CGS 3531F GLOBAL ENERGY REGIMES
Fall 2018 Theme: Energy Transition
The Centre for Global Studies
Huron University College
Dr. Katherine Lawless

Course Description

Humanity is at a crossroads: we must transition away from an oil-based economy or we must face the consequences of a warming world. Both involve a full transformation of the world as we know it. Energy humanities scholars are at the forefront of imagining what the transition from oil might look like. Throughout the semester, we examine a series of reigning historical energy systems—from biomass and water to oil and nuclear energy. We place these systems in world historical context to understand how corresponding social, cultural and aesthetic practices—in fact, our very existence—is ordered by global regimes of energy production, circulation and consumption. The concept of transition serves as our focal point. We ask why certain energy transitions, such as nuclear energy and renewable alternatives, have failed while others, particularly those falling under the umbrella of petro-carbons, have become dominant. In general, our inquiry is oriented by the following questions: What comes after oil? How can we use our understanding of previous energy transitions to successfully trigger the coming transition? What role does sustainability play in this process, and how must it be reimagined accordingly?

Course Information

Professor	**Dr. Katherine Lawless**
Contact Information	705-438-7224 x705; klawles@uwo.ca
Office Hours	Mon 2:00-3:00 in A206
Class Information	Mon 10:30-1:30 in W8

Prerequisites: 0.5 CGS course at 1000-1099 level, or permission by the Centre for Global Studies

Learning Outcomes

On completing this course, students should be able to:

1) Identify and explain the social, political, cultural and economic factors contributing to past energy transitions
2) Evaluate different perspectives on the causes and effects of various energy transitions
3) Situate individual energy transitions within the broader system of global energy regimes
4) Analyze the widespread failure of clean alternatives to oil, including nuclear energy, wind, solar power, and biofuels
5) Construct a collective timeline that places key energy transitions in their socio-historical context
6) Identify the limits to global energy transition
7) Use historical energy transitions to imagine what life might look like after oil
8) Develop research questions, critically evaluate and synthesize scholarly sources, and conduct original research to support hypotheses

Course Methods

This course uses a combination of informal lectures, class discussion, student presentations, and small group activities. These methods will be supplemented by course readings and occasional film screenings. You are expected to come to class having completed ALL required readings and prepared to engage in scholarly conversation.

Course Requirements

Assignment	Worth	Due Date	Learning Outcome
Participation	10%	Ongoing	ALL
Timeline Project	20%	Various	1, 5
Reading Responses (3)	30%	Oct 1, Oct 29, Nov 19	2, 3, 4, 6

Research Statement and Annotated Bibliography	10%	Nov 5	8
Research Paper	30%	Dec 7	7, 8

Assignment Descriptions

Participation
Your participation grade is based on attendance and in-class participation, which means coming to class on time having done all the assigned readings, and being prepared with questions and/or contributions based on these readings. As a rule, speaking more often does not mean you will receive a higher participation grade; the content of your contribution is equally important. Half a percent will be deducted for each unexcused absence. Two percent of your participation grade will come from your participation in a peer review workshop on November 26. On this date, you will bring a rough draft of your research paper to be proofread by one of your peers. Failure to attend this class or bring a rough draft will result in a grade of zero.

Timeline Project
For this project, you will choose a key energy transition from the following list: wood; steam; coal; natural gas; nuclear; oil; wind; solar; and biofuel. Provide the socio-historical context for this transition and explain why it was or was not successful. Please include a full bibliographic handout with your presentation. The digital platform for creating timeline entries will be discussed in further detail in class.

Reading Responses
Over the course of the semester you will write three short two-page essays in response to the course readings. Additional details will be provided in class.

Research Statement and Annotated Bibliography
The research statement is a brief explanation of the intended trajectory of your paper. It should do the following things: introduce the topic; provide some background or general context for your investigation; identify significant research questions, assumptions, and frameworks for analysis; and provide a preliminary thesis statement that summarizes your anticipated position. These details may change during the writing process—this is a necessary aspect of research and not something to be concerned about. The research statement is really an initial roadmap for the writing process. The annotated bibliography will include no less than 10 sources with 3-4 sentences describing each source's main argument, its contributions to the field, and its relevance to your research project. These sources may have already been used in the timeline project; you are free to draw on any of the bibliographies provided during timeline presentations.

Research Paper
For your final research paper, you will use timeline project information along with additional external research and course texts to answer the following question: What comes after oil? This paper requires you to use sound critical research skills to speculate on our energy future. Here are some questions you might ask yourself as you contemplate the problem of how to transition from an oil economy: What does the coming transition look like? What is the role of humans in this

transition? What might the world look like after this transition? How must our current institutions be modified or dismantled? How will we move past the limitations of lifestyle politics while recognizing the implications of individual actions? You must support your argument with evidence from the text and include a minimum of 5 peer-reviewed scholarly sources.

Course Texts

Podobnik, Bruce. *Global Energy Shifts: Fostering Sustainability in a Turbulent Age*. Temple University Press, 2006.

Smil, Vaclav. *Energy and Civilization: A History*. MIT Press, 2018.

Szeman, Imre et al. *After Oil*. Petrocultures Research Group, 2016.

Reading Schedule

Date	Topic	Assigned Reading	Additional Info
Sept 10	Introduction	**Course Outline** Smil, "Chapter 1: Energy and Society"	*Sign up for timeline presentations*
Sept 17	Energy in Prehistory	Smil, "Chapter 2: Energy in Prehistory" and "Chapter 3: Traditional Farming"	*Example presentation (biomass?)*
Sept 24	Energy in the Preindustrial World	Smil, "Chapter 4: Preinudstrial Prime Movers and Fuels" Unger, "The Long View" (online)	*Wood*
Oct 1	Global Energy Transitions	Podobnik, "Global Energy Shifts in World Historical Perspectives" Unger, "The Twentieth Century and Beyond" (online) World Energy Council, "Global Energy Transitions" Van Beurden, "The Three Keys to a Successful Global Energy Transition" (Shell)	*Steam* **Due:** Reading Response 1

		Hund et al, "A framework for fostering effective energy transitions" World Economic Forum, "Fostering Effective Energy Transition"	
READING WEEK: Oct 9-12			
Oct 15	Modern Energy Regimes	Podobnik, "The Rise of Coal"; "Conflict in Coal…"; and "The First Period of Crisis" Smil, "Chapter 5: Fossil Fuels, Primary Electricity, and Renewables" Thomas, "Keeping the Lights On: Oil Shocks, Coal Strikes, and the Rise of Electroculture"	*Coal* *Electricity*
Oct 22	Modern Energy Regimes cont.	Podobnik, "The Rise of Oil, Natural Gas, and Nuclear Power" and "The Second Period of Crisis" Broinowski, "Nuclear Power and Oil Capital in the Twentieth Century"	*Oil*
Oct 29	Petroculture	Smil, "Chapter 6: Fossil-Fueled Civilization" Szeman et al, *After Oil* Szeman and Diamanti, "Beyond Petroculture: strategies for a Left energy transition" Cetinic and Diamanti, "Monumental Oil"	*Nuclear* **Due:** Reading Response 2
Nov 5	Sustainable Futures?	Smil, "Chapter 7: Energy in World History"	*Solar* *Wind*

		Podobnik, "Toward a Sustainable Energy Regime" Medak, "Technologies for an Ecological Transition: A Faustian Bargain?"	**Due:** Research Statement and Annotated Bibliography
Nov 12	Feminist and Indigenous Critique	Wilson, "Energy Imaginaries: Feminist and Decolonial Futures" Warren Cariou: "Oil Drums: Indigenous Labour and Visions of Compensation in the Tar Sands Zone" **Screening:** Nuuca	*Biofuel*
Nov 19	Germany	Morris and Pehnt, "The German Energiewende Book"; book.energytransition.org Federal Ministry for Economic Affairs and Energy, "The Energy of the Future" **Screening:** Die 4. Revolution: Energy Autonomy	**Due:** Reading Response 3
Nov 26	Greenland	Readings TBA	
Dec 3	Final Thoughts	None	**Peer review workshop** (2 % of your participation grade)
Research Paper Due December 7!			

COURSE POLICIES

Email
I will make every attempt to reply to emails on the same day if they are received between the hours

of 9am and 6pm. I do not check my emails after 6pm on weekdays or at all on weekends. Kindly allow 48 hours before sending a gentle reminder. Please contact me using only your university email account and include the course code in your subject line. In the case of an urgent message, please contact me instead by telephone.

Office Hours and Appointments
If you wish to utilize office hours, please contact me at least 24 hours in advance to make an appointment. Appointments are limited and granted on a first-come, first-serve basis. If you are unable to attend allocated office hours, please contact me to discuss an alternative appointment time. Unfortunately, while I will do my best to accommodate, I cannot guarantee appointments outside of my office hours. For any appointment, please come prepared with specific questions and concerns as appointments are limited to 15 minutes each.

Class Cancellations
In the event of unexpected class cancellations, I will post an announcement on OWL as soon as possible. Every attempt will be made to post cancellations in advance.

Grading Scale

A+ (90-100)	Superb. No mistakes, well-written, well-researched, original thesis. One could scarcely expect better from a student at this level.
A (80-89)	Excellent. No mistakes, well-written and distinctive but not original. Superior work that is clearly above average.
B (70-79)	Good. No serious mistakes, well-written but not distinctive. Good work, meeting all requirements, and eminently satisfactory.
C (60-69)	Fine. Some errors, but demonstrates a basic understanding of the material. Competent work, meeting basic requirements.
D (50-59)	Poor. Many errors, and a dubious grasp of the material. Fair work, minimally acceptable.
F (below 50)	Fail. Problematic on all fronts. No real grasp of material or complete lack of effort.

Late Assignments
5% will be deducted per day up until one week. I will not accept assignments that are more than one week late unless you have been granted academic accommodation.

Assignment Discussion and Grade Appeals
I will provide detailed feedback on all assignments to make the assigned grade clear. If you wish to discuss your grade you must make an in-person appointment during a pre-designated time that will be announced when the assignment is returned – I will not discuss grades via email. Before your appointment, please review the feedback in relation to assignment guidelines and grading scale (above). Appointments will not be granted if more than one week has passed since the assignment was returned. If after discussing your grade with me you wish to appeal it, you must make a request in writing that shows how your paper meets the necessary requirements. Be aware that reassessment of the assignment may potentially result in *a grade decrease*.

The Appendix to Course Outlines is posted to the OWL course site.