

University of Toronto Scarborough
Department of Physical and Environmental Sciences
Introduction to Environmental Studies ESTB01H3
Wednesday 1-3 pm, MW-130, Fall 2016

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Course Description

This course is designed to provide a strong interdisciplinary focus on specific environmental problems as they exist within a socioeconomic, institutional, political and cultural context. The orientation of the course is pragmatic in the sense that it is concerned with the use of proactive action for dealing with environmental issues. As such we will broadly consider the tools, methods and resources that are employed in ‘solving’ environmental issues, but we will do so within the context of the limitations of these methods and of scientific knowledge more generally.

In this course students will gain a better understanding of key concepts in environmental studies and be introduced to critical skills in environmental problem-solving. Environmental issues have many sides including scientific, social, cultural, ethical, political, and economic, and comprise multiple stakeholders promoting divergent points of view and interests. Using fair procedures, legitimate knowledge and facilitated dialogue, we can go a long way towards achieving agreed-upon terms of reference for addressing environmental problems.

Course Objectives

Upon completion of this course, students will have an enhanced sense of the different, yet complementary perspectives on the environment, sustainability, environmental problems and their solutions to be found in the natural and social sciences. The student will have a solid understanding of what environmental studies are and what the environmental studies major entails in a substantive sense. Broad course objectives include an awareness of the following fundamental themes associated with environmental problem solving:

1. It is critical that students first comprehend the fundamental complexity and interconnectedness of environmental issues. Whether defined as wicked, complex or hyper-complex, the first step in understanding the nature of human interaction with the environment is an awareness of the depths of uncertainty surrounding environmental issues.

2. As an extension of the first objective, we will examine the root drivers of human-induced environmental change (e.g. climate change), and the fundamental dilemma of ‘proactive’ human agency with respect to environmental issues. In other words, we will examine whether or not there is such a thing as directed environmental agency.
3. Students will be exposed to what might be considered the leading edge of international environmental problem-solving. There are a plethora of methodologies that are currently in use to deal with environmental issues. We will provide a broad overview of such methods, including their individual advantages and limitations. We will also introduce students to reflexive methods associated with what might be called the science of science.
4. Finally, case studies will be used to highlight fundamental differences in approaches to addressing environmental issues. Drawing upon the extensive partnerships of the New Brunswick Climate Change Research Collaborative and the UTSC ‘Science in Society Laboratory’ (i.e. *our collaborators currently include METROLINX; GNB; NRCAN-CFS; USDA; EC; SACiWaters; Women and Environment, Nepal; York University; University of Waterloo; University of Moncton; Canadian Rivers Institute; ARPFNB; University of New Brunswick; Université du Québec à Montréal; Institut National de la Recherche Scientifique ... etc*), we will seek to understand the functional relationship between the various institutional players.

At an individual level, particular skills will be fostered to deal with the differences in perspectives and interests that are part of environmental problem solving. Students will leave the course with specific skills including:

- Critical thinking across disciplines: identifying, explaining and synthesizing key concepts learned in class;
- Dialogical skills: explaining, assessing and articulating their own and others’ perspective on environmental issues;
- Reflexivity: noticing, articulating and working with one’s thought processes, emotions and reactions in the context of reading, writing, and dialogue;
- Demonstrating what they have learned through writing: summarizing, analyzing, assessing and synthesizing class readings and films.
- Simple, analytical skills

James Maclellan - Introduction to Environmental Studies ESTBO1H3

Table 1: ESTB01 course schedule.

Timetable FALL 2016: Intro Env Stud						
LECTURE	DATE	TOPIC	READINGS (Required)	READINGS (Suggested)	MOVIES	REQUIREMENTS
WEEK 1	07-Sep-16	Introduction to Environmental "Studies"	No Readings	<i>Primary Sources</i> : "Ecologic Agency ... (Chp 3, 4 and 5)" MacLellan 2006		
WEEK 2	14-Sep-16	Perspectives: I	No Readings	Weird Life - Toomey 2013; Story of Earth - Hazen 2012		
WEEK 3	21-Sep-16	Perspectives II	Simulation and Simulacra (5 pages)	Archeologies of the Future - Jameson 2005	The Matrix	Quiz 1 (week later)
WEEK 4	28-Sep-16	History 1: Nature	Gilgamesh: Tablets III, IV and V	George, A. 1999. The Epic of Gilgamesh: A New Translation. Penguin Books, New York.		Library Skills Seminar
WEEK 5	05-Oct-16	History 2: Humanity	Wealth of Nations (Chp 1-3) & Theory of Moral Sentiment (Part VI; Section 2; Chp. I-III)	The Fable of The Bees: or, Private Vices, Public Benefits (Bernard Mandeville 1714); The Selfish Gene (Dawkins 1976)	Attenborough	Quiz 2 (week later)
October 12, 2016						
WEEK 6	19-Oct-16	History 3: Integration	The New Atlantis (20 pages) - Francis Bacon - 1624	Bacon, F. 1620. Novum Organum. Open Court, Chicago, Illinois.; P. J. Schoemaker and C. A. van der Heijden, "Integrating scenarios into strategic planning at Royal Dutch/Shell," Planning Review, vol. 20, no. 3, pp. 41-46, 1992.		Assign 1 (due)
WEEK 7	26-Oct-16	Human Intentions: Utopians, Counterfactuals and Scenarios	Hitchhiker's Guide to the Galaxy (141- end) - Douglas Adams 1979	Kuhn, T.S. 1962. The Structure of Scientific Revolutions. University of Chicago Press, Chicago.	Manufactured Landscapes	Quiz 3 (week later); Midterm
WEEK 8	2-Nov-16	Human Intentions: The Market Imperative: Hayek's Legacy	Hayek, F.A. 1945. "The use of knowledge in society," The American economic review, pp. 519-530.	Batie, S.S. "Wicked problems and applied economics," American Journal of Agricultural Economics, vol. 90, no. 5, pp. 1176-1191, 2008.		
WEEK 9	9-Nov-16	Environmental Agents: ENGO Perspective	Rachel Carson: Silent Spring (Chp 8)	Our Stolen Future - Dumanoski, Myers, and Colborn - 1996	Chasing Ice	Quiz 4 (week later)
WEEK 10	16-Nov-16	Environmental Agents: Government's Role?	Berkhout, F. 2005. Rationales for adaptation in EU climate change policies. Climate Policy 5(3): 377-391.	The Politics of Climate Change - Giddens 2006		
WEEK 11	23-Nov-16	Impact and Risk Assessments and Case Study	Beck - Risk Society (TBA)	The Norm Chronicles - Blastland and Spiegelhalter 2014		Assign 2 (due)
WEEK 12	30-Nov-16	Last Class: Case Study and Review	Foucault: Madness and Civilisation (Page 187 - 191)	No Readings		
EXAMS						

Required Readings

Please see Table 1 for the *required* readings all of which will be made available through Blackboard. A list of *suggested* readings is given as a means of identifying primary sources and background material – students are not directly responsible for this material but it will come up in the lectures. You are responsible for the lecture content and material; the official version of the lecture slides is posted after the lecture date.

Class Attendance

Because of the nature of the material covered in class, class participation is highly recommended. Students are required to do readings before class and come prepared with questions about the readings to discuss in class. We will also be viewing four films, which will be on hold in the UTSC library. The mid-term and final exam will consist of multiple and short-answer questions, which will draw upon the lecture content as well as the films, hence students who miss class are required to view films on their own time and seek lecture notes from their classmates.

Grading Scheme

In this course you will have 3 assignments (the first of which is decomposed into 4 quizzes) a mid-term exam (in class) and a final exam (during the exam period).

Assessments	Percentage
Assignment 1 Movie Quiz (4)	10%
Assignment 2 Literature\Interpretation\Synthesis	15%
Assignment 3 Assessment\Interpretation\Synthesis	20%
Mid-term	20%
Final exam TBD	35 %

Missed Term Work

Late assignments will be subject to a late penalty of 10% per day (including weekends) of the total marks for the assignment. All assignments are due at the beginning of class.

A Note on Marking:

Feel free to contact me at any time to discuss the requirements of this course. If you are unhappy with the mark you received on an assignment please come to speak to me with a written response to the comments on your assignment.

Handing in Your Assignment:

Hardcopies of the assignments must be handed in class at the due date. I do not accept assignments sent by email.

Please follow the University of Toronto procedure to be completed in order to be considered for academic accommodation for any course work such as missed tests or late assignments. Verification of Student Illness or Injury forms can be found on the Office of the Registrar's webpage (<http://www.illnessverification.utoronto.ca/getattachment/index/Verification-of-Illness-or-Injury-form-Jan-22-2013.pdf.aspx>).

Extension of Time

Students MUST submit a request for extension in ADVANCE of the deadline in order to receive a decision. For extensions of time beyond the examination period you must submit a petition through the Office of the Registrar. <http://www.erin.utoronto.ca/index.php?id=6988>

Academic Integrity

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's *Code of Behaviour on Academic Matters* (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment. On tests and exams cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

Please avoid academic dishonesty, have confidence in your own ability to learn and grow academically by doing your own thinking and writing!

Accessibility

Students with diverse learning styles and needs are welcome in this course! In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in SW302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca

Communicating With You

The best way to communicate with me is before or after class, and during office hours. You may also email the class tutorial assistant whose email is provided. From time-to-time I will send email messages to the class to notify you of changes in schedule and opportunities that you may want to take advantage of. **I can only send messages to your U of T e-mail address.** If you use another account (gmail, hotmail, yahoo, etc.) make sure that your U of T email is sent to your

alternate email account. Similarly if you want to communicate with me, please send the message from your U of T address as I will not respond to emails from other email accounts.