

University of Manitoba
Clayton H. Riddell Faculty of Environment, Earth and Resources
Department of Environment and Geography

ENVR 3250 – ENVIRONMENTAL ASSESSMENT (EA)
Winter 2016

Instructor: Isabel Martinez-Welgan
Office: TBA
Office hours: By appointment (typically Tuesdays or Thursdays)
Email: ummartii@myumanitoba.ca
Lecture location: 217 Wallace Building, Tuesday/Thursdays 8:30 – 9:45 AM
Lab location: 217 Wallace Building, Tuesdays 2:30 -5:30 PM

Textbooks: **Required textbook:** Noble, B.F. 2014, *Introduction to Environmental Impact Assessment: A Guide to Principles and Practice*, 3rd Edition. Don Mills: Oxford University Press. 360 pp.

Lab Manual: ENVR 3250 Lab Manual/Project Guide (available on D2L).

Additional: Additional resources/reading materials and lecture notes will be posted online at least one day prior to the scheduled lecture whenever possible.

General Course Outline

Environmental Assessment (EA) is an important policy and regulatory tool used to integrate environmental concerns into decision-making about development. EA in simple terms is based on the idea of “looking before one leaps” to help ensure that better decisions are made, and is necessary for license and permit approvals for development projects in most of the countries across the world. EA is the process used to *predict, assess, evaluate, mitigate* and *follow up* on the consequences of human actions on the environment. It is intended as a proactive planning and management tool that can enable environmental protection, and can provide a platform for meaningful public participation and engagement in decision making processes.

Course Objectives

The purpose of this course (ENVR 3250) is to provide an overview of the theory, practice and key issues in environmental assessment. The specific objectives for the course are:

- Provide awareness of environmental assessment principles, legislations, processes and practices.
- Examine how environmental assessments are carried out, with particular focus on how various stakeholders participate in the process, and how the results are used in decision making.
- Demonstrate application of environmental assessment through the life-cycle of a project including planning, design, construction, operation and decommissioning.

ENVR 3250 is a classroom lecture and laboratory/project course that examines EIA principles, legal requirements, practical exercises, example assessments and case study review. The lecture part of the course is presented in three parts a) brief history and background of EA, as well as its aims, objectives, principles and legislations; b) EA methods and procedures, and c) EA topics and case studies from other parts of Canada/world – as time permits.

Lab assignments: The laboratory/project portion of the course involves conducting an environmental assessment on one of the several possible small to medium-sized projects. Students will work in teams to conduct the assessment, prepare an assessment report and present the results before the class. Worksheets are provided to assist students with various stages of an environmental assessment from scoping to report preparation. While students work in teams on their environmental assessments, they are encouraged to share their knowledge and exchange ideas about their project and EA methods, and also raise concern about possible environmental effects of other projects.

Teams must submit a fully complete environmental assessment report at the end of the term to receive a grade for the course.

Method of Evaluation

Class assignment(s)	15%
Midterm Exam	20%
Lab Assignments	10%
Final Exam	25% (scheduled by Student Records office)
Laboratory EA project	30% (4/5 written report; 1/5 class presentation)

* Please note that in all the tests and exams, dictionaries, digital dictionaries, notes, books, textbooks, cell phones, PDAs (such as palm pilots) or text messaging devices are **strictly not allowed**.

Assignments: Assignment topics are based on practical use of legislation and public registries, and readings in environmental assessment topics. Information on the topics will be generally available online, in textbooks, periodicals, newspapers, magazines etc. as well as Manitoba Conservation Public Registry, the Canadian Environmental Assessment Registry, and the internet.

Student teams are required to complete the laboratory assignment (i.e, worksheets and summaries of results) and submit the final report on the date specified by the Instructor. As required, some laboratory assignments may be marked by a TA; the final report will be marked by the Instructor.

Mid-Term/Final Exams: These tests may be comprised of definitions, fill-in-the-blank, multiple choice as well as short and/or long answer questions.

Policy regarding late assignments: Students will not be permitted to write make-up exams or hand in assignments late, except for documented medical or compassionate reasons.

Evaluative feedback: Will be provided before the voluntary withdrawal deadline date which is March 18, 2016.

Grade Numerical Equivalent

A+	90 ≥
A	80-89
B+	76-79
B	70-75
C+	66-69
C	60-65
D	50-59
F	0-49

Academic Dishonesty: Copying of another student's assignment (or an Instructor's answer sheet from a previous year) or the submission of the same material for two or more courses is plagiarism. Plagiarism and other forms of cheating are prohibited. The source of Materials must be given and proper credit must be provided for all copied materials (e.g. parts from another person's assignment, the internet, a textbook or published literature). **Students should acquaint themselves with the University's policy on plagiarism and cheating and examination impersonation (see University of Manitoba General Calendar).**

Expectations: All students are expected to:

- Attend all the classes and participate in discussions of the lecture topics.
- Complete and submit lab work and assignments on time.
- Actively and fully participate in the team exercise, report writing and presentation.
- Raise relevant questions, queries, comments or suggestions during the class.
- Reading ahead and beyond the course requirement, taking notes during class and summarizing notes after class are strongly recommended.

ENVR 3250: Lecture Topics and Reading Outline

(Note: lecture schedule and topics are subject to change to accommodate availability of guest lecturers*, pace of the class, and other opportunities that may arise from current events, etc.)

Lecture #	Date	Subject	Remarks
1	Jan 7	Introduction to the course Basics of environmental assessment	
2	Jan 12	Principles and History of EA	
3	Jan 14	Federal EA Legislation	
4	Jan 19	Federal EA Legislation (cont.)	
5	Jan 21	Manitoba EA Legislation	(Guest Lecturer - MCWS)
6	Jan 26	Panel review processes; EA harmonization/cooperative processes	
7	Jan 28	EA methodology	
8	Feb 2	Describing the Project and the Environment	
9	Feb 4	Scoping environmental assessments	Assignment #1 due
10	Feb 9	Identifying and assessing effects	
11	Feb 11	Mid-Term Exam	
12	Feb 23	Mitigating, evaluating, and managing environmental effects	
13	Feb 25	Mitigating, evaluating, and managing environmental effects (cont.)	
14	Mar 1	Decision-making, reporting, and follow-up	
15	Mar 3	Case Study: Implementing mitigation & follow-up after approvals.	(Guest Lecturer – Manitoba Hydro)
16	Mar 8	Cumulative effects assessment	
17	Mar 10	Cumulative effects assessment (cont.)	
18	Mar 15	Public Participation	
19	Mar 17	Aboriginal Consultation	
20	Mar 22	Aboriginal Consultation (cont.)	Assignment #2 due
21	Mar 24	Case Study – Public Participation	(Guest Lecturer)
22	Mar 29	Considering Traditional Ecological Knowledge in EA	
23	Mar 31	Strategic Environmental Assessment	
24	Apr 5	Case Study	
25	Apr 7	Case Study &/or Course Review	
26	TBA	FINAL Exam	

*tentative guest lecture schedule

ENVR 3250: ENVIRONMENTAL ASSESSMENT LAB SCHEDULE, Winter 2016

Lab	Date	Subject
1	Jan. 12	• Introduction • Project Assignments • Instructions
2	Jan. 19	• SCOPING • Complete worksheet 1 and summarize results
3	Jan. 26	• DESCRIBING THE PROJECT • Complete worksheet 2 and summarize results
4	Feb. 2	• DESCRIBING THE ENVIRONMENT • Complete worksheet 3 and summarize results
5	Feb. 9	• IDENTIFYING ENVIRONMENTAL EFFECTS • Complete worksheet 4 and summarize results
6	Feb. 23	• ASSESSING ENVIRONMENTAL EFFECTS • Complete worksheet 5 and summarize results
7	Mar. 1	• IDENTIFYING MITIGATION MEASURES & FOLLOW-UP REQUIREMENTS • Complete worksheets 6 and 7, and summarize results
8	Mar. 8	• CONSIDERING PUBLIC CONCERN & CUMULATIVE EFFECTS • Complete worksheets 8 and 9, and summarize results
9	Mar. 15	• EVALUATING SIGNIFICANCE • Complete worksheet 10 and summarize results
10	Mar. 22	• REPORTING • Complete worksheet 11 and summarize results
11	Mar. 29	• Reviews and summaries • Presentations
12	Apr. 5	• Submit completed report • Presentations • Reviews and summaries

DELIVERABLES

DATE	TASK
February 4, 2016	Assignment 1: Public Registry review
February 11, 2016	Midterm Exam
March 22, 2016	Assignment 2: Reading/Report
March 29, 2016	Presentations
April 5, 2016	Final Report + Presentations cont'
TBA	Final Exam

Acknowledgements: The teaching materials and formats of the lecture and the lab used in this course (including the general outline, notes, handouts, lecture and lab schedule, etc.) were originally developed by Mr. Mel Falk (M.Sc, P.Biol., CCEP), President of Falk Environmental Inc, through his teaching of the Environmental Assessment course in previous years. Modifications to these teaching materials have been made by Wendy Botkin (previous Instructor) to fit the current teaching needs and schedules of the course