

Faculty of Management Course Syllabus
ENVI 5001.01/MGMT 4705.03
Environmental Assessment
Fall 2022

Course Overview

Description

Impact assessment (IA, also known as environmental assessment or environmental impact assessment) includes a suite of tools used to predict the potential biophysical, social, economic, and human health impacts of development projects and is legally required in many jurisdictions. In this course, you will learn the professional practice of impact assessment in Canada as well as its political controversies. The course is delivered through a mix of lecture content, reading, discussion, reflection, and research. You will meet and work with professionals in IA from industry, government, non-profits, and Indigenous organizations. By the end of the course, you will be equipped with the necessary skills to critically evaluate and participate in IA processes as both a professional and a citizen.

Course Prerequisites

Enrollment in a Master's program. Upper-year undergraduate students may request admission from the instructor.

Instructor

Dr. Alana Westwood (pronouns: she/her). Find instructor profile [online](#).

Office hours: Held on Thursdays from 10:30-14:00 ADT. Virtual or in-person. Make an appointment to guarantee your slot: <http://calendly.com/alanawestwood/officehours/>

Contact:

- Microsoft Teams instant message. Response time <3 hours on working days (~9:00-17:30 M-F).
- Discussion forum on Brightspace: Response time <24 hour working hours
- Regular email (a.westwood@dal.ca): Response time 1-3 business days

Course Delivery

Location: Thursdays, Rowe Management Building Room 5001, 14:35-17:25 ADT.

The course will be delivered from September 6 through December 7, 2022. Course delivery is through a mix of in-person lectures, discussion forum posts, videos, readings, podcasts, discussions, and other materials. Discussions will be composed of question and answer sessions with guest speakers, facilitated discussion on required reading material, and opportunities to review assignments and course expectations with the instructor. Group work is optional but encouraged. Students may coordinate group work as they wish, but a messaging channel and document storage space/virtual meeting room can be provided for each group in Microsoft Teams.

Course Objectives/Learning Outcomes

The student will be able to:

- Become familiar with legislation and policy processes for IA in Canada
- Learn the parties involved in IA and their roles, responsibilities, actions, and attitudes
- The technical skills used to apply IA, and the kinds of activities to which they are applied
- Analyze relevance of IA to students' personal and professional lives, including how to conduct and participate in IA processes
- To evaluate processes, documents, and data producing during the course of an IA
- Make oral presentations and write technical papers related to IA

Course Materials

Required Resources

Students must have access to the university library as well as a computer or a functional tablet for word processing, and consistent access to the internet. Learn more about digital tools available to students [at this link](#). If you require support for the course or university technologies you can contact Information Technology Services (ITS) at 1-800-869-3931 or support@dal.ca



Brightspace is our classroom space! This All required reading (inclusive of text, video, and audio materials) will be provided through Brightspace. This is where you'll find the class announcements, weekly modules, course readings, dropbox for submitting assignments, and discussion boards for questions. Readings may be provided as little as one week prior to the next scheduled synchronous discussion so as to address current affairs.



Teams is our conferencing platform. Should Covid-19 or extenuating circumstances require us to switch to an online format, all students will be added to a Teams page for online classes. Groups may be designated a private channel they can use to organize and conduct meetings.

Optional Resources

Students who wish to underpin the course material with foundational texts will find the following resources helpful. I particularly recommend them to those considering careers in impact assessment.

Hanna, K. 2009. Environmental Impact Assessment. Oxford University Press, Toronto.

MacKinnon, A., Duinker, P.N., Walker, T.R. 2018. The Application of Science in Environmental Impact Assessment. Routledge.

Noble, B. 2014. Introduction to Environmental Impact Assessment: A Guide to Principles and Practice. Oxford University Press, Toronto.

Course Schedule

The course is structured in 11 modules which occur on an approximately weekly basis. The schedule below could be subject to further change, particularly in relation to the scheduling of guest speakers. You will be informed ASAP if there are any changes to the schedule via Brightspace announcements.

Session	Topics	Tasks for the week
Block 1 Sep 8 Introductions & Course outline	<ul style="list-style-type: none"> • Lecture: Course overview • Lecture: Introduction to IA terms and concepts • Assignment: Introducing Assignment 3 • Assignment: Introducing Bonus Assignment • Discussion: Classroom norms setting 	<ul style="list-style-type: none"> • Introduce yourself in Brightspace • Read Assignment 3 & Bonus Assignment instructions • Sign up for time slots for Bonus Assignment (optional)
Block 2 Sep 15 Federal IA	<ul style="list-style-type: none"> • Lecture: Overview of IA in Canada and introduction to the IAAC Registry • Lecture: How IA legislation gets made: IAA case study • Groupwork: Setting Assignment 3 groups and group norms 	<ul style="list-style-type: none"> • Last day to drop fall term courses with complete refund (Sep 16) • Reading: Strong science in impact assessment • Sign up for Assignment 3 topic & group
Block 3 Sep 22 Provincial IA	<ul style="list-style-type: none"> • Guest lecture: Overview of IA in Nova Scotia (Renata Magesta de Silva, Nova Scotia Department of Environment) (cancelled: now covered by Dr. Westwood) • Introducing Assignment 1 • Lecture: How to write policy briefs 	<ul style="list-style-type: none"> • Sign up for Assignment 1 topic • Reading: Anaconda Gold Mine and the modern Nova Scotia gold rush
Block 4 Sep 29 Valued components & Truth & Reconciliation	<ul style="list-style-type: none"> • Guest lecture: Impact of major projects on Indigenous women & girls (Dr. Sherry Pictou, Dalhousie University & former Chief of L'sitkuk) • Introducing Assignment 2 • Lecture: Valued components overview 	<ul style="list-style-type: none"> • Reading: Major projects and impacts on Indigenous women & girls • Sign up for Assignment 2 topic • Last day to drop fall term courses without a "W" (Oct 3)
Block 5 Oct 6 EA Consulting	<ul style="list-style-type: none"> • Guest lecture: EA – A consultant's perspective (Dr. Tony Walker, Dalhousie University) • Lecture: EIS evaluation • Discussion: Impacts on Indigenous women & girls 	<ul style="list-style-type: none"> • Reading: Professional reliance and consulting
Block 6 Oct 13 Regional assmt	<ul style="list-style-type: none"> • Lecture: Regional & strategic assessment • Groupwork: Think/pair/share on VCs and Assignment 2 working time 	<ul style="list-style-type: none"> • Reading: TBD related to regional assessment • Complete Assignment 1 (due October 14)

Session	Topics	Tasks for the week
Block 7 Oct 20 Cumulative effects	<ul style="list-style-type: none"> • Lecture: Cumulative effects assessment • Guest lecture: Open Science and Data Platform demonstration (Kelsea Deblois, Natural Resources Canada & former MREM) • Discussion: Linking data sources and Assignment 2 	<ul style="list-style-type: none"> • Reading: TBD related to cumulative effects and data tools
Block 8 Oct 27 Professionals in IA	<ul style="list-style-type: none"> • IA career panel (Victoria Goodday, NS Department of Environment; Nicole MacDonald, CBCL; Kathryn MacCarthy, IAAC; Darcy Kavanagh, Wood PLC) • Q&A session about Case Study (Kathryn MacCarthy, IAAC) • Groupwork: Assignment 3 mid-point check-in 	<ul style="list-style-type: none"> • Reading: Professional practice in IA • Last day to drop fall term classes with a "W" (Nov 1) • Complete assignment 3a (due Oct 28) • Complete mid-term course review (not for marks)
Block 9 Nov 3 Social and cultural IA	<ul style="list-style-type: none"> • Guest Lecture: Cultural resources and artifacts (Eric Thurston, MREM) • Lecture: Gender-based analysis plus • Discussion: Professional practice in IA 	<ul style="list-style-type: none"> • Reading: Social concerns & community-based assessment
Fall study break Nov 7-11, no class		
Block 10 Nov 17 Decision-making	<ul style="list-style-type: none"> • Lecture: Public engagement • Lecture: Decision-making: Significance & public interest • Groupwork: Assignment 3 working time 	<ul style="list-style-type: none"> • Reading: Post-certificate amendments • Complete Assignment 2a (due Nov 18)
Block 11 Nov 24 Follow-up and monitoring	<ul style="list-style-type: none"> • Guest lecture: post-certificate amendments as a loophole in the IA system + the scientific publication process (Ben Collison, Department of Fisheries and Oceans & MREM) • Lecture: Follow-up and monitoring • Groupwork: Assignment 3 working time 	<ul style="list-style-type: none"> • Reading: Consequences and loose ends
Block 12 Dec 1 Reflections on IA	<ul style="list-style-type: none"> • Lecture & discussion: Is IA a system worth keeping? • Course celebration 	<ul style="list-style-type: none"> • Reading: How to make hard choices • Complete course review • Complete Assignment 2b (due Dec 2) • Complete Assignment 3b (due Dec 9)

Course Assessment

Assignment	Grade Proportion – Graduate Students	Grade Proportion – Undergraduate Students	Due date
1. Major project briefing note & process diagram	15	25	October 14
2. Case study: Public comment submission	(30)	(40)	
<ul style="list-style-type: none"> 2a: Initial submission 2b: Revised submission + response to comments 	25 5	30 10	November 18* December 2*
3. Research report: Registry data extraction and analysis (group project)	(50)	(35)	
<ul style="list-style-type: none"> 3a: Proposal + workplan 3b: Final report + autorating form 	15 40 multiplier	10 25 multiplier	October 28 December 9 December 9
Bonus: Facilitating discussion session	+2	+2	As agreed with instructor

**Due dates for Assignment 2 may shift based on timelines for submission set by the regulator. Any shifts will be discussed with the class well in advance.*

All assignments are due at 10:00 PM Atlantic Daylight Time unless stated otherwise on the assignment instructions. All assignments are accompanied by a detailed instruction sheet, verbal instructions, and a marking rubric on Brightspace. Short summaries of the assignments are as follows:

Assignment 1. Briefing note and project status diagram

For this assignment, each student will select an ongoing or completed project undergoing an IA from any jurisdiction in any country (e.g. federal, provincial, state, municipal). Each student must select a different project, and a sign-up sheet will be provided.

You will develop a two-page briefing note which summarizes the project, introduces the major actors involved in the project, and highlights several areas of concern for project impacts. You will also develop one-page infographic situating the project along the relevant IA timeline for its jurisdiction, including all relevant dates and stages in the IA process. The infographic may be hand-drawn or computer-generated. Marks will not be allocated for artistry, but for appropriate and accurate inclusion of content, logical flow, and ease of understandability of the diagram.

You may choose to prepare the briefing package for a real organization of your choice. After grading, you will have instructor support to submit the brief to an organization if you so choose.

Assignment 2. Case study: Public comment submission

Each student will create a short report using a provided format voicing concerns with, or support for, the Case Study project by the relevant regulator. You will raise concerns with, or argue in support for, the project from the lens of one Valued Component or procedural aspect of IA. The public comment reports should critically reflect on the chosen Valued Comment or procedural aspects and compare them to best practices and other IA examples. Each student must sign up for a different Valued Component or procedural aspect. Examples of argumentation on a component or procedural element:

- The proposed mitigation for shipping traffic is insufficient, because increased shipping traffic will still have unacceptably high noise levels
- The Case Study project will bring substantial economic benefit based on independent verification of the economic models
- The Case Study project poses a risk of catastrophic harm for a lichen species at risk only present in the project area

The assignment will be completed in two parts. The first is a draft submission which the instructor will provide feedback on. The second is a revised submission as well as a response to the instructor feedback. You may opt-in to have your revised submission be included in a public submission to the relevant regulator on behalf of the class. If you do so, you will be credited as an author on a technical report which can be added to your CV.

Assignment 3. Research report: Registry data extraction and analysis

This assignment will be completed in groups of 3-5 students. You will conduct original research on trends related to IA scoping, data collection, valued components, and/or decision-making. Students will extract and analyse data from federal, provincial, and/or territorial IA registries and produce a report detailing the relevant background information and their findings. A list of candidate research questions will be provided in the assignment instructions, some of which will be undertaken with partner organizations. You may also propose your own research question, which must be approved by the instructor.

The assignment will be completed in two parts: a) a proposal and workplan and b) a final report. The proposal and workplan is due near the mid-point of the course to give students opportunity to select their project, develop group norms, and discuss with their partner organization. The final report will be 6000-7500 words depending on group size. A peer and self-evaluation component will be included to ensure fairness during grading for both parts of the assignment.

Students will be given several sessions during the course to conduct groupwork as well as discuss their progress and challenges with the instructor. Students working with a partner organization will be expected to coordinate with the provided liaison and stay in regular contact with their research partner to set expectations and evaluate outcomes. If students are interested in developing the assignment into a published report or a peer-reviewed publication, they should book office hours

with the instructor to discuss expectations and procedure. In the past, groups have turned this project into a technical report or paper, such as:

Collison, B., Reid, P., Dvorski, H., Lopez, M., Westwood, A., Skuce, N. 2022. [Undermining environmental assessment laws: Post-assessment amendments for mines in British Columbia, Canada, and potential impacts on water resources](#). FACETS, 7: 611-638.

Bonus assignment: Facilitation of discussion session

To gain up to two bonus marks, students may sign up to facilitate a 30-40 minute period of a scheduled discussion. Facilitation will include introducing the guest speaker or discussion topic and facilitating the Q&A and/or discussion. Students will be expected to facilitate stimulating conversation and to ensure the inclusion, safety, and civility of all members. Students who wish to gain the bonus mark but cannot facilitate a synchronous discussion session due to accommodations-related limitations (or in the unlikely event that all available discussion slots have been filled) must advise the instructor as soon as possible so as to develop an alternate bonus assignment.

Grading

Conversion of numerical grades to Final Letter Grades follows the [Dalhousie Common Grade Scale](#). Note that for students in a **graduate program, a minimum grade of B- is required** to pass the course. In other words, a final term grade of under 70% will be assigned an F for all graduate students. Receiving a final grade of F in a graduate program means different things in different programs. In the MREM, a single F results in automatic dismissal from the program with the right to appeal to re-enter the program. The Dalhousie Common Grade Scale is as follows:

A+ (90-100)	B+ (77-79)	C+ (65-69)	D	(50-54)
A (85-89)	B (73-76)	C (60-64)	F	(<50)
A- (80-84)	B- (70-72)	C- (55-59)		

Course Policies

- 1. Attendance and participation is your responsibility.** You are expected to attend all lectures and review all course content.
- 2. Collegiality.** You are expected to treat all classmates and your instructor with collegiality and to treat each person as an equal, independent of any factors relating to their identity.
- 3. Brightspace.** Keeping up to date with the announcements, learning materials, and discussions posted on Brightspace, as well as submitting your assignments through the Brightspace dropbox, is your responsibility.
- 4. Late assignments.** A deduction of 10% will be taken off for each day an assignment is late and will not be accepted more than five days after the due date. Arrangements to hand in assignments late due to extenuating circumstances must be made with the instructor at least 48 hours before the assignment is due. All assignments are due at 10:00 PM ADT unless otherwise stated on the assignment instructions. To improve time management skills, visit [Studying for Success](#) for a self-assessment, free workshops, and personal coaching.
- 5. Your wellness and inclusion is priority.** This course has been designed to the best of the instructor's ability with [principles of universal design](#), which supports accessible education as a default. Access should be proactive and inclusive, with the course designed for all. If the course materials do not meet your access needs, in addition to contacting [Accessibility Services](#), please contact the instructor to discuss alternate arrangements or redesigning course elements. Any conversations with the instructor about accessibility are confidential and are strictly for facilitating learning needs or accommodations.

University policies and services

Accommodation policy for students

Though this course has been designed with universal principles, students still may face barriers to success related to disability, religious obligation, or any characteristic protected under Canadian Human Rights legislation. The full text of Dalhousie's Student Accommodation Policy can be [accessed at this link](#). Students who require accommodation for classroom participation or the writing of tests and exams should make their request to the **Student Accessibility Centre** prior to or at the outset of the regular academic year. Find more information and the **Request for Accommodation** form [online](#).

Student health and wellness

Your health and wellness is a priority. Students in Halifax should be aware of the in-person [Student Health and Wellness Centre](#) where you can see doctors, nurses, psychiatrists, counsellors, and other health professionals. Counselling is provided free of charge to Dalhousie students.

Completing a full courseload involves a great deal of screen time on computers and other devices, which may be stressful for some students' physical and mental well-being. Free text-to-speech/speech-to-text software, Read and Write Gold, is available through Dalhousie's [software library](#). Students may wish to consider using this or similar software to convert long readings to audio or to write first drafts of papers by dictation.

The Student Accessibility Centre also has a [Lending Library](#) which includes technology resources that may ease eyestrain, improve audio quality, improve seated ergonomics, or make it possible to work effectively in unavoidably noisy study spaces. Examples include tablets, noise-cancelling headphones, a portable text-to-speech pen, recording devices, and more.

Academic integrity

Academic integrity, with its embodied values, is seen as a foundation of Dalhousie University. It is the responsibility of all students to be familiar with behaviours and practices associated with academic integrity. Instructors are required to forward any suspected cases of plagiarism or other forms of academic cheating to the Academic Integrity Officer for their Faculty.

The Academic Integrity website (<http://academicintegrity.dal.ca>) provides students and faculty with information on plagiarism and other forms of academic dishonesty, and has resources to help students succeed honestly. Any paper submitted by a student at Dalhousie University may be checked for originality to confirm that the student has not plagiarized from other sources. Plagiarism is considered a very serious academic offence that may lead to loss of credit, suspension or expulsion from the University, or even the revocation of a degree. See the [full text](#) of Dalhousie's **Policy on Intellectual Honesty and Faculty Discipline Procedures**. You should be familiar with the [Faculty of Management Professor and Student Contract on Academic Integrity](#), and it is your responsibility to ask questions if there is anything you do not understand.

Dalhousie offers many ways to learn about academic writing and presentations so that all members of the University community may acknowledge the intellectual property of others. Knowing how to find, evaluate, select, synthesize and cite information for use in assignments is called being "information literate." Information literacy is taught by Dalhousie University Librarians in classes and through online tutorials.

Do not plagiarize any materials for or from this course. For guidance on what constitutes plagiarism, how to avoid it, and proper methods for attributing sources, see [these resources](#). If you suspect cheating by colleagues or lapses in standards by a professor, use the confidential email: managementintegrity@dal.ca which is read only by the Assistant Academic Integrity Officer.

Student code of conduct

Dalhousie University has a [student code of conduct](#), and it is expected that students will adhere to the code during their participation in lectures and other activities associated with this course. In general:

"The University treats students as adults free to organize their own personal lives, behaviour and associations subject only to the law, and to University regulations that are necessary to protect

- the integrity and proper functioning of the academic and non – academic programs and activities of the University or its faculties, schools or departments;
- the peaceful and safe enjoyment of University facilities by other members of the University and the public;
- the freedom of members of the University to participate reasonably in the programs of the University and in activities on the University's premises;
- the property of the University or its members."

Other services available to students

The following campus services are available to help students develop skills in library research, scientific writing, and effective study habits, as well as to connect with other students to support both coursework and campus life. The services are available to all Dalhousie students and, unless noted otherwise, are **free**.

[Academic advising](#) – Support for understanding degree requirements and academic regulations. Academic advising can support you through academic or other difficulties and ensure you meet your educational or career goals.

[Black student advising centre](#) – Provides support for Black students including scholarship and bursary information as well as a directory of Black student societies and groups and related events. Also provides a physical space for Black students to study and network.

[Dalhousie's libraries](#) – Beyond simply being a place to do online or in-person research, librarians advice on search methods, support you with finding materials to complete assignments, and help you reference your work correctly. You can also book a computer, study room, or space for group work in the library.

[Dalhousie Student Union societies](#) – Peer support and team-building is an essential part of the university experience. With over 250 active societies, students can meet others with mutual interests or identities. Student societies can be of particular importance for those who may face identity-related barriers to the university experience.

[Indigenous student centre](#) – Provides support for Indigenous students including regular smudging, scholarship and bursary information, and orientations and other events. Also provides a physical space for Indigenous students to study and network. The [Elders in Residence](#) program provides students with access to First Nations Elders for guidance, counsel and support. Visit the office in the Indigenous Student Centre, 1321 Edward Street, or email elders@dal.ca.

[International student centre](#) – Provides support for international students including one-on-one mentorship and guidance for university life Canada. Also provides information for domestic students wishing to study abroad.

[South House](#) – A full-time gender justice centre which provides support to those of marginalized sexual and/or gender identities, including LGBTQ2S+ identities and beyond. Offers space for relaxation or studying, a community computer, and a vast library. Regularly offers workshops and educational events relating to gender justice and sexual and gender diversity.

[Writing Centre](#) – Provides free coaching/tutoring to support any assignment with a written component, ranging from a graduate thesis to a poster to an annotated bibliography and anything in-between. Students will be paired with a tutor from the same discipline who can assist with discipline-specific writing conventions and referencing. The Writing Centre also provides free workshops and comprehensive resource guides.