



# SYLLABUS

# GEOG 2960

Introduction to Physical Geography  
Spring 2021 – Online - Course # 27289

## COURSE OVERVIEW

### Course information

- Class lecture periods: Tuesday, Thursday, 2:20 - 3:40 p.m.
- Credit hours: 4
- Prerequisites: None
- Mode of delivery: Distance Learning

### Instructors

Instructor: Dr. Bryan G. Mark (address as Professor Mark)

- Email address: mark.9@osu.edu
- Phone number: 614-247-6180
- Office hours: T/R 11 a.m. -12 p.m. on zoom or by appointment

Graduate Teaching Assistant: Forrest Schoessow

- Email: schoessow.1@osu.edu
- Office hours: T/R 3:45 - 5 p.m. on zoom or by appointment
  - <https://osu.zoom.us/j/94949587843?pwd=K05DYUhaQ0FzUTI0eUF6clg3blAyQT09>
  - Meeting ID: 949 4958 7843
  - Password: geog2960

## Brief course description

This course is an introduction to physical geography, the study of Earth's natural environmental elements and processes, their characteristics, distribution, and implications for the human habitat. Earth is the only planet to support humans, and this course aims to provide a physical science understanding for key questions about: what controls climate and hydrology; why and how landscape features exist where they do; how life varies, is distributed, and sustained; and both what and how physical processes relate to environmental issues relevant to society.

There are no prerequisites for the class, but students are not allowed to enroll without permission if they have already received credit for the following closely related GEOG courses: 1900 (120), 1900H (120H), 2800 (210), 2960H (220H), or 220. We will use basic arithmetic and some algebra, but no calculus.

## Course objectives and learning outcomes

A primary course objective is to provide students with a basic understanding of the processes shaping the environment in which we live. The course uses an Earth Systems approach that describes how the flow of energy and matter through the hydrosphere (water), lithosphere (solid earth), atmosphere, and biosphere produce local and global patterns of weather and climate, vegetation, soils, rivers, and landforms. Secondly, students will be instructed about the dynamic nature of our Earth environment and challenged to consider the implications for society. How much has it changed in the past, to what extent is it changing at present, and what aspects of these changes relate to human activity?

By the end of this course, students should successfully be able to:

- Appreciate the dimensions of Earth, its orientation in the solar system, the distribution of continents and oceans, its major landscape features, lines of longitude and latitude, and time zones.
- Be familiar with how locations and environmental conditions are mapped, the fundamental features and limits of map projections, basics of spatial interpolation, and how topography is depicted.
- Understand the fundamentals of Earth's climate system, how it changes over time, zonations by latitude, the general circulation patterns (winds and currents), and how the radiative energy balance is altered by both natural and human-induced changes in biogeochemistry.
- Describe the location of and causes natural hazards like earthquakes, volcanoes, tsunamis, hurricanes, tornadoes and floods.
- Critically assess biodiversity, its limitations and ecological controls, and describe the general locations and key plant and animal species in Earth's biomes.

**General Education (GE) Expected Learning Outcomes:** This course meets GE requirements in one area - **Natural Science, Physical Science** (i.e. <http://asccas.osu.edu/curriculum/ge-goals-and-learning-outcomes>). Specifically this means we aspire to the following goals: Students understand the principles, theories, and methods of modern science, the relationship between science and technology, the implications of scientific discoveries and the potential of science and technology to address problems of the contemporary world.

We aim to address the expected GE learning outcomes as follows:

**1) Students understand the basic facts, principles, theories and methods of modern science.**

A combination of lectures, readings & exercises, and labs will help students comprehend natural processes on Earth that influence our lives. We'll consider how these processes involve flows of energy and matter throughout many spheres of the Earth System, and result in landscape features we interact with in the environment. We'll address principles of Earth's energy balance, climate, hydrology, tectonics, geomorphology, ecology, and biology. We'll focus on specific insights and tools (theories and methods) that Geography brings to bear on these topics. Students will apply what they learn during lecture in the lab section, where they will learn and practice many of the key methods used by actual physical geographers. Students will access real geographic data, practice analyses, and critically evaluate scientific evidence for how we understand these processes.

**2) Students understand key events in the development of science and recognize that science is an evolving body of knowledge.**

Students will study the history of key concepts in physical geography, with a particular focus on how we have understood longitude, climate changes, and the evolution of both landscapes and life forms. We will take a critical look at the data, observations, models and assumptions that underlie our understanding to be able to appreciate how we know what we know, and how that has changed progressively over time.

**3) Students describe the inter-dependence of scientific and technological developments.**

Students will examine how technology has informed our understanding of natural phenomena, what measurements document climatic and environmental changes, and how technology continues to provide critical observations of these processes, from the laboratory to satellites in space. We will use instrumentation, and visit an actual science lab in action. We'll pay particular attention to geospatial tools like satellite imagery and digital mapping, and experience how these technologies have revolutionized our view of the Earth with hands-on exercises.

**4) Students recognize social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.**

Students will confront the evidence of how the landscape and Earth System are impacted by both human and natural processes, and get exposed to the implications of these for policy makers; climate and environmental changes are considered among the leading problems facing the contemporary world. We will provide the basic facts and physical principles involved, and what processes influence change over different time scales. Throughout the course, students will be asked to specifically link Physical Geography concepts to issues and problems of contemporary relevance, helping them develop knowledge useful for problem solving.

This course meets these goals and objectives by introducing students to a variety of elements and processes in the natural environment, and how scientists analyze them. Important sub-themes include landscape evolution, earth history, surface processes, global climate and environmental change.

## HOW THIS COURSE WORKS

This 4 credit lab course is structured around two weekly lectures of 80 minutes, and one weekly lab session of 80 minutes. Regular class and lab attendance and participation is expected for successful completion. The text includes enhanced MasteringGeography (online) content to aid the students in learning material, and will have weekly deadlines. There are two midterm exams and a comprehensive final exam that are based on topics covered in lecture and lab.

**Mode and pace of delivery:** This course will be delivered **100% online**, with all course materials accessible from OSU's **Carmen Canvas** interface. Content will be delivered by lecture, text (with online exercises), and lab. To insure consistent pacing with regular and substantive interaction with instructors, we will deliver **synchronous lectures and class activities** during regularly scheduled class/lab periods using **CarmenZoom** and record them. **TopHat** will be used during lectures to engage students in synchronous interactive questions. All lecture recordings will be posted to Carmen along with pdfs of presented slides.

**Schedule of activities:** This course is divided into **weekly modules** that are released by the first scheduled class on Tuesday and will track the instructional topics, as recorded in the **weekly schedule** that will be posted on Carmen and regularly updated. The schedule is **subject to change** so students should be sure to retain most current version. Students can see the current version by observing the date appended to the pdf file name. Modules will organize the content into weekly blocks comprising lectures, pre-lab worksheets, lab exercises, textbook reading assignments, and online assignments through the "MyLab and Mastering" from the text publisher (Pearson). These Mastering assignments will include variable combinations of reading questions, study modules, and quizzes on content from both lecture

and assigned readings. Most weekly assignments in modules are due on the following Monday by 11:59 p.m. for full credit. Some assignments will have longer due dates, like the final **Personal Geo Project**. Students are expected to keep pace with all deadlines and participate in scheduled class activities but may schedule their efforts on homework exercises and complete readings and quizzes freely within that time frame. **Weekly lab exercises** are worth 30% of the final grade and must be completed each week and submitted by the Monday 11:59 p.m. deadline for full credit. Students have the option to join synchronous lab instructional periods held via Zoom to work on the labs.

**Credit hours and work expectations:** As a **4-credit-hour course**, in accordance with [Ohio State policy](#), students should expect around 4 hours per week of time spent on direct instruction (lecture, lab and activities, for example) in addition to 8 hours of homework (reading and assignment preparation, lab completion, etc.) to receive a passing grade.

**Attendance and participation requirements:** This is an online course with synchronous lectures occurring at set times. Students will be expected to log on regularly (multiple times per week) to Carmen and keep track of assignments and content. If you have a situation that might cause you to miss an entire week of class, discuss it with instructors *as soon as possible*. Student attendance and class participation will be tracked by use of **TopHat** and **Zoom** reporting. The following is a summary of everyone's expected participation:

- **Lectures: TWICE PER WEEK.** Lectures will be conducted live online via CarmenZoom during scheduled class period (T/R 2:20 - 3:40 p.m.) and will feature opportunities for student engagement (using **TopHat**). They will also be recorded and posted on Carmen with slides for asynchronous access.
- **Labs: ONCE PER WEEK.** Weekly lab exercises are required, with optional synchronous lab instructional periods held via Zoom. Each week an introductory video reviewing the key concepts will be posted alongside the weekly lab exercises. Students have the option to work with one or two classmates to complete weekly lab exercises, but each individual is responsible for showing and submitting their own work each week. These labs are designed to provide students with a more in-depth understanding of many of the same basic concepts discussed in lecture, along with new material. Though online, the labs will demonstrate tools and technologies used by physical geographers, and allow students to practice techniques and explore (at least virtually) diverse landscapes of Earth.
- **Office hours: OPTIONAL.** Zoom sessions will be the mode of office hours. Two hours per week will be allocated, but additional meetings can be arranged by email.

# COURSE MATERIALS AND TECHNOLOGIES

## Textbook

We will use the following textbook and accompanying Mastering Geography online components:

**Geosystems Core (1st edition)**, by Christopherson / Cunha / Thomsen / Birkeland (Pearson)

The text is available directly from the Pearson at a competitive bundled price for the e-text and Mastering. Students who do not already have a Mastering account from another class can register directly with the publisher for an account that has a digital version of the text and Mastering (\$79.99) by accessing the publisher from Carmen.

Text readings will be assigned weekly, with Mastering exercises assigned for completion prior to lecture and within a week.

## STEPS TO REGISTER FOR PEARSON MASTERING

First, sign in to Canvas and enter our course.

- Select the **MyLab and Mastering** link in the Course Navigation.
- Then, click on the **OpenMyLab and Mastering** button/link.

Next, get access to your Pearson course content:

- Enter your Pearson account username and password to Link Accounts.
  - You have an account if you have ever used a MyLab or Mastering product.
  - If you don't have a Pearson account, select **Create** and follow the instructions.
- Select an access option:
  - Enter the access code that came with your textbook or that you purchased separately from the bookstore.
  - If available for your course:
    - ✓ Buy access using a credit card or PayPal.
    - ✓ Get temporary access.
- From the You're Done page, select Go to **My Courses**.

*Note:* It is recommended you always enter your Mastering Geography course through Canvas. For Pearson online support: <https://support.pearson.com/getsupport/s/>

## Other readings, media

We will introduce other readings from news and scientific journals, as well as mixed media (video, podcasts). These will all be provided as pdfs or URL links to the weekly Modules or via Assignments in Carmen. We will also maintain a separate Module with a repository of helpful articles, web media, and more that will be archived in Carmen.

## Course technology

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at [ocio.osu.edu/help/hours](https://ocio.osu.edu/help/hours), and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** [ocio.osu.edu/help](https://ocio.osu.edu/help)
- **Phone:** 614-688-4357(HELP)
- **Email:** [servicedesk@osu.edu](mailto:servicedesk@osu.edu)
- **TDD:** 614-688-8743

## BASELINE TECHNICAL SKILLS FOR ONLINE COURSES

- Basic computer and web-browsing skills
- Navigating Carmen: for questions about specific functionality, see the [Canvas Student Guide](#).

## REQUIRED TECHNOLOGY SKILLS SPECIFIC TO THIS COURSE

- [CarmenZoom virtual meetings](#)
- [TopHat student response system](#)
- [Pearson text and Mastering](#)
- [Recording a slide presentation with audio narration](#)
- [Recording, editing, and uploading video](#)

## REQUIRED EQUIPMENT

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in laptop or tablet mic or external microphone
- Other: a mobile device (smartphone or tablet) or landline to use for BuckeyePass authentication

## REQUIRED SOFTWARE

- [Microsoft Office 365](#): All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program.
  - Full instructions for downloading and installation can be found [at go.osu.edu/office365help](https://go.osu.edu/office365help).
- [Zoom](https://osu.zoom.us/) (https://osu.zoom.us/) is the academic audio web conferencing solution for Ohio State, and we will be using it for lectures and interactive course elements.
  - [Getting started with CarmenZoom](#)
- [TopHat](#): As mentioned, we will use TopHat to deliver quizzes during lecture for synchronous student response.
  - Access information here: <https://teaching.resources.osu.edu/toolsets/top-hat>.
  - Additional help from TopHat on OSU connection: <https://success.tophat.com/s/article/Professor-Ohio-State-University-Single-Sign-On-Account-Setup>.

## CARMEN ACCESS

You will need to use [BuckeyePass](#) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](#) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the [Duo Mobile application](#) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.



## GRADING AND FACULTY RESPONSE

### How your grade is calculated (% breakdown)

ASSIGNMENT CATEGORY	% POINTS
TopHat - participation & review	10
MyLab and Mastering	15
Labs	30
Midterm exam	15
Final exam	15
Personal Geo Project	15
<b>Total</b>	<b>100</b>

See course schedule below for due dates.

### Assignment descriptions

**Participation:** This will be assessed based on attendance and student responses to TopHat 'quizzes' during class periods. Full credit will be assigned at the end of class for students who obtain at least 75% of available points.

- TopHat points are awarded for questions answered correctly in class – these regular 'quizzes' will come from material covered previously (review) or in reading for the week.
- Review questions will be asked during lecture based on material from the previous class (in-class 'quizzes'). There will be about 4-5 questions per lecture on average, but anywhere from 1-10 is possible.
- For each Top Hat question you answer in class, you will get partial points for the correct answer, and partial points for any answer (participation). The distribution will vary, depending on the nature of the question, with some questions designated as 'participation only' where any answer will be credited fully.
- After lectures, TopHat questions and answers will then be made accessible 'for review' on Top Hat and serve as excellent practice when studying for exams.

**MyLab and Mastering:** Students will be required to complete assignments as posted within the Pearson plugin accessed from Carmen and based on course material in the textbook.

**Labs:** Students will complete lab exercises most weeks and will submit them electronically. Lab exercises can be accessed each week beginning with the release of the module on

Tuesday. Labs are due by the following Monday at 11:59 p.m. There will be optional synchronous lab sessions by Zoom as scheduled with the graduate TA, and students are encouraged to attend to complete exercises and get any desired extra help.

**Midterm Exam:** Students will take a midterm exam via Carmen that will be administered synchronously during regular class periods.

**Final Exam:** The final exam will also be administered via Carmen quiz format, during the regularly scheduled period assigned by the OSU Registrar: Monday April 26.

**Personal Geo Project:** This individual project will include self-selected project involving direct observation and interpretation of environmental information.

## Late assignments

Please refer to Carmen for due dates. Generally, modules will be completed by midnight on Monday night before new modules begin on Tuesdays (first class session of each week). Late assignments will be penalized by 10% per day late, and only accepted up to a maximum of 4 days late. If students anticipate having conflicts they are expected to discuss with instructors ahead of time.

## Grading scale

93–100: A	73–76.9: C
90–92.9: A-	70 –72.9: C-
87–89.9: B+	67 –69.9: D+
83–86.9: B	60 –66.9: D
80–82.9: B-	Below 60: E
77–79.9: C+	

## Instructor feedback and response time

We provide the following list to give you an idea of our intended availability throughout the course. (Remember that you can call **614-688-HELP** at any time if you have a technical problem.)

- **Grading and feedback:** For regular weekly assignments, you can generally expect feedback within **7 days**. Some exercises and papers will take longer to grade.
- **Email:** We will generally reply to emails within **24 hours on days when class is in session at the university**.

- **Discussion board:** We will check and reply to messages in the discussion boards every **24 hours on school days**.

## OTHER COURSE POLICIES

### Academic integrity policy

#### POLICIES FOR THIS ONLINE COURSE

- **Assignments:** You must complete the weekly exercises and labs yourself, and hand in your own work. Unless otherwise indicated, external help or communication from the internet or other people is prohibited. Accessing personal notes from class material is permitted.
- **Personal Geo Project:** Your Personal Geo Project should be your own original work. In formal assignments, you should properly cite the ideas and words from other sources that you use in your research. ***It will be essential that you use a proper citation style consistently.*** You are encouraged to ask a trusted person to proofread your assignments before you turn them in—but no one else should revise or rewrite your work.
- **Labs:** Students have the option to work with one or two classmates to complete weekly lab exercises, but each individual is responsible for showing and submitting their own work each week.
- **Exams:** Exams will have a set time limit established within Carmen, but will be available for students to complete within a longer range of time. Use of any outside consulting or internet sources is prohibited during the exam. While study groups and peer-review of major written projects is encouraged, remember that comparing answers on exams or assignment is not permitted. If you're unsure about a particular situation of shared work, always contact instructor.

#### OHIO STATE'S ACADEMIC INTEGRITY POLICY

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university's [Code of Student Conduct](#), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university

or subvert the educational process.” Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university’s *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

**If we suspect that a student has committed academic misconduct in this course, we are obligated by university rules to report my suspicions to the Committee on Academic Misconduct.** If COAM determines that you have violated the university’s *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact us.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages ([COAM Home](#))
- *Ten Suggestions for Preserving Academic Integrity* ([Ten Suggestions](#))
- *Eight Cardinal Rules of Academic Integrity* ([www.northwestern.edu/uacc/8cards.htm](http://www.northwestern.edu/uacc/8cards.htm))

## Copyright disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## Statement on Title IX

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.

If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at [titleix.osu.edu](http://titleix.osu.edu) or by contacting the Ohio State Title IX Coordinator at [titleix@osu.edu](mailto:titleix@osu.edu). Title IX is part of the Office of

Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin and disability. For more information on OIE, visit [equity.osu.edu](https://equity.osu.edu) or email [equity@osu.edu](mailto:equity@osu.edu).

Land Acknowledgement: The Ohio State University acknowledge that its campuses have long served as sites of meeting and exchange for Indigenous peoples, including those in historical times known as the Shawnee, Miami, Wyandotte, Delaware, and the People of Fort Ancient, Hopewell, and Adena cultures, also known as the earthworks builders, as well as other tribal nations of the region. The Ohio State University honors and respects the diverse Indigenous peoples connected to this land in which we gather.

Covid-19 instructions: While this course will be conducted online, we take this opportunity to remind you of the Ohio State Health and safety requirements: All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>), which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses. These university-wide instructions are enforceable under the terms of the student honor code, and we trust that you will follow those guidelines.

## **Land acknowledgement**

Land Acknowledgement: The Ohio State University acknowledge that its campuses have long served as sites of meeting and exchange for Indigenous peoples, including those in historical times known as the Shawnee, Miami, Wyandotte, Delaware, and the People of Fort Ancient, Hopewell, and Adena cultures, also known as the earthworks builders, as well as other tribal nations of the region. The Ohio State University honors and respects the diverse Indigenous peoples connected to this land in which we gather.

## **Covid-19 instructions**

While this course will be conducted online, we take this opportunity to remind you of the Ohio State Health and safety requirements: All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>), which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses. These university-wide instructions are enforceable under the terms of the student honor code, and we trust that you will follow those guidelines.

## Your mental health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you find yourself feeling isolated, anxious or overwhelmed, please know that there are resources to help: [ccs.osu.edu](https://ccs.osu.edu). You can reach an on-call counselor when CCS is closed at (614) 292-5766 and 24 hour emergency help is also available through the 24/7 National Prevention Hotline at 1-(800)-273-TALK or at [suicidepreventionlifeline.org](https://suicidepreventionlifeline.org). The Ohio State Wellness app is also a great resource available at [go.osu.edu/wellnessapp](https://go.osu.edu/wellnessapp).

## ACCESSIBILITY ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

### Requesting accommodations

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability including mental health, chronic or temporary medical conditions, please let us know immediately so that we can privately discuss options. To establish reasonable accommodations, we may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. **SLDS contact information:** [slds@osu.edu](mailto:slds@osu.edu); 614-292-3307; 098 Baker Hall, 113 W. 12<sup>th</sup> Avenue.

### Accessibility of course technology

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- [CarmenCanvas accessibility](#)
- Streaming audio and video
- [CarmenZoom accessibility](#)
- Collaborative course tools

# COURSE SCHEDULE\*

For weekly text readings in the "Geosystems Core" text, chapters (units) are listed by number.

Wk	Topic	Lecture	Date	Lab	Text
1	Introduction to Physical Geography	1. Introduction & expectations	T 1/12	Intro to labs and the globe (latitude, longitude, time)	Intro, 1
		2. Physical geography, scientific method, maps	R 1/14		
2	Earth orientation	3. Energy, systems, seasons, atmosphere	T 1/19	Map projections	1, 2
		4. Radiation balance	R 1/21		
3	From planetary energy balance to circulation	5. Temperature patterns	T 1/26	Seasonality	2, 3
		6. Atmospheric pressure, winds circulation	R 1/28		
4	Atmospheric water & precipitation	7. Circulation, air masses, precipitation	T 2/02	Atmospheric circulation	3, 4
		8. Humidity, clouds, mid-latitude cyclones	R 2/04	<b>Personal Geo ID due (2/02)</b>	
5	Weather to climate	9. Storms	T 2/09	Fronts	4, 6
		10. Climate zones	R 2/11		
6	Global climate systems	11. Climographs & practice exam	T 2/16	Climate zones	6
		12. Climate change 1	R 2/18		
7	Paleoclimate	<b>2/23 NO CLASS: Instructional Break</b>	T 2/23	<b>No Lab</b>	7
		13. Climate Change 2	R 2/25	<b>Class Feedback survey</b>	
8	Recent climate change	14. Climate Change 3	T 3/02	Microclimates	7
		<b>MIDTERM EXAM</b>	R 3/04		

9	Tectonics & Geohazards	15. Tectonics and rock cycle	T 3/09	Geology of Ohio	8
		16. Earthquakes and volcanoes	R 3/11		
10	Weathering & erosion	17. Internal (review) to weathering & erosion	T 3/16	Exploring Geohazards via Google Earth	8
		18. Mass movements	R 3/18		
11	Water cycle & rivers	19. Water cycle	T 3/23	Olentangy Flood	5, 9
		20. Fluvial modification of landscape - rivers	R 3/25		
12	Coastal processes	21. Coastal landscape & processes	T 3/30	<b>Personal Geo Project progress evaluation</b> <b>No lab</b>	10
		<b>4/01 NO CLASS: Instructional Break</b>	R 4/01		
13	Glaciers & glacial landscapes	22. Glacial systems	T 4/06	Tour of the Cryosphere: virtual field trip	11, 12
		23. Glacial landscapes & legacy	R 4/08		
14	Biogeography	24. Biogeochemical cycles & soils	T 4/13	Extra lab option	13, 5
		25. Ecosystems & biomes	R 4/15		
15	THE END	26. Biomes	T 4/20	<b>No lab</b> <b>Personal Geo Project DUE</b>	13, 14
		Review	R 4/22		

\*This schedule is subject to change! Students should access most current version on Carmen, saved with date in pdf format.