



**University of Manitoba
Clayton Riddell Faculty
Department of Environment and Geography**

**ENVR 3250
Environmental Assessment
Winter 2019**

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Course Details

Course Title & Number:	Environmental Assessment ENVR 3250
Number of Credit Hours:	3 Credit Hours
Class Times & Days of Week:	Tuesday/Thursday 8:30-9:45 am Lab Tuesday 2:30-5:15 pm (attendance is mandatory)
Location for classes/labs/tutorials:	221 Wallace Building
Pre-Requisites:	A grade of "C" or better in [ABIZ 3550 (061.355) or ENVR 3160 or the former ENVR 3150] and [BIOL 2300 or BIOL 2301 or the former BOTN 2370 or the former BOTN 2371 or the former ZOOL 2370 or the former ZOOL 2371 or AGECE 2370] or [BIOL 2390 or the former BOTN 2280 or the former ZOOL 2290] or permission of department head.

Instructor Contact Information

Instructor(s) Name:	Dr. Erin McCance
Preferred Form of Address:	Dr. McCance
Office Location:	220B Sinnott Bldg. (Department of Env. Geog. Office)
Office Hours or Availability:	Monday 12:30-1:30pm; Tuesday 12:00 -1:00 pm; Friday 1:00 – 2:00 pm. Please email to schedule an appointment.
Office Phone No.	204-232-2941
Email:	E-mail: erin.mccance@umanitoba.ca Communication with students is conducted only through an @myumanitoba.ca email account. All email communication will be responded to within 48 hours
Contact:	Students should contact me by email.
TA:	Chantal MacLean, macleanc@myumanitoba.ca

Course Description

This course investigates the theory, principles, and practices of environmental assessment as a planning and decision-making process, including ways to identify and mitigate adverse effects of development projects. Environmental assessment is defined in the context of federal and provincial legislation, including applicable standards and guidelines. Laboratory assignments involve practical experiences, case study review, and basic report preparation.

General Course Outline

Environmental Assessment (EA) is an important policy and regulatory tool used to integrate environmental concerns into decision-making regarding landscape change and development. EA in simple terms, is based on the idea of “looking before one leaps”, to help ensure that better decisions are made. EA 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 to:

- 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; and
- 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 Environmental Impact Assessment principles, legal requirements, practical exercises, example assessments, and case study review. The lecture portion of the course is presented in three parts:

- a) 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.

Using Copyrighted Material

Please respect copyright. We will use copyrighted content in this course. I have ensured that the content I use is appropriately acknowledged and is copied in accordance with copyright laws and University guidelines. Copyrighted works, including those created by me, are made available for private study and research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the *Copyright Act* applies or written permission has been confirmed. For

more information, see the University's Copyright Office website at <http://umanitoba.ca/copyright/> or contact um_copyright@umanitoba.ca.

Recording Class Lectures

Dr. McCance holds copyright over the course materials, presentations and lectures which form part of this course. No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without express permission. Course materials (both print and digital) are for the participant's private study and research.

Textbook, Readings, Materials

REQUIRED TEXT:

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 U of M Learn)

Additional reading materials will be assigned throughout the course and provided on U of M Learn.

Course Technology

It is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical, and legal manner. Student may use all technology in classroom setting only for educational purposes as approved by instructor and/or the University of Manitoba Disability Services. Students should not participate in personal direct electronic messaging / posting activities (e-mail, texting, video or voice chat, wikis, blogs, social networking (e.g. Facebook) online and offline "gaming" during scheduled class time. If student is on call (emergency) the student should switch his/her cell phone on vibrate mode and leave the classroom before using it.

Class Communication

The University requires all students to activate an official University email account. For full details of the Electronic Communication with Students please visit:

http://umanitoba.ca/admin/governance/media/Electronic_Communication_with_Students_Policy_-_2014_06_05.pdf. Please note that all communication between myself and you as a student must comply with the electronic communication with student policy (http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html).

You are required to obtain and use your U of M email account for all communication between yourself and the university.

Expectations: I Expect You To

The lecture material covered in each class is provided on UM Learn. Since the notes are made available to you, I expect each student to be actively involved in class discussions. Students are required to attend every class. I expect you to come to class each week having read the outlined chapter in the text book and be prepared to discuss the topics outlined. You may use your computer to take notes during class. Students are expected to attend all classes and actively participate in the seminar discussions. I will treat you with respect and would appreciate the same courtesy in return. See [Respectful Work and Learning Environment Policy](#).

Academic Integrity:

In addition to the general information about academic integrity and student discipline that you provide (Schedule “A” Policies and Resources), references to specific course requirements for individual work and group work, such as:

- (i) Group projects are subject to the rules of academic dishonesty;
- (ii) Group members must ensure that a group project adheres to the principles of academic integrity.
- (iii) Students should also be made aware of any specific instructions concerning study groups and individual assignments;
- (iv) The limits of collaboration on assignments should be defined as explicitly as possible; and
- (v) All work is to be completed independently unless otherwise specified.

Students Accessibility Services

Student Accessibility Services (SAS)

If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services <http://umanitoba.ca/student/saa/accessibility/>
520 University Centre, 204 474 7423 Student_accessibility@umanitoba.ca

Expectations: You Can Expect Me To

I will be in class for 10 minutes prior to and after the class time. I will ensure that course grade requirements are clearly articulated and repeated several times throughout the course. I will be very responsive to student emails and phone calls and will return those messages within 48 hours. Should the student wish to discuss course materials in more detail, I will arrange a time during office hours (or another mutually agreeable time) with the student to meet. I will be consistent with all of my marking and constructive feedback and I ask that in return, students meet the deadlines that are clearly defined within this syllabus.

Class Schedule

Jan. 8	Introduction Basic Review of Environmental Assessment Definition of Environmental Assessment Objectives and Challenges	Chapter 1
Jan. 10	Principles and History of EA 1970s – present Terminology, definitions, lead legislation	Chapter 1
Jan. 15	Federal EA Legislation History CEEA Designated Projects Past Examples Lab Session: Project Scoping, Worksheet 1, Summary of Results	Chapter 2
Jan. 17	Federal EA Legislation Public Participation Aboriginal Consultation Funding Introduction to Manitoba EA Process	Chapter 2
Jan. 22	Manitoba EA Legislation Guest Speaker: Bruce Webb, Manitoba Sustainable Development Lab Session: Describing the Project, Worksheet 2, Summary of Results	In-Class Material
Jan. 24	Indigenous Environmental Legislation History of Treaties Royal Proclamation Indian Act Constitution Act Aboriginal Title	In-Class Material
Jan. 29	Film: Uranium Lab Session: Describing the Environment, Worksheet 3, Summary of Results	
Jan. 31	Harmonization/Cooperative Process Bilateral Agreements Canadian Council of the Ministers Clean Environment Commission Canadian-Manitoba Project Examples	In-Class Material

Feb 5.	EA Methodology Screening Scoping Effects Assessment Significance Evaluation Reporting & Decisions Importance of Checklists Lab Session: Identifying Environmental Effects, Worksheet 4, Summary of Results	Chapter 3 & 4
Feb. 7	In-Class Test #1	
Feb. 12	Describing the Project and the Environment Project Descriptions (what to include) Environment Descriptions Biotic and Abiotic Considerations Lab Session: Assessing Environmental Effects, Worksheet 5, Summary of Results	Chapter 4 & 5
Feb. 14	Scoping Environmental Assessments Screening vs. Scoping Purpose & Function Steps, Alternatives, Legislative Requirements VECs	Chapter 6
Feb. 19, 21	No Classes, Midterm Break	
Feb. 26	Identifying and Assessing Effects Terminology Approaches Challenges Lab Session: Identifying Mitigation Measures and Follow-up, Worksheet 6 & 7, Summary of Results	Chapter 7
Feb. 28	Mitigating, Evaluating, and Managing Environmental Effects Managing Adverse Effects Life Cycle of Mitigation Compensation	Chapter 9
March 5	Mitigating, Evaluating, and Managing Environmental Effects Environmental Management Systems Support Impact Management Impact Benefit Agreement Adaptive Management Lab Session: Considering Public Concerns & Cumulative Effects, Worksheet 8 & 9, Summary of Results	Chapter 9

March 7	In-Class Test #2	
March 12	Decision Making, Reporting, and Follow-up Who decides? Important considerations in Follow up, steps Importance of Reporting, Frameworks Lab Session: Evaluating Significance, Worksheet 10, Summary of Results	Chapter 10
March 14	Cumulative Effects Assessment Definition Considerations, Assessment, Actions Pathways	Chapter 12
March 19	Compliance and Enforcement North American Model of Wildlife Conservation Considerations and challenges of enforcement Provincial vs. Federal Lab Session: Reporting, Worksheet 11, Summary of Results	In-Class Material
March 21	Public Participation History Goals Guidelines/Frameworks How to's	Chapter 11
March 26	Film: Pipelines, Power, and Democracy Lab Session: Oral Presentations	
March 28	Duty to Consult Background TEK Success and Challenges	In-Class Material
April 2	Conclusions: The Future Lab Session: Oral Presentations	Chapter 14
April 4	Review Lecture	
April 8	Term Environmental Impact Assessment Reports Due	
April 10-21	Final Exam to be held during April Examination Period	

Team Term Project & Lab Assignment

Group-based Environmental assessment projects will be assigned where students will be placed in teams of 4-5 students and will be expected to define a Manitoba-based project, the project components, activities, etc. and other project details based upon the information provided. Environmental assessment teams are expected to scope the project and assessment, describe the project and environment, identify and assess environmental effects, identify measures to mitigate adverse environmental effects, evaluate significance of residual environmental effects, and other required tasks. Environmental assessment teams are responsible for identifying, assigning, and scheduling the environmental assessment tasks and presenting their results before the class. The presentation and report will be a collaborative effort. Students will also work together to complete and hand in weekly worksheets. More details on the requirements for the Term Project Environmental Assessments, Oral Presentations, and Lab Worksheet assignments are provided in the Lab Manual for the course found on U of M Learn.

The Final Environmental Assessments should be of sufficient length (~ 20 pages). The role/responsibility of each student must be briefly described in the Acknowledgements to the Assessment. The Environmental Assessments should be professionally presented in Times Roman 12 pt. Font and double spaced.

A final oral presentation made by the full team for each Environmental Assessment is presented to the class and to discipline specialists on March 26 and April 2nd. The scheduling of which team presents on which day is based on a 'first come, first serve' basis. Students are requested to email me their preference as soon as possible to secure their day and time to present. The final oral presentation of each team's Environmental Assessment should be 12 mins in length and are worth 10% of the total course grade. The final Environmental Assessment for each team is due April 8, 2019 by 4 pm into the U of M Learn Dropbox. The Final Environmental Assessments are worth 20% of the total course grade.

Course Evaluation Methods

Students are evaluated based on their participation, their written work through a course field trip assignment, progress report, as well as a term paper. Further, students are evaluated based on their oral presentation skills. The following table provides a detailed breakdown of the assessment tool and grade allocation breakdown:

Due Date:	Assessment Tool	Value of Final Grade
Ongoing	Class Participation	5%
Throughout Term	Lab Assignments	10%
Feb. 7, 2019	In-Class Test #1	15%
March 7, 2019	In-Class Test #2	15%
March 26/April 2, 2019	Final Term Project Oral Presentation	10%
April 8, 2019	Final Term Project Written Report	20%
April 2019 Exam Period	Final Exam	25%
Total		100%

Grading

The grading scale used for this course is:

Letter Grade	Percentage out of 100	Grade Point Range	Final Grade Point
A+	90-100	4.25-4.5	4.5
A	80-89	3.75-4.24	4.0
B+	75-79	3.25-3.74	3.5
B	70-74	2.75-3.24	3.0
C+	65-69	2.25-2.74	2.5
C	60-64	2.0-2.24	2.0
D	50-59	Less than 2.0	1.0
F	Less than 50		0

Late Assignment and Presentation Absence Policy

Should a student not attend the in-class oral presentations or fail to submit their assignments/term reports on time, as indicated within this syllabus, they will receive a zero. In accordance with the University of Manitoba Policy for Assignments, Reports, Tests, and Presentations: Without permission of the instructor and supporting documentation (e.g. medical certificate) or reasons provided, acquired **PRIOR TO THE DUE DATE**, will result in a grade of “F”.

Academic Supports: The University of Manitoba provides many services and supports to encourage good scholarship and overall health and wellness including: instruction to improve writing skills, best use practices for copyrighted materials, and supports for studying for examinations etc., personal health (both mental and physical) including: student advocacy, student counseling and health services, etc. and supports for assaults (both verbal and physical). These are designed to make each student’s experience positive, safe and assist in successful completion of courses and programs of study. The University provides and encourages all members and students to maintain a respectful work and learning environment. Policies have been developed regarding threatening behavior, or assaults whether verbal or physical to support victims and discipline offenders. For more information on these see Schedule “A” found at the end of the course syllabus.

Schedule “A”

Section (a) Academic Supports

Writing and Learning Support: The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at: <http://umanitoba.ca/student/academiclearning/>

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

University of Manitoba Libraries (UML): As the primary contact for all research needs, your liaison librarian (if they weren't recently fired by Central Administration) can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: <http://bit.ly/WcEbA1> or name: <http://bit.ly/1tJ0bB4>

In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: <http://bit.ly/1sXe6RA>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage: www.umanitoba.ca/libraries

Section (b) Mental Health

For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.

Student Counselling Centre: Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. **Student Counselling Centre:** <http://umanitoba.ca/student/counselling/> 474 University Centre S207 Medical Services (204) 474-8592

Student Support Case Management: Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team. **Student Support Intake Assistant** <http://umanitoba.ca/student/case-manager/index.html> 520 University Centre (204) 474-7423

University Health Service: Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation. **University Health Service** <http://umanitoba.ca/student/health/> 104 University Centre, Fort Garry Campus (204) 474-8411 (Business hours or after hours/urgent calls)

Health and Wellness: Contact our Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault. Health and Wellness Educator <http://umanitoba.ca/student/health-wellness/welcome.html> Katie.Kutryk@umanitoba.ca 469 University Centre (204) 295-9032

Live Well @ UofM: For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site: <http://umanitoba.ca/student/livewell/index.html>