This seminar sets out to explore the role of energy as a driving force in history. Taking the widespread harnessing of fossil fuels in the nineteenth century as our pivot, we will consider both the prior energy regimes of wood, wind, water, and human and animal muscle, as well as the politics of energy production and consumption from the industrial age to the present. While attentive to issues of environmental impact, we will also examine the broader implications of energy use for social, economic, and political structures across time. Readings consist of primary sources, classic works, recent scholarship, and a graphic novel, with cases drawn from all around the globe. As part of this course, we will also be taking a field trip to the Cornell Central Energy Plant.

**LEARNING OBJECTIVES**

By the end of this course, you should have a deeper appreciation for the ways that energy has shaped our past and present, from everyday experiences of life and work to the built and natural environments. You will also be introduced to tools from the fields of environmental history and the history of technology that will, I argue, help you better make sense of those changes. More broadly, this seminar seeks to help you develop skills in critical reading, informed debate, and clear writing.

**COURSE COMPONENTS**

**Active Attendance (20%)**: This course, as a seminar, is discussion-focused. You are expected to come to class on time, having done the readings for the day and ready to participate. Please bring copies of the readings and/or your notes on them with you when we meet. If you have to miss a class for any reason, you are to notify me in advance by email. Please note that unexcused and repeated absences will negatively affect your grade. Not showing any evidence of having done the readings will do likewise. In addition, you will each be responsible for initiating discussion for at least one session over the course of the semester. What this would involve is a general introduction of the readings and the posing of several questions at the start of class. This will factor into your active attendance grade.

**Short Quizzes (15%)**: There will be regular short quizzes to make sure that you understand the key concepts from the readings. These quizzes (2-3 short answer questions) are to be completed online on Blackboard by noon the date they are due. There will be twenty quizzes over the course of the semester. Out of these twenty, you will have to do at least fifteen of your choice. To gain full credit on a quiz (1%), you have to demonstrate that you have done the readings. Answering the questions without any meaningful reference to the readings will get you at most half credit (0.5%). Needless to say, failing to do a quiz before the deadline will result in you receiving no credit for it. The quiz
questions themselves are also meant to serve as guides to help you navigate the readings, so please look them over before you begin the assigned readings for each session.

**Book Review (10%)**: During the semester, you will write a review of one of the seven optional books listed below. You will divide these books among yourselves early on in the semester so as to prevent an imbalance in distribution. Please note that the due date for your review will vary on the book you choose. Your review should be 3-4 pages, double-spaced. A good review should summarize the arguments and contents of the book, and then critically engage 2-3 issues the book raises. I will be sending you samples of good reviews. All the books are on reserve at Uris Library. You are not required to buy any of them. You may, however, want to Borrow Direct a copy if you are working on a review. On the day that you turn in your review, you will be asked to briefly introduce the book to the rest of the class.


**Midterm Paper (20%)**: You are to write a midterm paper in response to this prompt: “The Industrial Revolution represented a rupture in history that was largely a result of the transition from organic to mineral (as Wrigley describes it) energy sources.” To what extent do you agree with this characterization? Your paper should be 5-7 pages, double-spaced, and should draw liberally from the course readings. This assignment is due on Wednesday, October 14. Late papers will be penalized 1% (out of the 20%) for each day that they are overdue. I will be glad to meet with you to go over outlines and drafts during my office hours in the weeks leading up to the submission date.

**Term Paper (35%)**: As a capstone to this course, you will write a term paper on a topic of your choice that relates to any aspect of the history of energy. The paper can be based on primary sources and/or secondary material, but has to advance an argument, and must also engage at least one of the issues raised in the course. This paper is to be 10-12 pages, double-spaced, and is due in class on Wednesday, December 2. Late papers will be penalized 1.5% (out of the 35%) for each day that they are overdue. As with the midterm paper, I will be more than happy to meet with you to go over outlines and drafts during my office hours in the weeks leading up to the submission date. I will also be doing one-on-one paper consultations with you on Monday, November 23. Please note that I
have blocked out the final week of class for term paper presentations. Your presentation will count towards the final grade for the paper.

**Grade Breakdown**

- 20% Active Attendance
- 15% Short Quizzes
- 10% Book Review
- 20% Midterm Paper
- 35% Term Paper

**Readings**

Because this is a discussion-based seminar, it is essential that you complete your readings before class. Please bring copies of these readings and/or your notes on them with you to our meetings. Almost all of the course readings are available on Blackboard. There are, however, three books that you are required to get. They are:


Cartoon from an 1861 issue of *Vanity Fair*.  
[http://commons.wikimedia.org/wiki/File:Grand_Ball_Given_by_Whales_%28Vanity_Fair,_1861%29.jpg](http://commons.wikimedia.org/wiki/File:Grand_Ball_Given_by_Whales_%28Vanity_Fair,_1861%29.jpg)
**Schedule of Classes, Readings, and Assignments**

**Week 1: Introduction**

**Wed Aug 26**  
Energy in History

**Week 2: A Grand Narrative**

**Mon Aug 31**  
From the Dawn of Time to the Fossil Fuel Age

  [http://science.howstuffworks.com/environmental/energy/timeline-energy-history.htm](http://science.howstuffworks.com/environmental/energy/timeline-energy-history.htm)

**Wed Sep 2**

Patterns of the Past in the Present


Short Quiz 1 due online by noon

**Week 3: Matters of Approach**

**Mon Sep 7**  
Labor Day – No Class

**Wed Sep 9**

Toward an Envirotechnical Analysis


Short Quiz 2 due online by noon

**Week 4: Structures and Shifts**

**Mon Sep 14**

Energy Regimes and Energy Transitions


**Short Quiz 3 due online by noon**

**Wed Sep 16**

**Networks and Nodes**

**Short Quiz 4 due online by noon**

**Fri Sep 18**

**Field Trip to the Cornell Central Energy Plant – Optional**

http://energyandsustainability.fs.cornell.edu/util/heating/production/cep.cfm


**Week 5: Earlier Energies**

**Mon Sep 21**

**Muscles and Machines**

**Short Quiz 5 due online by noon**

**Wed Sep 23**

**The Organic Economy**

**Short Quiz 6 due online by noon**


**Week 6: Industrial Revolutions**

**Mon Sep 28**

**Great Divergences**

**Short Quiz 7 due online by noon**

**Wed Sep 28**  
**King Coal and Steam Engines**


**Short Quiz 8 due online by noon**


**Week 7: CARBON’S POLITICAL ECONOMY**

**Mon Oct 5**  
**Rights of Extraction**


**Short Quiz 9 due online by noon**

**Wed Oct 7**  
**Limitless Growth**


**Short Quiz 10 due online by noon**


**Week 8: THE FORCE OF LABOR**

**Mon Oct 12**  
**FALL BREAK – NO CLASS**

**Wed Oct 14**  
**Coal Miners and Nuclear Workers**


• Gabrielle Hecht, *The Radiance of France: Nuclear Power and National Identity after*

Short Quiz 11 due online by noon
Midterm Paper due in class

Week 9: BLACK GOLD

Mon Oct 19  Pipe Dreams

Short Quiz 12 due online by noon

Wed Oct 21  Oil Curse

Short Quiz 13 due online by noon


Week 10: SCARCITY

Mon Oct 26  The Crisis of the 1970s

Short Quiz 14 due online by noon

Wed Oct 28  Sources on Shortages

**Short Quiz 15 due online by noon**

Fri Oct 30  **LIBRARY SESSION – OPTIONAL**


**Week 11: GEO-POLITICS**

Mon Nov 2  **Fueling War**


**Short Quiz 16 due online by noon**

Wed Nov 4  **Global Weirding**


**Week 12: GOING NUCLEAR**

Mon Nov 9  **The Age of the Atom**


**Short Quiz 17 due online by noon**

Wed Nov 11  **Plutonium: Perils in Possibilities**


**Short Quiz 18 due online by noon**

Week 13: PROCESSING POWER

Mon Nov 16  Calamity

Short Quiz 19 due online by noon

Wed Nov 18  Exhaustion and Extinction

Short Quiz 20 due online by noon

Week 14: PAPER CONSULTATIONS

Mon Nov 23  ONE-ON-ONE PAPER CONSULTATIONS

Wed Nov 25  THANKSGIVING BREAK – NO CLASS

Week 15: PRESENTATIONS

Mon Nov 30  PRESENTATIONS 1

Wed Dec 2   PRESENTATIONS 2
  Term Paper due in class

STATEMENT OF ACADEMIC INTEGRITY

All the work that you do in this course is to be your own. In regard to the short quizzes specifically, while I encourage you to discuss the readings among yourselves, please note that your written submissions are to be completed by you and you alone. Should you draw from any external sources, you are to cite the references appropriately. The University takes a harsh stance on plagiarism. If you are not sure about what constitutes plagiarism, please consult me. Ignorance, in this instance, is not bliss. Please also refer to Cornell’s Code of Academic Integrity: http://cuinfo.cornell.edu/aic.cfm