

SYLLABUS

GEOG 3900.01

Global Climate Change: Causes & Consequences
Autumn 2025 – Class # 21405

COURSE OVERVIEW

Course information

- Class Days & Times: Monday, Wednesday, Friday, 11:30 AM - 12:25 PM
- Room: Hitchcock Hall 031
- Credit hours: 3
- Prerequisites: None; not open to students with credit for 3900, 3900.02, 3901H
- Instruction Mode: In Person

Instructors

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

- Email: mark.9@osu.edu
- Office & hours: 1136 Derby Hall; M, Th 10 - 11 AM or by appointment

Graduate Teaching Assistant (GTA): Emily Mazan

- Email: mazan.4@buckeyemail.osu.edu
- Office & hours: 1070 Derby Hall; Wednesdays 1 – 3 PM, or by appointment

Course description

GEOG 3900.01 is a science class open to all majors that will develop an advanced understanding of how Earth's climate functions and changes over different time scales both naturally and because of human activity. The climate system is vitally connected to **sustainability**. Students will critically examine the key evidence of how climate changes, gain

experience with climate data, and learn directly from climate researchers how they conduct their science. We will explore the diverse consequences and implications of our presently altered climate and how it will likely continue to change in the future. By the end of this class, students will be able to describe the fundamental processes of Earth's climate and the carbon cycle, be familiar with energy units used in everyday life, appreciate broader economic, policy and legal dimensions of climate change, and identify creative strategies to respond.

There are ***no prerequisites*** for the class. We will use basic arithmetic and some algebra, but no calculus.

Goals and Expected Learning Outcomes (ELOs)

This course is part of the **Sustainability theme** in the University's **General Education (GE)** program because to understand climate change requires analyzing and explaining how the natural climate system is now fundamentally connected to our social and economic systems. ***Ultimately, human caused climate change amplifies the sustainability challenges our society faces.*** Yet because humans have agency in causing changes, we also have power to enact solutions. Therefore, students will link climate change and society's energy demands, sources and usage. They will research and work collaboratively to generate a scale-specific strategy to address climate change with practical actions or policies.

Course-based Goals

1. Students can articulate the scientific basis for, and consequences of, natural and human-produced climate change.
2. Students can describe how Earth's climate has changed over time, and how scientists have developed this knowledge.
3. Students can demonstrate literacy with concepts of energy and carbon cycling, including dimensional analyses, unit conversion, and usage in real-world case studies.
4. Students can propose compelling strategies to mitigate or adapt to climate change that critically acknowledge implications for different stakeholders and integrate quantitative reasoning.

GE Goals & ELOs for all themes:

Goal 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme:

Climate change implicitly engages students in critical and logical thinking about

sustainability because of the coupled ways that society relies on climate but also impacts climate. Students will critically engage with the hypothesis that human activities are altering the balance of radiative energy flows between the sun and Earth by altering the chemistry of the atmosphere but also reflect on the consequences and implications to future generations (see modules 1, 2).

ELO 1.2 Engage in advanced, in-depth, scholarly exploration of the topic or idea of the theme: The course engages in advanced, in-depth, scholarly study of climate change by challenging students to go beyond mere descriptions of the greenhouse effect to derive a model from fundamental laws of radiation physics, and then critically examine observational data showing evidence of diverse effects to test if hypothesized forcings explain the evidence (see modules 3, 4, 5). Students will also access and cite peer-reviewed science literature about paleoclimatology (proxy short paper assignment) and substantiate their ideas for a final scale-specific solution to human caused climate change (final project).

Goal 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

ELO 2.1 Identify, describe and synthesize approaches or experiences as they apply to the theme: Students engage in a combination of informed peer-group discussions and word problems as exercises on a weekly basis (see weekly modules) that provide opportunities to articulate connections to their broader academic knowledge and life experiences.

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment and creative work, building on prior experiences to respond to new and challenging contexts: Open to the full diversity of OSU undergraduate students, the class assumes no pre-requisite knowledge, but does encourage self-assessment of developing new understanding by including an entrance and exit survey to assess knowledge and reflect on level of concern for issues, and compute and reflect on personal “carbon footprint” calculations. Students progress through interactive exercises culminating in a final project that will allow them to draw upon prior experiences to respond to new challenges.

Sustainability Goals & ELOs:

Goal 3: Analyze and explain how social and natural systems function, interact, and evolve over time; how human wellbeing depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors, and institutions impact multi-faceted, potential solutions across time.

ELO 3.1: Describe elements of the fundamental dependence of humans on Earth and environmental systems and on the resilience of these systems: Students will build an integrated understanding of energy, carbon and water cycles to gain perspective on how they are fundamental for sustaining life, are impacted by human activity, and contribute to drive climate feedbacks. By connecting the composition of Earth's atmosphere to radiative balance, students will conceptually link fundamental physics to the resilience of the Earth system, as moderated by humans through energy conversion (fossil fuel combustion).

ELO 3.2 Describe, analyze and critique the roles and impacts of human activity and technology on both human society and the natural world, in the past, currently, and in the future: Students will learn how human energy conversion technology has changed over time, resulting in an intensification of carbon dioxide emissions that is on the order of 10x more than natural fluxes (e.g. from volcanoes), causing climate alterations, impacting sustainability now and into the future. Students will study in detail how ideas and technology progressed to solve the problem of ice ages (module 9). Yet human activity also holds potential solutions; students critically evaluate alternative energy technologies, and even geoengineering solutions to cool global warming by radiation modification or carbon dioxide sequestration (modules 14, 15).

ELO 3.3 Devise informed and meaningful responses to problems and arguments in the area of sustainability based on the interpretation of appropriate evidence and an explicit statement of values: Students will complete a final project involving identifying and formulating a "Scale-specific strategy" to address climate change in a particular context and present a compelling and quantitatively justified case. They will also conduct a formal evaluation of both their own and other group efforts.

Dimensions of Sustainability

Climate change touches on multiple dimensions of sustainability as defined at OSU: human and natural systems; earth and environmental systems; economy and governance; society and culture; engineering, technology and design; and health and well-being. We will focus primarily on the following four during this course:

- **Human and natural systems** frame the entire course, and students develop an understanding for how processes from each interrelate as they critically evaluate evidence for how human systems are capable of impacting climate change.
- **Earth and environmental systems** are given central focus as students learn fundamentals of how the atmosphere of Earth contains carbon and functions to alter flows of radiation that drives all climate. Properly assessing the causes and consequences of human impacts on climate is premised on understanding how the earth's environmental system works.

- **Economy and governance** are addressed with guest faculty experts on the economics of climate change and climate change law. Students appreciate that the impacts of climate change are not equal, and how more affluent lifestyles cause more warming, while those who suffer most are often the poorest. They will also critically evaluate the costs and benefits of certain strategies to address climate change.
- **Engineering, technology, and design** are central to the ways we convert energy to drive economies, and these concepts are likewise important as students critically evaluate all solutions to climate change.

Legacy GE Goals and ELOs:

This course also meets the **legacy GE (GEL)** requirements in one area - **Natural Science, Physical Science** (i.e. <https://asccas.osu.edu/legacy-general-education-gel-goals-and-elos>). 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 learning outcomes** as follows:

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

In this class, a combination of lectures, readings, exercises, and exams will help students comprehend the basic facts of Earth's climate system, including fundamental principles of energy balance, radiative forcing, the greenhouse effect (natural and 'enhanced'), the carbon cycle, feedbacks, natural climate variability, climate extremes and climate modeling. Students will access climate data, practice analyses, and critically evaluate evidence.

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

In this class, students will study the history of climate change science, with a particular focus on how we have understood ice ages, and the way the atmosphere functions.

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

In this class, students will examine how technology has informed our understanding of climate, what measurements document climate change, and how technology continues to provide critical observations of these changes, from the laboratory to satellites in space. We will visit an actual ice core paleoclimatology lab and see it in action.

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.**

In this class, students will confront the evidence of climate change impacts to human and natural systems and consider the implications of these for policy makers; climate change is considered one of the leading problems facing the contemporary world. We will provide the basic facts and physical principles involved, and what processes drives climate to change over different time scales. Students will practice with discussion and interact with concepts collectively in online discussions and group exercises, and evaluate dimensions of climate change mitigation, adaptation and geo-engineering during their final project.

HOW THIS COURSE WORKS

Mode of delivery: This course will be delivered in person. Class periods will feature lectures, in-class exercises, discussions, and on-campus tours. Attendance is expected and will contribute to the successful completion of the course. All course materials will be accessible from OSU's **Carmen Canvas** interface.

Weekly activities and materials: This course is divided into weekly **modules** that are released on Carmen Canvas by the first scheduled class on Mondays. These will include variable combinations of discussions, exercises, readings, and quizzes covering content from lecture, recitation and assigned readings. Lecture slides will be posted to Carmen as pdfs after lectures. Many weekly assignments are due the following Monday by 11:59 p.m. Other assignments will have longer due dates, like the proxy description, and final project. Students are expected to keep pace with all deadlines and participate in scheduled class activities, arranging their time to complete exercises and readings, and being prepared for in class quizzes. A weekly **class schedule** will be provided outlining content and assignments. The schedule is subject to change so students should be sure to retain most current version. All scheduling changes will be articulated clearly to class via Carmen Announcements.

Credit hours and work expectations: This is a **3-credit-hour course**. According to [Ohio State policy](#), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading, exercises, research and assignment preparation, for example) to receive a passing grade.

Attendance and participation requirements: Student attendance and participation during lectures will be tracked using **Top Hat**, as well as completion of feedback and entrance/exit surveys. Students are expected therefore to be attentive regularly to the class Carmen page. In addition to regular exercises, quizzes and exams, the following is a summary of expected participation:

- **Lectures: THREE PER WEEK.** Lectures will be delivered in person by the Professor or GTA as well as occasional guest experts and assistants during the scheduled class period in the assigned classroom. This is the most regular mode of contacting the Professor and GTA.

- **Top Hat: RANDOM DURING LECTURES.** Regular assessment of understanding and participation will be evaluated and recorded via Top Hat during lectures. Student participation in these Top Hat exercises will be used to assess attendance in class and this, in turn, contributes to the participation category in calculating the final grade. Most value will be participation alone, but a percentage (up to 50%) will be on the correctness.
- **Group activities: PERIODIC.** There will be in-class activities and a final “Scale-specific strategy” (S-cubed) group project that will require active participation and a single group grade. These include an on-campus tour and interactive games. The final project grade will be modified to reflect individual participation effort, but active involvement is expected from all students.

COURSE MATERIALS AND TECHNOLOGIES

Textbooks

We will use sections from **two primary textbooks** for the class. Required weekly readings will help organize our inquiry into global climate change AND provide good reference to basic principles. Because students can access them in different forms, we do not require purchase; the Dessler (2012, 204) is listed as recommended with OSU Bookstore.

1. **Dessler, A. *Introduction to Modern Climate Change*.** Cambridge University Press. Three editions have been published (2012, 2014, 2021). ***While the third has the most up-to-date information, all editions are valid for the class.***

First edition (2012): ISBN 978-0-521-17315-5. This has been ordered in previous classes and used copies should be available; it is on AMAZON. It is also available in the OSU Library: https://search.library.osu.edu/permalink/01OHIOLINK_OSU/1oqfg3i/alma991024095609708507

Note that one copy (limited to 2 users at a time) is an electronic resource through eBook Central at the OSU LIBRARY (accessible when on OSU computers):

<https://ebookcentral-proquest-com.proxy.lib.ohio-state.edu/lib/ohiostate-ebooks/detail.action?pq-origsite=primo&docID=807187>

There is a second edition (2014): ISBN 9781107480674, and the most recent is the third edition (2021): ISBN 9781108793872. This newest version has been ordered and should be available at OSU Bookstore. It is also on online sites (e.g. Amazon, B&N as paperback or as an eBook on Amazon or Google).

The second available text is Mathez and Smerdon (2018).

2. **Mathez, E. and J. Smerdon. *Climate Change: The Science of Global Warming and our Energy Future*.** Columbia University Press, 2018. Full open access online (pdf chapter downloads) is available when students log in through the library. ISBN 9780231547871: <https://www-degruyter-com.proxy.lib.ohio-state.edu/document/doi/10.7312/math17282/html>

Other readings, media:

Occasionally we will also assign readings from additional sources (scientific articles, news, web pages, book sections). When appropriate, we will direct students to important publicly available climate change information like the 5th National Climate Assessment Report (<https://repository.library.noaa.gov/view/noaa/61592>) and materials from the Intergovernmental Panel on Climate Change (<https://www.ipcc.ch/>). These will be announced in lecture and posted as assignments the modules where we will provide relevant web links or pdfs on Carmen. We will indicate the relevant weekly readings by date.

Other information complementary to the class can be found in mixed media (e.g. videos, podcasts). These will all be provided as pdfs or URL links via Carmen and linked to the weekly modules. One valuable resource students will obtain in the class will be a repository of articles, web media, and more that will be archived in Carmen.

Because our class learning goals include becoming familiar with peer-reviewed scientific literature, and critically evaluating material from the internet, we will introduce students to many sources of information as well as tools to organize, cite and reference them. We will enlist the assistance of a course librarian from the OSU Libraries, Professor Danny Dotson.

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. The IT Service Desk offers 24-hour support, seven days a week.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **Self Service and Chat Support:** <https://osuitsm.service-now.com/selfservice/>

Basic computer and web-browsing skills are expected, and navigating Carmen is an essential skill for this course. For questions about specific functionality, see the [Canvas Student Guide](#).

REQUIRED TECHNOLOGY SKILLS SPECIFIC TO THIS COURSE

- [CarmenZoom virtual meetings](#)
- [Recording, editing, and uploading video](#)

REQUIRED EQUIPMENT

- Computer: current Mac (OS) or PC (Windows) 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 Copilot 365](#): All Ohio State students are now eligible for free Microsoft Office 365 through Microsoft's Student Advantage (BuckeyeMail) program. Full instructions for downloading and installation can be found at <https://it.osu.edu/microsoft-365>.
- [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 some guest lectures, possible office hour options, and interactive course elements.
 - [Getting started with CarmenZoom](#)
- [Top Hat](#): We will use TopHat to deliver quizzes during lectures for synchronous student response.

CARMEN / CANVAS ACCESS

This course requires the use of Carmen Canvas. You will need to use [BuckeyePass](#) (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you can always connect to Carmen, all OSU users must register.

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](#) help article for step-by-step instructions.
- There are multiple options for using BuckeyePass. Be sure to check them out!

If you need further assistance you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you. On Canvas accessibility, see go.osu.edu/canvas-accessibility; on Carmen Zoom accessibility: go.osu.edu/zoom-accessibility

GRADING AND FACULTY RESPONSE

How your grade is calculated (% breakdown)

ASSIGNMENT CATEGORY	% POINTS
Participation	10
Exercises & Discussions	20
Paleoclimate proxy short paper	10
Quizzes	15
Exams (2)	25
Group video presentation	20
Total	100

Assignment descriptions:

Participation: This will be assessed based on student Top Hat participation, completion of entrance/exit questionnaires, and attendance taken selectively for in-class activities).

Exercises & Discussions: Students will conduct weekly exercises or discussions. Exercises will comprise homework problems or other activities related to material presented in class. Discussions will comprise short answer responses to prompts using Carmen Discussions. Expectations for what comprises full credit will be further articulated for each module. Due dates may extend beyond the end of weekly modules but will be specified in the assignment.

Paleoclimate proxy short paper: Students will research and complete a short critical description about a paleoclimate proxy of their choice, demonstrating proper citation of information, including at least two peer-reviewed sources. 3 pages.

Quizzes: Quizzes will be given using Carmen quizzes, and will be based on material presented in lectures, readings, videos and other online material from the respective module. Note that some material from previous modules may also be on quizzes. They are generally released after the Friday lecture and due the following Tuesday.

Exams: Two exams will be given during the semester based on class content. Guidance will be given beforehand about the format and scope of each exam given.

Final project - group “S-cubed” video presentation: The final “S-cubed” project will comprise a group research project and video presentation. Groups will be assigned early in the class, and students will be interacting throughout the semester to select a topic and complete a video presentation. Final project components will be scaffolded into the class schedule. Students will also conduct reviews of other group presentations and engage in Q&A with students from other groups.

Late assignments

Please refer to Carmen for due dates. Generally, modules will be completed by midnight on Sunday night before new modules begin on Mondays (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 them 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 assignments, you can generally expect feedback within 10 days. Some exercises and papers will take longer to grade.
- **Email:** We will generally reply to emails and Carmen messages within **24 hours on days when class is in session at the university**. Please add "G3900.01" to the subject in your email to identify yourself; we teach multiple classes.
- **Discussion board:** We will check and reply to messages in the Carmen discussion boards regularly.

COURSE SCHEDULE*

Class Modules, Dates, Assignments, Readings

*Note: This schedule is an outline of weekly module topics and assignments. However, because class content and readings are **subject to change** to accommodate guest speakers, a separate **Weekly Schedule** document will be posted to Carmen and regularly updated. Students should follow the most current **Weekly Schedule (file versions will include a date)**.

Wk (Dates)	Module	Assignments	Readings
1 (8/26-8/29)	Welcome & "Global Warming 101"	<u>Discussion 1 – intro self (due 9/02)</u> <u>Entrance questionnaire (due 9/05):</u> https://docs.google.com/forms/d/e/1FAIpQLSf937AWnf0I-GL2Kbg7-YbFN_tlvMVGGrKgNd_AmTo7JMxcZ9A/viewform	5 th NCA (https://repository.library.noaa.gov/view/noaa/61592) skim Overview Dessler 1
2 (9/01 – 9/05)	Is the climate changing? Critically assessing evidence	<u>No class – Labor Day (9/01)</u> <u>Exercise 1: geography of climate – data & global patterns (due 9/08)</u>	Dessler 2, 3 5 th NCA (https://repository.library.noaa.gov/view/noaa/61592) Chp 2, "Climate Trends"
3 (9/08 – 9/12)	Peer-review & Library Resources Intro to energy & radiation	<u>Exercise 2: proxy topic/peer review (due 9/15)</u>	Dessler 3 Mathez & Smerdon, 2018 (M&S) Chp 1 (Chp 2 in 2009 edition)
4 (9/15 – 9/19)	Understanding the energy driving climate - radiation Earth's planetary energy balance; the greenhouse effect (GHE) Modeling GHE	<u>Exercise 3: energy word problems (due 9/22)</u>	Dessler 3, 4 Mathez 5 M&S 1-3
5 (9/22 – 9/26)	Flows of Energy: models and reality	<u>Exercise 4: climate data 2 (due 9/29)</u>	Dessler 3, 4 M&S 1, 2, 3, 5 Weart: https://history.aip.org/climate/co2.htm

6 (9/29 – 10/03)	The carbon cycle and human alterations	<u>Exercise 5: Carbon footprint (due 10/06)</u>	Dessler 5 M&S 4 & 6
7 (10/06 – 10/10)	Paleoclimatology: Understanding past climates	<u>Final project scaffold (FPS): Project groups assigned</u>	M&S 7 Dessler 2.2; 7.3 Bradley, Paleoclimatology, Chp 1; Cronin 2, Methods
8 (10/13 – 10/17)	Ice Ages: An historic science discovery of Ice Ages	<u>Discussion 2: Reflections on historical development of science: Ice Ages (due 10/20)</u> 10/16 – 10/17: No class (Fall Break): Be safe -- get some rest!	Imbrie & Imbrie, Chp 1-3: <i>Ice Ages: Solving the Mystery</i> <i>Supplemental:</i> Hodell (2016), Shakun, 2015
9 (10/20 – 10/24)	Climate modeling & projecting future scenarios Review & <u>Exam #1</u>	<u>Proxy description (due 10/22)</u> <u>FPS: Class time for FP groups to meet, share contact info</u>	Dessler 6 – 8 Skim: NCA5, Chp 2.3, Appendix A3 (link above in week 1) Climate Science Special Report (2017): Chp 4 https://www.nrc.gov/docs/ML1900/ML19008A410.pdf
10 (10/27 – 10/31)	Testing choices: modeling scenarios Economics of climate change	<u>In-class activity (day 1 of 2; in person attendance req'd): EnROADS climate simulation</u>	Briefing statements for Climate Interactive role-playing (assigned to groups via Carmen) Dessler 8 - 11 Nordhaus, 2017
11 (11/03 – 11/07)	Dimensions and implications of decision making about climate change	<u>In-class exercise (day 2 of 2): Byrd facilitated discussion of group simulation</u> <u>FPS: Final project group intro video (due 11/10)</u>	
12 (11/10 – 11/14)	OSU ice core research – An expert perspective	<u>FPS: work on quantitative reasoning for group strategy (due 11/17)</u>	Dessler 11-14

13 (11/17 – 11/21)	Ohio: climate and energy “Big Ice” update, and modern glaciologist story	<u>FPS: quantitative analysis due</u>	Ohio's energy portfolio: https://www.eia.gov/state/?sid=OH
14 (11/24 – 11/28)	Thanksgiving week	11/26 – 11/28: No Class – Happy Thanksgiving!	<u>FPS: Final video presentations uploaded to discussion forum by 12/08</u>
15 (12/01 – 12/05)	Stabilizing emissions by “Wedges”	<u>In-class activity (in person attendance req’d):</u> Stability Wedges	Dessler Chp 9 National Climate Assessment (Midwest section: https://repository.library.noaa.gov/view/noaa/61592
16 (12/08 – 12/10)	Scale specific solutions: Final presentations. <u>Exam #2</u>	<u>Discussion: Final project peer-reviews and responses to questions from peers</u> <u>Exercise: group project assessment of effort; exit survey</u> Exam #2 (take home, due 12/15)	<u>Final project: Students will watch final video presentations & conduct peer-review</u> Take exit survey (Google) All material due Mon 15 Dec

OTHER COURSE POLICIES

Intellectual Diversity

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all, **please be respectful and thoughtful**. We seek a supportive learning community where everyone feels safe and where people can disagree amicably.

- **Writing style:** Students should use proper grammar, spelling, and punctuation. A more conversational tone is fine for non-academic topics in class discussion forums.
- **Tone and civility:** Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.
- **Citing your sources:** Proper citations of your sources will be emphasized in this class. For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link. See OSU's academic integrity policy and links below.
- **Backing up your work:** Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion

Academic integrity policy

- **Quizzes and exams:** Students must complete the weekly quizzes and exams by themselves, without external help or communication from the internet or other people. Accessing personal notes from class material is permitted unless indicated otherwise.
- **Written assignments:** Students' written assignments, including discussion posts, should be their own original work. In formal assignments, students should follow a consistent citation style (e.g. MLA, APA, or AGU) to cite the ideas, conclusions and words of their research sources. ***It is essential that students use a proper citation style consistently (further explanations will be provided on writing assignments).***

Students are encouraged to have material proofread before submitting them — but no one else should revise or rewrite student work.

- **Reusing past work:** In general, students are prohibited in university courses from turning in work from a past class, even if modified. Students should discuss the situation with instructors in advance if there is any doubt.
- **Collaboration and informal peer review:** The course includes opportunities for formal collaboration with your classmates. While study groups and peer-review of major written projects is encouraged, remember that comparing answers on a quiz or assignment is not permitted. If a student is unsure about a particular situation, ask before the deadline.
- **Group projects:** This course includes a group project and group activities. It can be stressful for students when it comes to dividing work, taking credit, and receiving grades and feedback. Instructors have attempted to make the guidelines for group work as clear as possible for each activity and assignment, but students should ask about any uncertainties or issues.

Academic Misconduct

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 please review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If an instructor suspects that a student has committed academic misconduct in this course, the instructor is obligated by University Rules to report those suspicions to the Committee on Academic Misconduct. If COAM determines that a student violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University.

If students have questions about the above policy or what constitutes academic misconduct in this course, they should contact the instructor.

Religious Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the Civil Rights Compliance Office. (Policy: Religious Holidays, Holy Days and Observances).

Copyright for instructional materials

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 educational purposes.

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's Student Life Counseling and Consultation Service (CCS) is here to support you. If you find yourself feeling isolated, anxious or overwhelmed, on-demand resources are available at go.osu.edu/ccsondemand. 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. The Ohio State Wellness app is also a great resource available at go.osu.edu/wellnessapp.

ACCESSIBILITY ACCOMMODATIONS

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If students anticipate or experience academic barriers based on a disability (including mental health and medical conditions, whether chronic or temporary), they should let their instructor know immediately so that they can privately discuss options. Students do not need to disclose specific information about a disability to faculty. To establish reasonable accommodations, students may be asked to register with Student Life Disability Services (see below for campus-specific contact information). After registration, students should make arrangements with their instructors as soon as possible to discuss your accommodations so that accommodations may be implemented in a timely fashion.

If students are ill and need to miss class, including if they are staying home and away from others while experiencing symptoms of viral infection or fever, they should let their instructor know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations.

SLDS offers in-person exam proctoring services. Students who are registered with SLDS and whose accommodations include adjustments to exams (e.g., additional time) will only be able to schedule an exam in the SLDS database if there is a seat available. Early scheduling of your exams – within the first two weeks of class – is strongly encouraged. SLDS will collaborate with you to try to find a space, but it is your responsibility to contact them early in the semester to initiate the process. The scheduling deadline is 1 week in advance. SLDS will allow students to schedule their exams within a 3-day window (class exam day + 2 days after). Students are expected to schedule their exams as close as possible to the day and time the exam is given in class. Students are strongly encouraged to take the exam on the same day, and overlapping in time, as the other students.

*

For policies on Artificial Intelligence and Academic Integrity; Grievances and Solving Problems; Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct see:

<https://ugeducation.osu.edu/academics/standard-syllabus/standard-syllabus-statements>