

**Energy & Society**  
Energy 89S—Fall 2017  
Gross Hall 230C

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**Overview**

This course examines how the production, transmission, and use of energy transform our daily lives. By reflecting on history, first-person accounts, and current events and debates, we will explore questions at the very core of the environmental, economic, political, and cultural dimensions of human society. Readings and discussions will introduce you to issues such as the emergence of fossil-fueled society (and its consequences), how the spread of intensive resource extraction increases the difficulty of balancing economic and environmental priorities, and energy's role in cultural construction. But the course is also designed to make you its driving force. By supplementing academic readings with the introduction and discussion of current events that interest you, we will bridge the gap between scholarship and the real-world application of its insights.

Through this seminar, you will gain knowledge and understanding of the major connections between energy and society, develop skill in the analysis of secondary sources and current events, learn about the landscape of energy scholarship at Duke, and practice being fair-minded and articulate about the strengths and weaknesses of arguments on either side of debates about energy, the environment, and inequality.

**Required Books**

Alfred Crosby, *Children of the Sun: A History of Humanity's Unappeasable Appetite for Energy*.

Silas House & Jason Howard, *Something's Rising: Appalachians Fighting Mountaintop Removal*.

Andrew Needham, *Power Lines: Phoenix and the Making of the Modern Southwest*.

David Nye, *Consuming Power: A Social History of American Energies*.

Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil*.

Jeremy Rifkin, *The Third Industrial Revolution: How Lateral Power is Transforming Energy, the Economy, and the World*.

## **Requirements**

Your participation will determine the success of this seminar. That means your attendance at each meeting is required. If you are unwell (and especially if your illness might spread to others), please contact me *before* class and we will make the appropriate arrangements. Just as importantly, you will need to complete and engage thoughtfully with the copious—but not insurmountable—reading assigned for each meeting. While I trust that you are up to this task, I will also encourage your participation in two ways:

First, throughout the semester, we will have three short answer-style **reading quizzes**. These are not intended to trick you and shouldn't require huge amounts of cramming; rather, if you are keeping up with the material and paying attention in class, they should be pretty straightforward.

Second, you will keep a **reading journal**, in which you will summarize each assigned reading and pose 2-3 questions you believe get at core issues they pose. These summaries don't need to be too extensive (approximately 200 words per reading will suffice), but your questions should be thoughtful and framed in ways that will prompt in-class discussion. To that end, you should also post your questions to the discussion board on Sakai **before 5pm** the day before each class meeting (compile your summaries in a separate file to submit to me upon request).

This class will also help integrate you into Duke's community of energy scholars. We will achieve that goal through the substantive **policy memo** that each of you will write. Through class discussion, you will select an issue to explore, contact the appropriate experts on campus, and write a brief that outlines the background, relevant science, and status of any legislation related to the issue. At the end of the semester, some of you may be invited to submit your memo to SciPol, a comprehensive resource for scientists, policy makers, the public, students, and other stakeholders on developments in science and technology policy published by Duke's Initiative for Science & Society. Because SciPol relies on student authors for content, this could not only be a chance to gain experience publishing content for public consumption, but also a valuable networking opportunity that could open other exciting doors for you.

Finally, you will write three **short (2-3 page) essays** over the course of the semester. These will be designed to build your skills in synthesizing information and critically assessing film and text. I will introduce the topics and deadlines for these assignments in class, at least one week before they are due.

## **Evaluation:**

Your final grades will be based on the following formula:

<b>Reading Quizzes</b>	15% (5% each)
<b>Short Essays</b>	15% (5% each)
<b>Reading Journal</b>	30%
<b>Policy Brief</b>	40 %

### **Statement on Diversity**

Because diversity is essential to fulfilling the university's mission, Duke is committed to building an inclusive and diverse university community. Every student, faculty, and staff member—whatever their race, gender, age, ethnicity, cultural heritage or nationality; religious or political beliefs; sexual orientation or gender identity; or socioeconomic, veteran or ability status—has the right to inclusion, respect, agency and voice in the Duke community. Further, all members of the University community have a responsibility to uphold these values and actively foster full participation in university life. I expect you to be as committed to these principles as I am. Please contact me at any point if any aspect of the course—including class discussion and my own contributions—does not adhere to them. Moreover, please contact me if you have a disability that will interfere with your participation in this class. We will work together, alongside the Student Disability Access Office, to find an accommodation.

### **Academic Integrity**

In your written work, take pains to give credit where credit is due and enable readers to see the sources on which you base your case. The Writing Studio is also an excellent resource for consultation. So that there is no doubt, review these documents before writing:

"Plagiarism: Its Nature and Consequences":

<http://library.duke.edu/research/plagiarism/index.html>

"Citing Sources and **Avoiding Plagiarism**: Documentation Guidelines":

<http://library.duke.edu/research/citing/index.html>

You are welcome—indeed, encouraged—to study with other students in the class and discuss course materials with them. But it is a serious breach of academic integrity to confer on the content of papers or to seek out or otherwise consult exams or papers from students enrolled in previous years. All papers must be also original and exclusive to this course. Any concern about intellectual dishonesty will be result in a formal investigation with the dean's office.

## **Electronics**

Laptops, cell phones, and other hand-held devices are not allowed in class. Having everyone fully present and able to think, listen, and engage helps ensure lively discussions.

## **Course Schedule**

\*Reading available in course pack

### **Part One: Basics**

9/1 Goals, expectations, & definitions  
Reading: Syllabus; Crosby, xiii-58

9/8 Buried Sunshine  
Reading: Crosby, 59-116; \*Chris Jones, Introduction to *Routes of Power: Energy and Modern America*

9/15 Looking beyond fossil-fueled society  
Reading: Crosby, 117-158; \*Boulding, "The Economics of the Coming Spaceship Earth"

### **Part Two: Technology & the Environment**

9/22 Of monsters and risk  
Reading: \*Bruno Latour, "Love Your Monsters"; \*Kate Wheeling and Max Ufberg, "'The Ocean is Boiling': The Complete Oral History of the 1969 Santa Barbara Oil Spill"; \*Allan M. Winkler, "The 'Atom' and American Life"

9/29 Rock, meet hard place, pt. 1: Mountaintop removal  
Reading: Silas House & Jason Howard, *Something's Rising: Appalachians Fighting Mountaintop Removal*; Hearings, \*U.S. House of Representatives, "Jobs at Risk: Community Impacts of the Obama Administration's Effort to Rewrite the Stream Buffer Zone Rule"

**\*\*\*\*FIRST READING QUIZ\*\*\*\***

10/6 Rock, meet hard place, pt. 2: Fracking

Reading: \*Nathaniel R. Warner, et al, “Impacts of Shale Gas Disposal on Water Quality in Western Pennsylvania”; \*Molly Redden, “The Amish are Getting Fracked.”

10/13 Environmental justice and energy production

Reading: Andrew Needham, *Power Lines: Phoenix and the Making of the Modern Southwest*, Introduction & Parts 2-3

### **Part Three: Society & Culture**

10/20 Cultures of energy

Reading: \*Joshua Rothman, “The Meaning of Culture”; \*Leslie White, “Energy and the Evolution of Culture”; \*Stefan Bouzarovski and Mark Bassin, “Energy and Identity: Imagining Russia as a Hydrocarbon Superpower”

10/27 Energy as a historical force

Reading: David Nye, *Consuming Power: A Social History of American Energies*

11/3 “Wonders, all”: Electricity, magic, and culture

Reading: \*Carolyn Thomas de la Pena, Chapter 3: “Exploring Electric Limits”; \**Cultures of Energy*, Part 3: “Electrification and Transformation”

### **\*\*\*\*SECOND READING QUIZ\*\*\*\***

11/10 Energized politics

Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil*

### **Part Four: Work & the Economy**

11/17 Knowing nature (or not)

Reading: Richard White, *The Organic Machine: The Remaking of the Columbia River*

11/24 No class: Thanksgiving break

12/1 Harlan County, USA

Reading: \*“God, Guns, and Guts,” in Alessandro Portelli, *The Say in Harlan County*.

12/8: Epilogue

Reading: Jeremy Rifkin, *The Third Industrial Revolution: How Lateral Power is Transforming Energy, the Economy, and the World*

**\*\*\*\*FINAL READING QUIZ\*\*\*\***

**12/15: FINAL POLICY BRIEFS & READING JOURNALS DUE**