

University of Toronto Scarborough  
Department of Physical and Environmental Sciences  
EESC13H3 F - Environmental Impact Assessment and Auditing  
2017 Outline

Professor: Mandy Meriano  
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Lecture time: Monday 11 am to 1pm  
Location: MW160

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**Required textbook:** Hanna, Kevin S. (Ed.) 2016. 3/E. Environmental Impact Assessment: Practice and Participation. Oxford University Press, Toronto.

The course textbook is available from the UTSC Bookstore.

Additional sources used in the course are listed at the end of this document.

**Course Overview:** Environmental Impact Assessment (EIA) has emerged as both an instrument of evaluation and as an important decision-making system. EIA is an integral part of environmental management in environmental policy at regional, national and international levels. While EIA ideally incorporates environmental consideration into planning and development processes, it is very much embedded within the growth ethic—it is not about preventing development. Ideally, EIA helps development occur within an environmentally responsive context. It informs decision-makers about the consequences of development decisions and identifies the likely or known impacts of development. However, even undertaking an EIA cannot guarantee that bad development decisions will *not* be made, that projects will perform as anticipated, or that impact mitigation will be done and will be effective.

This course examines EIA from a critical perspective as a strategic, comprehensive, and pro-active process employed to integrate the ecological and social aspects of development into planning and environmental/resource management processes.

**Course Objectives:** The course objectives are meant to provide a critical overview of EIA processes, a guide to normative and applied EIA practice, and to impart a fundamental understanding of how EIA works (or, sometimes, does not work) in the Canadian context.

EIA methods, approaches, regulation, and legislation are also discussed. Case studies from jurisdictions in Canada are used to illustrate themes and issues, along with an ongoing reference to practice in our province and at the federal level.

**Learning Objectives:** By the end of the course students will have developed an understanding of EIA processes and stages, EIA terminology, Canadian EIA practice and policy, and will have developed specific knowledge of the Canadian Federal and Ontario EIA systems. Students should be able to critique and analyse the relative performance and influence of different EIA systems, and understand the role of EIA in planning and environment/resource management.

**Evaluation:** A significant portion of the course evaluation (45%) is based on individual and group projects where you will explore EIA methods and the regulatory framework, examine case studies, and take on the role of practitioners in various professional roles in the EIA process. The complete evaluation is summarized below and will include: two in-class quizzes: value 5% each; a research paper on EIA methods/approaches: value 25%; a group project resulting in a 300-word summary report on a current or controversial EIA and presentation of results to the class: value 10%; a second group project resulting in a 1-2 page long briefing on the *Kincardine Deep Geologic Repository* and a mock mini-hearing: value 10%; a final exam (written answers): value 35%; and class participation - including the Professional Ethics Workshop: value 10%.

Evaluation Components	% Grade	Key Dates & Deadlines
Two in-class quizzes (multiple choice; 5% each)	10	Sept 25; Oct 23
Individual Project: Research Paper	25	Oct 16
Group Project: Case-Study a. 300-word Summary b. Group Presentation	10	a. Oct 30 b. Nov 06; Nov 13
Group Project: Mini-Hearing a. Briefing Report (1-2 page, single spaced) b. Mock Tribunal Hearing	10	a. Nov 20 b. Dec 04
Final Exam (written answers)	35	TBA
Participation a. Professional Ethics Workshop 2% b. Case Study* 4%, c. Mini-Hearing* 4%	10	a. Oct 23 b. Oct 30; Nov 20 c. Nov 13, Dec 04
Total Grade Possible	100	

\* Includes Work Plan and Peer Evaluation

The final exam will be cumulative; based on all term material (including readings and all lectures).

**Tentative Lectures and Readings:** Readings are from your course textbook: Hanna (2016). There will be additional assigned readings that will be uploaded to Blackboard or put on reserve at the library as they become available.

*Students should note that topics may span more than one lecture period.*

### **September 11**

An overview of the course, expectations, and objectives

Assignments and exams

A quick look at the textbook

Introduction to EIA

The importance of EIA in Canadian environment and resource management

Key themes and definitions

EIA as a planning tool

Ch. 1 Kevin Hanna

The ideal influence and attributes of EIA

Rational planning and EIA

### **September 18**

History and background of impact assessment in Canada

Ch. 2 Robert Gibson and Kevin Hanna

Formative events in Canadian EIA

Sustainability

Efficacy

The state of EIA influence

### **September 25**

#### **Quiz #1 (start of class)**

Typical (ideal) stages in the EIA process, what happens at each stage?

Ch 1. Kevin Hanna (*Note: this topic can take more two hours to work through, depending on the level detail (i.e., class discussion) we go into*)

Key terms

What happens at each stage in the EIA process?

How does the generic model compare to our provincial and federal processes?

Different types of impact assessment (strategic, cumulative, social and economic)

Measuring and identifying impacts, techniques, and methods

Ch. 3 Robert Milne and Lorne Bennett

Baseline conditions, environmental attributes  
How do we identify impacts?  
Significance  
Strengths and weaknesses to techniques and tools

### **October 02**

The challenge of strategic assessment  
Ch. 5 Bram Noble and Jill Gunn

How do we evaluate plans and policies?  
Method challenges  
Techniques of strategic assessment  
The state of strategic assessment in Canada

### **October 09**

Thanksgiving Day - University closed

### **October 16**

**Due: Research Paper on EIA methods at the start of class**

The Canadian federal EIA process: What the Canadian Environmental Assessment Act covers and how it works  
Ch 10 Brandon Gregg

History of the CEAA Act  
Recent changes and infrastructure spending, weakness, or needed streamlining  
An overview of the federal process  
When is an assessment mandatory?  
Types of assessment, screening and beyond

### **October 23**

**Quiz #2 (start of class)**

Ethics Workshop: Ms. Shehna Javeed and Mr. Byung Oh, UTSC Academic Advising and Career Centre

### **October 30**

**Due: Case-study summaries for the upcoming Group Presentations**  
**Due: "Work plan" for the Group Case-Study Project at the start of class**

Assessing social impacts, basic themes, and methods  
Ch. 6 John Parkins and Ross Mitchell

What are social impacts?  
How do we measure and value them?  
Case study and examples

Assessing cumulative impacts

Ch. 7 Graham Whitelaw and Daniel McCarthy

Defining cumulative impacts  
Understanding the estimation and measurement of cumulative  
Cumulative EIA example

**November 06**

Group Presentations and Discussions

**November 13**

**Due: "Work plan" for the Mini-Hearing (Kincardine Deep Geologic Repository) at the start of class**

Group Presentations and Discussions

Public participation, a key part of successful and meaningful EIA  
Ch. 4 A. John Sinclair and Alan Diduck  
The importance of participation  
How should participation affect EIA?  
Participation techniques and examples

What is a Hearing? Assessment boards and hearing process  
Ch. 4 A. John Sinclair and Alan Diduck  
Ch.18 Charles Hostovsky and Sonya Graci  
How a hearing works  
The power and function of boards and tribunals

**November 20**

**Due: Briefs for the upcoming Mini-Hearing at the start of class**  
**Due: Peer evaluations (case study and group presentation)**

Guest Lecture: Mr. Graham Rempe, Solicitor, City of Toronto Legal Services (Retired), Member of the Ontario Environmental Review Tribunal and U of T instructor (EESD13H3 Environmental Law, Policy and Ethics)

Topic: Environmental Assessment Law (Ontario)

Readings:

Lindgren, R.D. Burgandy, D. 2010. Environmental Assessment in Ontario: Rhetoric vs. Reality, Journal of Environmental Law and Practice, 21, 279-303 (<http://s.cela.ca/files/766.LindgrenDunnFinal.pdf>)

A link to the act itself can be found at: <https://www.ontario.ca/laws/statute/90e18>  
Although this is not essential for the lecture you may want to have a quick scan, especially sections 2, 5-7 and 13-14.

The link to the Ministry of the Environment and Climate Change (MOECC) page on environmental assessment for general reference:

<https://www.ontario.ca/page/environmental-assessments>

### **November 27**

EIA as resource planning. How EIA can function as a central planning tool: The example of Nunavut.

Ch. 8 Ginger Gibson, Lidsay Galbraith, and Alistair MacDonald

Ch. 11 D. Scott Slocombe, Lyn Hartley, and Meagan Noonan

Ch. 13 Ryan Barry, Sophia Granchincho, and Jeffery Rusk

EIA as the resource planning mechanism

A unique EIA system

The role of First Nations and traditional knowledge

Venues and setting

Harmonization

Screening, and that's all?

EIA as a 'green stamp of approval'?

### Readings (elective):

Simpson, L.B. 2014. Land as pedagogy: Nishnaabeg intelligence and rebellious transformation. Decolonization: Indigeneity, Education & Society, Vol 3, 3, 1-25

Links to other works by Leanne Betasamosake Simpson:

<http://briarpatchmagazine.com/articles/view/attawapiskat-revisited>

<http://leannesimpson.ca/writing/poetry-2/>

### **December 04**

**Due: Peer evaluations (mini-hearing)**

**Mini-Hearing Exercise**

Kincardine Deep Geologic Repository

# Assignments:

## ***(1) Individual Project: Term Paper (25%)***

### **Critical Review of Canadian EIA Processes**

**Due: October 16** - You will submit a digital copy of your paper in Blackboard (Turnitin.com) and will hand in a hardcopy at the START of class.

Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

You are also required to submit a hardcopy of your paper at the start of class

- Do not use plastic covers or any form of binder.
- Do not use a paper clip; just staple your paper.

### **Paper submission requirements:**

Prepare a critical paper that describes and critiques the Environmental Impact Assessment systems in one Canadian jurisdiction. You may choose any province or the Canadian federal EIA legislation. Refer to your course readings and other general and theoretical materials to develop a critique of the EIA approach used in your chosen province.

Your paper should be no longer than 12 pages, double-spaced, excluding title page, reference list, and any figures or tables you wish to include. Take care to proofread your paper in order to correct any faulty grammar and punctuation. Marking will be based on merit/content, style, and organization.

Your paper must include a critical/analytical component as well as descriptive elements. Consider elements such as:

- the scope of EIA application
- adherence to the ideal of effective EIA as indicated in the literature (and your course lectures)
- the methods used, and the regulatory framework (legislation or legal context) used to implement EIA
- does EIA apply to both private and public sector undertakings?
- is policy and program development subject to EIA?
- what do you think is successful or positive about the jurisdiction's approach to EIA, and what is not?

Be sure to:

- Use the APA reference format.
- Use a minimum of 8 references
- Present your paper in a research paper format.
- Use section headings (and subheadings)

- Reference all material. The use of internet material may be important to your work; however, such sources must be properly referenced.

You must demonstrate that you are familiar with the current state of EIA in your chosen jurisdictions; for example:

- has there been any proposals to amend the EA legislation or local/regional debates about aspects of the EA process?
- are there any particularly important EA reviews underway or recently completed?

General criteria for assessment of your research paper include:

- the quality of argument
- use of referencing
- accuracy of English
- use of evidence to support conclusions
- imagination and originality

## ***(2) Group Project: Case-study and Student Led Class Presentation/Discussion (10%)***

You can choose a controversial or relevant EIA topic (to be approved by the instructor) or you can choose from a list provided in Blackboard. Copies of the 'work plan' and 'peer evaluation' forms will be provided in Blackboard and must be completed by the due dates. Peer evaluation will be considered in the assessment of participation grade.

- a. Group Work Plan (submit a digital copy in Blackboard) due: Oct 30
- b. Summaries (300 words - submit a digital copy in Blackboard) due: Oct 30
- c. Student Led Class Discussions: Nov 06, 13
- d. Individual Peer Evaluation (submit a digital copy in Blackboard) due: Nov 20

## ***(3) Group Project: Mini-Hearing Exercise (10%)***

The mock tribunal mini-hearing will be on the Kincardine Deep Geologic Repository. Students will be divided into two groups (one proponent and one opponent). Each group will be subdivided into four subgroups (geologic disposal site, cumulative effects, social impact and economic impact). Each subgroup will prepare a one to two-page summary/brief to be made available to everyone by November 20th (two weeks ahead of the hearing), and make a 5-10 minutes long presentation at the hearing on December 4th. Each group will have to discuss and defend their arguments during questioning from Counsel (Mr. Graham Rempe), Tribunal (Mandy Meriano), and public (the class).

- a. Group Work Plan (submit a digital copy in Blackboard) due: Nov 13
- b. Group Summaries/Briefs due: Nov 20
- c. Mini-hearing: Dec 04
- d. Individual Peer Evaluation (submit a digital copy in Blackboard): Dec 04

Details for the assignments will be discussed in class and distributed in Blackboard.

## General Information about Your Term Work

**Grading:** Evaluation of assignments takes into account organization and structure, style and presentation, as well as research and content. Writing quality and content are both considered in grading. Your work for the case-studies, student led presentations/discussions, and mini-hearing will be graded by Prof. Meriano and the course TA. Your term paper will be graded by the TA. If you have a question or problem with the grade you receive, consult the professor or the TA. Your grade may be revised up or down based on the review.

Your assignments must have a plain title page with the title of your assignment, your name, course number, the date, your student number, and the instructor's name. Staple your assignment in the upper left corner; do not use folders, cover slips, or binders.

**Late Assignments:** The late penalty is assessed as follows:  
1 day 10%, 2 day 20%, 3 day 30%, 4 day 40%, 5 day 50%, 6 day and after 100%

**Absences:** If you need to miss a practical or term test for any legitimate reason, you must submit appropriate documentation within **three** business days of your absence. If the reason for your absence is medical, an official UTSC medical note must be completed by a doctor who examined you while you were ill/injured (i.e. not after the fact). The medical note can be downloaded at: [http://www.utsc.utoronto.ca/~registrar/resources/pdf\\_general/UTSCmedicalcertificate.pdf](http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf). Note that conditions ranked as mild or negligible will not be considered a valid excuse.

**Missed term work:** If a legitimate reason prevents you from submitting a piece of term work by its posted deadline, you must submit appropriate documentation within **three** business days of your absence. If the reason is medical, an official UTSC medical note must be completed by a doctor who examined you while you were ill/injured (i.e. not after the fact). The medical note can be downloaded at: [http://www.utsc.utoronto.ca/~registrar/resources/pdf\\_general/UTSCmedicalcertificate.pdf](http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf). Note that conditions ranked as mild or negligible will not be considered a valid excuse.

**Extensions:** Requests for an extension on an assignment must be tendered in writing in advance of the due date. In instances of illness, an official UTSC medical note must be completed by a physician (see above). Other notes are not acceptable. Extensions are granted at the discretion of the Professor (and the TA), and may be granted for other significant emergencies.

**Academic Misconduct and Academic Dishonesty** will not be tolerated. Students engaging in misconduct or dishonest practices on exams,

quizzes, or other assignments will be dealt with according to the guidelines established by the university.

**Plagiarism:** Please consult the University Calendar for a discussion and outline of the policy on plagiarism and academic integrity (also see proceeding section below). The sanctions can be severe. If, after reviewing the University policy, you are uncertain about what constitutes plagiarism, talk to your course instructor.

**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.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see <https://utsc.calendar.utoronto.ca/4-academic-integrity>).

Please consult the University Calendar for information about grade distribution and academic conduct.

**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. AccessAbility Services staff (located in Rm SW302, Science Wing) are available by appointment to assess

specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email [ability@utsc.utoronto.ca](mailto:ability@utsc.utoronto.ca). The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Students are encouraged to review the Calendar for information regarding all services available on campus.

## **References for the sources of information, data, and text used in the course:**

[Auditing Association of Canada](#)

[Canadian Environmental Assessment Agency](#)

Estrin, D. and Swaigen, J. 1993. *Environment on Trial: A Guide to Ontario Environmental Law and Policy*. 3rd ed. Toronto: Edmond Montgomery Publications Ltd.

Hanna, Kevin S. (Ed.) 2009. *Environmental Impact Assessment: Practice and Participation*. Oxford University Press, Toronto. pp. 467

Hanna, Kevin S. (Ed.) 2016. *Environmental Impact Assessment: Practice and Participation*. Oxford University Press, Toronto. pp. 488

Impact Assessment and Project Appraisal ([Journal](#))

[International Association for Impact Assessment](#) (IAIA)

Lindgren, R.D. Burgandy, D. 2010. Environmental Assessment in Ontario: Rhetoric vs. Reality, *Journal of Environmental Law and Practice*, 21, 279-303 (<http://s.cela.ca/files/766.LindgrenDunnFinal.pdf>)

Noble, B.F. 2010. *Introduction to Environmental Impact assessment: A Guide to Principles and Practice*. 2nd ed. Oxford University Press Canada

[Ontario Environmental Assessment Act](#)

United Nations University, RMIT University, and United Nations Environment Programme (UNEP). *Environmental Impact Assessment: Open Educational Resource*. <http://eia.unu.edu/>