

Term Information

Effective Term Spring 2023
Previous Value Spring 2019

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

new learning outcomes for new GE; addition of other campuses of offering; permanent approval of a distance learning option; updates to the catalog description and pre-requisites

What is the rationale for the proposed change(s)?

To align with the new GE; the course was successfully offered online under pandemic approval and would like permanent approval for offering flexibility

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

N/A

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area Environment & Natural Resource
Fiscal Unit/Academic Org Sch of Enviro&Natural Res - D1173
College/Academic Group Food, Agric & Environ Science
Level/Career Undergraduate
Course Number/Catalog 3200
Course Title Environmental and Natural Resources Policy
Transcript Abbreviation Env Nat Res Policy
Course Description This course covers topics such as the constitutional foundations of environmental policy, the role of congress and the executive branch in designing policy and bureaucratic agencies in implementing them, and the courts system as the final arbiter for environmental disputes. It also covers some of the foundational legislation in the U.S. to protect the environment and advance sustainability.
Previous Value *This course covers topics such as the constitutional foundations of environmental policy, the role of congress and the executive branch in designing policy and bureaucratic agencies in implementing them, and the courts system as the final arbiter for environmental disputes. It also covers some of the foundational legislation in the U.S. to protect the environment and natural resources.*
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week, 12 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? Yes
Is any section of the course offered 100% at a distance
Previous Value No
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture

Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus, Lima, Mansfield, Marion, Newark, Wooster
<i>Previous Value</i>	<i>Columbus, Mansfield</i>

Prerequisites and Exclusions

Prerequisites/Corequisites	Prereq: 2100 and 2300, or permission of the instructor.
<i>Previous Value</i>	<i>Prereq: 2100 and 2300.</i>
Exclusions	Not open to students with credit for 4000.
Electronically Enforced	Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	03.0201
Subsidy Level	Baccalaureate Course
Intended Rank	Sophomore, Junior, Senior

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors
General Education course:
Organizations and Politics; Sustainability

Previous Value

Required for this unit's degrees, majors, and/or minors
General Education course:
Organizations and Politics

Course Details

Course goals or learning objectives/outcomes

- Understand the theories and methods of social scientific inquiry as they apply to the study of organizations and politics.
- Understand the formation and durability of political, economic, and social organizing principles and their differences and similarities across contexts.
- Comprehend and assess the nature and values of organizations and politics and their importance in social problem solving and policy making.
- *Students will understand key concepts in natural resources policy.*
- *Students will have the skills necessary to listen carefully, communicate their thoughts to others, and make reasoned, informed decisions about natural resources issues.*
- *Students will gain a knowledge base and interest level to prepare them well for further study in natural resources policy, both in and beyond the classroom.*

Previous Value

Content Topic List

- Sustainability challenges now and then
- The value of institutions
- The US Constitution
- The Dominant Social Paradigm and Some Environmental History
- Basics of the Policy Making Process in the U.S.
- Congress, Courts, Agencies
- Theories of the Policy Process
- NEPA
- Endangered Species Policy
- Climate Change, Global Governance, and Obstacles to Political Action
- Justice, Equity, and Environmental Policy
- Fracking-Intro to hydraulic fracking in Eastern Ohio: roles & impacts of human activity and technology on sustainability; social-ecological perspectives; stakeholders & values
- Policy Instruments & tools
- Outreach & science-policy communication
- Sustainability in the public & private sectors

Previous Value

- *Environmental problems, now and then*
- *The value of institutions*
- *The US Constitution*
- *The Dominant Social Paradigm and Some Environmental History*
- *Basics of the Policy Making Process in the U.S.*
- *Congress, Courts, Agencies*
- *NEPA*
- *Endangered Species Policy*
- *Climate Change and Obstacles to Political Action*
- *Harmful Algal Blooms in Lake Erie*
- *Understanding Social-Ecological Systems*
- *Fracking*
- *Water Management in Ohio*
- *Designing a Policy Brief*

Sought Concurrence

No

COURSE CHANGE REQUEST
3200 - Status: PENDING

Last Updated: Osborne, Jeanne Marie
09/26/2022

Attachments

- ENR 3200_Distance Approval Cover Sheet.docx: Distance approval cover sheet
(Other Supporting Documentation. Owner: Fries, Sara Nicholson)
- ENR 3200 submission-sustainability.pdf: Sustainability submission
(Other Supporting Documentation. Owner: Fries, Sara Nicholson)
- ENR 3200 letter.docx: Cover Letter
(Cover Letter. Owner: Fries, Sara Nicholson)
- ENR 3200 residential_SF_MH_MH.docx: ENR 3200 in person
(Syllabus. Owner: Fries, Sara Nicholson)
- ENR 3200_online_SF_MH_MH_MH.docx: ENR 3200 online
(Syllabus. Owner: Fries, Sara Nicholson)

Comments

- Please see Panel feedback email sent 08/22/2022. *(by Hilty, Michael on 08/22/2022 11:34 AM)*
- Revise as per COAA via email message on 7 February 2022

Revise as per email message on 3 February 2022 *(by Osborne, Jeanne Marie on 02/07/2022 03:37 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Fries, Sara Nicholson	02/01/2022 12:19 PM	Submitted for Approval
Revision Requested	Osborne, Jeanne Marie	02/03/2022 01:58 PM	Unit Approval
Submitted	Fries, Sara Nicholson	02/03/2022 03:00 PM	Submitted for Approval
Revision Requested	Osborne, Jeanne Marie	02/07/2022 03:37 PM	Unit Approval
Submitted	Fries, Sara Nicholson	02/08/2022 12:19 PM	Submitted for Approval
Approved	Osborne, Jeanne Marie	02/09/2022 02:27 PM	Unit Approval
Approved	Osborne, Jeanne Marie	02/09/2022 02:28 PM	SubCollege Approval
Approved	Osborne, Jeanne Marie	02/09/2022 02:28 PM	College Approval
Revision Requested	Hilty, Michael	03/07/2022 12:12 PM	ASCCAO Approval
Submitted	Fries, Sara Nicholson	04/17/2022 10:00 PM	Submitted for Approval
Approved	Osborne, Jeanne Marie	04/20/2022 02:01 PM	Unit Approval
Approved	Osborne, Jeanne Marie	04/20/2022 02:02 PM	SubCollege Approval
Approved	Osborne, Jeanne Marie	04/20/2022 02:02 PM	College Approval
Revision Requested	Hilty, Michael	08/22/2022 11:34 AM	ASCCAO Approval
Submitted	Fries, Sara Nicholson	09/26/2022 02:41 PM	Submitted for Approval
Approved	Osborne, Jeanne Marie	09/26/2022 04:00 PM	Unit Approval
Approved	Osborne, Jeanne Marie	09/26/2022 04:01 PM	SubCollege Approval
Approved	Osborne, Jeanne Marie	09/26/2022 04:01 PM	College Approval
Pending Approval	Cody, Emily Kathryn Jenkins, Mary Ellen Bigler Hanlin, Deborah Kay Hilty, Michael Vankeerbergen, Bernadette Chantal Steele, Rachel Lea	09/26/2022 04:01 PM	ASCCAO Approval



September 26, 2022

Dear members of the Themes Panel of the ASC Curriculum Committee,

We received feedback (italicized below) on our proposal to include ENR 3200 (Environmental and Natural Resources Policy) as a course in the GE Sustainability Theme and we explain in this letter how we revised our syllabi to address the requests of the Panel.

- *The syllabus seems to shy away from utilizing the term “sustainability” and utilizes a focused set of terms surrounding “environment”. They ask that sustainability (and the term) be further integrated into the course syllabus to help make the sustainability theme more clear and to help distinguish the term “sustainability” from the term “environmental”.*
 - We have integrated sustainability much more extensively throughout the syllabus. Specifically, the syllabus includes (or elevates the prominence of sustainability) in the Course Description (4 additional references), the paragraph at the end of General Education Expected Learning Outcomes, Written Assignments and Policy Brief (in Descriptions of Major Course Assignments), the introductory paragraph for Course Schedule and Readings, and throughout the topic descriptions for class meetings (weeks 1, 2, 13, and 15).
- *They ask that the term “sustainability” be further added to the Course Objectives (provided in the curriculum.osu.edu Course Content list) to help further cement the course within the GE Theme: Sustainability.*
 - We have updated the catalog description of the course to read: “This course covers topics such as the constitutional foundations of environmental policy, the role of congress and the executive branch in designing policy and bureaucratic agencies in implementing them, and the courts system as the final arbiter for environmental disputes. It also covers some of the foundational legislation in the U.S. to protect the environment and advance sustainability.”
- *They ask that specific GE Theme: Sustainability ELOs be linked in the course calendar (syllabus pages 13-16) to specific lectures, assignments, readings, etc. to help further connect the course to the GE Theme and help students understand how these connections will be made.*
 - We have linked ELOs to specific lectures/readings and assignments throughout the course calendar.
- *The reviewing faculty would like an explanation provided surrounding how the course will prepare students who enroll that are outside the disciplines this course engages with (for example, how would a student whose declared major program is English expect to be successful?). As a part of the General Education program, it is expected that courses be accessible to students from all backgrounds, and the reviewing faculty are concerned that there will not be enough background provided to allow any students to be successful if they*



happen to not be enrolled in a similar major program. Additionally, they ask that the steps being taken to ensure all students are successful be detailed in the course syllabus so students can understand how they will be successful. Finally, they worry that having two prerequisites could be a significant barrier to students from outside the major or discipline and makes the course not accessible to students.

- We have added a section to the syllabus (“Succeeding in a Multidisciplinary Course”) that explains how the course engages students with diverse disciplinary backgrounds and how students can be successful regardless of their major. In particular, the syllabus notes: ENR 3200 examines environmental policy and sustainability from range of disciplinary perspectives, including social-ecological systems science, environmental science, history, political science, law, philosophy/ethics, and economics. Due to the multidisciplinary nature of ENR 3200, students will likely find that certain elements of the course enable them to draw more upon knowledge from prior coursework, while other elements provide greater exposure to new ideas. Accordingly, each student may find that their effort will vary across assignments and other elements of the course, depending on their particular disciplinary background. Regardless of students’ disciplinary backgrounds, every student has unique and valuable experiences that will enable success in this course.
- We have also updated the prerequisites for the course. Specifically, the revised syllabus notes that students may enroll despite not having taken the prerequisites by seeking permission of the instructor.

Sincerely,

Matthew Hamilton, PhD
Assistant Professor
School of Environment and Natural Resources
The Ohio State University

Syllabus

ENR 3200

Environmental and Natural Resources Policy
Autumn 2022

Course Information

- **Course times:** Tuesdays and Thursdays, 8:00am to 9:20am
- **Course location:** 103 Kottman Hall
- **Credit hours:** 3
- **Mode of delivery:** In-person

Instructor

- **Name:** Dr. Matt Hamilton [this course is also offered by Dr. Ramiro Berardo and Dr. Sayeed Mehmood in other semesters; information below is for Hamilton]
- **Email:** hamilton.1323@osu.edu
- **Phone number:** 614-292-2265 (SENR Front Desk)
- **Office location:** 320E Kottman Hall
- **Office hours:** Fridays from 10-11am and by appointment
- **Preferred means of communication:**
 - My preferred method of communication for questions is **email**.
 - My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to be sure you receive these messages.

Teaching Assistants

For students with family names A-K:

- **Name:** TA 1
- **Office hours:** By appointment

For students with family names L-Z:

- **Name:** TA 2
- **Office hours:** By appointment



Course Prerequisites

ENR 2100 and ENR 2300 or by permission of instructor.

Course Description

Catalog Description: This course covers topics such as the constitutional foundations of environmental policy, the role of congress and the executive branch in designing policy and bureaucratic agencies in implementing them, and the courts system as the final arbiter for environmental disputes. It also covers some of the foundational legislation in the U.S. to protect the environment and advance sustainability.

ENR 3200 examines the institutions and processes that shape environmental and natural resources policy. At its core, this course focuses on the relationships between societies and their biophysical environments and how those relationships affect sustainability in human and natural communities. While you will learn about key environmental laws and the responsibilities of different federal institutions, we will also discuss how policy processes are shaped by values, science, history, and relationships among stakeholder groups. Though perhaps not a learning objective, a key goal of this course is that students appreciate the diverse and dynamic settings in which environmental and natural resources policy processes play out, and consequently understand how these processes are relevant to their daily lives as well as their future careers. More specifically, by the end of the semester, you will be familiar with key concepts in environmental and natural resources policy (and how those concepts relate to one another and to broader sustainability goals). You will also gain skills that will enable you to analyze and understand policy processes and sustainability outcomes (for example: How are the costs and benefits of an environmental policy distributed among different groups of people? Why were they distributed that way?).

Succeeding in a Multidisciplinary Course

ENR 3200 examines environmental policy and sustainability from range of disciplinary perspectives, including social-ecological systems science, environmental science, history, political science, law, philosophy/ethics, and economics. Due to the multidisciplinary nature of ENR 3200, students will likely find that certain elements of the course enable them to draw more upon knowledge from prior coursework, while other elements provide greater exposure to new ideas. Accordingly, each student may find that their effort will vary across assignments and other elements of the course, depending on their particular disciplinary background.

Regardless of students' disciplinary backgrounds, every student has unique and valuable experiences that will enable success in this course.

Learning Outcomes

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

- Understand the theories and methods of social scientific inquiry as they apply to the study of organizations and polities.

- Understand the formation and durability of political, economic, and social organizing principles and their differences and similarities across contexts.
- Comprehend and assess the nature and values of organizations and polities and their importance in social problem solving and policy making.

General Education Expected Learning Outcomes

As part of the **Sustainability Theme** of the General Education curriculum, this course addresses the following goals:

1. Successful students will analyze sustainability at a more advanced and in-depth level than in the Foundations component.
2. Successful students will integrate approaches to sustainability 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.
3. Successful students will analyze and explain how social and natural systems function, interact and evolve over time; how human well-being depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors and institutions impact multifaceted potential solutions across time.

As part of the **Sustainability Theme** of the General Education curriculum, this course is designed to prepare students to:

- 1.1 Engage in critical and logical thinking about the topic or idea of sustainability
- 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of sustainability
- 2.1 Identify, describe, and synthesize approaches or experience as they apply to sustainability
- 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.
- 3.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems, and on the resilience of those systems
- 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, present, and future

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

This course fulfills these learning outcomes through lectures, exercises, assignments, and other activities that examine historical and contemporary perspectives on the nature of environmental problems and sustainability challenges, the role of environmental institutions, frameworks and theories of the policy processes, foundational policies (e.g., the National Environmental Policy Act, the Endangered Species Act), landmark court decisions shaping policies, and cross-cutting issues such as environmental justice and climate change. Through multiple activities and assignments, ENR 3200 helps students develop skills for analyzing complex sustainability issues

How This Course Works

Mode of delivery: This course is 100% in-person.

Credit hours and work expectations: This is a 3 credit-hour course. According to [Ohio State bylaws on instruction](https://go.osu.edu/credithours) (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of C average.

Participation: Participation is important, and students are expected to contribute constructively to class activities and discussions. Your participation will contribute to your understanding of topics.

Attendance: Attendance is not mandatory. However, exams will evaluate your understanding of concepts that are discussed in class but are not covered in the readings. More importantly, lectures will help you contextualize and more completely understand material, which will enable you to get the most out of this course. Make-up exams will be scheduled only for medical reasons or emergencies that can be properly documented. In the event of an emergency or illness, please reach out to the instructor as soon as possible.

Course Materials, Fees and Technologies

Required Materials and/or Technologies

- None. There is no textbook for the course. All readings will be posted to Carmen unless otherwise specified.

Required Equipment for accessing CarmenCanvas

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection
- **Other:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at go.osu.edu/student-tech-access.

Required Software

Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Visit the [installing Office 365](http://go.osu.edu/office365help) (go.osu.edu/office365help) help article for full instructions.

CarmenCanvas Access

You will need to use [BuckeyePass](http://buckeyepass.osu.edu) (buckeyepass.osu.edu) 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 do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](http://go.osu.edu/add-device) (go.osu.edu/add-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.
- [Install the Duo Mobile application](http://go.osu.edu/install-duo) (go.osu.edu/install-duo) on 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 \(HELP\)](tel:614-688-4357) and IT support staff will work out a solution with you.

Technology Skills Needed for This Course

- Basic computer and web-browsing skills
- [Navigating CarmenCanvas](http://go.osu.edu/canvasstudent) (go.osu.edu/canvasstudent)

Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

- **Self Service and Chat:** go.osu.edu/it

- **Phone:** [614-688-4357 \(HELP\)](tel:614-688-4357)
- **Email:** servicedesk@osu.edu

Grading and Faculty Response

How Your Grade is Calculated

Assignment Category	Points
Weekly reading questions (0.2% each)	10
Written assignments (5% each)	20
Policy brief	25
Exam 1	20
Exam 2	25
Total	100

See [Course Schedule](#) for due dates.

Descriptions of Major Course Assignments

Weekly reading questions (~0.2% each; 10% collectively). Every Friday, I will provide reading questions for the material to be covered in the following week. The purpose of these reading questions is to help you engage with the readings in ways that enable you to develop theoretical and substantive expertise in core areas of environmental policy and sustainability. These questions will be posted in Carmen. There will be 2-4 questions each week that will be

graded. Your answers to the reading questions will be due at 5pm on Friday during the week when readings are assigned. There will be no reading questions for the first week of class.

Academic integrity and collaboration: Students may use notes and/or readings to complete these questions but must complete the assignment alone.

Written assignments (5% each; 20% collectively). Students will also complete four written assignments. The purpose of these written assignments is to sharpen your skills in describing, analyzing, and critiquing the roles of environmental policy processes in shaping sustainability in human societies and the natural world. Assignments will pertain to an issue of the student's choosing, but there are two topics that the assignments CANNOT BE ABOUT: climate change and hydraulic fracturing (fracking). Deadlines for assignments are as follows:

1. Assignment #1 due at 11:55 pm on Tuesday, February 2
2. Assignment #2 due at 11:55 pm on Tuesday, March 2
3. Assignment #3 due at 11:55 pm on Tuesday, March 16
4. Assignment #4 due at 11:55 pm on Thursday, April 1

Academic integrity and collaboration: Your written assignments should be your own original work. You should cite the ideas and words of your research sources using a standard citation style of your choice. 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.

Policy brief (25%). Students will write a policy brief on the topic of fracking in eastern Ohio. Details will be posted in Carmen, and we will cover how to write a policy brief as part of this course. The purpose of this assignment is to help you strengthen your skills in summarizing and evaluating policy responses to sustainability challenges based on your review of scientific evidence and your understanding of the values of distinct stakeholder groups. The deadline for the submission of the policy brief (to Carmen) is April 20 at 11:55pm.

Academic integrity and collaboration: Your policy brief should be your own original work. You should cite the ideas and words of your research sources using a standard citation style of your choice. 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.

Exams (45%). There will be two examinations, but no final exam. The two exams will be administered during class, and will consist of a mix of multiple choice, true/false and essay questions designed to test understanding of the readings and lectures. Make-up exams will be scheduled only for medical reasons or emergencies that can be properly documented. Except for students registered with SLDS, exams will last for the duration of class and will be proctored in class.

Academic integrity and collaboration: Students must complete each exam alone during the allotted time period and without the aid of any external materials.

Late Assignments

The maximum grade of written assignments will decrease by 5% for each day late, including weekends. Late penalties will not be applied in cases of emergencies or other excused absences if documentation is provided. Please refer to Carmen for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments.

Instructor Feedback and Response Time

- **Preferred contact method:** If you have a question, please contact me first through my Ohio State email address. I will reply to emails within **24 hours on days when class is in session at the university**.
- **Class announcements:** I will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check [your notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- **Grading and feedback:** For assignments submitted before the due date, I will try to provide feedback and grades within **seven days**. Assignments submitted after the due date may have reduced feedback, and grades may take longer to be posted.

Grading Scale

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

Other Course Policies

Academic Integrity Policy

See [Descriptions of Major Course Assignments](#) for specific guidelines about collaboration and academic integrity in the context of this class.

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](http://studentconduct.osu.edu) (studentconduct.osu.edu), 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 I suspect that a student has committed academic misconduct in this course, I am 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 me.

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 the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also

have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Diversity Statement

The Ohio State University affirms the importance and value of diversity of people and ideas. We believe in creating equitable research opportunities for all students and to providing programs and curricula that allow our students to understand critical societal challenges from diverse perspectives and aspire to use research to promote sustainable solutions for all. We are committed to maintaining an inclusive community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among all members; and encourages each individual to strive to reach their own potential. The Ohio State University does not discriminate on the basis of age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment.

To learn more about diversity, equity, and inclusion and for opportunities to get involved, please visit:

- <https://odi.osu.edu/>
- <https://odi.osu.edu/racial-justice-resources>
- <https://odi.osu.edu/focus-on-racial-justice>
- <http://mcc.osu.edu/>

In addition, this course adheres to **The Principles of Community** adopted by the College of Food, Agricultural, and Environmental Sciences. These principles are located on the Carmen site for this course; and can also be found at <https://go.osu.edu/principlesofcommunity>. For additional information on Diversity, Equity, and Inclusion in CFAES, contact the CFAES Office for Diversity, Equity, and Inclusion (<https://equityandinclusion.cfaes.ohio-state.edu/>). If you have been a victim of or a witness to a bias incident, you can report it online and anonymously (if you choose) at <https://equity.osu.edu/>.

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 or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th floor of the Younkin Success Center and 10th floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

For students in the College of Food, Agricultural, and Environmental Sciences, David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor on the Columbus campus. To contact David, please call 614-292-5766. Students should mention their affiliation with CFAES if interested in speaking directly with David.

Accessibility Accommodations for Students with Disabilities

Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I 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; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Accessibility of Course Technology

This course requires use of CarmenCanvas (Ohio State's learning management system). If you need additional services to use these technologies, please request accommodations as early as possible.

- [CarmenCanvas accessibility](http://go.osu.edu/canvas-accessibility) (go.osu.edu/canvas-accessibility)
- Streaming audio and video

Course Schedule and Readings

Refer to the CarmenCanvas course site for up-to-date due dates.

Readings associated with each session topic are provided below. All are available in the Modules section of the Carmen course site. Some readings are seminal scholarly works that introduce core topics in environmental policy and sustainability. Other readings serve as concise reviews of the application of general topics/concepts to environmental policy and sustainability (e.g., the readings on Congress, Courts, and Agencies). In addition to scholarly publications such as academic journal articles and book chapters, you will also read news and opinion articles, regulatory documents, and other types of materials that will help you get a sense of how diverse groups of stakeholders (including the public) engages with the topic of environmental policy and sustainability. Generally, readings earlier in the course will emphasize scholarly works; we will engage non-scholarly works more frequently as the course progresses. This approach will help you develop a solid foundation of theoretical and substantive expertise about (a) the structure and function of environmental policy processes, (b) how outputs of these policy processes affect human wellbeing (including on future generations and on societies globally), and (c) the scope of potential policy solutions that can be brought to bear on sustainability and environmental governance challenges.

As part of the **Sustainability Theme** of the General Education curriculum, this course is designed to prepare students to:

- 1.1 Engage in critical and logical thinking about the topic or idea of sustainability
- 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of sustainability

2.1 Identify, describe, and synthesize approaches or experience as they apply to sustainability

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.

3.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems, and on the resilience of those systems

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, present, and future

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

These Learning Outcomes are referenced throughout the course calendar that follows to help students understand how these connections will be made.

Week	Topics, Readings, Assignments, Due Dates
1	<p>Session 1: Introductions; overview of syllabus and course</p> <ul style="list-style-type: none"> No readings <p>Session 2: Sustainability Challenges Now and Then (<i>ELOs 1.1, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> Hardin, Garret. 1968. "The Tragedy of the Commons." <i>Science</i> 162(3859):1243-1248.
2	<p>No session 1 (Martin Luther King Jr. Day)</p> <p>Session 2: The Value of Institutions: How functional interdependence of human and natural communities shapes sustainability and social-ecological resilience (<i>ELOs 1.1, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> Dietz, Thomas, Elinor Ostrom, and Paul Stern. 2003. "The Struggle to Govern the Commons." <i>Science</i> 302 (5652):1907-12.
3	<p>Session 1: The U.S. Constitution (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> Squire et al. 2005. <i>Dynamics of Democracy</i>. Ch. 2 partial: pp. 22-27, 30-38, 40. <p>Session 2: The Dominant Social Paradigm and Some Environmental History: Impacts of human activity on societies and the natural world (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> Smith, Zachary A. 2013. <i>The Environmental Policy Paradox</i>. 6th edition. Pearson. Chapter 2, pp. 7-21.
4	<p>→ Written assignment #1 due at 11:55 pm on Tuesday, February 2 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Basics of the Policy Making Process in the U.S. (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> Lazarus, Richard J. 2004. <i>The Making of Environmental Law</i>. Chicago, IL: The University of Chicago Press. Chapter 3. Environmental Protection Agency. "The Basics of the Regulatory Process." <p>Session 2: Congress (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> Klein, Ezra. 2016. The single most important fact about American Politics. Gilens, Martin, and Benjamin I. Page. 2014. "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens." <i>Perspective on Politics</i> 12(3):564-581.
5	<p>Session 1: Courts (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> Duane, Timothy. 2012. "Courts, Legal Analysis, and Environmental Policy." In Michael Kraft and Sheldon Kamieniecki (eds.) <i>The Oxford Handbook of U.S. Environmental Policy</i>. Oxford University Press.

	<p>Session 2: Agencies (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> • Rosenbaum, Walter A. 2014. Environmental Politics and Policy. 9th Edition. CQ Press. Chapter 3, pp. 97-111. • Smith, Kevin B., and Michael J. Licari. 2006. Public Administration. Power and Politics in the Fourth Branch of Government. Roxbury Publishing Company. pp. 50-52, 60-62.
6	<p>Session 1: Review for Exam #1 Session 2: Exam #1 (<i>ELO 2.2</i>)</p>
7	<p>Session 1: Theories of the Policy Process (I) (<i>ELOs 1.1, 1.2, and 2.1</i>)</p> <ul style="list-style-type: none"> • Cairney, Paul. The Policy Cycle and its Stages. • Cairney, Paul. Rational Choice and the IAD. <p>(No second session: instructional break)</p>
8	<p>→ Written assignment #2 due at 11:55 pm on Tuesday, March 2 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Theories of the Policy Process (II) (<i>ELOs 1.1, 1.2, and 2.1</i>)</p> <ul style="list-style-type: none"> • Cairney, Paul. Multiple Streams Analysis. • Cairney, Paul. The Advocacy Coalition Framework. <p>Session 2: NEPA (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Council on Environmental Quality. 2004. "National Environmental Policy Act." In Annual Report 1994-1995.
9	<p>Session 1: Endangered Species Policy: How values and science intersect to shape biodiversity protection (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Kraft, Michael E. 2011. Environmental Policy and Politics. 5th edition. Pearson. Pp.197-201. • U.S. Fish & Wildlife Service. 40 Years of Conserving Endangered Species. • Brosi, Berry J. and Eric G. N. Biber. 2012. "Citizen Involvement in the U.S. Endangered Species Act." Science Vol. 337, Issue 6096, pp. 802-803. <p>Session 2: Climate Change and Global Governance: How policy processes shape the resilience of global social-ecological systems (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Harris, Paul. 2011. "Reconceptualizing Global Governance." In John Dryzek, Richard B. Norgaard, and David Schlosberg (eds.) The Oxford Handbook of Climate Change and Society. Cambridge, MA: Oxford University Press. Pp. 639-652.

<p>10</p>	<p>→ Written assignment #3 due at 11:55 pm on Tuesday, March 16 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Climate Change and Obstacles to Political Action (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Environmental Protection Agency. 2015. "Overview of the Clean Power Plan." • Farrell, Justin. 2015. "Network structure and influence of the climate change counter-movement." <i>Nature Climate Change</i>. <p>Session 2: Justice, Equity, and Environmental Policy (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Taylor, Dorceta E. 2011. "Introduction: The Evolution of Environmental Justice Activism, Research, and Scholarship." <i>Environmental Practice</i> 13, no. 4. 280–301.
<p>11</p>	<p>Session 1: Review Exam #2</p> <p>Session 2: Exam #2 (<i>ELO 2.2</i>)</p>
<p>12</p>	<p>→ Written assignment #4 due at 11:55 pm on Thursday, April 1 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Introduction to hydraulic fracturing in Eastern Ohio (<i>ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • Jacquet, Jeffrey B., Anne N. Junod, Dylan Bugden, Grace Wildermuth, Joshua T. Fergen, Kirk Jalbert, Brian Rahm, et al. 2018. "A Decade of Marcellus Shale: Impacts to People, Policy, and Culture from 2008 to 2018 in the Greater Mid-Atlantic Region of the United States." <i>The Extractive Industries and Society</i> 5(4): 596–609. <p>(No second session: instructional break)</p>
<p>13</p>	<p>Session 1: Hydraulic fracturing in Eastern Ohio: Roles and impacts of human activity and technology on sustainability (<i>ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • Ohio State University Extension – Environmental Impacts (https://shalegas.osu.edu/shale-library/environmental-impacts) • Biviano, Dennis. 2018. "Ohio Natural Gas Production Continues Growth" (https://spectrumnews1.com/oh/columbus/news/2018/12/06/ohio-natural-gas-production-continues-growth) <p>Session 2: Social-ecological perspectives on hydraulic fracturing: what factors are important? (<i>ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • Clark, Corrie E., A. J. Burnham, Christopher B. Harto, and Robert M. Horner. 2012. "Hydraulic fracturing: technology, impacts, and policy." No. ANL/EVS/R-12/5. Argonne National Lab (ANL), Argonne, IL (United States), 2012.

	<p>Mental models of fracking: Students will create models to understand a range of social and biophysical dynamics associated with fracking, using the Mental Modeler software (accessible at http://www.mentalmodeler.org/).</p>
14	<p>Session 1: Stakeholders, values, and fracking in Eastern Ohio (<i>ELOs 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • Patterson, Brittany. 2018. “Fracking’s Next Boom? Petrochemical Plants Fuel Debate Over Jobs, Pollution” (http://ohiovalleyresource.org/2018/11/30/frackings-next-boom-petrochemical-plants-fuel-debate-over-jobs-pollution/) • Grant, Julie. 2018. “Gearing Up For Fracking Fight, Ohio Residents Turn To Pennsylvania For Advice” (http://radio.wosu.org/post/gearing-fracking-fight-ohio-residents-turn-pennsylvania-advice#stream/0) • Sams, Dylan. 2018. “Fracking begins at Cabot Oil’s Ashland County site” (https://www.dispatch.com/business/20180904/fracking-begins-at-cabot-oils-ashland-county-site) <p>Fracking stakeholder policy networks: Students will document relationships among diverse groups of stakeholders involved in fracking in Ohio and will gain insight into how these relationships shape policy as well as environmental and social outcomes. Students will develop these networks using the Mental Modeler software (accessible at http://www.mentalmodeler.org/).</p> <p>Session 2: Policy instruments and tools (<i>ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • https://epa.ohio.gov/Portals/0/general%20pdfs/OhioRegsShaleGasWellDrilling.pdf • https://epa.ohio.gov/Portals/0/general%20pdfs/generalshale711.pdf
15	<p>→ Policy brief due at 11:55 pm on Tuesday, April 20 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Outreach and science-policy communication (<i>ELOs 1.1, 2.1, 2.2, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • No readings <p>Session 2: Sustainability in the public and private sectors (<i>ELOs 1.1, 2.1, 2.2, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • No readings

Syllabus

ENR 3200

Environmental and Natural Resources Policy
Autumn 2022

Course Information

- **Course times and location:** No required meetings; see *How This Online Course Works*, below, for details.
- **Credit hours:** 3
- **Mode of delivery:** Distance Learning

Instructor

- **Name:** Dr. Matt Hamilton [this course is also offered by Dr. Ramiro Berardo and Dr. Sayeed Mehmood in other semesters; information below is for Hamilton]
- **Email:** hamilton.1323@osu.edu
- **Phone number:** 614-292-2265 (SENR Front Desk)
- **Office location:** 320E Kottman Hall
- **Office hours:** Fridays from 10-11am and by appointment
- **Preferred means of communication:**
 - My preferred method of communication for questions is **email**.
 - My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to be sure you receive these messages.

Teaching Assistant

For students with family names A-K:

- **Name:** TA 1
- **Office hours:** By appointment

For students with family names L-Z:

- **Name:** TA 2
- **Office hours:** By appointment



Course Prerequisites

ENR 2100 and ENR 2300 or by permission of instructor

Course Description

Catalog Description: This course covers topics such as the constitutional foundations of environmental policy, the role of congress and the executive branch in designing policy and bureaucratic agencies in implementing them, and the courts system as the final arbiter for environmental disputes. It also covers some of the foundational legislation in the U.S. to protect the environment and advance sustainability.

ENR 3200 examines the institutions and processes that shape environmental and natural resources policy. At its core, this course focuses on the relationships between societies and their biophysical environments and how those relationships affect sustainability in human and natural communities. While you will learn about key environmental laws and the responsibilities of different federal institutions, we will also discuss how policy processes are shaped by values, science, history, and relationships among stakeholder groups. Though perhaps not a learning objective, a key goal of this course is that students appreciate the diverse and dynamic settings in which environmental and natural resources policy processes play out, and consequently understand how these processes are relevant to their daily lives as well as their future careers. More specifically, by the end of the semester, you will be familiar with key concepts in environmental and natural resources policy (and how those concepts relate to one another and to broader sustainability goals). You will also gain skills that will enable you to analyze and understand policy processes and sustainability outcomes (for example: How are the costs and benefits of an environmental policy distributed among different groups of people? Why were they distributed that way?).

Succeeding in a Multidisciplinary Course

ENR 3200 examines environmental policy and sustainability from range of disciplinary perspectives, including social-ecological systems science, environmental science, history, political science, law, philosophy/ethics, and economics. Due to the multidisciplinary nature of ENR 3200, students will likely find that certain elements of the course enable them to draw more upon knowledge from prior coursework, while other elements provide greater exposure to new ideas. Accordingly, each student may find that their effort will vary across assignments and other elements of the course, depending on their particular disciplinary background.

Regardless of students' disciplinary backgrounds, every student has unique and valuable experiences that will enable success in this course.

Learning Outcomes

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

- Understand the theories and methods of social scientific inquiry as they apply to the study of organizations and polities.



- Understand the formation and durability of political, economic, and social organizing principles and their differences and similarities across contexts.
- Comprehend and assess the nature and values of organizations and polities and their importance in social problem solving and policy making.

General Education Expected Learning Outcomes

As part of the **Sustainability Theme** of the General Education curriculum, this course addresses the following goals:

1. Successful students will analyze sustainability at a more advanced and in-depth level than in the Foundations component.
2. Successful students will integrate approaches to sustainability 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.
3. Successful students will analyze and explain how social and natural systems function, interact and evolve over time; how human well-being depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors and institutions impact multifaceted potential solutions across time.

As part of the **Sustainability Theme** of the General Education curriculum, this course is designed to prepare students to:

- 1.1 Engage in critical and logical thinking about the topic or idea of sustainability
- 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of sustainability
- 2.1 Identify, describe, and synthesize approaches or experience as they apply to sustainability
- 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.
- 3.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems, and on the resilience of those systems
- 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, present, and future

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

This course fulfills these learning outcomes through lectures, exercises, assignments, and other activities that examine historical and contemporary perspectives on the nature of environmental problems and sustainability challenges, the role of environmental institutions, frameworks and theories of the policy processes, foundational policies (e.g., the National Environmental Policy Act, the Endangered Species Act), landmark court decisions shaping policies, and cross-cutting issues such as environmental justice and climate change. Through multiple activities and assignments, ENR 3200 helps students develop skills for analyzing complex sustainability issues

How This Online Course Works

Mode of delivery: This course is 100% online. There are no required sessions when you must be logged in to Carmen at a scheduled time. ENR 3200 will be offered asynchronously with all lectures and materials available on the course Carmen website.

Pace of online activities: This course is divided into **weekly modules** that are released one week ahead of time. Students are expected to keep pace with weekly deadlines but may schedule their efforts freely within that time frame.

Credit hours and work expectations: This is a 3 credit-hour course. According to Ohio State policy, students should expect to spend 9 hours per week of the average student's time required to earn the average grade of "C" in this course. A student's 9-hour workweek includes watching videos, taking notes, studying, readings, assignments, quizzes, and exams.

Attendance and participation requirements: Attendance is based on your online activity and participation in Carmen. You are expected to log in to the course in Carmen every week. During most weeks you will probably log in many times. Make-up exams will be scheduled only for medical reasons or emergencies that can be properly documented. In the event of illness or an emergency, please reach out to the instructor as soon as possible.

Course Materials, Fees and Technologies

Required Materials and/or Technologies

- None. There is no textbook for the course. All readings will be posted to Carmen unless otherwise specified.

Required Equipment

- **Computer:** current Mac (MacOS) or PC (Windows 10) 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) to use for BuckeyePass authentication

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at go.osu.edu/student-tech-access.

Required Software

Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Visit the [installing Office 365](https://go.osu.edu/office365help) (go.osu.edu/office365help) help article for full instructions.

CarmenCanvas Access

You will need to use [BuckeyePass](https://buckeyepass.osu.edu) (buckeyepass.osu.edu) 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 do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](https://go.osu.edu/add-device) (go.osu.edu/add-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.
- [Install the Duo Mobile application](https://go.osu.edu/install-duo) (go.osu.edu/install-duo) on 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 \(HELP\)](tel:614-688-4357) and IT support staff will work out a solution with you.

Technology Skills Needed for This Course

- Basic computer and web-browsing skills
- [Navigating CarmenCanvas](https://go.osu.edu/canvasstudent) (go.osu.edu/canvasstudent)
- [CarmenZoom virtual meetings](https://go.osu.edu/zoom-meetings) (go.osu.edu/zoom-meetings)
- [Recording a slide presentation with audio narration and recording, editing and uploading video](https://go.osu.edu/video-assignment-guide) (go.osu.edu/video-assignment-guide)



Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

- **Self Service and Chat:** go.osu.edu/it
- **Phone:** [614-688-4357 \(HELP\)](tel:614-688-4357)
- **Email:** servicedesk@osu.edu

Grading and Faculty Response

How Your Grade is Calculated

Assignment Category	Points
Weekly reading questions (0.2% each)	10
Written assignments (2.5% each)	10
Participation in discussions	10
Policy brief	25
Exam 1	20
Exam 2	25
Total	100

See [Course Schedule](#) for due dates.

Descriptions of Major Course Assignments

Weekly reading questions (~0.2% each; 10% collectively). Every Friday, I will provide reading questions for the material to be covered in the following week. The purpose of these reading questions is to help you engage with the readings in ways that enable you to develop theoretical and substantive expertise in core areas of environmental policy and sustainability. These questions will be posted in Carmen. There will be 2-4 questions each week that will be graded. Your answers to the reading questions will be due at 5pm on Friday during the week when readings are assigned. There will be no reading questions for the first week of class.

Academic integrity and collaboration: Students may use notes and/or readings to complete these questions but must complete the assignment alone.

Participation in discussions (10%). On a weekly basis, students will contribute to discussions (via Carmen) that integrate reflections and critical analysis of readings, lectures, and related content (e.g., reporting on current events). Each student will be responsible for contributing one question to each week's discussion board, along with one response (e.g., to another question or to another response).

Written assignments (5% each; 20% collectively). Students will also complete four written assignments. The purpose of these written assignments is to sharpen your skills in describing, analyzing, and critiquing the roles of environmental policy processes in shaping sustainability in human societies and the natural world. Assignments will pertain to an issue of the student's choosing, but there are two topics that the assignments CANNOT BE ABOUT: climate change and hydraulic fracturing (fracking). Deadlines for assignments are as follows:

1. Assignment #1 due at 11:55 pm on Tuesday, February 2
2. Assignment #2 due at 11:55 pm on Tuesday, March 2
3. Assignment #3 due at 11:55 pm on Tuesday, March 16
4. Assignment #4 due at 11:55 pm on Thursday, April 1

Academic integrity and collaboration: Your written assignments should be your own original work. You should cite the ideas and words of your research sources using a standard citation style of your choice. 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.

Policy brief (25%). Students will write a policy brief on the topic of fracking in eastern Ohio. Details will be posted in Carmen, and we will cover how to write a policy brief as part of this course. The purpose of this assignment is to help you strengthen your skills in summarizing and evaluating policy responses to sustainability challenges based on your review of scientific evidence and your understanding of the values of distinct stakeholder groups. The deadline for the submission of the policy brief (to Carmen) is April 20 at 11:55pm.

Academic integrity and collaboration: Your policy brief should be your own original work. You should cite the ideas and words of your research sources using a standard citation style of your choice. 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.

Exams (45%). There will be two examinations, but no final exam. The two exams will be administered through Carmen, and will consist of a mix of multiple choice, true/false and essay questions designed to test understanding of the readings and lectures. Make-up exams will be scheduled only for medical reasons or emergencies that can be properly documented. Each exam will be available for 48 hours but must be completed within an 80-minute window during those 48 hours (with exceptions for students registered with SLDS). Exams will not be proctored; please see the academic integrity and collaboration statement below as well as Ohio State's Academic Integrity Policy (described below), which applies to this class as well.

Academic integrity and collaboration: Students must complete each exam alone during the allotted time period and without the aid of any external materials.

Late Assignments

The maximum grade of written assignments will decrease by 5% for each day late, including weekends. Late penalties will not be applied in cases of emergencies or other excused absences if documentation is provided. Please refer to Carmen for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments.

Instructor Feedback and Response Time

- **Preferred contact method:** If you have a question, please contact me first through my Ohio State email address. I will reply to emails within **24 hours on days when class is in session at the university**.
- **Class announcements:** I will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check [your notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- **Grading and feedback:** For assignments submitted before the due date, I will try to provide feedback and grades within **seven days**. Assignments submitted after the due date may have reduced feedback, and grades may take longer to be posted.

Grading Scale

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

Other Course Policies

Academic Integrity Policy

See [Descriptions of Major Course Assignments](#) for specific guidelines about collaboration and academic integrity in the context of this online class.

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](http://studentconduct.osu.edu) (studentconduct.osu.edu), 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 I suspect that a student has committed academic misconduct in this course, I am 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 me.

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 the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

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 or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th floor of the Younkin Success Center and 10th floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

For students in the College of Food, Agricultural, and Environmental Sciences, David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor on the Columbus campus. To contact David, please call 614-292-5766. Students should mention their affiliation with CFAES if interested in speaking directly with David.

Accessibility Accommodations for Students with Disabilities

Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I 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; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Accessibility of Course Technology

This online course requires use of CarmenCanvas (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 as early as possible.

- [CarmenCanvas accessibility](http://go.osu.edu/canvas-accessibility) (go.osu.edu/canvas-accessibility)
- Streaming audio and video

- [CarmenZoom accessibility](https://go.osu.edu/zoom-accessibility) (go.osu.edu/zoom-accessibility)

Course Schedule and Readings

Refer to the CarmenCanvas course site for up-to-date due dates.

Readings associated with each session topic are provided below. All are available in the Modules section of the Carmen course site. Some readings are seminal scholarly works that introduce core topics in environmental policy and sustainability. Other readings serve as concise reviews of the application of general topics/concepts to environmental policy and sustainability (e.g., the readings on Congress, Courts, and Agencies). In addition to scholarly publications such as academic journal articles and book chapters, you will also read news and opinion articles, regulatory documents, and other types of materials that will help you get a sense of how diverse groups of stakeholders (including the public) engages with the topic of environmental policy and sustainability. Generally, readings earlier in the course will emphasize scholarly works; we will engage non-scholarly works more frequently as the course progresses. This approach will help you develop a solid foundation of theoretical and substantive expertise about (a) the structure and function of environmental policy processes, (b) how outputs of these policy processes affect human wellbeing (including on future generations and on societies globally), and (c) the scope of potential policy solutions that can be brought to bear on sustainability and environmental governance challenges.

As part of the **Sustainability Theme** of the General Education curriculum, this course is designed to prepare students to:

- 1.1 Engage in critical and logical thinking about the topic or idea of sustainability
- 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of sustainability
 - 2.1 Identify, describe, and synthesize approaches or experience as they apply to sustainability
 - 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.
- 3.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems, and on the resilience of those systems
- 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, present, and future

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

These Expected Learning Outcomes (ELOs) are referenced throughout the course calendar that follows to help students understand how these connections will be made.

Week	Topics, Readings, Assignments, Due Dates
1	<p>Session 1: Introductions; overview of syllabus and course</p> <ul style="list-style-type: none"> No readings <p>Session 2: Sustainability Challenges Now and Then (<i>ELOs 1.1, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> Hardin, Garret. 1968. "The Tragedy of the Commons." <i>Science</i> 162(3859):1243-1248.
2	<p>No session 1 (Martin Luther King Jr. Day)</p> <p>Session 2: The Value of Institutions: How functional interdependence of human and natural communities shapes sustainability and social-ecological resilience (<i>ELOs 1.1, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> Dietz, Thomas, Elinor Ostrom, and Paul Stern. 2003. "The Struggle to Govern the Commons." <i>Science</i> 302 (5652):1907-12.
3	<p>Session 1: The U.S. Constitution (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> Squire et al. 2005. <i>Dynamics of Democracy</i>. Ch. 2 partial: pp. 22-27, 30-38, 40. <p>Session 2: The Dominant Social Paradigm and Some Environmental History: Impacts of human activity on societies and the natural world (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> Smith, Zachary A. 2013. <i>The Environmental Policy Paradox</i>. 6th edition. Pearson. Chapter 2, pp. 7-21.
4	<p>→ Written assignment #1 due at 11:55 pm on Tuesday, February 2 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Basics of the Policy Making Process in the U.S. (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> Lazarus, Richard J. 2004. <i>The Making of Environmental Law</i>. Chicago, IL: The University of Chicago Press. Chapter 3. Environmental Protection Agency. "The Basics of the Regulatory Process." <p>Session 2: Congress (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> Klein, Ezra. 2016. The single most important fact about American Politics. Gilens, Martin, and Benjamin I. Page. 2014. "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens." <i>Perspective on Politics</i> 12(3):564-581.
5	<p>Session 1: Courts (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> Duane, Timothy. 2012. "Courts, Legal Analysis, and Environmental Policy." In Michael Kraft and Sheldon Kamieniecki (eds.) <i>The Oxford Handbook of U.S. Environmental Policy</i>. Oxford University Press.

	<p>Session 2: Agencies (<i>ELOs 1.1 and 1.2</i>)</p> <ul style="list-style-type: none"> • Rosenbaum, Walter A. 2014. <i>Environmental Politics and Policy</i>. 9th Edition. CQ Press. Chapter 3, pp. 97-111. • Smith, Kevin B., and Michael J. Licari. 2006. <i>Public Administration. Power and Politics in the Fourth Branch of Government</i>. Roxbury Publishing Company. pp. 50-52, 60-62.
6	<p>Session 1: Review for Exam #1 Session 2: Exam #1 (<i>ELO 2.2</i>)</p>
7	<p>Session 1: Theories of the Policy Process (I) (<i>ELOs 1.1, 1.2, and 2.1</i>)</p> <ul style="list-style-type: none"> • Cairney, Paul. <i>The Policy Cycle and its Stages</i>. • Cairney, Paul. <i>Rational Choice and the IAD</i>. <p>(No second session: instructional break)</p>
8	<p>→ Written assignment #2 due at 11:55 pm on Tuesday, March 2 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Theories of the Policy Process (II) (<i>ELOs 1.1, 1.2, and 2.1</i>)</p> <ul style="list-style-type: none"> • Cairney, Paul. <i>Multiple Streams Analysis</i>. • Cairney, Paul. <i>The Advocacy Coalition Framework</i>. <p>Session 2: NEPA (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Council on Environmental Quality. 2004. "National Environmental Policy Act." In <i>Annual Report 1994-1995</i>.
9	<p>Session 1: Endangered Species Policy: How values and science intersect to shape biodiversity protection (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Kraft, Michael E. 2011. <i>Environmental Policy and Politics</i>. 5th edition. Pearson. Pp.197-201. • U.S. Fish & Wildlife Service. <i>40 Years of Conserving Endangered Species</i>. • Brosi, Berry J. and Eric G. N. Biber. 2012. "Citizen Involvement in the U.S. Endangered Species Act." <i>Science</i> Vol. 337, Issue 6096, pp. 802-803. <p>Session 2: Climate Change and Global Governance: How policy processes shape the resilience of global social-ecological systems (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Harris, Paul. 2011. "Reconceptualizing Global Governance." In John Dryzek, Richard B. Norgaard, and David Schlosberg (eds.) <i>The Oxford Handbook of Climate Change and Society</i>. Cambridge, MA: Oxford University Press. Pp. 639-652.



<p>10</p>	<p>→ Written assignment #3 due at 11:55 pm on Tuesday, March 16 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Climate Change and Obstacles to Political Action (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Environmental Protection Agency. 2015. "Overview of the Clean Power Plan." • Farrell, Justin. 2015. "Network structure and influence of the climate change counter-movement." <i>Nature Climate Change</i>. <p>Session 2: Justice, Equity, and Environmental Policy (<i>ELOs 1.1, 1.2, 2.1, 3.1, and 3.2</i>)</p> <ul style="list-style-type: none"> • Taylor, Dorceta E. 2011. "Introduction: The Evolution of Environmental Justice Activism, Research, and Scholarship." <i>Environmental Practice</i> 13, no. 4. 280–301.
<p>11</p>	<p>Session 1: Review Exam #2</p> <p>Session 2: Exam #2 (<i>ELO 2.2</i>)</p>
<p>12</p>	<p>→ Written assignment #4 due at 11:55 pm on Thursday, April 1 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Introduction to hydraulic fracturing in Eastern Ohio (<i>ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • Jacquet, Jeffrey B., Anne N. Junod, Dylan Bugden, Grace Wildermuth, Joshua T. Fergen, Kirk Jalbert, Brian Rahm, et al. 2018. "A Decade of Marcellus Shale: Impacts to People, Policy, and Culture from 2008 to 2018 in the Greater Mid-Atlantic Region of the United States." <i>The Extractive Industries and Society</i> 5(4): 596–609. <p>(No second session: instructional break)</p>
<p>13</p>	<p>Session 1: Hydraulic fracturing in Eastern Ohio: Roles and impacts of human activity and technology on sustainability (<i>ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • Ohio State University Extension – Environmental Impacts (https://shalegas.osu.edu/shale-library/environmental-impacts) • Biviano, Dennis. 2018. "Ohio Natural Gas Production Continues Growth" (https://spectrumnews1.com/oh/columbus/news/2018/12/06/ohio-natural-gas-production-continues-growth) <p>Session 2: Social-ecological perspectives on hydraulic fracturing: what factors are important? (<i>ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • Clark, Corrie E., A. J. Burnham, Christopher B. Harto, and Robert M. Horner. 2012. "Hydraulic fracturing: technology, impacts, and policy." No. ANL/EVS/R-12/5. Argonne National Lab (ANL), Argonne, IL (United States), 2012.

	<p>Mental models of fracking: Students will create models to understand a range of social and biophysical dynamics associated with fracking, using the Mental Modeler software (accessible at http://www.mentalmodeler.org/).</p>
14	<p>Session 1: Stakeholders, values, and fracking in Eastern Ohio (<i>ELOs 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • Patterson, Brittany. 2018. “Fracking’s Next Boom? Petrochemical Plants Fuel Debate Over Jobs, Pollution” (http://ohiovalleyresource.org/2018/11/30/frackings-next-boom-petrochemical-plants-fuel-debate-over-jobs-pollution/) • Grant, Julie. 2018. “Gearing Up For Fracking Fight, Ohio Residents Turn To Pennsylvania For Advice” (http://radio.wosu.org/post/gearing-fracking-fight-ohio-residents-turn-pennsylvania-advice#stream/0) • Sams, Dylan. 2018. “Fracking begins at Cabot Oil’s Ashland County site” (https://www.dispatch.com/business/20180904/fracking-begins-at-cabot-oils-ashland-county-site) <p>Fracking stakeholder policy networks: Students will document relationships among diverse groups of stakeholders involved in fracking in Ohio and will gain insight into how these relationships shape policy as well as environmental and social outcomes. Students will develop these networks using the Mental Modeler software (accessible at http://www.mentalmodeler.org/).</p> <p>Session 2: Policy instruments and tools (<i>ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • https://epa.ohio.gov/Portals/0/general%20pdfs/OhioRegsShaleGasWellDrilling.pdf • https://epa.ohio.gov/Portals/0/general%20pdfs/generalshale711.pdf
15	<p>→ Policy brief due at 11:55 pm on Tuesday, April 20 (<i>ELOs 1.1, 1.2, 2.1, 2.2, and 3.3</i>)</p> <p>Session 1: Outreach and science-policy communication (<i>ELOs 1.1, 2.1, 2.2, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • No readings <p>Session 2: Sustainability in the public and private sectors (<i>ELOs 1.1, 2.1, 2.2, 3.2, and 3.3</i>)</p> <ul style="list-style-type: none"> • No readings

GE THEME COURSES

Overview

Courses that are accepted into the General Education (GE) Themes must meet two sets of Expected Learning Outcomes (ELOs): those common for all GE Themes and one set specific to the content of the Theme. This form begins with the criteria common to all themes and has expandable sections relating to each specific theme.

A course may be accepted into more than one Theme if the ELOs for each theme are met. Courses seeking approval for multiple Themes will complete a submission document for each theme. Courses seeking approval as a 4-credit, Integrative Practices course need to complete a similar submission form for the chosen practice. It may be helpful to consult your Director of Undergraduate Studies or appropriate support staff person as you develop and submit your course.

Please enter text in the boxes to describe how your class will meet the ELOs of the Theme to which it applies. Please use language that is clear and concise and that colleagues outside of your discipline will be able to follow. You are encouraged to refer specifically to the syllabus submitted for the course, since the reviewers will also have that document. Because this document will be used in the course review and approval process, you should be as specific as possible, listing concrete activities, specific theories, names of scholars, titles of textbooks etc.

Course subject & number

General Expectations of All Themes

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

Please briefly identify the ways in which this course represents an advanced study of the focal theme. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities. *(50-500 words)*

Course subject & number

ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

A large, empty rectangular box with a thin black border, intended for the student to write their response to the ELOs. It occupies the lower half of the page.

Course subject & number

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.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

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.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Course subject & number

Specific Expectations of Courses in Sustainability

GOAL 1: Students 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.

1.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems and on the resilience of these systems. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Course subject & number

1.2 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. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

1.3 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. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Distance Approval Cover Sheet

For Permanent DL/DH Approval

Course Number and Title: ENR 3200 – Environmental and Natural Resource Policy

Faculty Preparer Name and Email: Ramiro Berardo (berardo.3@osu.edu), Matthew Hamilton (hamilton.1323@osu.edu), and Sayeed Mehmood (mehmood.9@osu.edu)

Carmen Use

For more on use of Carmen: <https://teaching.resources.osu.edu/teaching-topics/carmen-common-sense-best-practices>

A Carmen site will be created for the course, including a syllabus and gradebook at minimum. **YES**

If no: Enter additional details if you responded no...

Syllabus

Proposed syllabus uses the ODEE distance learning syllabus template (or own college distance learning syllabus template based on ODEE model), includes boilerplate language where required, as well as a clear description of the technical and academic support services offered, and how learners can obtain them. **YES**

Syllabus is consistent and is easy to understand from the student perspective. **YES**

Syllabus includes a schedule with dates and/or a description of what constitutes the beginning and end of a week or module. **YES**

If there are required synchronous sessions, the syllabus clearly states when they will happen and how to access them. **YES**

Additional comments (optional):

Enter any additional comments about syllabus...

Instructor Presence

For more on instructor presence: <https://teaching.resources.osu.edu/teaching-topics/online-instructor-presence>

Students should have opportunities for regular and substantive academic interactions with the course instructor. Some ways to achieve this objective:

- Regular instructor communications with the class via announcements or weekly check-ins
- Instructional content, such as video, audio, or interactive lessons, that is visibly created or mediated by the instructor

- Regular participation in class discussion, such as in Carmen discussions or synchronous sessions
- Regular opportunities for students to receive personal instructor feedback on assignments

Please comment on this dimension of the proposed course (or select/explain methods above):

Instructors will regularly post videos that provide overviews of learning modules, and will additionally use Announcements on Carmen to direct attention to newly posted material and upcoming assignments, among other items. Videos and other content will be organized clearly in Modules in Carmen. Instructors will use Discussions in Carmen to facilitate guided interaction and participation among students. All submitted assignments will receive individualized feedback from the instructors and teaching assistants.

Delivery Well-Suited to DL/DH Environment

Technology questions adapted from the [Quality Matters](#) rubric. For information about Ohio State learning technologies: <https://teaching.resources.osu.edu/toolsets>

The tools used in the course support the learning outcomes and competencies. YES

Course tools promote learner engagement and active learning. YES

Technologies required in the course are current and readily obtainable. YES

Links are provided to privacy policies for all external tools required in the course. YES

Additional technology comments:

Enter any additional comments about course technology...

Which components of this course are planned for synchronous delivery and which for asynchronous delivery? (For DH, address what is planned for in-person meetings as well.)

All components of this course will be asynchronous – videos of lectures will be posted to Carmen and interaction with students via discussions will be conducted using Discussions on Carmen.

If you believe further explanation would be helpful, please comment on how course activities have been adjusted for distance learning:

Enter comments...

Workload Estimation

For more information about calculating online instruction time: [ODEE Credit Hour Estimation](#)

Course credit hours align with estimated average weekly time to complete the course successfully. YES

Course includes direct (equivalent of “in-class”) and indirect (equivalent of “out-of-class”) instruction at a ratio of about 1:2. YES

Provide a brief outline of a typical course week, categorizing course activities and estimating the approximate time to complete them or participate:

Each week, students will view approximately three hours of lectures, organized in short (e.g., 5-15 minute) videos. These lectures will generally encompass the scope of learning material developed by the instructors previously for in-class sections of the course, and include lectures on core topics, interviews of guest speakers, and short segments of videos produced by others. Students will also spend approximately five hours each week completing readings and answering short quizzes on the assigned readings. Finally, students will spend approximately one hour participating in discussion forums in Carmen. This hour includes time that students will spend preparing discussion questions and responses, reviewing other students' contributions to the discussion, and fielding questions or otherwise responding to other students' contributions to the discussion.

In the case of course delivery change requests, the course demonstrates comparable rigor in meeting course learning outcomes. **YES**

Accessibility

For more information or a further conversation, contact the [accessibility coordinator](#) for the College of Arts and Sciences. For tools and training on accessibility: [Digital Accessibility Services](#)

Instructor(s) teaching the course will have taken Digital Accessibility training (starting in 2022) and will ensure all course materials and activities meet requirements for diverse learners, including alternate means of accessing course materials when appropriate. **YES**

Information is provided about the accessibility of all technologies required in the course. All third-party tools (tools without campus-wide license agreements) have their accessibility statements included. **YES**

Description of any anticipated accommodation requests and how they have been/will be addressed. **YES**

Additional comments:

Enter any additional comments about accessibility...

Academic Integrity

For more information: <https://go.osu.edu/teaching-resources-academic-integrity>

The course syllabus includes online-specific policies about academic integrity, including specific parameters for each major assignment: **YES**

Assignments are designed to deter cheating and plagiarism and/or course technologies such as online proctoring or plagiarism check or other strategies are in place to deter cheating: **YES**

Additional comments:

Enter additional comments about academic integrity...

Frequent, Varied Assignments/Assessments

For more information: <https://teaching.resources.osu.edu/teaching-topics/designing-assessments-student>

Student success in online courses is maximized when there are frequent, varied learning activities. Possible approaches:



Opportunities for students to receive course information through a variety of different sources, including indirect sources, such as textbooks and lectures, and direct sources, such as scholarly resources and field observation

Variety of assignment formats to provide students with multiple means of demonstrating learning

Opportunities for students to apply course knowledge and skills to authentic, real-world tasks in assignments

Comment briefly on the frequency and variety of assignment types and assessment approaches used in this course (or select methods above):

Students will learn from a side scope of materials, including book chapters, peer-reviewed journal articles, blog posts, newspaper articles, podcasts, and videos. Likewise, assignments will provide opportunities for students to demonstrate knowledge by writing for scholarly audiences as well as policymakers/practitioners and the public. The topic of the course provides ample opportunities to apply concepts to current events and instructors will regularly incorporate news stories to illustrate real-world application of course topics.

Community Building

For more information: <https://teaching.resources.osu.edu/teaching-topics/student-interaction-online>

Students engage more fully in courses when they have an opportunity to interact with their peers and feel they are part of a community of learners. Possible approaches:

Opportunities for students to interact academically with classmates through regular class discussion or group assignments

Opportunities for students to interact socially with classmates, such as through video conference sessions or a course Q&A forum

Attention is paid to other ways to minimize transactional distance (psychological and communicative gaps between students and their peers, instructor, course content, and institution)

Please comment on this dimension of the proposed course (or select methods above):

Discussions will provide opportunities for interaction among students, and between students and teaching assistants as well as instructors. Because these discussions will be conducted on the Carmen platform—where all other course materials will be delivered—students will be able to participate more fully in discussions without spending extra effort to navigate additional learning platforms.

Transparency and Metacognitive Explanations

For more information: <https://teaching.resources.osu.edu/teaching-topics/supporting-student-learning-your>

Students have successful, meaningful experiences when they understand how the components of a course connect together, when they have guidance on how to study, and when they are encouraged to take ownership of their learning. Possible approaches:

Instructor explanations about the learning goals and overall design or organization of the course

Context or rationale to explain the purpose and relevance of major tasks and assignments

- Guidance or resources for ancillary skills necessary to complete assignments, such as conducting library research or using technology tools
- Opportunities for students to take ownership or leadership in their learning, such as by choosing topics of interest for an assignment or leading a group discussion or meeting
- Opportunities for students to reflect on their learning process, including their goals, study strategies, and progress
- Opportunities for students to provide feedback on the course

Please comment on this dimension of the proposed course (or select methods above):

The instructors will clearly articulate learning goals as well as the scope and design of the course, both in the syllabus and in introductory videos in each week of the semester. Prompts for all assignments will explain goals and expectations for the assignment, including how the assignment relates to the overall learning goals of the course. Written assignments will encourage students to focus on topics or concepts of their particular interest, thereby providing opportunities for students to develop specialized expertise according to their own interests and goals. Students will share targeted feedback about readings as well as about the overall course approximately halfway through the semester.

Additional Considerations

Comment on any other aspects of the online delivery not addressed above:
Enter any additional considerations...