

**Course Syllabus**  
**Spring 2022****ISEN 453 *The Economics of Environmental and Social Justice*****Possible Instructors / Guest Lecturers:**

[Jennifer Walling](#), Illinois Environmental Council

[Marge Anderson](#), Slipstream

[Meena Beyers](#), Nicor

[Meleah Geertsma](#), NRDC, Senior Attorney

[Tony Greams](#), University of Michigan

[Jacqueline Patterson](#), Senior Director, Environmental and Climate Justice Program NAACP

[Tasha Seitz](#), Impact Engine

[Kristol Whatley Simms](#), Ameren

[Matthew Tejada](#), US EPA, Director of Environmental Justice

[Terry Travis](#), EV Hybrid Noire

[Kim Wasseran](#), LVEJO

[Kathleen Falk](#), Professor of Environmental Law at U VT Law

[Andrew Barbeau](#), The Accelerate Group

[John Petoskey](#), ELPC

[Julia Pino](#), LVEJO

**Office Hours:** TBD

**Class Type:** 1 credit (10 weeks) Elective for Master of Science in Energy & Sustainability; open to other graduate students including Kellogg students and McCormick School of Engineering graduate students

Classroom: TBD

Class Timing: Spring Quarter, March 29 – June 3, 2022; Finals through June 10, 2022

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**Definition of Environmental Justice from the US Environmental Protection Agency**

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys:

- the same degree of protection from environmental and health hazards, and
- equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

**Course Synopsis**

This course is designed for a broad base of students working in energy and sustainability to ensure a common understanding of environmental justice and its role in today's markets. This course is highly relevant for students who may not make environmental and social justice the central focus of their career but will need to understand the definition of, rationale for, and economic value of environmental and social justice.

The course is structured in three parts. First, we will build a toolkit for quantifying and modelling the economic costs, benefits, and externalities of ESJ or a lack thereof. In the second part, we will consider the key stakeholders in practice, focusing on the roles of large corporations, state actors, and non-profit/activist/frontline communities. The third part will apply the theoretical frameworks built up so far to real-world ESJ considerations ('big issues') such as food, water, clean energy, and public health. Throughout the course, we will 'zoom in' and 'out', addressing both global and local (American) dimensions of our big issues.

**Course Goals**

At the end of this course, students should clearly understand the following:

- **Historical Context**– the historical conditions that have driven focus on ESJ and created a current day scenario where ESJ has not yet been achieved.
- **Stakeholders in ESJ** – who does / should care about EJ and why; understand the impact on various communities (geographies / neighborhoods, demographic groups, businesses, governments etc.)
- **Costs & Benefits of ESJ** – Ability to outline major drivers of costs and benefits associated with EJ. During the course, students will conduct/build multiple economic models through case studies and their final presentations.
- **ESJ as Global and Local**— Developing an understanding of ESJ issues (for example, energy poverty) as having global and local dimensions, with different stakeholders and affected groups.
- **Relationships Between ESJ and Broader Social Movements** – Developing an understanding of the relationship between EJ and causes such as indigenous people’s rights, urban policy reform, not-in-my-backyard mentalities etc. Students should be able to clearly link these with the broader issue of climate change in general.
- **Ability to explain and discuss ESJ** – Build the vocabulary and understanding of environmental justice that will allow emerging professionals to determine what role EJ will have in their future endeavors (business, government, non-profit etc.)

The primary success metric in the course is to ensure that students are conversant in environmental justice and can lead a fact-based conversation about the application of EJ in today’s market upon completion of the course.

**Grading/Assessment**

Grading will be based on the following rubric:

Component	Weight	Details	Due
Reflective Responses	10%	A 500-600-word reflection (x2) on the themes discussed in the class so far. How have they challenged or augmented your view of climate change and the environment? What, if anything, surprised you? How do you find yourself situated in the themes of the course? For some weeks, prompts may be provided, but they are entirely optional--this is meant to be a personal reflection.	Week #4 Week #9
Case Studies	40%	Deliver 2-3-page write ups on environmental justice case examples (x4, 15% each).	Week #2 Week #6 Week #7



			Week #8
Final Presentation	10%+ 20% + 5%	<p>The final presentation will be graded in three parts:</p> <ul style="list-style-type: none"> <li>• 10% of your grade is based on a 2-page proposal your group submits at the end of Week 5.</li> <li>• 20% of your grade is based on the group’s final presentation in Week 10.</li> <li>• 5% of your grade is based on peer ratings from your group.</li> </ul> <p>Examine one current or historical environmental justice case and perform an economic analysis. Make a recommendation for how to ensure economic benefit (including externalities) OR explain through detailed analysis how this ESJ case cannot create economic value. Good responses will incorporate theories and methods learned in class. Groups will be formed in Week #1.</p>	Week #1 Week #5 Week #10
Participation	15%	Active participation in all 10 weeks of the course is critical. ESJ can be a difficult topic to discuss but contribution to the course will require students to navigate these topics. It is important to build this skill for use in the workplace.	All quarter

**Grading Policy**

All questions and problems regarding grades must be presented in writing within one week after the test, homework, or project has been returned. The grading scale is fixed; please do not wait until the end of the quarter if you are concerned about the direction of your grade. Grades will be assigned based on all the work you have completed during the semester using the following scale:

<b>A</b>	93.333 to 100	<b>C</b>	73.333 to 76.666
<b>A-</b>	90.000 to 93.333	<b>C-</b>	70.000 to 73.333
<b>B+</b>	86.666 to 90.000	<b>D+</b>	66.666 to 70.000
<b>B</b>	83.333 to 86.666	<b>D</b>	63.333 to 66.666
<b>B-</b>	80.000 to 83.333	<b>D-</b>	60.000 to 63.333
<b>C+</b>	76.666 to 80.000	<b>F</b>	< 60.000

Unless an exception has been granted by the professor in advance, 10% will be deducted from late homework assignments turned in within 24 hours of the deadline. 50% will be deducted from late homework assignments that are more than 24 hours but less than 7 days late. No credit will be given for homework turned in more than 7 days after the deadline. -All questions and problems regarding grades must be presented in writing within one week after the test, homework, or project has been returned.

**Potential Course Readings**



The following texts are required for the class. Other articles and essays will be distributed in class via Canvas. Students should bring the assigned texts and copies of all articles to class for discussion. This is a non-exhaustive list and is subject to change.

- [EPA Factsheet on Environmental Justice](#)
- [The Economics of Environmental Justice, with Samuel Stolper and Catherine Hausman \(resourcesmag.org\)](#)
- [The History of Environmental Justice in Five Minutes | NRDC](#)
- [How Decades of Racist Housing Policy Left Neighborhoods Sweltering](#): New York Times
- Ryan Holifield (2001) [Defining Environmental Justice and Environmental Racism](#), *Urban Geography*, 22:1, 78-90, DOI: 10.2747/0272-3638.22.1.78
- Naomi Klein (2014) *This Changes Everything: Beyond Extractivism* (Chapter 5).
- Parviainen, T., Lehtikoinen, A., Kuikka, S. *et al.* [How can stakeholders promote environmental and social responsibility in the shipping industry?](#). *WMU J Marit Affairs* 17, 49–70 (2018). <https://doi.org/10.1007/s13437-017-0134-z>
- EPA: [Technical Guidance for Assessing Environmental Justice in Regulatory Analysis](#)
- The Guardian: [“Amnesty seeks criminal inquiry into Shell over alleged complicity in murder and torture in Nigeria”](#)
- Rector, J. (2018). *The Spirit of Black Lake: Full Employment, Civil Rights, and the Forgotten Early History of Environmental Justice*. *Modern American History*, 1(1), 45-66. doi:10.1017/mah.2017.18
- Patz, J.A., Gibbs, H.K., Foley, J.A. *et al.* *Climate Change and Global Health: Quantifying a Growing Ethical Crisis*. *EcoHealth* 4, 397–405 (2007). <https://doi.org/10.1007/s10393-007-0141-1>
- Greentech Media: [Why It’s Still Important to Talk About Diversity in the Renewables Industry](#)
- Chester Energy and Policy: [Green Causes Are Not Always Colorblind: Racial Disparity in Energy Issues](#)
- Leonard, L. [Mining Corporations, Democratic Meddling, and Environmental Justice in South Africa](#). *Soc. Sci.* 2018, 7, 259.
- Selected readings from [The Hamilton Project](#)

### Supplemental Reading List

#### Readings:

- William Reilly, “Environmental Equity”
- Bill Clinton, “Executive Order 12898” (and accompanying Memorandum)
- Robert Bullard, “Environmental Justice in the Twenty-First Century”
- Robert Bullard et al., “Environmental Justice: Milestones and Accomplishments”
- Alexandria Ocasio-Cortez, “Resolution Recognizing the Duty of the Federal Government to Create a Green New Deal”
- Ike Okonta and Oronto Douglas, “Where Vultures Feast: Shell, Human Rights and Oil”
- [Racing to Justice](#) John A. Powell
- [Democracy in Black](#) Eddie S. Glaude
- [The Economics of Environmental Justice](#) Samuel Stolper and Catherine Hausman

**Video Viewings**

[ProPublica](#)

[NRDC](#)

**CLASS OUTLINE**

Weekly Topic	Description	Deliverables
<p><b>1:</b> Introduction, Defining Terms</p>	<ul style="list-style-type: none"> <li>● Introduction to course, logistics, syllabus</li> <li>● How do we define environmental justice?</li> <li>● How do we define social justice?</li> <li>● Who is disproportionately affected: race, class, gender, indigeneity, Global North / South</li> <li>● Introducing key concepts:               <ul style="list-style-type: none"> <li>○ Historical Context</li> <li>○ Contemporary Impact of Unjust Policy</li> <li>○ Notion of ‘Sacrifice Zones’</li> <li>○ Opportunities in EJ</li> </ul> </li> <li>● One key example that ties this all together/encapsulates these issues: potential case study of Nauru (see Klein reading)</li> </ul>	<p><b>Form groups for final presentation</b></p>
<p><b>2:</b> Costs, Benefits, Externalities: Economic Modelling</p>	<ul style="list-style-type: none"> <li>● Laying out stakeholders in EJ today: corporations, state actors, MNCs, global non-profits, grassroots activists, frontline communities</li> <li>● Costs and benefits of EJ to each</li> <li>● What tools can be used for EJ by each stakeholder: CSR, policy, activism, reparative measures, protests, etc.</li> <li>● How can we attach economic value to EJ? Quantifying externalities through existing models (Nordhaus, models from the EPA, etc.)</li> <li>● Sample cases that have incorporated a wide variety of stakeholders: for example, <a href="#">public-private collaboration</a> in Chicago.</li> </ul>	<p><b>CASE #1</b></p>
<p><b>3:</b> Stakeholders: Corporations and States</p>	<ul style="list-style-type: none"> <li>● EJ in the supply chain: Relationships between circular economy, renewable power, clean tech and EJ.</li> <li>● EJ and CSR (corporate social responsibility): How can CSR be optimized for EJ? Has it been an effective tool in the past?</li> <li>● Corporations and Politics: How have MNCs eroded political process historically, especially in the Global South? What does this have to do with EJ, sacrifice zones, human rights? Key example of Shell in Nigeria.</li> <li>● EJ and the State: Example of Dakota Access Pipeline protests, relationship of the state and policing to EJ.</li> </ul>	



<p><b>4: Stakeholders:</b> Non-Profits, Activists, Frontline Communities</p>	<ul style="list-style-type: none"> <li>● Non-Profits in ESJ: auditing, policy-focused, think-tanks, watchdogs of other kinds. How do NGOs affect policy/other ESJ concerns?</li> <li>● Activism and Frontline Communities: Elaboration on Dakota Access protests, Sunrise Movement, etc. Agenda-setting power, direct action, and mutual aid as micro-methods of achieving ESJ</li> </ul>	<p><b>Reflection #1</b></p>
<p><b>5: Big Issues:</b> Energy</p>	<ul style="list-style-type: none"> <li>● Energy Poverty: American and global dimensions, differential rates of affordable energy coverage (of any form).</li> <li>● Green Energy Transition: How can the Global South afford this? Global frameworks (Kyoto, Paris) and cost-sharing.</li> <li>● Green infrastructure in the US: access to small-scale green tech such as rooftop solar, disproportionate benefits of large-scale green tech.</li> <li>● Introducing additional stakeholders: international orgs and their role.</li> <li>● Potential Case Study/Example/Exercise: <a href="#">The Energy Equity Project</a></li> </ul>	<p><b>Final presentation proposal due</b></p>
<p><b>6: Big Issues:</b> Food and Water</p>	<ul style="list-style-type: none"> <li>● Global dimensions of water and food: distribution, role of international aid, gatekeeper states.</li> <li>● Nutritional quality, calorific intake, impacts of climate change (weather, food patterns), fertilizer revolutions, famine preparedness, food deserts</li> <li>● Sustainable sourcing and the role of supply chains in food.</li> <li>● Clean water access and connection to public health</li> </ul>	<p><b>CASE #2</b></p>
<p><b>7: Big Issues:</b> Public Health, Air Quality</p>	<ul style="list-style-type: none"> <li>● EJ and Health: How are health and EJ related? What is the connection between conventional energy generation, EJ and health? Think gentrification, coal factories</li> <li>● Economic modelling of health, developmental issues: difficulties in quantifying externalities</li> <li>● Air pollution, wealth and energy generation: see <a href="#">NYT article</a> about New Delhi</li> <li>● Global perspectives: COVID, waste disposal (from Global North to South), manufacturing safety</li> </ul>	<p><b>CASE #3</b></p>
<p><b>8: Big Issues:</b> Workforce Development, Access and Migration</p>	<ul style="list-style-type: none"> <li>● EJ and employment: what are the historical linkages between demands for employment and EJ? Civil rights, New Deal legislation</li> <li>● Representation: how can new green jobs be avenues for redressing injustices?</li> <li>● Employment as a subset of access: global focus on climate refugees, migration patterns</li> <li>● Job pathways – Roles in the energy transition for people from a variety of backgrounds</li> </ul>	<p><b>CASE #4</b></p>
<p><b>9: The Future and Social Justice</b></p>	<ul style="list-style-type: none"> <li>● Contemporary politics: Green New Deal, Just transition plans for fossil fuel workers. Analyzing the Biden infrastructure plan from an ESJ perspective.</li> </ul>	<p><b>Reflection #2</b></p>

	<ul style="list-style-type: none"> <li>Addressing linkages between social, environmental, and economic justice, frameworks of intersectionality.</li> </ul>	
<b>10: Conclusion + Presentations</b>	<ul style="list-style-type: none"> <li>Group presentations followed by Q&amp;A session. Wrapping up the course: key learnings, vocabulary, models.</li> <li>Recap of big issues and key takeaways</li> <li>Final reflections</li> </ul>	<b>In-class final presentations</b>

**COVID-19 Classroom Expectations Statement**

Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the [COVID-19 Code of Conduct](#). With respect to classroom procedures, this includes:

- Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current masking, testing, Symptom Tracking, and social distancing requirements.
- In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADA) accommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.
- No food is allowed inside classrooms. Drinks are permitted, but please keep your face covering on and use a straw.
- Faculty may assign seats in some classes to help facilitate contact tracing in the event that a student tests positive for COVID-19. Students must sit in their assigned seats.

If a student fails to comply with the [COVID-19 Code of Conduct](#) or other University expectations related to COVID-19, the instructor may ask the student to leave the class. The instructor is asked to report the incident to the Office of Community Standards for additional follow-up.

**Class Recording**

This class or portions of this class will be recorded by the instructor for educational purpose and available to the class during the quarter. Your instructor will communicate how you can access the recordings. Portions of the course that contain images, questions or commentary/discussion by students will be edited out of any recordings that are saved beyond the current term.

Unauthorized student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact [AccessibleNU](#). Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University’s [Copyright Policy](#), faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction,



such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

### **Expectations for Class Participation**

Being prepared for class is about more than just showing up, it's also about making sure you've completed the readings, homework, etc. so that you are able to make thoughtful contributions during class. Sitting silently and/or being unprepared can damage your participation grade. When in a virtual class, we expect students to keep their camera and mute on as much as possible. When in the classroom, we expect students to keep their phones off and put away.

### **Academic Integrity**

Academic integrity is taken very seriously at Northwestern. Students are responsible for reading and understanding Northwestern's Academic Integrity policies. All suspected violations will be reported to the McCormick College of Engineering's Dean's Office. These include cheating, plagiarism, fabrication, unfair advantage, unauthorized collaboration, and aiding and abetting of academic dishonesty. Students found in violation of academic integrity may receive a zero on the assignment or a failing grade for the course and may be suspended or permanently expelled from the University. See [Academic Integrity: A Basic Guide](#) for more information.

### **The Writing Place**

When working on writing assignments for this class, I encourage you to visit the Writing Place, Northwestern's peer writing center. You will work with juniors and seniors who have been trained to provide you feedback and assistance on any type of writing at any stage in the writing process. They will not edit your work. Rather, they will work with you to brainstorm ideas, organize or outline an essay, clarify your argument, document your sources correctly, or refine grammar and style.

### **Accessibility Statement**

Northwestern University is committed to providing the most accessible learning environment as possible for students with disabilities. Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (e: [accessiblenu@northwestern.edu](mailto:accessiblenu@northwestern.edu); p: 847-467-5530). If you already have established accommodations with AccessibleNU, please let me know as soon as possible, preferably within the first two weeks of the term, so we can work together to implement your disability accommodations. Disability information, including academic accommodations, is confidential under the Family Educational Rights and Privacy Act.

### **Illness and Medical Leave of Absence**



Review the University's [policy](#) on missing academic work due to illness. Your instructor cannot waive an assignment missed due to illness unless the illness can be verified (e.g., by University Health Services or other licensed health professionals).

### **Discrimination and Sexual Harassment**

Northwestern's Policies on Discrimination, Harassment, and Sexual Harassment apply to all members of the University community, including students, staff, faculty, and third parties. Any student, staff, faculty member, or third party who believes that they have been discriminated against or harassed on the basis of their race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, pregnancy, parental status, marital status, age, disability, citizenship, veteran status, genetic information or any other classification protected by law, should contact the Office of Equity at (847) 467- 6571.

Additional information about the University's discrimination and harassment policies, including the campus resources available to assist individuals with discrimination or harassment concerns, is available online on the [Office of Equity Website](#). Students, staff, and faculty who report harassment, discrimination, or sexual misconduct are also protected under the [University's Policy on Non-Retaliation](#).

### **Sexual Misconduct and Reporting**

Northwestern University is committed to fostering an environment where students are safe and free from sexual misconduct. [Confidential resources](#) are available to those who have experienced sexual misconduct. Faculty and instructors are not confidential resources and are required to report incidents of sexual misconduct, whether discussed in your assignments or in person, to the Office of Equity, which can provide information about resources and options. We encourage students who have experienced sexual misconduct to talk with someone to get support. For more information, including how to request interim protective measures and academic accommodations or file a complaint, see the [Get Help page](#).

### **Other Resources**

Students can find useful resources for safety and security, academic support, and mental and physical health and well-being at the [NUhelp website](#).