



Course Outline

MSCI0501

The Marine environment

School of BEES

Faculty of Science

Summer U1, 2020

1. Staff

Position	Name	Email & contact details	Consultation times and locations
Course Convenor	Tracey Rogers	t.rogers@unsw.edu.au	By appointment
Lecturer	Tracey Rogers	t.rogers@unsw.edu.au	By appointment

2. Course information

Units of credit: 6

Pre-requisite(s): None

Teaching times and locations: This is a 3-week intensive short course, see course schedule (section 4) for class details.

<http://www.timetable.unsw.edu.au/2019/MSCI0501>

2.1 Course summary

This course covers aspects of both the physical and biological environments of the sea and their inter-relationships. It depicts marine science as a body of knowledge and a process of continual enquiry and testing of ideas. It considers human impacts on the marine environments and how the principles and methods of science in general are used to predict and to solve the problems created by human activities.

The course includes discussion of: i) the marine environment: its physical, geological, chemical and biological characteristics and their interactions; ii) the sea as a source of human food. Attention is given to aspects of marine productivity, fisheries and mariculture and how science can assist in management for a sustainable yield; and iii) the effects of development, especially industrial development on the marine environment and how science can contribute to providing solutions to these problems created by development.

Throughout the course emphasis is placed on case studies. Field excursions are used to supplement the lectures and to encourage further discussion of the problems created by human interference in the environment and their possible solutions.

2.2 Course aims

This is a descriptive introduction to some of the marine science disciplines. The aims of the course are to:

- Educate non-scientists of the main physical processes which influence the marine environment.
- Develop awareness of the pertinent issues affecting the contemporary marine environment
- Foster an appreciation of the inter-disciplinary nature of the marine environment and the complexities surrounding issues of ocean and coastal conservation.

2.3 Course learning outcomes (CLO)

At the successful completion of this course you (the student) should be able to:

1. Understand and apply marine safety.
2. Discuss the importance of oceans, and how life in the oceans shape the Earth and our climate.
3. Understand and describe the challenges facing life in the sea and the adaptations needed to live in the ocean.
4. Discuss contemporary marine issues, how human activities threaten life in the ocean and how we can play a part in the solution, including the main consequences climate change is having upon our oceans and its marine life.
5. Explain how marine resources are managed and restored for long-term resource security.
6. Describe the local Sydney marine environment, and have an understanding of its formation and its threats.

3. Strategies and approaches to learning

3.1 Learning and teaching activities

This course is delivered in a blended format, made up of a mix of face-to-face field trips, labs, and tutorials, supplemented by online modules.

Online lectures and online material are designed to introduce and help students understand a range of important topics in marine science. Tutorials and workshops are designed to be more interactive, and provide more opportunities to relate concepts and critically engage with the topics at hand. Field trips provide opportunities to apply material in the field and see how material learnt in the classroom applies to real life. At the completion of the course the MarineFest Film Festival is an opportunity to showcase student learning.

3.2 Expectations of students

Students are expected to participate in all class activities as well as all online components. This includes but is not limited to engaging in class discussions, reading provided materials, and completing all allocated tasks.

Attendance at 80% of classes is compulsory.

4. Course schedule and structure

Date	Activity	Title	Notes & assessments
Week 3 20-26 Jan 2020	4 x Online lecture modules with associated interactive activities	Module 1. Online lectures - Threats to marine systems - Anthropogenic activities Module 2. Online lectures - The consequences of climate change for ocean processes and marine life Module 3. Online lectures - Balancing marine resources Module 4. Online lectures - Marine Restoration	Module 1 to 4 Online lectures and activities Module 1 to 4 assessed in Quiz 1.
	4 x 1 hr workshops	Workshop 1. Course introduction, aims and logistics and Introduction to the MarineFest Program - Science in Society and commence Social Media program Workshop 2. Threats to marine systems - Anthropogenic activities - Plastics & Dioxins Workshop 3. Managing sharks - am I safe? Do we kill them, fence them, live with them? Workshop 4. MarineFest - Part II & Social Media program.	Workshop 1 and 4 assessed as Workshop 10. Workshop 2 and 3 assessed Quiz 1.
Week 3 Friday, 24/1/2020.	Quiz 1	Quiz 1 – 30 multiple choice questions in class Modules 1, 2, 3, 4 and Workshops 2, 3	Quiz 1. Multiple choice in class (15%) Friday, 24/1/2020
Week 4 27 Jan to 2 Feb 2020 (Public Holiday on Monday 27 Jan)	3 x Online lecture modules with associated interactive activities	Module 5. Living in the sea - new life Module 6. Living in the sea - Finding food Module 7. Return to the sea	Online lectures and activities. Module 5 to 7 assessed Quiz 2.
	3 x 1 hr workshops	Workshop 5. Adaptations to live in the sea Part 1 – Changing shape Workshop 6. Adaptations to live in the sea Part II - Feeding Workshop 7. MarineFest - Part III – Report due.	Workshop 5 and 6 assessed Quiz 2. Workshop 7 - Assessed as Report (5%) due Thursday, 30/1/2020.
Week 4 Friday, 31/1/2020	Quiz 2	Quiz 2 – 30 multiple choice questions in class Modules 5, 6, 7 and Workshops 6, 7.	Quiz 2. Multiple choice in class (15%) Friday, 31/1/2020

<p>Week5 3-9 Feb 2020</p>	<p>3 x Online lecture modules with associated interactive activities</p>	<p>Module 8. Beach Safety and Coastal Processes Module 9. Sydney's marine life Module 10. Why our oceans matter</p>	<p>Online lectures and activities Module 8 to 10 assessed as part of Final Exam.</p>
	<p>2 x 3 hr field trips 1 x 3 hr Film Festival</p>	<p>Workshop 8. Sydney Rocky Fore Shore Field Trip I, Maroubra Beach: 11:00 Monday 3/2/2020 Workshop 9. Sydney Rocky Shores Field Trip II Maroubra Beach, 11:00, Tuesday 4/2/2020 Workshop 10. MarineFest film festival 10:00 till 1:00 Wednesday, 5/2/2020. MarineFest Social Media program due Thursday, 6/2/2020.</p>	<p>Workshop 8 and 9 - Assessed as part of Final Exam. Workshop 10 Assess student-made 'MarineFest' films in class (20%), Wednesday, 5/2/2020 Assess students' MarineFest Social Media campaign online (5%), due Thursday, 6/2/2020.</p>
<p>Week 5 Friday, 7/2/2020</p>	<p>Final Exam</p>	<p>Final Exam – 80 multiple choice questions in class Modules 1-10 and Workshops 2-3 and 5-9.</p>	<p>Final Exam. Multiple choice in class (40%) Friday, 7/2/2020.</p>

5. Assessment

5.1 Assessment tasks

Assessment task	Weight	Due date	Submission	Feedback
Assessment 1: Moodle quizzes (x 2)	30%	Quiz 1. Week 3, Friday, 24/1/2020 Quiz 2. Week 4, Friday, 31/1/2020	Moodle	Immediate, via Moodle, mark only
Assessment 2: MarineFest Science in Society Report (5%) Film (20%) Social Media (5%)	30%	Report. Due Week 4. Thursday, 30/1/2020 Film. Due Week 5. Wednesday, 5/2/2020 Social Media Program. Due Week 5. Thursday, 6/2/2020	In class	1 week after submission, via Moodle, marks and comments
Assessment 3: Exam	40%	Due Week 5. Friday, 7/2/2020	Moodle	Immediate, via Moodle, mark only

Further information

UNSW grading system: student.unsw.edu.au/grades

UNSW assessment policy: student.unsw.edu.au/assessment

5.2 Assessment criteria and standards

Moodle quizzes (30%)

2 Moodle quizzes, worth 15% each, will be released over the course. These are low stakes assessments that students will do directly after the end of a modules to check their understanding of lecture, field trip and workshop material.

The 'MarineFest' Film Festival (30%)

You will be forming groups of 4 people to investigate controversial marine issues. Through Weeks 1 to 3 you will conduct an individual Social Media campaign using Twitter to investigate and highlight marine issues that are interested in personally (5%). In Week 2, as a group you will submit a report that outlines the controversial topic under investigation by your group. This report will provide a clear statement of your topic, background to the topic, as well conflicting opinions around the topic, and a list of reference material that you will use to produce your film (5%). In Week 3, as a group you will produce a 3-minute video which you will showcase to the class and to a panel of experts in a Film Festival atmosphere within class - The 'MarineFest' Film Festival. Your film will be marked by a panel of experts, as well as a People Choice mark awarded by your peers (20%). This will assess material you have developed through the workshops.

Final Exams (40%)

The final exam is an assessment comprising of 80 multiple choice questions that are based on material presented in the online lectures and the workshops. This exam will be in class in the last week of the course.

MARKING

Grades will be posted on the course webpage available through Moodle.

5.3 Submission of assessment tasks

If you experience sickness, misadventure or other circumstances beyond your control that may impact your ability to complete/attend compulsory classes/fieldtrip/tests, you should request special consideration through <https://student.unsw.edu.au/special-consideration>. Please also e-mail the course convenor, as soon as possible. The School of BEES also has certified Mental Health First Aiders who can help in an emergency or help with accessing other university or external supports. and can help provide information regarding supports provided by the university and externally. <http://www.bees.unsw.edu.au/flourish-mentally>

Late assignments will be penalised at a rate of 10% per day unless accompanied by a medical certificate.

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at student.unsw.edu.au/referencing

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage.¹ At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity and **plagiarism** can be located at:

- The *Current Students* site student.unsw.edu.au/plagiarism, and
- The *ELISE* training site subjectguides.library.unsw.edu.au/elise

The *Conduct and Integrity Unit* provides further resources to assist you to understand your conduct obligations as a student: student.unsw.edu.au/conduct.

7. Readings and resources

Provide a list of required and/or useful resources.

8. Administrative matters

School information	School website: http://www.bees.unsw.edu.au/ School office – The Biosciences Student Office is where to go for administrative matters relating to BEES courses. It is located on the ground floor of the biological sciences building, room G27. BEESinfo@unsw.edu.au
Occupational Health and Safety	Information on relevant Occupational Health and Safety policies and can be found on the following website: http://www.bees.unsw.edu.au/health-and-safety UNSW OHS Home page: http://safety.unsw.edu.au/
Equity and Diversity	Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course Convenor prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit (9385 4734 or http://www.studentequity.unsw.edu.au/). Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

¹ International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

Student complaint procedure	<p>In all cases you should first try to resolve any issues with the course convenor.</p> <p>If this is unsatisfactory, you should contact the School Student Ethics Officer (A/Prof Stephen Bonser, s.bonser@unsw.edu.au) or the Deputy Head of School (A/Prof Scott Mooney s.mooney@unsw.edu.au) who is the School's Grievance Officer and Designated Officer under the UNSW Plagiarism Procedure.</p> <p>UNSW has formal policies about the resolution of complaints that are available online for review (see https://student.unsw.edu.au/complaints).</p>		
	School contact	Faculty Contact	University contact
	Dr S Mooney Deputy Head of School (Undergraduate Programs) s.mooney@unsw.edu.au Tel: 9385 8063	Dr Chris Tisdell Associate Dean (Education) cct@unsw.edu.au Tel: 9385 6792 or Dr S Mooney Associate Dean (Undergraduate Programs) s.mooney@unsw.edu.au Tel: 9385 8063	Student Administration in the Office of the Pro- ViceChancellor (Students). clare.jones@unsw.edu.au Tel: 9385 3087 University Counselling and Psychological Services3 Tel: 9385 5418 counselling@unsw.edu.au

9. Additional support for students

- The *Current Students* Gateway: student.unsw.edu.au
- Academic Skills and Support: student.unsw.edu.au/skills
- Student Wellbeing, Health and Safety: student.unsw.edu.au/wellbeing
- Disability Support Services: student.unsw.edu.au/disability
- UNSW IT Service Centre: www.it.unsw.edu.au/students