

Course Syllabus

E.J. Bloustein School of Planning and Public Policy, Rutgers University, last revised 7/23/2026
34:833:680 Energy Sustainability and Policy

Course Information:

Wednesdays 6:00 pm to 9:00 pm

Fall 2026

Civic Square Building, Room 112

Instructor Information:

John Gray

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Office Hours: Mondays 11:00 am to 12:00 pm, via Zoom ([Monday Link](#))

Tuesdays 3:00 pm to 4:00 pm, via Zoom ([Tuesday Link](#))

Course Description:

Energy planning and policy are essential for a sustainable future for both people and the planet. Energy is a key component in local, state, national, and international planning and public policy. These policies and plans influence energy supply and demand at all levels, with strategies and programs adopted by the public and private sectors directly affecting our lives. Further, energy generation, distribution, consumption, and security have extensive economic, environmental, and equity implications. Understanding these impacts will help students advance principles of sustainable development, energy plans, and policies.

This graduate seminar will explore energy planning and policies through an interactive and analytical approach. Recognizing today's challenges require active problem-solving, this course is structured as a seminar built around in-class debates, policy simulations, and case studies.

Learning Objectives:

- Learn about the role and potential of policy and planning to shape the energy system.
- Develop the tools to understand the data and trends for energy supply and demand.
- Understand how security, environment, and economics influence energy policy and systems.
- Evaluate the economic, environmental, and equity attributes of various energy systems, infrastructures, markets, and technologies.
- Identify key points and issues for future energy policy, planning, and management.

Core Competencies:

Upon successful completion of this course, students will possess the following core competencies for the MPP degree:

- Primary core competency: To analyze, synthesize, think critically, solve problems & make evidence informed decisions in a complex and dynamic environment.
 - Understanding quantitative and qualitative approaches to energy policy.

- Applying economic, environmental, security, and equity analysis to energy policy.
 - Synthesizing and critiquing research and analysis in existing and potential energy policy.
- Secondary core competency: To communicate and interact productively and in culturally responsive ways with a diverse and changing workforce and society at large and to participate in, and contribute to, the policy process.
 - By identifying economic, environmental, security, and equity challenges in the energy system.
 - By providing quantitative tools to analyze the impacts of various energy policies.

Prerequisites:

Students from all departments and programs are welcome. No formal prerequisites are required or necessary.

Course Website:

[Rutgers Canvas Site](#)

Textbook:

No textbook required. Weekly readings will be posted online on Canvas by 12pm Friday. You will be expected to understand and remember the basic ideas and principles of the readings, and to demonstrate your understanding of the readings during the discussions in class and through assignments. In addition, I encourage you to follow energy policy issues in the news and think about how they relate to the course.

Grading:

- Policy Talk and Presentation 25%
- Seminar Leadership & Participation 25%
- Final Paper and Presentation 50%

Coursework:

Seminar Leadership: Students will be asked to present a policy topic and lead a discussion it during the semester. You will be responsible for identifying a key policy issue that relates your interests and the scheduled class topic. You will be responsible for framing the topic (15 mins), answering questions (5 mins), and facilitating a conversation around the topic (10 mins). A one-page plan is due the Friday before your session. When not leading, you are expected to contribute thoughtfully to the activities and discussion.

Final Paper: Each student will prepare a final paper on topics related to the class due December 9, 2026. Paper topic and style guidelines will be provided during the semester. The final paper should synthesize what you learn over the semester by considering a planning, policy, or technological innovation or issue that expands on a topic covered in this course.

Final Presentation: Each student will give a 10-minute presentation on their final paper topic during the Class on December 2, 2026.

It is my goal that students actively engage in the learning process through attending lectures and participating in discussions. Your presence and participation are valuable contributions to our classroom. Full credit for attendance and participation will be awarded to students who attend all lectures and actively engage in discussions. If you attend a lecture without participating, you will not receive attendance and participation credit for that day. I understand that students may need to miss class for a range of personal, cultural, and professional reasons. If you find that you must miss a class, please communicate with me so that we can discuss appropriate make-up assignments to support your continued learning. As a commuter, I recognize that external factors such as NJ TRANSIT delays and unexpected traffic may occasionally affect your ability to arrive on time. I encourage you to plan your commute in a way that prioritizes timely arrival. However, should you experience a commuting delay, please inform me via email so we can make the necessary adjustments.

Course Protocols:

- Assignments are due by 11:59 PM the day before class via Canvas. An assignment schedule is available in the syllabus and on Canvas.
- Assignments submitted late will incur a penalty of 10% of total points per day late without prior approval from the instructor.
- All files submitted should be a PDF with the following naming convention: Lastname_Date_AssignmentTitle.pdf (e.g., Andrews_Oct31_ProblemSet2).
- Assignments should be written in Times New Roman, 12-pt font, 1.5 spacing, justified text.
- You may use generative AI programs (e.g., tools like ChatGPT) to help generate ideas and brainstorm. However, please note that the material generated by these programs may be inaccurate, incomplete, or otherwise problematic. Beware that use may also stifle your own independent thinking and creativity. You may not submit any work generated by an AI program as your own. If you include material generated by an AI program, it should be cited like any other reference material (with consideration for the quality of the reference, which may be poor).
- In order to avoid plagiarism and gain a deeper understanding of academic writing, it is imperative to use proper and consistent citations. For this class, please use *APA 7th edition*. There are several good basic writing guides available online. I recommend Purdue's online writing lab. Please let me know if you have any questions.
- The syllabus, schedule, assignments, and readings are subject to change. A revised syllabus will be provided if this occurs.
- I will respond to all emails within 24 hours of receiving them. If I am unable to provide a thorough response within that timeframe, I will notify you and let you know when you can expect a more detailed reply.

Respect for diversity and commitment to inclusion:

It is my intent that students from all diverse identities, backgrounds, perspectives, and situations be well served in this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit. It is my intent to present materials and activities that are respectful of diversity, which may include but is not limited to: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, religion, political affiliation, and culture. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our

course meetings conflict with your religious or cultural events, please let me know so that we can make arrangements for you.

All people have the right to be addressed and referred to in accordance with their personal identity. In this course, students will have the chance to indicate the name that they prefer to be called and, if they choose, to identify pronouns with which they would like to be addressed.

Students with disabilities:

Students with disabilities are encouraged to contact the instructor so that appropriate accommodations can be made. See also <https://ods.rutgers.edu/> for more information. Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation.

If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Academic integrity:

Rutgers' academic integrity policy will be strictly enforced in this course. Failure to comply with this policy can result in severe sanctions up to and including expulsion from the University. See the full text at <http://nbacademicintegrity.rutgers.edu/home/academic-integrity-policy/>. The following excerpt serves as a reminder that the student must: properly acknowledge and cite all use of the ideas, results, or words of others; properly acknowledge all contributors to a given piece of work; make sure that all work submitted as their own in a course or other academic activity is produced without the aid of unsanctioned materials or unsanctioned collaboration; obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with their interpretation or conclusions; and treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress; and uphold the canons of the ethical or professional code of the profession for which they are preparing.

Schedule of Classes

Assignments are due by 11:59 PM the day before the class session listed.

Part I: Foundations of Energy & Society

- Week 1 | Sep. 2 | Introduction: Energy as a Complex Problem
- Week 2 | Sep. 9 | The Science of Energy and Fundamentals of Electric Generation
- Week 3 | Sep. 16 | The Grid and Reliability of Energy Services
- Week 4 | Sep. 23 | Siting of Energy Infrastructure and Governance Structure

Part II: Energy Markets

- Week 5 | Sep. 30 | NO CLASS
 - Watch: *Smartest Guys in the Room*
- Week 6 | Sep. 30 | Overview of Energy Markets and Regulation
- Week 7 | Oct. 14 | Energy Demand: Efficiency, Behavior, and Management
- Week 8 | Oct. 21 | Advocacy and Representation in the Energy Sector
 - **Special Session with Barbara Koonz**

Part III: Policies and Impacts

- Week 9 | Oct. 28 | The Global Energy Landscape & Sustainable Development Goals
- Week 10 | Nov. 4 | Energy Policy Formulation and Tools at the Federal and State Levels
 - Final Paper Topic is Due
- Week 11 | Nov. 11 | Regional and State Energy Issues
 - **Special Session with Bob Martin**
- Week 12 | Nov. 18 | Energy Equity and Justice

Part IV: Emerging Concepts

- Week 13 | Dec. 2 | Final Project Research Symposium
- Week 14 | Dec. 9 | Emergent Issues and Wrap-Up
- Finals Week | Dec. 18 | Final Paper Due by 11:59 PM