accessibility Services Center (ASC) and make their requests sufficiently in advance. For more information, contact ASC (Location: 104 H&K, Phone: 402.554.2872, Email: unoaccessibility@unomaha.edu.)

The Accessibility Services Center (ASC) recognizes that amidst the rolling transition back to campus, some students may still need to exercise physical distancing. This is especially the case for students who have underlying health conditions or who may be taking care of others who are at-risk for COVID-19. Please contact the ASC if there are concerns about on-campus courses and programming related to COVID-19.

Tentative Course Schedule

Week	Topic	Chapter(s)
Week 1: 1/11 – 1/15	Introduction to Geography	Chapter 1: Essentials of Geography
	Mapping and Geospatial Visualization	Chapter 1: Essentials of Geography
Week 2: 1/18 – 1/22	Earth's Cosmic Address	Chapter 2: The Energy Atmosphere System
	Earth- Sun Relations	Chapter 2: The Energy Atmosphere System
Week 3: 1/25 – 1/29	Atmospheric Composition	Chapter 3: Earth's Atmosphere
	Pollutants & Human Imprint	Chapter 3: Earth's Atmosphere
Week 4: 2/1-2/5	Heat Transfer	Chapter 4: Atmospheric Energy and Global Temperatures
	Temperature Control	Chapter 4: Atmospheric Energy and Global Temperatures
Week 5: 2/8-2/12	Unit I Test	Chapters 1-4
	Wind and Atmospheric Circulation	Chapter 5: Atmospheric and Oceanic Circulation
Week 6: 2/15-2/19	Hydrological Cycle and Ocean Currents	Chapter 5: Atmospheric and Oceanic Circulation Chapter 6: Water and Atmospheric Moisture
	Weather Patterns	Chapter 7: Weather
Week 7: 2/22-2/26	Extreme Weather Events	Chapter 7: Weather
	Classifying Climate	Chapter 9: Earth's Climactic Regions
Week 8: 3/1-3/5	Earth's Ecosystems & Biomes	Chapters 19: Ecosystem essentials & Chapter 20: Terrestrial Biomes
	Global Climate Change	Chapter 10: Climate Change
Week 9: 3/8-3/12	Unit II Test	Chapters 5-7, 9-10, 19-20
	Hydrology and the Hydrosphere	Chapter 8: Water Resources
Week 10: 3/15-3/19	Spring Break	
Week 11: 3/22-3/26	River Drainage and Streamflow	Chapter 14: River Systems
	Flood Control	Chapter 14: River Systems

Week 12: 3/29-4/2	Oceans and Coastal Systems	Chapter 16: Oceans and Coastal Systems
	Glaciology and Earth's Ice Caps	Chapter 17: Glacial Landscapes and the Cryosphere
Week 13: 4/5-4/9	Unit III Test	Chapter 8, 14, 16-17
	Earth's Geosphere	Chapter 11: The Dynamic Planet
Week 14: 4/12-4/16	Plate Tectonics & Continental Drift	Chapter 12: Tectonics, Earthquakes, & Volcanism
	Seismic Activity and Volcanology	Chapter 12: Tectonics, Earthquakes, & Volcanism
Week 15: 4/19-4/23	Geomorphology	Chapters 13: Weathering, Karst Landscapes and Mass Movement & Chapter 15: Eolian Processes and Arid Landscapes
	Soils and Supporting the Biosphere	Chapter 18: The Geography of Soils
Week 16: 4/26/4/30	Prep Week	
Week 17: 5/3-5/7	Final May 4 th , 2021 @ 4:00	

- Feb 7th is last day to withdraw with a "w"
- Schedule & Topics are tentative and subject to change