



## ECE 654 US Offshore Renewable Energy Policy

### Course Modality:

This is an online course, which will be conducted fully online, asynchronously via Canvas. For more information on using Canvas and other supported learning tools, visit the IST Service Desk [Knowledgebase](#).

**Course Workload:** This course values your time and effort and aims to provide a rewarding learning experience. You can expect to dedicate approximately **7.5 hours** to the course per week. This estimate includes, but is not limited to, time spent on readings, watching course videos, completing assignments, participating in discussions, and reviewing feedback.

### Instructor Information

Instructor	Email	Office Hours
Joseph Brodie	joseph.brodie@njit.edu	Via Zoom, by appointment

\*I will respond to all emails/Inbox messages within 48 hours. Quizzes, assignments, and discussions will be graded weekly.

### General Information

#### Course Description

This course will examine the statutory and regulatory frameworks that govern offshore wind farm leases and the permitting requirements associated with project development and construction. It will provide an overview of the legal regimes relevant to offshore wind, including property rights, climate change and energy, marine environmental protection, and maritime safety and security. Students will obtain a firm understanding of the permitting framework for offshore wind projects and the potential legal challenges associated with their development, construction, and finance. The course aims to equip students with an enhanced framework for evaluating US offshore energy and environmental policies that goes beyond traditional economic and regulatory perspectives.

#### Prerequisites/Co-requisites

None.

## Course Learning Outcomes

By the end of the course, students will be able to:

1. Identify challenges and opportunities in the offshore wind industry, including regulatory frameworks and legal issues.
2. Describe the sequence of process steps, including permitting, to get from policy concept to steel-in-the-water.
3. Explain the technical relationships between the various components of the offshore wind industry.
4. Analyze offshore wind projects to determine their legal, regulatory, and stakeholder contexts, including property rights, environmental considerations, and permitting frameworks.
5. Create an action path to address legal, regulatory, and stakeholder challenges in offshore wind project development, ensuring compliance with permitting frameworks and effective risk mitigation.
6. Evaluate and critique alternative approaches to resolving offshore wind challenges.
7. Formulate and present policy options by synthesizing offshore wind concepts.
8. Formulate and present a strategy for lease procurement and project permitting approval.

## Required Materials

There will be no required textbook for the course. Instead, you will be expected to gather information and research materials as needed from a variety of recommended and credible resources, details of which will be provided in class and posted on the course website. This may include academic journals, reputable websites, and other resources available through the university library.

## Grading Policy

[NJIT Grading Legend](#)

### Final Grade Calculation

Final grades for all assignments will be based on the following percentages:

<b>Quizzes</b>	<b>10%</b>
<b>Discussion Forums</b>	<b>20%</b>
<b>Assignments</b>	<b>35%</b>
<b>Project (Milestone 1 = 5%, Milestone 2 = 5% Milestone 3 = 10%, Milestone 4 = 15%)</b>	<b>35%</b>

## Course Work

**Quizzes: (10% of grade)** There will be frequent multiple-choice and/or short answer quizzes throughout the course. They are meant to help you practice course concepts.

**Discussion Forums: (20% of grade)** You are expected to participate in regular discussion forums hosted in Canvas. When all students participate in a discussion, it creates an active learning environment that will help you better understand the materials and be more successful in the class. When assigned, you will respond to a specific topic related to offshore wind energy, such as critical analysis of recent research articles or emerging issues in the sector. You will post your initial response to the prompt by Fridays at 11:59 pm and respond to peers by Sunday at 11:59 pm of the week they are listed.

**Assignments: (35% of grade)** You will engage in diverse assignments that combine theoretical insights and practical applications related to wind energy development. These will include researching the legislative and regulatory authority behind energy policies, analyzing detailed aspects of specific offshore wind projects, and creating strategic models for policy decision-making, such as procurement and permitting strategies. These tasks are designed to enhance research and analytical skills, apply theoretical concepts practically, and promote strategic decision-making, preparing you for real-world challenges in the energy sector.

**Project: (35% of grade)** This project offers you an opportunity to actively engage with the field of offshore wind energy. You will be part of an offshore wind development team seeking to procure a federal lease and develop a plan to complete the necessary permitting approvals for the project to be successfully executed. Each member of your team will focus on an aspect of offshore wind energy, such as technological advancements, resource assessment, federal permits, state and/or local permits, economic models, regulatory challenges, or legal frameworks that will be incorporated into a semester-long project.

Your exploration will be grounded in a comprehensive review of relevant literature, case studies, and existing policies, ensuring a solid foundation for your creative and analytical work. You will be able to focus on your specific interests in the field of offshore wind.

Your project will culminate in a presentation, allowing you to showcase the significance and impact of your work. This presentation is a chance to hone your professional communication skills, engaging with peers and instructors as stakeholders and experts in the field. Through this process, you will receive constructive feedback, enabling you to refine and enhance your project continuously.

The project is structured around key milestones that facilitate continuous improvement and deep engagement with your contribution to the team's effort. You will have opportunities to refine your ideas and outputs, responding to detailed feedback from both peers and the instructor.

## **Feedback**

I will deliver feedback on each assignment using the comments feature in Canvas as well as providing comments during discussions. This includes overall impressions of comments and arguments for cohesiveness, thoroughness, and presentation.

## Letter to Number Grade Conversions

A	B+	B	C+	C	F
90-100	86-89	80-85	76-79	70-75	0-69

## Exam Information and Policies

This course does not have any exams. Per the NJIT [Online Course Exam Proctoring Policy](#), this course will use authentic assessment, meaning you will be assessed and graded on your ability to deliver real-world outputs as well as your participation and feedback to other students.

## Policy for Late Work

Quizzes, discussion, and assignments will be marked down 10% per calendar day if submitted late. Project milestones 1, 2, and 3 will also be marked down 10% per calendar day if submitted late. Project milestone 4 will be marked down 20% per calendar day if completed late.

## Academic Integrity

*“Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the [NJIT academic code of integrity policy](#).*

*Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at [dos@njit.edu](mailto:dos@njit.edu)”*

## Generative AI

Generative AI may be used to help with studying and making sense of course content. However, writing assignments and preparation of presentation materials shall be done without the assistance of generative AI, in order to allow you to fully understand the complex issues involved. If and when students use artificial intelligence in this course, the AI must be cited as is shown within the NJIT Library AI citation page for AI.

## Netiquette

*Throughout this course, you are expected to be courteous and respectful to classmates by being polite, active participants. You should respond to discussion forum assignments in a timely manner so that your classmates have adequate time to respond to your posts.*

*Please respect opinions, even those that differ from your own, and avoid using profanity or offensive language.*

### **Weekly Expectations**

This course is organized by weekly modules. Each week, students must participate in an asynchronous online class, complete a reading assignment, and participate in a class discussion forum by Friday at 11:59 pm. Other assignments are typically due by Sunday at 11:59 pm.

## **Course Schedule**

<b>Week</b>	<b>Topic</b>	<b>Assignment</b>	<b>Due Dates</b>
1 (9/2/25)	An Introduction to the US Offshore Renewables Industry: What, Where, and Why	<ul style="list-style-type: none"><li>• Module 1 Discussion</li><li>• Module 1 Quiz</li></ul>	<ul style="list-style-type: none"><li>• Initial Post by Friday (9/5) 11:59pm; Follow-up posts by Sunday (9/7) 11:59pm</li><li>• Quiz: Sunday (9/7) 11:59pm</li></ul>
2 (9/8/25)	State Policies and Procurements	<ul style="list-style-type: none"><li>• Module 2 Knowledge Check</li><li>• Module 2 Discussion</li><li>• Module 2 Quiz</li></ul>	<ul style="list-style-type: none"><li>• Knowledge Check: Friday (9/12) 11:59pm</li><li>• Initial Post by Friday (9/12) 11:59pm; Follow-up posts by Sunday (9/14) 11:59pm</li><li>• Quiz: Sunday (9/14) 11:59pm</li></ul>
3 (9/15/25)	The Federal Leasing Process	<ul style="list-style-type: none"><li>• Module 3 Discussion</li><li>• Project Milestone 1</li></ul>	<ul style="list-style-type: none"><li>• Initial Post by Friday (9/19) 11:59pm; Follow-up posts by Sunday (9/21) 11:59pm</li><li>• Milestone: Sunday (9/21) 11:59pm</li></ul>
4 (9/22/25)	Planning for and Executing a Lease Sale	<ul style="list-style-type: none"><li>• Module 4 Discussion</li><li>• Module 4 Assignment</li></ul>	<ul style="list-style-type: none"><li>• Initial Post by Friday (9/26) 11:59pm; Follow-up posts by Sunday (9/28) 11:59pm</li><li>• Assignment: Sunday (9/28) 11:59pm</li></ul>
5	Introduction to the	<ul style="list-style-type: none"><li>• Module 5 Discussion</li></ul>	<ul style="list-style-type: none"><li>• Initial Post by Friday</li></ul>

(9/29/25)	Permitting Process and Plan Approvals	<ul style="list-style-type: none"> <li>● Module 5 Quiz</li> </ul>	(10/3) 11:59pm; Follow-up posts by Sunday (10/5) 11:59pm <ul style="list-style-type: none"> <li>● Quiz: Sunday (10/5) 11:59pm</li> </ul>
6 (10/6/25)	Other Federal Permits, Consultations, and Approvals	<ul style="list-style-type: none"> <li>● Module 6 Discussion</li> <li>● Project Milestone 2</li> </ul>	<ul style="list-style-type: none"> <li>● Initial Post by Friday (10/10) 11:59pm;</li> <li>Follow-up posts by Sunday (10/12) 11:59pm</li> <li>● Milestone: Sunday (10/12) 11:59pm</li> </ul>
7 (10/13/25)	Site Assessment and Construction and Operations Plans	<ul style="list-style-type: none"> <li>● Module 7 Discussion</li> <li>● Module 7 Assignment</li> </ul>	<ul style="list-style-type: none"> <li>● Initial Post by Friday (10/17) 11:59pm;</li> <li>Follow-up posts by Sunday (10/19) 11:59pm</li> <li>● Assignment: Sunday (10/19) 11:59pm</li> </ul>
8 (10/20/25)	Environmental Review and Stakeholder Involvement	<ul style="list-style-type: none"> <li>● Module 8 Discussion</li> <li>● Module 8 Assignment</li> </ul>	<ul style="list-style-type: none"> <li>● Initial Post by Friday (10/24) 11:59pm;</li> <li>Follow-up posts by Sunday (10/26) 11:59pm</li> <li>● Assignment: Sunday (10/26) 11:59pm</li> </ul>
9 (10/27/25)	State and Local Permitting	<ul style="list-style-type: none"> <li>● Module 9 Discussion</li> <li>● Module 9 Assignment</li> </ul>	<ul style="list-style-type: none"> <li>● Initial Post by Friday (10/31) 11:59pm;</li> <li>Follow-up posts by Sunday (11/2) 11:59pm</li> <li>● Assignment: Sunday (11/2) 11:59pm</li> </ul>
10 (11/3/25)	Projects: Steel-in-the-Water, Pending, and Approved	<ul style="list-style-type: none"> <li>● Module 10 Discussion</li> <li>● Project Milestone 3</li> </ul>	<ul style="list-style-type: none"> <li>● Initial Post by Friday (11/7) 11:59pm;</li> <li>Follow-up posts by Sunday (11/9) 11:59pm</li> <li>● Milestone: Sunday (11/9) 11:59pm</li> </ul>
11 (11/10/25)	Permit Compliance and Risk Management	<ul style="list-style-type: none"> <li>● Module 11 Discussion</li> </ul>	<ul style="list-style-type: none"> <li>● Initial Post by Friday (11/14) 11:59pm;</li> <li>Follow-up posts by Sunday (11/16) 11:59pm</li> </ul>
12 (11/17/25)	The Role of Technology in Environmental	<ul style="list-style-type: none"> <li>● Module 12 Discussion</li> <li>● Module 12 Quiz</li> </ul>	<ul style="list-style-type: none"> <li>● Initial Post by Friday (11/21) 11:59pm;</li> </ul>

	Compliance		<ul style="list-style-type: none"> <li>Follow-up posts by Sunday (11/23) 11:59pm</li> <li>Quiz: Sunday (11/23) 11:59pm</li> </ul>
13 (11/24/25)	New Industry Challenges Ahead	<ul style="list-style-type: none"> <li>Module 13 Discussion</li> </ul>	<ul style="list-style-type: none"> <li>Initial Post by Monday (11/24) 11:59pm; Follow-up posts by Wednesday (11/26) 11:59pm</li> </ul>
14 (12/1/25)	Final Project	<ul style="list-style-type: none"> <li>Module 14 Discussion</li> <li>Project Milestone 4</li> </ul>	<ul style="list-style-type: none"> <li>Initial Post by Friday (12/5) 11:59pm; Follow-up posts by Sunday (12/7) 11:59pm</li> <li>Milestone Presentation: Wednesday (12/3) 11:59pm</li> <li>Milestone Report: Sunday (12/7) 11:59pm</li> </ul>

## Additional Information and Resources

### Accessibility:

This course is offered through an accessible learning management system. For more information, please refer to Canvas's [Accessibility Statement](#).

### Requesting Accommodations:

The Office of Accessibility Resources and Services works in partnership with administrators, faculty, and staff to provide reasonable accommodations and support services for students with disabilities who have provided their office with medical documentation to receive services.

If you are in need of accommodations due to a disability, please contact the [Office of Accessibility Resources and Services](#) to discuss your specific needs.

### Resources for NJIT Online Students

NJIT is committed to student excellence. To ensure your success in this course and your program, the university offers a range of academic support centers and services. To learn more, please review the "Student Services" page in Canvas, which includes information related to technical support.