GEOG 3770 – Geographies of Energy, Environment and Society



Edward Burtynsky - Oil Fields #19a. Belridge, California, USA, 2003

University of Manitoba
Department of Environment and Geography
Tues-Thurs 2:30-3:45
St. John's College 125
Instructor: Jonathan Peyton

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Office: Sinnott Bldg 305

Office Hours: Wednesday 1-2:30

Course Objectives:

- (1) To assess, question and complicate the intimate connections between human societies and our energy production and consumption.
- (2) To analyse the social, economic and environmental inequalities that emerge from (and are built into) our energy systems.
- (3) To analyse the legacies of our energy systems at multiple scales from the local to the global, from the natural to the social, from the micro-organic to the market.
- (4) To consider how our energy pasts and presents might inform our energy futures.

Course Outline: The course will be organized into modules to create a kind of logic for our semester. Don't think of these modules as self-contained units – there will be a great deal of overlap as we weave our way through the intimate connections and contradictions

of energy, environment and society. Topics for the year will focus on: (1) Energy and Environment (2) Energy, Development and Geopolitics; (3) Energy Futures: Renewables and Alternatives; (4) Social Movements and the Contradictions of Public Policy.

Required Reading: There is no textbook for this course – instead, we will read and analyse scholarly, newspaper, and popular articles as well as relevant policy documents. All required readings are available through the University Library e-journal system or online. Links and pdfs will be provided where appropriate.

Referencing Style Guide: Students will be encouraged to choose a citation method that suits their own work. Students are free to choose any method as long as the styled chosen fits an accepted academic format and they are consistent throughout their work. Further instruction and assistance will be provided in class.

Course Etiquette

What to expect from your professor: provocative, challenging and informative lectures; wrapping up lectures/discussions on time; a willingness to listen to and learn from you; prompt and fair grading of your assignments; timely responses to your questions and comments.

What I expect from you: being prepared for class, arriving on time, and not engaging in disruptive behaviour (you can sleep, browse Instagram, talk to friends, and send texts in the many hours when you are not in this class); completing the readings and preparing questions and comments for class discussions; a willingness to listen and learn from your instructors and your classmates.

Lecture Schedule

January 4 – Introductions and Syllabus

January 9 – Placing Energy in Historical and Global Context

- Kirby Calvert, "From 'Energy Geographies' to "Energy Geographies'" *Progress in Human Geography* 40.1 (2016): 105-125.
- (Optional) Imre Szeman, "How to Know About Oil: Energy Epistemologies and Political Futures" *Journal of Canadian Studies* 47.3 (Autumn 2013), 145-168.

Unit 1 – Energy and Environment

January 11 – Athabasca: The Tar Sands and the Oil Sands

 Andrew Nikiforuk, "Declaration of a Political Emergency" Excerpt from Tar Sands http://www.andrewnikiforuk.com/Declaration%20of%20a%20Political%20Emergency.pdf

January 16 – Externalities of Energy

January 18 – Energy Actors

• Kara Shaw, "Climate deadlocks: the environmental politics of energy systems," *Environmental Politics* 20 (2011): 743-63.

January 23 – Fracking Follies: The Shale Gas Revolution?

- Bill McKibben, "Why Not Frack? *The New York Review of Books* (March 8, 2012) http://www.nybooks.com/articles/archives/2012/mar/08/why-not-frack/?pagination=false
- John Deutch, "Why Frack?" *The New York Review of Books* (April 26, 2012) http://www.nybooks.com/articles/archives/2012/apr/26/why-frack/?pagination=false

January 25 – Fossil Fuels and the Political Economy of Climate Change

• James Hansen, "Climate Change is Here – and Worse than we Thought" *The Washington Post*, August 3, 2012 http://www.washingtonpost.com/opinions/climate-change-is-here--and-worse-than-we-thought/2012/08/03/6ae604c2-dd90-11e1-8e43-4a3c4375504a story.html

January 30 – Skim a Little Off the Top: Mountaintop Coal Removal

Unit 2 – Energy, Geopolitics and Development

February 1 – OPEC, Oil Cartels and Oil Shocks

• Timothy Mitchell, "Carbon Democracy" *Economy and Society* 38.3 (2009): 399-432.

February 6 – Oil, Energy and "National Security"

• Thomas Friedman, "The First Law of Petropolitics" *Foreign Policy* 154 (May-Jun 2006): 28-36.

February 8 – Petrostates: Energy Monopolies and the Dutch Disease

 Bruce Campbell, "Managing Oil Wealth: The Alberta/Canada Model vs. the Norwegian Model" Ottawa: Canadian Centre for Policy Alternatives (2012). http://www.policyalternatives.ca/publications/commentary/managing-oil-wealth

February 13 – Resource Depletion, Scarcity and the Peak Oil Debate

• Matthew Huber, "Enforcing Scarcity: Oil, Violence and the Making of the Market" *Annals of the Association of American Geographers* 101.4 (2011): 816-826.

February 15 – MIDTERM

February 20 & 22 – Reading Week: NO CLASSES!

February 27 – Energy and the Developing World

 Lawrence Wright, "Lithium Dreams: Can Bolivia Become the Saudi Arabia of the Electric Era?" *The New Yorker* (March 22, 2010): 47-59. https://www.newyorker.com/magazine/2010/03/22/lithium-dreams

March 1 – Colonial Legacies: Energy, Development and Violence

 Michael Watts, "Empire of Oil: Capitalist Dispossession and the Scramble for Africa" *Monthly Review* 58.4 (2006): 1-16

Unit 3 – Energy Futures: Renewables and Alternatives

March 6 – Local Focus: Manitoba Hydro

 Marcelo Leite et al., "The Battle of Belo Monte" Folha de Sao Paulo http://arte.folha.uol.com.br/especiais/2013/12/16/belo-monte/en/index.html

March 8 – "Unconventional Fuels": Shale, CBM, LNG, Oil Sands

March 13 – Nuclear Promise, Nuclear Perils

• Sarah Pritchard, "An Envirotechnical Disaster: Nature, Technology, and Politics at Fukushima," *Environmental History*, 17:2 (2012): 219-243. http://envhis.oxfordjournals.org/content/17/2/219.full.pdf+html

March 15 – Biofuels and the Next Great Hope(s): Tidal, Geothermal, Wind, Solar

• Vaclav Smil, "Examining Energy Transitions: A Dozen Insights Based on Performance" Energy Research and Social Science 22 (2016); 94-97.

Unit 4 – Social Movements and the Contradictions of Public Policy

March 20- Carbon Economies: Making Markets, Regulations and Emissions

March 22 – Big Oil and Indigenous Peoples in the Amazon

- William Langewiesche, "Jungle Law" *Vanity Fair* (May 2007) http://www.vanityfair.com/politics/features/2007/05/texaco200705
- Major Papers Due

March 27– Media, Protest and Popular Movements Around Energy

• Suzana Sawyer, "Human Energy" *Dialectical Anthropology* 34 (2010): 67-75.

March 29 – The New North: Drilling in the Arctic

April 3 – China and 'Green' Energy

Evan Osnos, "The Green Giant: Beijing's Crash Program for Clean Energy" *The New Yorker* (Dec 21, 2009)
 http://www.newyorker.com/reporting/2009/12/21/091221fa fact osnos

April 5 – Final Exam in class

Assignments & Evaluation

Op-Ed (800-900 Words) – **15%** (February 8)
Midterm – **20%** (February 8)
Major Research Paper/Project (8-12 pages – March 22) – **35%**Final Exam – **20%** (April 5 in class)
Participation – **10%**

Midterm and Final: There will be a midterm and a final exam – both of these exams will take place in class and will last for 75 minutes. They will have the same format – (A) identify and explain the significance of terms/ideas/places/people/concepts, and (B) an essay. You will have choices for each section. Each are worth 20% of your final grade.

Written Assignments

There are two written assignments in the class: A shorter written assignment due February 8 (of about 800-900 words) and a more substantial assignment due toward the end of March (of 2000-2500 words). You will be offered a choice for each assignment – you can choose to tailor your coursework to your own strengths as a learner.

NOTE: Further instruction will be provided in class for all of the assignments, papers and exams. In-class handouts and additional instructions will be provided.

The **Grading Standard** for this course is as follows:

A+ (90-100%) is Exceptional

A (80-89%) is Excellent

B+ (75-79%) is Very Good

B (70-74%) is Good

C+ *(65-69%) is Satisfactory*

C (60-64%) is Adequate

D (50-59%) is Marginal

F (0-49%) is Failure

Course Policies and Miscellaneous Information:

Late Assignments

Students will not be permitted to write make-up tests, except for documented medical or compassionate reasons. Students may hand in assignments late but will be assessed a late penalty if they do so (– 2 marks per day including weekends).

Feedback

Evaluative feedback will be provided by the voluntary withdrawal deadline date on March 16.

Academic Dishonesty

Students should acquaint themselves with the University's policy on plagiarism and cheating and examination impersonation (see University of Manitoba General Calendar). Please submit your own unique work. Consult the U of M Calendar "academic regulations" for more information on plagiarism and other forms of academic dishonesty. I will talk about proper citation methods when we get closer to assignment due dates. Please see me if you have any questions about sources, citations or academic/research ethics

Student Accessibility Services

If you are experiencing difficulties with your studies or assignments, or have a disability or illness which may affect your course of study, you should discuss these issues with your instructor and/or one of the following Student Affairs offices as soon as possible. You are not required to disclose your disability to the instructor.

Student Accessibility Services, 520 University Centre (Main Office) 474-7423 (voice), 474-9690 (TTY), student_accessibility@umanitoba.ca

Student Counseling Centre, 474 University Centre, 474-8592

University 1, 205 Tier Building, 474-6209

Academic Learning Centre, 201 Tier, 480-1481

<u>A Note on Email</u>: I will happily answer email queries that you might have about course administration or other housekeeping duties – but I will only be checking email during regular office hours (ie. not on evenings and weekends). If your questions are more substantive (requiring a longer answer or explanation) I will ask you bring them to me before/after class or during office hours. Feel free to stop me in the halls or to make an appointment if you're not able to make it to the regularly scheduled office hours.

Here is the U of M blurb about class communication:

The University requires all students to activate an official University email account. For full details of the Electronic Communication with Students please visit: http://umanitoba.ca/admin/governance/media/Electronic_Communication_with_Students Policy - 2014 06 05.pdf

Please note that all communication between myself and you as a student must comply with the electronic communication with student policy:

(http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html). You are required to obtain and use your U of M email account for all communication between yourself and the university.

A Note on Technology: Many students prefer to take notes on laptops. This is fine as long as you use the computer only for this purpose (ie. not for reading blogs or Tumblr, using Facebook, writing emails, playing games, etc.). This is disruptive for your classmates. Cell phones should be turned off at the beginning of class... and texting is a big-time breach of classroom etiquette. Please do not text during class. Unless a specific dispensation has been made, I would prefer students not to record lectures. Posting of class materials or recordings to the internet is prohibited.

A Note on Lectures: I'll be using powerpoint and links to the internet during the lectures to illustrate and supplement the things we talk about in class. I'll post the slides and links so that you can use them as study guides. I tend to use little text on the powerpoints so please don't use them as a substitute for lecture/seminar attendance. The slides should be used as a general outline but not as a comprehensive guide to what we will be talking about. You should still take notes.