University Of Toronto @ Scarborough Course Outline - Fall 2008

EESC13 - Environmental Impact Assessment and Auditing

Instructor:

Chuck Hostovsky, PhD, MCIP, RPP

Email:

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http://www.geog.utoronto.ca/people/faculty/hostovsky/

Course web site:

http://ca.groups.yahoo.com/group/jpg1413/

Office/Phone:

TBD @ UTSC

at St. George - SS5035, 416 978-3375

Timetable:

Tuesdays 6 - 8 pm in SW 221

Office hours:

@ UTSC Tuesdays 4:00 - 5:30 pm

Also office hours at St. George Wednesday and Thursday, by appointment

Exclusion: GGR393, INI220, GGRC41

Prerequisites: 2.5 F.C.E.'s in EES courses, or permission of the instructor

Required text:

No text book - individual papers handed out in class or online

Email Discussion Group and Course Web Site

A yahoo web site and email discussion group has been set up at Yahoo Canada in order to facilitate communication among the professor and students. Items to be posted include assignment questions, lecture material discussion, current events relevant to the course, newspaper stories, job opportunities in the field, etc. Students are free to post to the group. Questions can be posed to the group and will be answered by the Instructor or TA for everyone's benefit.

- Go to http://ca.groups.yahoo.com/group/jpg1413/ and click on "Join This Group"
- The web site contains the discussion group archives, Prof. Chuck's lecture notes (see "Files" section), class participation online response area, and other course reading and multi-media material

Note - online participation with the 418 Yahoo group will form part of the class participation grade. Further, sstudents are expected to attend class and take their own notes. Anti-spam technology on the Yahoo server limits the daily download of files. Therefore students should start downloading papers and lecture notes on a regular basis throughout the term. Students who wait until the night before the exam may have problems downloading files due to bandwidth limitations.

Tentative Grading & Assignments:

| Tentative Grading & Assignments. | | 1 |
|--|-------------|------|
| Synopsis of three EIAs (Canada, US, international) | Sept. 30 | 20% |
| Analysis of the effectiveness of an EIA | Nov. 4 | 30% |
| Attendance and analysis of an EIA public meeting | Nov. 18 | 25% |
| Attendance and analysis of all EIA public meeting | Exam week | 25% |
| Exam | LXAIII WEEK | 2070 |

- Assignment late penalty 3% per day
- Requests for re-grading must be in memo format, in writing, containing rationale based on adjustments to the assignment marking key, as follows:

Typical Marking Key

Points: 0 - no effort, 1-poor, 2-needs work, 3-adequate, 4-good, 5-excellent

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|---|--------------|
| CRITERIA | MARK (0 – 5) |
| | |
| Introduction - problem statement | |
| Understanding of ***** issues | |
| Understanding of ***** issues | |
| Critical thought and analysis | |
| Logic of recommendations | |
| Conclusions | |

HANDING IN LATE ASSIGNMENTS - Accepting late papers is solely at the discretion of the instructor. Being too busy will not be accepted for extensions. Requests for extensions must be in writing or via email with your rationale explained. All assignments should be handed in at or before the beginning of the class on the due date specified. Assignments should be given directly to the professor. If this is not possible, the assignment should be presented at the departmental office, during business hours. The instructor is not responsible for assignments put under the office door and those assignments will be given a late penalty based on the date the instructor finds it under the door.

Important EIA Web Sites

http://www.ceaa-acee.gc.ca/index_e.htm

Canadian Environmental Assessment Agency

http://www.ene.gov.on.ca/envision/ea/index.htm

Ontario Environmental Assessment

http://www.iaia.org/

International Association for Impact Assessment

http://lnweb18.worldbank.org/ESSD/envext.nsf/47ByDocName/EnvironmentalAssessment

World Bank

http://www.unep.org/themes/assessment/

UNEP Activities in Environmental Assessment

http://www.adb.org/Environment/default.asp

Asian Development Bank

http://europa.eu.int/comm/environment/eia/home.htm

European Union Environmental Assessment

http://www.epa.gov/compliance/nepa/

USA National Environmental Policy Act

Course Overview:

The first objective of this course is to provide a critical analysis of the planning processes of EIA as per various government and funding agency regulations. Students will become familiar with EIA history and theory from the 1960's to the present. We will examine EIA as a planning process at various levels of government, including:

- 1. Federal Canadian EA Act,
- 2. Provincial Ontario EA
- 3. Municipal Environmental Impact Statements and Official/Master Plan policies
- 4. International CIDA, World Bank, Asian Development Bank

The second objective of this course is to familiarize students with impact assessment techniques, that is, the science of impact prediction, including:

- Basic impact assessment techniques checklist, matrices, adaptive modelling, etc.
- Route and site selection, especially McHargian overlay/contraint mapping (using GIS)
- Multi-criteria decision-making (i.e. rank ordering alternatives/sites/routes)
- Determining impact indicators
- Project management of impact assessment specializations including air, noise, traffic, aquatic biology, terrestrial biology, hydrogeology, surface water, etc.
- Health/risk assessment

The third objective of this course reflects on "participatory planning" - with emphasis on the design and implementation of effective and meaning public involvement in EIA, including multi-stakeholder perspectives:

- government regulator/reviewer (i.e., bureaucrats)
- the proponent (i.e., facility/project owner)

- EIA consultants (i.e., technocrats), and
- intervenors (i.e., citizen activists, public oppostion).

Students may also explore newer areas of EIA practice, including Strategic EA, cumulative effects assessment, and traditional ecological knowledge (TEK). Other topics may be examined as the course progresses and if students suggest them.

Students will also attend a class or individual field trip to an EIA public meeting and attendance will be expected. Analysis of the meeting will be an assignment requirement. Students will also investigate a chosen case study in detail in order to explore and analyze a selected EIA. The student will review an EIA based on federal or provincial guidelines.

Throughout the course we will integrate the following themes:

- International EIA and cross-cultural comparisons with Canada.
- Alternative dispute resolution (ADR) processes including facilitation, negotiation, and mediation.
- Environmental and spatial justice, especially Aboriginal issues.

Tentative lectures and readings by week:

| | TIAO what is an vivo montal audition? |
|------|---|
| 1 | Introduction and working definitions – what is EIA? what is environmental auditing? |
| | History of EIA |
| | Dearden, Philip and Mitchell, Bruce. 1998. Environmental Change and Challenge: A Canadian Perspective, |
| | 2 nd edition (Chapter 10 – Impact Assessment). Toronto: Oxford University Press, pp. 214-225. |
| 2, 3 | EIA analytical frameworks – 10 step model |
| | Hostovsky, C. 2006. "The Paradox of the Rational Comprehensive Model of Planning: Tales From Waste |
| | Management Planning in Ontario, Canada." Journal of Planning Education and Research. Vol. 25 No. 4, pp. |
| | 382-395. |
| | Post EIA Auditing and Follow-Up |
| | Case study – Hwy 404 widening Toronto to Newmarket 2001 (Oak Ridges Moraine Conservation Plan) |
| | The Roles of the Environmental Planner in EIA |
| | Randolph, John. 2004. "The Role of the Planner (chapter 2)". Environmental Land Use Planning and |
| | Management. Washington: Island Press |
| 4 | Participatory EIA: Public Involvement in Western Nations |
| | Aggens, Lorenz. 1998. "Identifying Different Levels Of Public Interest In Participation", in James L. Creighton, |
| | Jerome Delli Priscoli, C. Mark Dunning. Public Involvement Techniques: A Reader of Ten Years Experience at the |
| | Institute for Water Resource Institute. U.S. Corps of Engineers. |
| | Arnstein, Sherry R. "A Ladder of Citizen Participation," Journal of the American Planning Association, Vol. 35, |
| | No. 4, July 1969, pp. 216-224 |
| | Randolph, John. 2004. Environmental Land Use Planning and Management. Washington: Island Press – |
| | Chapter 4 Collaborative Environmental Management and Public participation |
| 5 | Participatory EIA: Public Involvement in Developing Nations |
| | Hostovsky, C. SEA-UEMA Project International Conference on Integrated Solid Waste Management in |
| | Southeast Asian Cities, "Public Consultation in Vietnamese Waste EIA's" (paper peer reviewed), Siem Reap, |
| | Cambodia, July 2, 2005. |
| 6 | Project EIA: Federal – the Canadian Environmental Assessment Act |
| | Canadian Environmental Assessment Agency web page: www.ceaa.gc.ca |
| | Delicaet, Alison. 1995. "The new Canadian Environmental Assessment Act: a Comparison With the |
| | Environmental Assessment Review, Vol. 15, No. 6, |
| | pp. 497-505 |
| 7 | Project EIA: Ontario processes – Full and Class EAs |
| | www.ene.gov.on.ca/envision/ebr |
| | Ontario Environmental Assessment Activities web page |
| | Levy, Alan D. 2002. "A Review of Environmental Assessment In Ontario", Journal of Environmental Law and |

| | Direction Vol. 11, No. 0, pp. 172-282 |
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| | Practice. Vol. 11, No. 2., pp. 173-282. |
| 8 | Municipal EIA The Stoney Creek Open Spaces & Natural Environment System The Greenbelt Plan |
| | Gordon, David L.A. and Ken Tamminga. 2002. "Large-scale traditional neighbourhood development and pre- emptive ecosystem planning: The Markham experience, 1989-2001, <i>Journal of Urban Design</i>, Vol. 7, No. 2, pp. 321-340 |
| | Hostovsky, Chuck, Miller, David and Keddy, Cathy. November 1995. "The Natural Environment Systems Strategy: Protecting Ottawa-Carleton's Ecological Areas", Plan Canada, pp. 26 - 29. |
| 9 | International EIA Boyle, John. 1998. "Cultural influences on implementing environmental impact assessment: insights from Thailand, Indonesia, and Malaysia", <i>Environmental Impact Assessment Review</i>, 18, pp. 95-116. CIDA. 2003. <i>Environmental Assessment and CIDA</i>. (http://www.acdicida.gc.ca/cida_ind.nsf/0/3DA3CCFA410511C885256ADB007071CE?OpenDocument) Doberstein, Brent. 2003. "Environmental capacity-building in a transitional economy: the emergence of EIA capacity in Viet Nam", Impact Assessment and Project Appraisal, 21, 1, pp. 25-42. |
| 10 | First Nations and Traditional Ecological Knowledge Inglis, J. T. (Ed.).1993. Traditional Ecological Knowledge: Concepts and Cases. Ottawa, International Development Research Center and International Program on Traditional Ecological Knowledge, Canadian Museum of Nature. Paci, Chris; Tobin, Ann; Robb, Peter. 2002. "Reconsidering the Canadian Environmental Impact Assessment Act: A place for traditional environmental knowledge", Environmental Impact Assessment Review, Vol. 22, No. 2, pp. 111-127. |
| 11 | EIA techniques – Site and Route Selection Excerpts from - Rodriguez-Bachiller, Agustin and John Glasson. 2003. Expert Systems and Geographical Information Systems for Impact Assessment. London: CRC. EIA techniques – Multi-Criteria Decision-Making Students will participate in an evaluation criteria workshop |
| 12 | Careers and job search for EIA Exam overview |

Academic Integrity:

"Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site." Students are asked to upload their assignment to www.turnitin.com and submit papers in hard copy to the instructor. Plagiarism will not be tolerated and will result in a mark of zero and academic discipline.

Examples of offences for which you can be penalized include (but are not limited to):

- using any unauthorized aids on an exam or test (e.g., "cheat sheets", etc.)
- plagiarism representing someone else's work as your own (including cutting and pasting from internet sources)
- falsifying documents or grades
- purchasing an essay online or from others
- submitting someone else's work as your own
- submitting the same essay or report in more than one course (without permission)
- looking at someone else's answers during an exam or test
- impersonating another person at an exam or test or having someone else impersonate you
- making up sources or facts for an essay or report.

For more information see How Not to Plagiarize:

http://www.utoronto.ca/writing/plagsep.html