

Faculty of Science Course Syllabus Department of Oceanography OCEA 1000X/Y Conversations with Ocean Scientists Fall and Winter 2016

Instructor: Dr. Carly Buchwald cbuchwald@dal.ca LSC 5621

Office hours: Tuesdays @ 12:30 – 1:30 pm (or e-mail for appointment)

Teaching Assistants (TAs):

Colleen Wilson (T01) <u>colleen.wilson@dal.ca</u> LSC 5654

Krysten Rutherford (T02) <u>krysten.rutherford@dal.ca</u> LSC 2612

Isabelle Hurley (T03) irochehurley@gmail.com

Lectures and Tutorials:

Tuesdays and Thursdays 10:05 – 11:25 am

Tuesdays are always in the lecture hall. Thursdays alternate between small group tutorials led by the TAs in the tutorial rooms and lectures in the lecture hall (see schedule below for details).

Lecture hall: LSC Common Area, room C206 (fall & winter)

Tutorial rooms: T01 LSC Biol & Earth Sci. B812 (fall);

LSC Psych. P5208 (winter)

T02 LSC Common Area C214 (fall);

LSC Psych. P4208 (winter)

T03 LSC Common Area C210 (fall & winter)

Course Description

What does an Ocean Scientist do? In this writing intensive course, you will explore this question by meeting a wide range of scientists active in Ocean Studies from within Dalhousie and the surrounding community as well as working through ocean science activities in the Core Concepts lectures and in a wet-lab. You will learn about different facets of Ocean Science, how scientists disseminate their research results, and get the opportunity to discuss writing and other forms of scientific communication with active researchers. Your biggest contribution to the conversation will be the drafting of a research or review paper that you will take through the entire journal submission and peer review process with the aim of eventual publication in the online journal Oceans First (http://oceansfirstjournal.com) that accompanies this class.

Course Prerequisites

MATH 1000.03 or MATH 1215, STAT 1060



Course Objectives/Learning Outcomes

After completing this course you should be able to:

- Describe the breadth Ocean Science and how different subdisciplines relate
- Demonstrate skills in scientific writing
- Communicate science to a variety of audiences
- Demonstrate scientific literacy and critical thinking at a level useful for global citizenship and your future studies

Course Materials

Required Textbook: "Writing in the Life Sciences: A Critical Thinking Approach" by Laurence Greene (Oxford University Press, 2010).

Detailed Instructions for assignments and other class materials will be available on the course website is on Brightspace at

https://dal.brightspace.com/d2l/home/22271

Course Assessment

Detailed descriptions of all assignments will be posted on the course website. All assignments must be submitted electronically on the website at

https://dal.brightspace.com/d2l/lms/dropbox/admin/folders_manage.d2l?ou=22271 AND on paper.

Library Skills Worksheets (2% of final grade; due on Sept 15 and 20)

You will complete two worksheets based on the Library Skills Sessions.

Lecture Analyses (15% of the final grade; due on Oct 25, Dec 6, Feb 14, and Apr 4)

You will write a brief analysis about each guest lecture consisting of a brief lecture summary, a question and an answer.

Major Project (33% of the final grade; see due dates for project components below)

You will write a Review Paper of a topic of your choice within Ocean Science. Many tutorial sessions will be devoted to helping you through the process of creating and polishing your Review Paper, as well as the peer review process.

Components of the Major Project (% of final grade; due date):

Proposal (2%; due Oct 20)

5 relevant, peer-reviewed papers (1%; due on Nov 1)

Outline of your paper (3%; due on Nov 17)

Presentation (2%; on Nov 24 or Dec 1)

Paper submission for peer review (10%; due on Dec 6)

Final revised submission (15%; due on Mar 30)

Peer Reviews (10% of the final grade; 1st is due on Jan 24, 2nd is due on Mar 14)



You will review two of your class mates' paper submissions and provide written peer reviews offering constructive criticism (5% each).

Blog Post (5% of final grade; due on Oct 11)

You will write a science blog post on an aspect of Ocean Science.

Lab Report (10% of final grade; due on Feb 23)

You will write a lab report based on the "Density and Stratification" experiment.

Tutorial Quizzes (5% of final grade)

Every tutorial will include a brief (5 min) quiz. The lowest quiz mark will be omitted.

Participation in Lectures and Tutorials (5% of final grade)

Marks will be based on engaged, well-prepared and respectful participation in lectures and tutorials. Note that assigned reading is to be completed beforehand.

Final Exam (15% of final grade; scheduled by the Registrar)

The 3-hour exam will be combination of short-answer and long-answer questions. The Registrar will schedule the exam. Do not make travel plans before you know the date of your exam. It will not be possible to write the exam early.

Conversion of numerical grades to Final Letter Grades follows the <u>Dalhousie Common Grade</u> 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

All assignments must be submitted electronically on the course website before the deadline <u>and</u> in paper copy. If you submit after the deadline, a late penalty of 10% of total points per day (including weekends) will be assigned based on the time of the electronic submission. If you do not hand in a paper copy of your assignment and we have to print it, we will assign an additional printing penalty of 5% of the total points. If you are submitting an assignment late, bring a printed copy to the main office in Oceanography (LSC 3631) between 8:30 am and 4:30 pm on the next working day. Extensions will only be given to students with a documented illness or emergency. Documentation must be provided.



Course Schedule

Week	Tuesday	Thursday	Assignments
#1	Sept 6	Sept 8, (Dunn 301A)	
	Intro & Syllabus	Library skills session 1-	
		Science Articles	
#2	Sept 13 (Dunn 301A)	Sept 15 (lecture hall)	1 st library worksheet due Thu @ 10 am
	Library skills session 2-	Core Concepts 1	,
	Science Databases	·	
#3	Sept 20	Sept 22 (tutorial)	Reading for Thu tutorial; 2 nd library work-
	Spkr 1	T1- Science and styles	sheet due Tue @ 10 am
#4	Sept 27	Sept 29 (tutorial)	Reading for Thu tutorial
	Spkr 2	T2- Writing lab (blog)	
#5	Oct 4	Oct 6 (tutorial)	Reading for Thu tutorial
	Spkr 3	T3- Audiences and styles	
#6	Oct 11	Oct 13 (tutorial)	Blog post due Tue @ 10 am
	Spkr 4	T4- Writing lab (proposal)	
#7	Oct 18	Oct 20 (tutorial)	Reading for Thu tutorial; Major project
	Spkr 5	T5- Critical Reading I	proposal due Thu @ 10 am
#8	Oct 25	Oct 27 (tutorial)	Reading for Thu tutorial; 1 st set of lecture
	Core Concepts 2	T6- Critical reading II	analyses due Tue @ 10 am
#9	Nov 1	Nov 3 (tutorial 7)	Reading for Thu tutorial; 5 papers posted
	Spkr 6	T7- Writing lab (paper	by Tue @ 10 am
		outline)	
#10	Nov 8 (no class)	Nov 10 (no classes)	
ш11	N 15	No. 17 (but a dal)	Outline due Thu O 10 and
#11	Nov 15	Nov 17 (tutorial)	Outline due Thu @ 10 am
412	Spkr 7	Work on major project	BA-iitititit
#12	Nov 22	Nov 24 (tutorial)	Major project presentation in tutorial
"42	Spkr 8	Project presentations	
#13	Nov 29	Dec 1 (tutorial)	Major project presentation in tutorial
41.4	Spkr 9	Project presentations	and an effective and the Top O 10
#14	Dec 6		2 nd set of lecture analyses due Tue @ 10
	Core Concepts 4		am; First submissions of major project paper by Tue @ 10 am
#15	Jan 10	Jan 12 (tutorial)	Reading for Thu tutorial
	Core Concepts 3	T8- Critical reading III	
#16	Jan 17	Jan 19 (tutorial)	Reading for Thu tutorial
	Spkr 10	T9- Constructive criticism	
#17	Jan 24	Jan 26 (tutorial)	1 st peer review due Tue @ 10 am
	Spkr 11	,	
#18	Jan 31	Feb 2 (tutorial)	Reading for Thu tutorial
	Spkr 12	Lab: Density & Stratification	
#19	Feb 7	Feb 9 (tutorial)	Reading for Thu tutorial
	Spkr 13	T10- Graphics lab	



#20	Feb 14	Feb 16 (tutorial)	Reading for Thu tutorial; 3 rd set of lecture
	Core Concepts 5	T11- Revisions I: Global	analyses due Tue @ 10 am
#21	Feb 21 (no class)	Feb 23 (no class)	Lab report due Thu @ 10 am
#22	Feb 28	Mar 2 /tutorial)	Dooding for Thu tutorial
#22		Mar 2 (tutorial)	Reading for Thu tutorial
	Spkr 14	T12- Revisions II: Paragraph	
#23	Mar 7	Mar 10 (tutorial)	Reading for Thu tutorial
	Spkr 15	T13- Revisions III: Sentence	
#24	Mar 14	Mar 16 (tutorial)	2 nd peer review due Tue @ 10 am
	Spkr 16		
#25	Mar 21	Mar 23 (tutorial)	Reading for Thu tutorial
	Spkr 17	T14- Responding to reviews	
#26	Mar 28	Mar 30 (tutorial)	Final major project papers and responses
	Spkr 18		to reviews due Thu @ 10 am
#27	Apr 4	Apr 6	4 th set of lecture analyses due Tue @ 10
	Spkr 19	Wrap up & review	am
Exam p	period: Final Exam		



ACCOMMODATION POLICY FOR STUDENTS

Students may request accommodation as a result of barriers 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 here:

http://www.dal.ca/dept/university_secretariat/policies/academic/student-accommodation-policy-wef-sep--1--2014.html

Students who require accommodation for classroom participation or the writing of tests and exams should make their request to the **Advising and Access Services Centre (AASC)** prior to or at the outset of the regular academic year. More information and the **Request for Accommodation** form are available at www.dal.ca/access.

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. The full text of Dalhousie's *Policy on Intellectual Honesty* and *Faculty Discipline**Procedures* is available here:

http://www.dal.ca/dept/university_secretariat/academic-integrity/academic-policies.html

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."

The full text of the code can be found here:

http://www.dal.ca/dept/university secretariat/policies/student-life/code-of-student-conduct.html



SERVICES AVAILABLE TO STUDENTS

The following campus services are available to help students develop skills in library research, scientific writing, and effective study habits. The services are available to all Dalhousie students and, unless noted otherwise, are <u>free</u>.

Service	Support Provided	Location	Contact
General	Help with	Killam Library	In person: Killam Library Rm G28
Academic Advising	 understanding degree requirements and academic regulations choosing your major achieving your educational or career goals dealing with academic or other difficulties 	Ground floor Rm G28 Bissett Centre for Academic Success	By appointment: - E-mail: advising@dal.ca - Phone: (902) 494-3077 - Book online through MyDal
Dalhousie Libraries	Help to find books and articles for assignments Help with citing sources in the text of your paper and preparation of bibliography	Killam Library Ground floor Librarian offices	In person: Service Point (Ground floor) By appointment: The subject librarian for Oceanography is Michelle Paon (mpaon@dal.ca).
Studying for Success (SFS)	Help to develop essential study skills through small group workshops or one-onone coaching sessions Match with a tutor for help in course-specific content (for a reasonable fee)	Killam Library 3 rd floor Coordinator Rm 3104 Study Coaches Rm 3103	To make an appointment: - Visit main office (Killam Library main floor, Rm G28) - Call (902) 494-3077 - E-mail Coordinator at: sfs@dal.ca - Simply drop in to see them during posted office hours All information can be found on the website: www.dal.ca/sfs
Writing Centre	Meet with coach/tutor to discuss writing assignments (e.g., lab report, research paper, thesis, poster) - learn to integrate source material into your own work appropriately - learn about disciplinary writing from a peer or staff member in your field	Killam Library Ground floor Learning Commons & Rm G25	To make an appointment: - Visit the Centre (Rm G25) and book an appointment - Call (902) 494-1963 - E-mail writingcentre@dal.ca - Book online through MyDal Open six days a week Website: writingcentre.dal.ca