

Syllabus

ENR 3200

Environmental and Natural Resources Policy
Fall 2023

Course Information

- **Course times:** Tuesdays and Thursdays, 9:35 am - 10:55 am
- **Course location:** 100 Ramseyer Hall
- **Credit hours:** 3
- **Mode of delivery:** In-person

Instructor

- **Name:** Dr. Matt Hamilton
- **Email:** hamilton.1323@osu.edu
- **Office location:** 320E Kottman Hall
- **Office hours:** Tuesdays from 3-4pm 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.

Graduate Teaching Associate

- **Name:** Kimberly Ordonez
- **Email:** ordonez.33@buckeyemail.osu.edu
- **Office location:**
<https://osu.zoom.us/j/78286123456>
- **Office hours:** Wednesdays from 1-2pm 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.

Student Instructional Associate

- **Name:** Mads Spearing
- **Email:** spearing.4@buckeyemail.osu.edu
- **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.

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 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.

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

Note: This course also fulfills the Legacy GE category Social Science, subcategory Organizations and Politics, with the following expected outcomes:

1. Students understand the theories and methods of social scientific inquiry as they are applied to the study of organizations and politics.
2. Students understand the formation and durability of political, economic, and social organizing principles and their differences and similarities across contexts.
3. Students comprehend and assess the nature and values of organizations and politics and their importance in social problem solving and policy making.

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 will not be recorded. 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](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)

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
Reading questions (0.2% each)	10
Written assignments (10% each)	20
Policy brief	25
Exam 1	20
Exam 2	25
Total	100

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

Descriptions of Major Course Assignments

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 7:00 a.m. on the day the reading is 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 (10% each; 20% collectively). You will complete two 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 examine an issue of your choice, but there are two topics that the assignments CANNOT BE ABOUT: climate change and hydraulic fracturing (fracking).

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%). You will write a policy brief on the topic of hydraulic fracturing (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.

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 **ten business 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

Religious accommodations

Our inclusive environment allows for religious expression. Students requesting accommodations based on faith, religious or a spiritual belief system in regard to examinations, other academic requirements, or absences, are required to provide the instructor with written notice of specific dates for which the student requests alternative accommodations at the earliest possible date. For more information about religious accommodations at Ohio State, visit odi.osu.edu/religious-accommodations.

Weather or other short-term closing

Should in-person classes be canceled, we will meet virtually via Zoom during our regularly scheduled time. I will share any updates via CarmenCanvas.

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 Counseling and Consultation Services (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 through the 24/7 National Suicide Prevention Hotline at 1-(800)-273-TALK or at suicidepreventionlifeline.org

David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor. He is available for new consultations and to establish routine care. To schedule with David, please call 614-292-5766. Students should mention their affiliation with CFAES when setting up a phone screening.

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.

August 22 | Introductions; overview of syllabus and course

- No readings

August 24 | Sustainability Challenges Now and Then (ELOs 1.1, 2.1, 3.1, and 3.2)

- Hardin, Garret. 1968. "The Tragedy of the Commons." *Science* 162(3859):1243-1248.

August 29 | The Value of Institutions: How functional interdependence of human and natural communities shapes sustainability and social-ecological resilience (ELOs 1.1, 2.1, 3.1, and 3.2)

- Dietz, Thomas, Elinor Ostrom, and Paul Stern. 2003. "The Struggle to Govern the Commons." *Science* 302 (5652):1907-12.

August 31 | The U.S. Constitution (ELOs 1.1 and 1.2)

- Squire et al. 2005. *Dynamics of Democracy*. Ch. 2 partial: pp. 22-27, 30-38, 40.

September 5 | The Dominant Social Paradigm and Some Environmental History: Impacts of human activity on societies and the natural world (ELOs 1.1, 1.2, 2.1, 3.1, and 3.2)

- Smith, Zachary A. 2013. *The Environmental Policy Paradox*. 6th edition. Pearson. Chapter 2, pp. 7-21.

September 7 | Basics of the Policy Making Process in the U.S. (ELOs 1.1 and 1.2)

- Lazarus, Richard J. 2004. *The Making of Environmental Law*. Chicago, IL: The University of Chicago Press. Chapter 3.
- Environmental Protection Agency. "The Basics of the Regulatory Process."

September 12 | Congress (ELOs 1.1 and 1.2)

- 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." *Perspective on Politics* 12(3):564-581.

September 14 | Courts (ELOs 1.1 and 1.2)

- Duane, Timothy. 2012. "Courts, Legal Analysis, and Environmental Policy." In Michael Kraft and Sheldon Kamieniecki (eds.) *The Oxford Handbook of U.S. Environmental Policy*. Oxford University Press.

September 19 | Agencies (ELOs 1.1 and 1.2)

- 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.

September 21 | Session 1: Review for Exam #1**September 26** | Exam #1 (ELO 2.2)**September 28** | Theories of the Policy Process (I) (ELOs 1.1, 1.2, and 2.1)

- Cairney, Paul. The Policy Cycle and its Stages.
- Cairney, Paul. Rational Choice and the IAD.

October 3 | Theories of the Policy Process (II) (ELOs 1.1, 1.2, and 2.1)

- Cairney, Paul. Multiple Streams Analysis.
- Cairney, Paul. The Advocacy Coalition Framework.

October 5 | NEPA (ELOs 1.1, 1.2, 2.1, 3.1, and 3.2)

- Council on Environmental Quality. 2004. "National Environmental Policy Act." In Annual Report 1994-1995.

→ Written assignment #1 due at 11:55 pm on October 5 (ELOs 1.1, 1.2, 2.1, 2.2, and 3.3)

October 10 | Endangered Species Policy: How values and science intersect to shape biodiversity protection (ELOs 1.1, 1.2, 2.1, 3.1, and 3.2)

- 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.

October 17 | Climate Change and Global Governance: How policy processes shape the resilience of global social-ecological systems (ELOs 1.1, 1.2, 2.1, 3.1, and 3.2)

- 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.

October 19 | Climate Change and Obstacles to Political Action (ELOs 1.1, 1.2, 2.1, 3.1, and 3.2)

- Environmental Protection Agency. 2015. "Overview of the Clean Power Plan."
- Farrell, Justin. 2015. "Network structure and influence of the climate change counter-movement." Nature Climate Change.

October 24 | Climate Change and Obstacles to Political Action (continued)

October 26 | Justice, Equity, and Environmental Policy (ELOs 1.1, 1.2, 2.1, 3.1, and 3.2)

- Taylor, Dorceta E. 2011. "Introduction: The Evolution of Environmental Justice Activism, Research, and Scholarship." Environmental Practice 13, no. 4. 280–301.

October 31 | Review Exam #2

November 2 | Exam #2 (ELO 2.2)

November 7 | Designing a policy brief: Outreach and science-policy communication (ELOs 1.1, 2.1, 2.2, 3.2, and 3.3)

- No readings

November 9 | Introduction to hydraulic fracturing in Eastern Ohio (ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3)

- 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." *The Extractive Industries and Society* 5(4): 596–609.

November 14 | Hydraulic fracturing in Eastern Ohio: Roles and impacts of human activity and technology on sustainability (ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3)

- 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>)

November 16 | Social-ecological perspectives on hydraulic fracturing: what factors are important? (ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3)

- 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.
- 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/>).

→ Written assignment #2 due at 11:55 pm on November 16 (ELOs 1.1, 1.2, 2.1, 2.2, and 3.3)

November 21 | Stakeholders, values, and fracking in Eastern Ohio (ELOs 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, and 3.3)

- 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>)

November 28 | Stakeholders, values, and fracking in Eastern Ohio, continued (ELOs 1.1, 1.2, 2.1, 2.2, 3.1, 3.2, and 3.3)

- No additional readings
- 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/>).

November 30 | Policy instruments and tools (ELOs 1.1, 1.2, 2.1, 3.1, 3.2, and 3.3)

- <https://epa.ohio.gov/Portals/0/general%20pdfs/OhioRegsShaleGasWellDrilling.pdf>
- <https://epa.ohio.gov/Portals/0/general%20pdfs/generalshale711.pdf>

December 5 | Policy Brief workshop (ELOs 1.1, 2.1, 2.2, 3.2, and 3.3)

- No readings

December 7 | Sustainability in the public and private sectors (ELOs 1.1, 2.1, 2.2, 3.2, and 3.3)

- No readings

→ *Policy brief due at 11:55 pm on December 8 (ELOs 1.1, 1.2, 2.1, 2.2, and 3.3)*

