Department of Geography and Environmental Studies

Geography 4004: Environmental Impact Assessment
Fall 2011

Instructor: Dr. Jon Tunnicliffe, B343 Loeb Building
Phone: (613) 520-2600 ext. 2563
Email: jon_tunnicliffe@carleton.ca or get in touch via WebCT
Office Hours: Mondays 5:00 – 6:00 p.m.

Lecture: 6:05-8:55, Monday Evenings, Location 417 Southam Hall (SA)

Teaching Assistant: TBA


Lecture Power Point material will be made available on WebCT, providing a detailed outline and many of the figures covered in class. In addition, some lectures will draw on information presented in journals and web sources. Links to these articles will be available on WebCT.

Course Description:
The objective of GEOG 4004 is to provide a fundamental understanding of the principles and objectives of Environmental Impact Assessment (EIA) and to examine the many techniques that are used in impact studies. We will look at the application of EIA in a range of different contexts and geographic settings, using a number of case studies to learn about the complexities that arise in the process of predicting the magnitude of impacts on the natural environment, public health and community interests. The focus in the first part of the term is EIA in Canada at the provincial and federal levels, later moving on to the challenges of working in an increasingly globalized world, where resources in the supply chain can move across a multitude of borders. Natural and political boundaries rarely coincide, and so we look at some of the emerging perspectives for developing a more unified and fair international framework.

In order to achieve the course objectives, students will be expected to integrate what they have learned in the classroom, and apply it to a number of assignments and projects throughout the course. To better reflect the multi-disciplinary nature of EIA, students will be asked to work in groups for most of these assignments.

Mark Distribution:
EIA Report Review: 25%
EIA Scoping Report: 20%
EIA Panel Review: 45%
   | 15% Project Briefing
   | 15% Presentation
   | 15% Final Paper
Class Participation: 10%
Group Work
The environmental impact assessment process is a multi-disciplinary exercise, with participants holding different skill sets and diverse outlooks on the problem at hand. For this reason, GEOG 4004 is driven by group discussion and group work. Two major group exercises will be carried out during the term. You are encouraged to form a different group for each exercise. Strive to form a diverse group in order to view the project from as many different angles as possible.

EIA Report Review (25%) Group work
As we examine the various aspects of EIA, we will review at least one historic case study in each class to illustrate how the process functions (or doesn’t function) according to theory. Working as a group, you will be asked to provide a brief (10-15 min.) overview of an actual EIA, and moderate a class discussion on items of interest, such as how the process was carried out, what could be improved, what weighed most heavily on the final decision, and how the case may influence subsequent investigations. An individually-written paper will be due 1 week later, providing a concise summary of the case study and a summary of how EIA principles were followed. More details on this assignment to follow.

EIA Scoping Project (20%) Individual work
You will be given a hypothetical project proposal, and will be asked to provide a scoping analysis that employs the principles discussed in the text and in class. You may work in groups, but individuals must provide their own short report that summarizes their own ideas and research, supplemented with any points raised in group discussions.

EIA Panel Review (45%) Group work
The class will be presented with a major industrial proposal, with all of the associated EIA documentation and baseline data. We will conduct a full panel review, with the class divided into various players: proponent, several levels of government, local citizen groups, environmental groups, etc. More details on this project will be provided by the middle of term. The panel review will take place near the end of term.

Plagiarism and Cheating:
THIS IS IMPORTANT IN GEOG 4004. Because you are working in groups, you must be very careful not to copy the work of a fellow student. Work as a group, but be sure to clearly express your own thoughts and views, giving credit to other sources where it is due. If students do plagiarize or cheat, the Dean’s Office will be notified and appropriate action will be taken.

Academic Accommodations (Paul Menton Centre):
Location: Room 500, Unicentre, Monday-Friday, 8:30 a.m. – 4:30 p.m.
Tel.: (613) 520-6608

Students with disabilities requiring academic accommodations in this course are encouraged to contact a coordinator at the Paul Menton Centre for Students with Disabilities to complete the necessary letters of accommodation. After registering with PMC, make an appointment to meet and discuss your needs with me at least two weeks prior to the first assignment/exam. This is necessary in order to ensure sufficient time to set up for the needed arrangements. Please note the deadline for fall term courses as outlined in the Undergraduate Calendar.
**For Religious Observance:**
Students requesting academic accommodation on the basis of religious observance should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such request should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory academic event. Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved.

Students who have questions or wish to confirm accommodation eligibility of a religious event or practice may refer to the Equity Services website for a list of holy days and Carleton’s Academic Accommodation policies, or may contact an Equity Services Advisor in the ES Department.

**For Pregnancy:**
Pregnant students requiring academic accommodation are encouraged to contact an Equity Advisor in Equity Services to complete a letter of accommodation. The student must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.
**Tentative** Class Schedule - Fall, 2011

<table>
<thead>
<tr>
<th>Date</th>
<th>Week #</th>
<th>Topics</th>
<th>Reading</th>
<th>Assignments</th>
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</thead>
<tbody>
<tr>
<td>Sept</td>
<td>12</td>
<td>1 Introduction to EIA</td>
<td></td>
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<tr>
<td></td>
<td>19</td>
<td>2 Terminology, Screening, Scoping, Baseline Studies</td>
<td>Hanna, Chap 1, 3</td>
<td>Scoping Exercise</td>
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<tr>
<td></td>
<td>26</td>
<td>3 Impact Prediction, Cumulative Effects, and Mitigation</td>
<td>Hanna, Chap 4, 8</td>
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<tr>
<td>Oct</td>
<td>3</td>
<td>4 Federal EIA: Canadian Environmental Assessment Act</td>
<td>Hanna, Chap 10, 14</td>
<td><strong>Scoping Paper Due</strong></td>
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<td>10</td>
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<td><strong>Statutory Holiday</strong></td>
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<td>17</td>
<td>5 Provincial EIA, Class EAs</td>
<td>Hanna, Chap 15, 19</td>
<td>Panel Review Documents Distributed</td>
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<td>24</td>
<td>6 Strategic Assessments</td>
<td>Hanna, Chap 6</td>
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<tr>
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<td>31</td>
<td>7 Transboundary Issues</td>
<td>Hanna, Chap 9</td>
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<td>Nov</td>
<td>7</td>
<td>8 Int’l Aspects of EIA (cont). <em>Invited Speaker</em></td>
<td>Readings Provided</td>
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<td>14</td>
<td>9 Social/Health Impact Assessment</td>
<td>Hanna, Chap 7, Readings Provided</td>
<td><strong>Project Briefing Due</strong></td>
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<td>21</td>
<td>10 The Mackenzie Valley Joint Review Panel</td>
<td>Readings Provided</td>
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<td>28</td>
<td>11 Class Review Panel</td>
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<tr>
<td>Dec</td>
<td>5</td>
<td>12 Debriefing, Class Review</td>
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<td><strong>Panel Review Paper Due</strong></td>
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