

FACULTY OF ENVIRONMENTAL STUDIES
York University
BES Program

UNDERGRADUATE COURSE SYLLABUS

Course: ES/ENVS 3130 3.0 Energy and the Environment in Canada

Term: Winter 2015

Calendar Description

The course focuses on relationships between socio-economic development, energy use, and the environment in Canada. Energy sources, energy end use, energy technology, and energy institutions as well as the social and ecological impacts of energy use are examined. Energy systems supportive of sustainable development are explored.

Prerequisite

ENVS 2400.6 or permission of the Course Director

Course Director

Prof. Christina Hoicka

HNES 215

Course consultation hours: Tuesdays 3 to 4 PM

Teaching Assistant

Juan Senisterra

HNES _____

Course consultation hours:

Course Management

Time and Location

Lectures: Tuesday, 1130-230 Room

Tutorial Group 1: Tutorial will take place during class, and will depend on the day's activities.

Note: TAs have been directed **not** to accept students into a tutorial unless they have formally registered in that section. In exceptional circumstances, the Course Director will consider recommending to the Undergraduate Program Director that a student be permitted to change tutorial group enrolment; a written request detailing the reasons why a change is being requested and the choice of alternative tutorials must be submitted **by the student** to the Course Director prior to the first tutorial session.

Communication Policy

All email communication must follow the following guidelines to ensure prompt and accurate responses:

- Responses will be provided to emails for which the email subject heading begins with "ENVS 3130"
- Prior to sending an email, please review the syllabus carefully. Answers that are contained in the

syllabus may not be responded to.

- Responses will be provided within three business days. Please plan accordingly.
- For reasons of privacy and confidentiality, please email me from the email registered to your Moodle account.
- You are responsible for checking your email associated with your Moodle account, and this is the email I may contact you through.
- Content related questions will be discussed in class, or on online discussion forums with the entire group.

Purpose and Objectives of the Course

The learning outcomes of this course are to:

1. explain the basic concepts of energy sources, energy end use, and energy technology;
2. describe the landscapes of energy production and consumption;
3. describe the key ideas, institutions and interests that inform Canadian energy policy;
4. describe and differentiate between the drivers of change and path dependence in energy systems and resource intensive communities;
5. analyse the interaction of the physical characteristics of energy, with ideas, actors and institution in the formulation of energy policy in Canada through case studies;
6. evaluate the sustainability of energy systems and the uses of energy technologies;
7. generate a proposal for a policy that is supportive of energy and sustainability;
8. communicate complex concepts and materials in a concise and effective manner.

Organization of the Course

This course is supported by eLearning at York University, and we will make extensive use of lectures and discussion posted in Moodle, and other internet resources such as social media.

The lectures will supplement and expand on the required readings. The lectures will be delivered in two formats, please refer to the Moodle for week by week details.

- During some weeks, we will have a flipped lecture, where students will watch a lecture on video on Moodle, and engage in learning activities and discussions during class.
- During other weeks, the lecture will be given in class. The course involves formal lectures by the instructors and invited guests and may include videos as well.
- Tutorial sessions will be conducted by a teaching assistant or the course director and will be the main focus for discussion of required and recommended reading and assignments in the course.
- Some course activities will take place online in the Moodle environment. Please refer to the courses Moodle site for details.
- We will make use of my blog cehoicka.blog.yorku.ca and twitter hashtag #envs3130

Required Readings

The following books are required reading for the course:

Newman P, Beatley T, Boyer H (2009) Resilient cities responding to peak oil and climate change. Island Press, Washington, DC

Course reading package that will be available in the bookstore, and at the Scott Library Reference Desk.

Supplementary Reading

The following book is **strongly recommended** as reference material, but is not a required reading.

Everett R, Boyle G, Peake S, Ramage J (2012) *Energy Systems and Sustainability: Power for a Sustainable Future*. Oxford University Press

Students will find this book to be critical to understanding the basics of various energy technologies, resources and the functioning of the energy systems. I recommend that those students who know they will pursue the Certificate in Energy Sustainability and/or a career in energy policy and planning to purchase this book as a handbook that you can use throughout your career.

In addition to the reading kit, there are many excellent sources that deal with the general issues covered in this course, as well as particular topics. These will be posted to the Moodle website under Resources for Students or on my blog.

Schedule of Topics and Readings by week

The following list of lecture topics and readings is subject to change. The readings and online learning materials for each week will be posted on the Moodle website.

Week 1: January 6, 2015 Course Introduction

Week 2: January 13, 2015 Energy in society and economy

Week 3: January 20, 2015 Science of Energy and Climate change

Week 4: January 27, 2015 Peak oil and fossil fuel resources

Week 5: February 3, 2015 Energy landscapes and environment

Week 6: February 10, 2015 Energy and climate change policy in Canada

No class, block week February 17 2014

Week 7: February 24, 2015 Oil sands

Week 8: March 3, 2015 Soft paths

Week 9: March 10, 2015 Resilient communities and energy

Week 10: March 17, 2015 Transportation

Week 11: March 24, 2015 Aboriginal energy

Week 12: March 31, 2015 Presentations

Grading Scheme, Assignment Submissions, and Lateness Penalties

The grading scheme for ENVS courses conforms to the 9-point system used in other undergraduate programs at York. Assignments and tests will bear either a letter grade designation (e.g., A, B, C+, etc.) or an equivalent percentage grade. (See detailed descriptions in the FES *Regulations* or in the BES *Handbook*) The final grade for the course will be calculated using the weighting formula established above for this course.

Assignment Submissions

- Students are encouraged to submit their assignments via the Moodle website in the appropriate dropbox.
- Assignments must be submitted in Word (.doc or .docx) format. **Assignments in PDF format will not be accepted and will result in a grade of zero.**
- Students with supplementary materials in an Excel spreadsheet are encouraged to submit the spreadsheet with calculations.

Evaluation

The grade for the course will be based on the following items weighted as indicated:

		% of grade	Due date
Tests	Test 1	15	10-Feb-14
	Test 2	15	17-Mar-14
	Reading summaries	10	Weekly, due day BEFORE class
Reading Summaries			
Community Participation Assignment	Part I	5	24-Feb-14
	Part II	5	
Cabinet Package	Proposal	5	03-Feb-14
	Presentation	10	31-Mar-14
	Report	20	31-Mar-14
Participation	Class/ Moodle	10	Across Semester
	Cabinet Package	5	Across semester
	Total	100	

Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles.

Instructions and grading schemes for assignments are posted in the Moodle website.

Each test is one hour long, and will consist of short answers and essay format responses. The test will cover required readings, activities in class and online, and lecture materials that were covered up to the week prior to the test. Students with disabilities please refer to information below, and please note timelines and your responsibilities in arranging accommodations.

A reading summary is due for 10 course readings, each worth 1% of the final mark. Each reading summary will be no longer than 1 page long and will follow the format and structure as the template posted on Moodle.

To enhance the learning experience, the reading summaries will be posted in Q and A forum format, where students can see each other's post **after** posting their own.

Students will engage in a community participation assignment. The assignment will be based on the lecture

given on January 20th, and is posted to Moodle.

Students will write a cabinet decision package. The proposal for this package is due February 3rd, 2014. The proposal will contain the topic of your decision package, and the proposal must be approved by the Course Director or by the Teaching Assistant for your cabinet package presentation and report to be considered. You may not change topics once your topic has been approved. Detailed instructions for the proposal, report and presentation will be posted to Moodle. Please note that this will count towards your participation mark. Students who produce a report considered high quality will be invited to have it posted on Dr. Hoicka's website.

Your Participation grade will be based on two parts:

- The first is your attendance and participation in class, on Moodle and in tutorials, contributions to discussions, awareness of issues in required readings, and ability to relate issues to broader concerns of the course. Participation includes listening to others speak and encouraging the sharing of ideas.
- The second is your participation in the group, as evaluated by your peers, with both quantitative and qualitative assessments.
- Your participation grade will be assigned by your tutorial leader based on a subjective assessment of these factors.

Instructions for Submission and Return of Final Assignments

Students are encouraged to submit their assignments via the Moodle website. In cases where students will be handing an assignment in hard copy format late in the term and the Professor or Teaching Assistant will not have an opportunity to return the graded assignment in a subsequent class/tutorial, special arrangements must be made to accommodate students' wishes to have the graded assignment returned to them:

- a) students must submit their final assignment with a self-addressed, stamped, envelope if they want to receive the graded assignment. If the assignment is more than 5 pages in length they are advised to have the post office weigh the package to determine appropriate postage required.
- b) if students do not attach a self-addressed stamped envelope, they must attach a document with their course details, their name and student number and their signature and a statement confirming they do not wish to have the assignment returned to them.

Proper academic performance depends on students doing their work not only well, but on time. Accordingly, **the assignments for ENV5 courses must be received by the Instructor or Teaching Assistant on the due date specified for the assignment.** Students are encouraged to submit their assignments via Moodle, although assignments can be handed in either the course drop box located across room 114 HNES.

Note: students may have their essay or assignment date stamped by Reception staff in HNES 137. Once date stamped, Reception staff will deposit the essay or assignment in the course drop box on behalf of the student. Assignments should not be deposited in the Instructor's or TA's mailboxes in the HNES building.

Lateness Penalty

Assignments received later than the due date will be penalized 5% of the value of the assignment *per day* that the assignments are late. For example, if an assignment worth 20% of the total course grade is a day late, 1 point out of 20 (or 5% per day) will be deducted. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc. will be entertained by the Course Director **only** when supported by

appropriate written documentation (e.g., a doctor's letter).

Missed Tests

Students with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (e.g., doctor's letter) may request accommodation from the Course Instructor. (*State accommodation arrangement: e.g., allowed to write a make-up test on xx date.*) Further extensions or accommodation will require students to submit a formal petition to the Faculty.

ADDITIONAL INFORMATION

Group Work. This course requires group work. Group work, when done well, can teach collaborative skills that are essential in many work contexts. It can enrich everyone's learning by making all students resources for each other, and can create a synergy based on the diversity of histories and perspectives of the group members. To ensure that group work is a positive experience, each group should first discuss and agree to ground-rules for effective group work such as: 1) active listening and facilitating equal participation of all; 2) respecting different opinions and different ways of knowing or communicating; 3) considering issues of power, difference and discrimination; 4) identifying a clear path of communication with Course Director should there be issues/concerns; and 5) making clear a path of action for issues regarding equity-related or harassment concerns.

Students will evaluate each other's participation and contribution in the groups, and this will contribute to 5% of the students' participation mark.

Useful articles on working through equity issues in groups:

Burke, Bev et al. "Thinking Equity." *Education for Changing Unions*. Toronto: Between the Lines, 2002, 74-77.

Narayan, Uma. "Working Together Across Differences: Some Considerations on Emotions and Political Practice." *Hypatia*, Vol. 3, No. 2 (Summer, 1998), pp. 31-47.

Inclusivity in the BES Program

The BES Program strives to include a broad range of perspectives and substantive material in its course offerings. Central to a clear understanding of environmental problems is the link between exploitation of the natural world, and justice issues related to racism, gender inequity, and poverty. An inclusion of non-western perspectives is therefore essential to a fruitful discussion of North-South issues, and environmental debates generally.

Religious Observance Days

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course director immediately. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete and Examination Accommodation Form, which can be obtained from Student Client Services, W120 Bennett Centre for Student Services or online at http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf

Academic Honesty

York students are required to maintain high standard of academic integrity and are subject to the Senate Policy on Academic Honesty as set out by York University and by the Faculty of Environmental Studies. Please read the *Senate Policy on Academic Honesty* (which can be found as Appendix One of the *Academic Regulations of the Faculty of Environmental Studies* or in the University Policies and Regulations section of the *York University Undergraduate Programs Calendar*), available at: <http://www.yorku.ca/secretariat/legislation/senate/acadhone.htm>

There is also an academic integrity website with complete information about academic honesty. Students are expected to review the materials on the Academic Integrity website at:

<http://www.yorku.ca/tutorial/academicintegrity>

HPRC Review Process

FES GUIDELINES AND PROCEDURES FOR ETHICAL REVIEW OF RESEARCH INVOLVING HUMAN PARTICIPANTS IN UNDERGRADUATE COURSES

York students are subject to the York University Policy for the ethics review process for research involving Human Participants. All research activity with human participants and minimal risk as part of this course has to undergo ethical review. Please consider the following definitions:

- “**Human participants**” in research will be defined as persons who provide data or information to the researcher which are typically not part of their professional capacity.
- The draft **definition of funded research** from the Human Participants Review Sub-Committee [HPRC] is: “‘Funded’ will refer to all research that is receiving money that is in response to a specific proposal and administered by the university. Research using monies not administered by the University, and/or not in response to a specific proposal, will be considered ‘unfunded’.”
- The **definition of minimal risk** being used is the one given in the SSHRC/NSERC/MRC *Tri-Council Policy Statement Aethical Conduct for Research Involving Humans@* (August, 1998): “If potential subjects can reasonably be expected to regard the probability and magnitude of possible harms implied by participation in the research to be no greater than those encountered by the subject in those aspects of his or her everyday life that relate to the research, then the research can be regarded as within the range of minimal risk.” (p. 1.5)

HPRC review forms are available at: <http://www.yorku.ca/fes/resources/acadreg/>

Student Conduct

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. A statement of the policy and procedures involving disruptive and/or harassing behaviour by students in academic situations is available on the York website at: <http://www.yorku.ca/secretariat/policies/document.php?document=202>

Access/Disability

York provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. It is the student's responsibility to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. *You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs.* Failure to make these arrangements may jeopardize your opportunity to receive academic accommodations.

Additional information is available at <http://www.yorku.ca/cds/> or from disability service providers:

- Office for Persons with Disabilities: Room N110 of the Bennett Centre for Student Services , 416-736-5297,
- Learning and Psychiatric Disabilities Programs - Counselling & Development Centre: Room N110 of the Bennett Centre for Student Services, 416- 736-5297, <http://www.yorku.ca/cdc/>
- Glendon students - Glendon Counselling & Career Centre: Glendon Hall 111A, 416-487- 6709, <http://www.glendon.yorku.ca/counselling/personal.html>