

Conversations with Ocean Scientists II

Syllabus

Department of Oceanography
OCEA 1002.03 Winter 2025

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.

Course Instructors

Name	Email	Office Hours Office
Laura deGelleke (prof)	laura.degelleke@dal.ca	W 11:00-12:00 LSC O3627E
Alexis Bazinet (TA T01)	alexis.bazinet@dal.ca	TBA
William Nesbitt (TA T02)	william.nesbitt@dal.ca	TBA
Kit Tymoshuk (TA T03)	ktymoshuk@dal.ca	TBA

Lectures: Tuesdays (Jan 7 – Apr 1) 10:05-11:25 LSC C338

Tutorials: Thursdays (Jan 9 – Apr 3) 10:05-11:25

T01 – LSC C202
T02 – LSC C212
T03 – LSC P4208

Course Description

Students engage with working ocean scientists about their research, its relevance, and how to communicate science to different audiences. In addition to regular writing exercises that include journaling, blogging, and lab reporting, students compose a research paper and follow it through the process of submission and peer-review for an in-class journal.

NOTES: Credit will not be granted if OCEA 1001.03 and OCEA 1002.03 are not completed consecutively in the same academic year. College of Arts & Science general writing requirement fulfilled with a passing mark.

Course Prerequisites: OCEA 1001.03

Exclusions: OCEA 1000.06

Course Structure

This course meets all together on Tuesdays for lecture lead by the course instructor and in smaller groups on Thursdays for tutorial lead by teaching assistants (TAs). Each week, you can expect three types of content:

1. Ocean Core Concepts – material about basic ocean science
2. Science Communication – material about science communication, mainly scientific writing but also oral presentations and figures
3. Conversation with an Ocean Scientist – a short audio interview with an ocean scientist

We will discuss Ocean Core Concepts material and the week's Conversation Interview in lecture on Tuesdays. Ocean Core Concepts Reading Quizzes are due before class on Tuesdays. Participation will be graded each week.

We will discuss Science Communication material and upcoming assignments in tutorial on Thursdays. Science Communication Reading Quizzes are due before class on Thursdays. Participation will be graded each week. Assignments are always due on Thursdays before class. You will have at least one week to complete each assignment.

Course Materials

To complete this course, you will need reliable access to a computer with high-speed internet. This course uses two required textbooks, one to overview basic oceanography concepts and one to overview the process of scientific writing.

1. OCEANS: A Very Short Introduction (OAVSI) by Dorrik Stow (ISBN: 978-0199655076)
2. Writing in the Life Sciences (WITLS) by Laurence Greene (ISBN: 978-0195170467)

Assessment

Your grade in this course is calculated cumulatively through both fall and winter semesters. An “MT” will temporarily appear on your transcript for OCEA 1001 (fall) until you complete OCEA 1002 (winter). Once you complete the winter term, your grade will appear for both the fall and winter terms.

All assignments must be submitted on Brightspace and are due at 10:00 on the due date.

Component	Weight (% of final grade)	Due Date
Library Skills Worksheets	2% (2 total, 1% each)	Sept 21
Science Blog Post	4% (2 total, 2% each)	Sept 28, Feb 27
News Briefs	8% (4 total, 2% each)	Oct 12 & 26, Feb 6, Mar 13
Opinion Piece	2%	Mar 27
Review Paper	44% (total for all milestones)	
Topic Proposal	2.5%	Oct 5
Reading List	2.5%	Oct 19
Paper Outline	5%	Nov 16
Oral Presentation	5%	Nov 28
Paper 1 st Submission	10%	Dec 7
Self-evaluation	2%	Jan 16
Response to Reviewers	2%	Apr 7
Paper Final Submission	15%	Apr 7
Peer Reviews	10% (2 total, 5% each)	Feb 27, Mar 13
Lab Report	10%	Feb 6
Ocean Reading Quiz	5%	Weekly online (10min)
Sci Comm Reading Quiz	5%	Weekly online (10min)
Lecture Participation	5%	Weekly in-class
Tutorial Participation	5%	Weekly in-class

Conversion of numerical grades to final letter grades follows the [Dalhousie Grade Scale](#)

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (0-49)
A- (80-84)	B- (70-72)	C- (55-59)	

General Course Policies

1. Include both your instructor and TA on email correspondence related to the class.
2. Allow 24-48 *weekday* hours for replies to emails. We will try, but we cannot guarantee a quicker response time.
3. If you want an extension on a due date, request one via email. Make your request in advance of the due date, briefly provide a reason, and suggest a revised due date. Requests that are *received* on the actual due date are not approved.

Course Policies on Missed or Late Academic Requirements

4. The late penalty is 5% for the first day (24 hours) and doubles every day after including weekends.
5. You may submit a maximum of 2 Student Declaration of Absence (SDA) forms per term. SDAs are a mechanism to handle short term absences for any reason. They can be used last-minute for urgent issues and do not require approval. Because it is reasonable to assume whatever issue is causing the absence will also affect ability to meet deadlines, SDAs automatically generate due date extensions (see below).
6. SDA forms must be completed and submitted on Brightspace before the class meeting or deadline that will be missed.
7. SDA forms give you 3 additional days to submit any assignment due within 3 days after the absence starts (a three-day push). Students will not be reminded of revised due dates and late penalties will apply.
8. The 2 lowest reading quiz grades in each category are dropped each term. There are no make-up quizzes, even with an SDA.

Course Policies related to Academic Integrity

9. You may discuss material and exchange ideas with others, but you must submit individual, original work not generated by AI.
10. Plagiarism detection software may be used to monitor any written work submitted in this course and assist in plagiarism detection.
11. Allegations of plagiarism can be made at any point during the course, including after assignments have been marked and returned.
12. Plagiarized assignments will receive a zero, and students may be referred to a Faculty of Science Academic Integrity Officer for further discipline.

Learning Objectives

After completing this course, you will be able to:

1. Understand conventions and challenges associated with different forms of scientific communication.
2. Appreciate the breadth of ocean science and explain core ocean concepts.
3. Read critically and for comprehension.
4. Construct scientific arguments that are supported by primary literature.
5. Describe and demonstrate different types of scientific communication, especially writing.
6. Give and accept constructive criticism, and then use this process to improve.

Course Content

Week	Ocean Core Concepts Reading	Reading Quiz	Ocean Core Concepts Topics	Science Communication Reading	Reading Quiz	Science Communication Topics	Assignment	Due Date	Interview Series
13 Jan 6-10	NONE	NONE	Fall Review & Winter Overview	NONE	NONE	Reflection	Self-Evaluation	Jan 16	NONE
14 Jan 13-17	Watch video	NONE	Density and Stratification Lab	NONE	Online	Accepting Criticism	Lab Worksheet	Jan 23	Convo #10
15 Jan 20-24	OAVSI pp. 75-77	Online	Solar energy, greenhouse effect	WITLS pp. 397-437	Online	Lab Report Writing	Lab Report	Feb 6	Convo #11
16 Jan 27-31	OAVSI pp. 80-91	Online	Oceanic heat redistribution, past climate change	WITLS pp. 211-218 and 248-253	Online	Revision Process	News Brief #3	Feb 6	Convo #12
17 Feb 3-7	OAVSI pp. 92-103	Online	First life on Earth, evolution, extinction	WITLS pp. 218-248	Online	Global Revisions	Peer Review #1	Feb 27	Convo #13
18 Feb 10-14	OAVSI pp. 104-109 and 112-126	Online	Marine habitats, diversity of life	Rougier et al. (2014)	Online	Figures	Science Blog Post #2	Feb 27	Convo #14
Winter Break: Feb 17-21									

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.