



Course Outline

MSCI0501

The Marine Environment

School of BEES

Faculty of Science

T2C, 2022

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 4-week intensive short course, see course schedule (section 4) for class details.

<http://timetable.unsw.edu.au/2022/MSCI0501.html>

2.1 Course summary

This course covers aspects of both the physical and biological environments of the sea and their inter-relationships. 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 and its physical, geological, chemical and biological characteristics and their interactions;
- ii. the sea as a source of human food with attention 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 industrial development on the marine environment and how science can contribute to providing solutions to the problems created by this 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

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 completion of this course you 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 understand 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, workshops, 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	Assessments
Week 1 15 - 19 Aug 2022	Mon - Thu 4 x Online lecture modules	<p>Module 1 Anthropogenic threats to marine systems</p> <p>Module 2 The consequences of climate change</p> <p>Module 3 Balancing marine resources</p> <p>Module 4 Marine restoration</p>	Modules include interactive questions and activities.
	Fri (10 am - 1 pm) 4 x In-person workshops	<p>Workshop 1 Course and Marine Science in Society 'MarineFest' program introduction</p> <p>Workshop 2 Marine pollutants, plastics and dioxins</p> <p>Workshop 3 Managing sharks - Am I safe? Do we kill them, fence them, live with them?</p> <p>Workshop 4 'MarineFest' program and social media development.</p>	Work done during Workshop 1 and 4 will be assessed as part of Workshop 10. <p>Quiz 1 Multiple-choice in- person quiz covering Modules 1-4 and Workshops 2-3. (15% of final mark)</p>
Week 2 22 - 26 Aug 2022	Mon - Thu 3 x Online lecture modules	<p>Module 5 Living in the sea - new life</p> <p>Module 6 Living in the sea - finding food</p> <p>Module 7 Return to the sea</p>	Modules include interactive questions and activities.
	Fri (10 am - 1 pm) 3 x In-person workshops	<p>Workshop 5 Adaptations to life in the sea - changing shape</p> <p>Workshop 6 Adaptations to life in the sea - feeding</p> <p>Workshop 7 Sustainability and climate change</p>	<p>Quiz 2 Multiple-choice in- person quiz covering Modules 5-7 and Workshops 5-7. (15% of final mark)</p>

Week 3 29 Aug - 2 Sep 2022	Mon - Thu 3 x Online lecture modules	Module 8 Sydney marine life Module 9 Beach safety and coastal processes Module 10 Why our oceans matter	Modules include interactive questions and activities.
	Fri (9 am - 12 pm) 2 x Field trips at Maroubra Beach	Workshop 8 Rocky shore field trip Workshop 9 Beach morphology and safety field trip	MarineFest report due. (5% of final mark).
Week 4 5 - 9 Sep 2022	Fri (10 am - 1 pm) Film Festival	Workshop 10 Marine Science in Society 'MarineFest' Film Festival	MarineFest student- made films due. (20% of final mark) End of social media program. (5% of final mark) Final exam. Multiple-choice in- person exam covering all modules and Workshops 2-3 and 5-9. (40% of final mark)

5. Assessment

5.1 Assessment tasks

Task	Weight	Due date	Submission	Feedback
Assessment 1 Moodle quizzes x 2	30%	Quiz 1 Week 1 Fri 19 Aug 2022 Quiz 2 Week 2 Fri 26 Aug 2022	Moodle	Immediate via Moodle, mark only
Assessment 2 Marine Science in Society 'MarineFest' Program	30%	Report Due Week 3 Fri 2 Sep 2022 (5%) Film Due Week 4 Fri 9 Sep 2022 (20%) Social Media Program Ends Week 4 Fri 9 Sep 2022 (5%)	In class	1 week after submission via Moodle, marks and comments
Assessment 3 Exam	40%	Week 4 Fri 9 Sep 2022	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%)

Two Moodle quizzes, worth 15% each, will be completed during the Friday workshops in Weeks 1 and 2. These are low stakes assessments to check student understanding of the lectures and workshop material.

Marine Science in Society 'MarineFest' Film Festival (30%)

You will be forming groups of four people to investigate controversial marine issues. Throughout the course you will conduct an individual Social Media campaign using Twitter to highlight marine issues that you are personally interested in (5%). At the end of Week 3 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 information, conflicting opinions around the topic, and a list of reference material that you will use to produce your film (5%). As a group you will produce a 3-minute video which you will showcase at the end of Week 4 to the class and a panel of experts - The 'MarineFest' Film Festival. Your film will be marked by the experts and a People's Choice mark will be awarded by your peers (20%). This will assess material you have developed through the workshops.

Final Exam (40%)

The final exam is an assessment comprised of 80 multiple choice questions that are based on material presented in the online lecture modules and 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. 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

Relevant readings and resources will be provided as part of the online lecture modules and workshop materials.

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/ http://www.equity.unsw.edu.au/disabil.html). 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.

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