

GEOG 3471: Environmental Assessment and Management

Tuesday and Thursday 10:00-11:30 a.m., OA 2015

Course Objective and Scope

The course introduces environmental assessment in the context of sustainable development and environmental management. Focusing on environmental impact assessment (EIA), lectures will focus on the basic principles of biophysical and socio-economic assessment and how they relate to environmental management policies and practice. Although the Canadian EIA system will be given particular attention, key techniques and methods will also be covered using case studies from selected Canadian jurisdictions. The course is lecture-based with an application of methods and techniques on the practice of environmental assessment in Canada and elsewhere.

Required Text:

Hanna, Kevin S., (2015). *Environmental Impact Assessment: Practice and Participation*, 3rd edition. Oxford and New York: Oxford University Press.

Recommended Text:

Noble, Bram F., (2014). *Introduction to Environmental Impact Assessment: A Guide to Principles and Practice*, Third Edition. Oxford: Oxford University Press.

Evaluation:

Assessment of student performance will be as follows:

- Class Participation- 20% (Exercises*)
- Mid-term Exam- 30%
- Final Exam- 30%
- Instrument and Tool Review Paper- 20%

NOTES:

1. *Exercises: Take home assignments, individualized with instructions provided. The guidelines for the Critique Paper are found in D2L (Content).
2. In addition to regular in-person sessions, the class will have access to D2L, e-mail and telephone communications (by appointment).

Schedule of Lectures/Readings:

<u>Week</u>	<u>Topic</u>
Week 1	Introduction to Course- Environmental Impact Assessment (EIA) and Management Overview: Environmental Management Nature, Origins and Development of EIA <i>-Read Chapter 1, Noble, 2014</i>
Week 2	The Canadian EIA System EIA and Sustainable Development EIA Process <i>- Read Chapter 1, Hanna 2015, Chapter 1, Noble, 2014</i> Legal Basis; Evolution of Federal Environmental Assessment in Canada <i>-Read Chapter 2, Noble, 2014</i> The Canadian Federal EIA System as revised, 2019 <i>-Read Chapter 10, Hanna 2015; Chapter 2, Noble, 2014</i> <i>- The Impact Assessment Act of Canada, 2019</i>
Week 3	The Science of Assessment and Environmental Impacts Public Participation in Canadian EIA <i>-Read Chapters 3-4, Hanna 2015; Chapter 10, Noble, 2014</i>
Week 4	The EIA Practice Consideration of Alternatives, Screening of Actions <i>-Read Chapter 4, Noble, 2014</i> Scoping of Impacts <i>-Read Chapter 5, Noble, 2014</i> Predicting Environmental Impacts <i>-Read Chapter 6, Noble, 2014</i> Managing Project Impacts <i>-Read Chapter 7, Noble, 2014</i>
Week 5	Techniques and Methods in EIA Tools Supporting EIA Practice The Practitioners Toolkit and Impact Identification <i>-Read Chapter 3, Noble, 2014</i> <i>Exercise 1 due October 7, 2021 (via D2L)</i>
Week 6	<i>Thanksgiving and Study Break (October 11-15, 2021)</i>
Week 7	Strategic Environmental Assessment <i>-Read Chapter 5, Hanna 2015</i> Aboriginal Engagement and C-Management in Canada's EA <i>-Read Chapter 8, Hanna 2015</i>

- Week 8 *Mid-Term Examination- October 19, 2021 via D2L*
Multi-jurisdictional Environmental Assessment
-Read Chapter 9, Hanna 2015
- Week 9 **EIA in Canadian Jurisdictions**
Environmental Assessment in the Yukon
-Read Chapter 11, Hanna 2015
EIA in Northwest Territories
-Read Chapter 12, Hanna 2015
- Week 10 **EIA in Canadian Jurisdictions**
Impact Assessment in Nunavut
-Read Chapter 13, Hanna 2015
Impact Assessment in British Columbia
-Read Chapter 14, Hanna 2015
EIA in Alberta
-Read Chapter 15, Hanna 2015
Exercise 2 due Nov 9, 2021 via D2L
- Week 11 **EIA in Canadian Jurisdictions**
Environmental Assessment in Saskatchewan
-Read Chapters 16, Hanna 2015
Environmental Assessment in Manitoba
-Read Chapter 17, Hanna 2015
- Week 12 **EIA in Canadian Jurisdictions**
Ontario Environmental Assessment Act
-Read Chapter 18, Hanna 2015
EA in Quebec
-Read Chapter 19, Hanna 2015
EA in the Atlantic
-Read Chapter 20, Hanna 2015
- Week 13 **Wrap-up and Integration**
Final Exam date to be announced by the Registrar's Office
Due: Instrument and Tool Review Paper, December 6, 2021

Student Responsibilities:

1. Students are encouraged to attend classes regularly and participate in class discussions and learning activities.
2. All students are advised to familiarize themselves with the policies on academic dishonesty such as plagiarism and cheating.
3. Students are strongly encouraged to contact the Instructor during office hours, by e-mail or by telephone, and/or by appointment, if they have questions or study issues.