



Faculty of Science Course Syllabus
Department of Oceanography
Marine Management II – OCEA 4402
Winter 2024

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present. The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people. Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

Instructors:

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Lectures: Tuesdays and Thursdays 2:35p.m.–4:55p.m. at LSC 334

Laboratories: None

Office hours: Contact the instructors to schedule a meeting (Office, Skype, Zoom...)

Course description

This course is the second half of a year-long, two-course exposure to marine management by students in the Bachelor of Ocean Science. In the fall term, OCEA 4401 introduced students to the breadth of issues confronting the marine environment and the challenges facing marine managers as they attempt to minimize conflicts, achieve benefits, and ensure the ecosystem goods and services provided by the oceans are sustainable. This course builds on the material taught in OCEA 4401. It uses a case study approach to expose students to the urgent need to link scientific knowledge of the ocean/land/air environments with policy, governance and management issues. Using specific examples and taking a DPSIR (driver-pressure-state-impact-response) framework approach, it challenges students to focus on how problems arising in different coastal and maritime jurisdictions (from local through national to international) have been addressed and where improvement opportunities might lie. To put it another way, the science/policy interface currently works well only under a few selected circumstances. There is a strong need to grow an appreciation of its virtues and a recognition of the new endpoint, which is

an understanding of the critical need to embrace the collected components of science and policy as a continuum.

Course Prerequisites

OCEA 2000.06 (or OCEA 2001.03/2002.03). Restricted to 4th year students. While not a prerequisite, students are strongly encouraged to take OCEA 4401 before taking OCEA 4402.

Course Objectives

The course is structured to achieve the following course objectives:

1. Expand and deepen marine science students' exposure to the theoretical and practical aspects of marine management, law and policy;
2. Promote problem/case-based learning related to bridging the science/policy gap.
3. Demonstrate the importance of the role of science and scientists in changing human behaviour.

Expected Course Outcomes

By the end of the course, students should have achieved the following learning outcomes:

1. Demonstrate increased knowledge of the policy process in marine affairs at the international, regional, national and sub-national levels and the way these processes are affecting ocean activities and ocean-related research;
2. Demonstrate an increased understanding of factors that contribute to bridging the science/policy interface;
3. Demonstrate enhanced writing and oral presentation skills and ability to communicate to both scientific and policy-focused audiences effectively;
4. Demonstrate critical thinking at a level expected of future marine scientists and meaningfully participate in issues they will no doubt confront in their future chosen careers.

Required Course Materials

There is no required text for this course. A list of required readings for each class will be provided, and students are expected to do all of the required readings each week before coming to class. The course material will be available to registered students on Brightspace.

Course Assessment

Course evaluation will be based on four components due throughout the term and in-class participation demonstrating evidence of reading assigned readings before class. As a fourth-year course based on a broad survey of the integrated nature of Marine Management, this course will not have a final exam scheduled by the Registrar.

Component	Weight (% of final grade)
In-class participation	5%
Journaling and in-class leadership of research papers	30%
Mid-term exam	20%
Research paper: annotated outline	5%
Research paper: final research paper	40%

In-class participation (5%)

Based on engaged, well-prepared and respectful in-class participation, demonstrating evidence of having read assigned readings before class and full participation in each student-led leadership assignment for which you are not the lead.

Journaling and in-class leadership of research papers (30%)

Reflecting on lecture topics, speakers and provided readings, each group (2-3 students) will be assigned in-class time to lead a discussion on one of the case studies addressed in the course. In addition to the in-class group leadership, each individual student will also be responsible for submitting a written component of the topic.

For the in-class **group** leadership component (worth 15%), the group should: 1) set the context of the case study; 2) summarize the papers contributing to the identified management problem(s); and 3) identify a series of questions which arise as a result of the readings and lecture notes for the rest of the class to participate in and offer their insights (in-class discussion). These questions could be based on a class activity, for example, a role simulation with different stakeholder groups.

For the **individual** written component (worth 15%), the paper should be well-written and referenced. It should contain: 1) a brief summary of the relevant lectures and assigned readings for the selected case study, 2) an assessment of the in-class discussion, and 3) a reflection on the papers and lectures on the topic, including, for example, how does it fit into the field of Marine Science and how might it contribute to bridging the science/policy gap? How does this affect me and my potential study/career choices? What are some of the challenges and opportunities observed as a result of the readings and lectures for the selected case study? The paper is expected to be ~5 pages (double space), not counting references, figures and tables.

Mid-term exam (20%)

A combination of short-answer and essay questions half-way through the term.

Research paper: annotated outline (5%)

This is the precursor to the Research Paper (below). The student should describe the topic of the main research paper and present an annotated outline of the final paper. The goal of this exercise is to evaluate the paper's progress and develop synthesis skills. This assignment will strengthen the quality of the final assignment. Maximum 2 pages (double space), not counting references.

Note: The student cannot repeat the topic of the final paper topic from OCEA 4401.

Research paper: final research paper (40%)

An in-depth written analysis and **recommendations for enhancing the science/policy interface** of a significant contemporary marine-related issue. The written component will be evaluated based on the thoroughness of the research, organization and logical flow, analysis/insight/synthesis, level of writing ability, and completeness of in-text citation and bibliographic referencing. The paper is expected to be approximately 3000 words, not counting references or figures/tables.

Other course requirements

1. Students will be expected to attend all classes and participate actively throughout the course. Non-attendance of a class will result in a substantial knowledge gap for the student concerned and negatively affect the student's final grade.
2. Regular reading of weekly reading assignments, in advance of scheduled classes. Reading materials support actual class discussions or provide background and context for students to enable them to participate better in class discussions and to improve their critical analysis of the subject matter being discussed.
3. Students are expected to be familiar with the academic and administrative rules of the University, paying particular attention to policies regarding plagiarism and other forms of academic misconduct.

Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale

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. Assignments submitted late will be subject to 10% reduction per day. In case of reasonable exceptional circumstances (e.g. technological issues, illness, extracurricular activities, etc.), an extension on the assignment may be obtained. Given the flexibility in the assignment submission deadline, no alternative evaluation is offered. Note that there is no final exam in this course.
2. Students can use the Student Declaration of Absence form for late or missed requirements (Brightspace) or contact the course coordinator directly. All reasonable circumstances (e.g. technological issues, illness, extracurricular activities, etc.) will be considered. Medical notes are not required.
3. Students are not allowed to work together on individual assignments.
4. The instructors have the right to use plagiarism software.

Course content

Week # (Class #)	Topic	Instructor(s)	Notes / Deadlines
1 Jan 9 (C1) Jan 11 (C2)	Science-Policy interface Humans and Nature	RF HH	
2 Jan 16 (C3) Jan 18 (C4)	Case study #1 Case study #1 (con't)	RF RF	
3 Jan 23 (C5) Jan 25 (C6)	Case study #1 (con't) Group-led discussion #1	RF RF	
4 Jan 30 (C7) Feb 1 (C8)	Case study #2 Case study #2 (con't)	HH HH	Group #1 paper
5 Feb 6 (C9) Feb 8 (C10)	Case study #2 (con't) Group-led discussion #2	HH HH	
6 Feb 13 (C11) Feb 15 (C12)	Review of materials and mindmap Mid-term exam	RF – HH RF – HH	Group #2 paper
7 Feb 20 Feb 22	<i>Winter study break</i>		
8 Feb 27 (C13) Feb 29 (C14)	Case study #3 Case study #3 (con't)	TBD TBD	Annotated outline
9 Mar 5 (C15) Mar 7 (C16)	Case study #3 (con't) Group-led discussion #3	TBD TBD	
10 Mar 12 (C17) Mar 14 (C18)	Case study #4 Case study #4 (con't)	LF LF	Group #3 paper
11 Mar 19 (C19) Mar 21 (C20)	Case study #4 (con't) Group-led discussion #4	LF LF	
12 Mar 26 (C21) Mar 28 (C22)	Case study #5 Case study #5 (con't)	TBD TBD	Group #4 paper
13 Apr 2 (C23) Apr 4 (C24)	Case study #5 (con't) Group-led discussion #5	TBD TBD	
14 Apr 11 Apr 15			Group #5 paper Final paper

University Policies and Statements

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit or e-mail the Indigenous Student Centre at 1321 Edward St or elders@dal.ca. Additional information regarding the Indigenous Student Centre can be found at: https://www.dal.ca/campus_life/communities/indigenous.html

Internationalization

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." Additional internationalization information can be found at: <https://www.dal.ca/about-dal/internationalization.html>

Academic Integrity

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. Additional academic integrity information can be found at: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion, please contact the Student Accessibility Centre (https://www.dal.ca/campus_life/academic-support/accessibility.html) for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro (<https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html>)

Conduct in the Classroom – Culture of Respect

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity.

We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). Additional diversity and inclusion information can be found at: <http://www.dal.ca/cultureofrespect.html>

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner - perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution. The full Code of Student Conduct can be found at:

https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Fair Dealing Policy

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie. Additional information regarding the Fair Dealing Policy can be found at:

https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html

Originality Checking Software

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. Additional information regarding Originality Checking Software can be found at:

https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality-checking-software-policy-.html

Student Use of Course Materials

Course materials are designed for use as part of this course at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g. uploading to a commercial third-party website) may lead to a violation of Copyright law.

Student Resources and Support

University Policies and Programs

Important Dates in the Academic Year (including add/drop dates):

http://www.dal.ca/academics/important_dates.html

Classroom Recording Protocol:

https://www.dal.ca/dept/university_secretariat/policies/academic/classroom-recording-protocol.html

Dalhousie Grading Practices Policies:

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

Grade Appeal Process: https://www.dal.ca/campus_life/academic-support/grades-and-student-records/appealing-a-grade.html

Sexualized Violence Policy: https://www.dal.ca/dept/university_secretariat/policies/health-and-safety/sexualized-violence-policy.html

Scent-Free Program: <https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html>

Learning and Support Resources

General Academic Support – Advising (Halifax): https://www.dal.ca/campus_life/academic-support/advising.html

General Academic Support – Advising (Truro): <https://www.dal.ca/about-dal/agricultural-campus/ssc/academic-support/advising.html>

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness.html

On Track (helps you transition into university, and supports you through your first year at Dalhousie and beyond): https://www.dal.ca/campus_life/academic-support/On-track.html

Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html

Indigenous Connection: <https://www.dal.ca/about-dal/indigenous-connection.html>

Elders-in-Residence (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 or contact the program at elders@dal.ca or 902-494-6803:

<https://cdn.dal.ca/content/dam/dalhousie/pdf/academics/UG/indigenous-studies/Elder-Protocol-July2018.pdf>

Black Student Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre.html

South House Sexual and Gender Resource Centre: <https://southhousehalifax.ca/about/>

LGBTQ2SIA+ Collaborative: <https://www.dal.ca/dept/vpei/edia/education/community-specific-spaces/LGBTQ2SIA-collaborative.html>

Dalhousie Libraries: <http://libraries.dal.ca/>

Copyright Office: <https://libraries.dal.ca/services/copyright-office.html>

Dalhousie Student Advocacy Services: <https://www.dsu.ca/dsas?rq=student%20advocacy>
Dalhousie Ombudsperson: https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html
Human Rights and Equity Services: <https://www.dal.ca/dept/hres.html>
Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html
Study Skills/Tutoring: http://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html
Faculty of Science Advising Support: <https://www.dal.ca/faculty/science/current-students/undergrad-students/degree-planning.html>

Safety

Biosafety: <http://www.dal.ca/dept/safety/programs-services/biosafety.html>
Chemical Safety: <https://www.dal.ca/dept/safety/programs-services/chemical-safety.html>
Radiation Safety: <http://www.dal.ca/dept/safety/programs-services/radiation-safety.html>
Laser Safety: <https://www.dal.ca/dept/safety/programs-services/radiation-safety/laser-safety.html>