



EESC1160

Blue Planet: Oceans, Climate and Life

Session 2, Weekday attendance, North Ryde 2021

Archive (Pre-2022) - Department of Earth and Environmental Sciences

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Session 2 Learning and Teaching Update

The decision has been made to conduct study online for the remainder of Session 2 for all units WITHOUT mandatory on-campus learning activities. Exams for Session 2 will also be online where possible to do so.

This is due to the extension of the lockdown orders and to provide certainty around arrangements for the remainder of Session 2. We hope to return to campus beyond Session 2 as soon as it is safe and appropriate to do so.

Some classes/teaching activities cannot be moved online and must be taught on campus. You should already know if you are in one of these classes/teaching activities and your unit convenor will provide you with more information via iLearn. If you want to confirm, see the list of [units with mandatory on-campus classes/teaching activities](#).

Visit the [MQ COVID-19 information page](#) for more detail.

General Information

Unit convenor and teaching staff

Unit convenor and lecturer

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Credit points

10

Prerequisites

Corequisites

Co-badged status

Unit description

Oceans cover more than 70% of Earth's surface; they are the unique feature of our blue planet which enabled the evolution of complex life, influences Earth's climate and weather, and provides food for much of the world's population. This unit introduces this exceptional environment through study of the oceans past, present and future, with particular focus on the oceans' ties to climate and life. The unit considers: the history and dynamics of ocean basins; technology for probing the ocean's depths; physical, biological and chemical oceanographic processes; ocean circulation patterns; waves and tides; shallow water and deep marine depositional environments; marine life; long term global climate change; and human interactions with the marine environment for a sustainable future. Students will be introduced to water and sediment sampling techniques via a marine fieldtrip. This unit pairs well with ENVS1017 The Living Environment and EESC1150 Planet Earth.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: demonstrate knowledge of global tectonic processes to understand the configuration and temporal evolution of ocean basins.

ULO2: apply understanding of oceanic and atmospheric circulation to explain our climate.

ULO3: use the physical and chemical properties of seawater to predict the distribution and characteristics of marine sediments and life.

ULO4: display competency in collecting and communicating scientific data to address questions in marine science and reconstruct past climates.

General Assessment Information

GENERAL ASSESSMENT CRITERIA

Assessment Criteria

Assessment at Macquarie University is standards-based, as outlined in the [Assessment Policy](#). This means that your work will be assessed against clear criteria, and these criteria (e.g. in a rubric) will be made available when the assessment tasks are released to you on iLearn.

Hurdle Requirements

A hurdle requirement is an activity for which a minimum level of performance or participation is a condition of passing the unit (see the [Assessment Policy](#)). Failure to meet the hurdle requirement will result in failure of the unit. In this unit **practical participation** is a hurdle requirement. You

must attend and participate in at least 10 of the 12 weekly practical classes to pass this unit. Please contact your tutor or the unit convenor if you are unwell and are unable to attend, you can attend a practical scheduled on another day or participate online if approved by the unit convenor.

Submission of Assessments

All assessments must be submitted online through [Turnitin](#) unless otherwise indicated. Links for the submission of each assessment will be available on [iLearn](#).

You should always check that you have uploaded the correct file. If you have a problem, please email the Unit Convenor with your correct file. You must also keep a copy of your assessments until the end of semester in case there is a problem with your submission. It is your responsibility to ensure that you can provide a copy of your assessment if requested.

Marking of Assessments

Assignments will usually be marked through Turnitin with grades provided through Gradebook on iLearn. Please do not submit your assessments via email or in hard copy unless requested (e.g. a sketch or drawing).

We aim to return your assessment grades and feedback within two to three weeks of the date that you submitted it. We appreciate your patience and will advise you through iLearn when your marked assessments and feedback are available for viewing.

Penalties for Late Assessments

The penalty for late submission of assessments in this unit is **ten percent (10 %) of the assessment value per day**, calculated from the due time and date. This means that if the assignment is worth a total of 30 marks (or 30 % of the unit) you will lose 3 marks for each day it is late. This is a hefty penalty designed to make you aware of the importance of organising yourself around assessment due dates. The penalty will be applied over weekdays and weekends unless you have been granted an extension prior to the due date.

Extensions for Assessments

To obtain an extension for an assessment task, you will need to follow the formal process as outlined in the [Special Consideration Policy](#), and you must provide appropriate supporting evidence (e.g. medical certificate - see advice for [Special Consideration](#) requests). The final decision regarding the granting of an extension lies with the unit convenor. Permission for extensions must be sought **before the due date** unless there are exceptional circumstances. Please let us know of problems in advance or as soon as possible, not after the event. We are likely to be much more sympathetic and able to accommodate your circumstance if you follow this advice.

Exams

Details of exam conditions and timetables can be found on the [Exams and Results](#) portal. The draft exam timetable will be released approximately eight weeks before the commencement of the exams. The final exam timetable will be published 4 weeks before commencement. All students (including exchange students) are expected to present themselves for the exam at the

time and place designated in the exam timetable. Note this may include weekends.

For unavoidable disruptions during exams, you should apply for [Special Consideration](#) as soon as possible. If a Supplementary Examination is granted as a result of the Special Consideration process, the exam time will be scheduled after the conclusion of the official examination period and you will receive an individual notification prior to the exam with the exact date and time of the Supplementary Examination. You will only be allowed one opportunity to sit the Supplementary Exam as outlined in the [Special Consideration Policy](#).

Assessment Tasks

Name	Weighting	Hurdle	Due
Multiple Quizzes	20%	No	Weekly
Case study report	20%	No	Week 12
Final Exam	40%	No	Examination Period
Workshop / Practical Participation	0%	Yes	Weekly
Tectonics, Oceanography & Climate Report	20%	No	Week 7

Multiple Quizzes

Assessment Type ¹: Quiz/Test

Indicative Time on Task ²: 12 hours

Due: **Weekly**

Weighting: **20%**

The quizzes test knowledge and may be online or in-class. See iLearn for a detailed list of quizzes in this unit.

On successful completion you will be able to:

- demonstrate knowledge of global tectonic processes to understand the configuration and temporal evolution of ocean basins.
- apply understanding of oceanic and atmospheric circulation to explain our climate.
- use the physical and chemical properties of seawater to predict the distribution and characteristics of marine sediments and life.
- display competency in collecting and communicating scientific data to address questions in marine science and reconstruct past climates.

Case study report

Assessment Type ¹: Case study/analysis

Indicative Time on Task ²: 20 hours

Due: **Week 12**

Weighting: **20%**

Report synthesising sediment property data to explain the source and distribution of sediments in the marine environment. See iLearn for details.

On successful completion you will be able to:

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Final Exam

Assessment Type ¹: Examination

Indicative Time on Task ²: 18 hours

Due: **Examination Period**

Weighting: **40%**

The final examination requires students to apply the new skills and knowledge developed in this unit.

On successful completion you will be able to:

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- display competency in collecting and communicating scientific data to address questions in marine science and reconstruct past climates.

Workshop / Practical Participation

Assessment Type ¹: Participatory task

Indicative Time on Task ²: 0 hours

Due: **Weekly**

Weighting: **0%**

This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)

The participatory task is a hurdle assessment and requires participation in more than 75% of workshops / practical classes.

On successful completion you will be able to:

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- apply understanding of oceanic and atmospheric circulation to explain our climate.
- use the physical and chemical properties of seawater to predict the distribution and characteristics of marine sediments and life.

Tectonics, Oceanography & Climate Report

Assessment Type ¹: Report

Indicative Time on Task ²: 24 hours

Due: **Week 7**

Weighting: **20%**

Report evaluating the links between tectonics, oceanography and climate. See iLearn for details.

On successful completion you will be able to:

- demonstrate knowledge of global tectonic processes to understand the configuration and temporal evolution of ocean basins.
- apply understanding of oceanic and atmospheric circulation to explain our climate.
- use the physical and chemical properties of seawater to predict the distribution and characteristics of marine sediments and life.
- display competency in collecting and communicating scientific data to address questions in marine science and reconstruct past climates.

¹ If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the [Writing Centre](#) for academic skills support.

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

DELIVERY AND RESOURCES

Unit iLearn

This unit has an iLearn page that can be accessed through ilearn.mq.edu.au. It contains important information and other materials relating to the unit, including details and links for assessments.

Communication

The unit iLearn is the primary way that we communicate with you. Please check it regularly for announcements and posts. You are encouraged to use the Discussion Board on iLearn to post questions and generate discussion with other students. Please only email the convenor with private matters – ***all other questions should be posted on iLearn.***

Unit Organisation

This unit is delivered in as several inter-related modules. The organisation of these is outlined in a detailed unit schedule which is available on [iLearn](#).

The class will be delivered through iLearn, online lectures, practicals as well as mandatory weekly reading. In addition, you are encourage to do your own research.

Classes

Practicals and lectures start in WEEK 1. You are expected to have listened to the online lectures **before** participating in the practical class. The class timetable for this unit can be found through the [Timetable](#) portal. You should also check the unit schedule as some weeks may have other instructions or locations.

Workload

The expected workload for this 10-credit point unit is 150 hours of activity, comprising lectures, practicals, weekly reading, weekly quiz and research and writing of assessment tasks.

Requirements to complete this unit satisfactorily

To complete this unit satisfactorily, you must:

1. Participate in all scheduled classes;

2. Complete all assessments and the final exam; and
3. Achieve a pass grade or higher.

The descriptions for grades common to all coursework units offered by Macquarie University are outlined in [Schedule 1 of the Assessment Policy](#).

Textbook

We will be using Segar's "Introduction to Ocean Science (4th Edition)" - available via the authors website - as the primary textbook for EESC1160. Textbooks usually cost well over \$100, but the author of this text has chosen to make it freely available. However, we do ***ask that you contribute a few dollars for the book through PayPal (info is on the book download page) to help the author cover costs of keeping this excellent resource up to date.*** We also highly recommend Trujillo & Thurman's "Essentials of Oceanography". Additional readings will be made available via iLearn as required.

Please remember that the weekly readings are compulsory, you will have to keep on top of these to do well in EESC1160. The quizzes and the exam will include material from the readings that we will not have time to cover in detail in the lectures or in the practical sessions.

Technology Used and Required

This unit will use iLearn and Echo360. See the [Instructions on how to log in to iLearn](#) and the [iLearn quick guides for students](#) which will help you:

- [Getting started](#) - Find out how to navigate and familiarise yourself with the iLearn environment
- [Activities](#) - Learn how to effectively complete the activities required of you in iLearn
- [Assignments and Gradebook](#) - Find out how to submit assessments and view your grades using iLearn
- [Online study tips](#) - Studying online is a unique experience, learn how to navigate it here
- [Discussion forums](#) - Explore the different types, and features of discussion forums in iLearn
- [Lecture recordings](#) - Find out how to access lectures online, as well as the features available to you

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](#). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)

- [Fitness to Practice Procedure](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies \(https://students.mq.edu.au/support/study/policies\)](https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit [Policy Central \(https://policies.mq.edu.au\)](https://policies.mq.edu.au) and use the [search tool](#).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/admin/other-resources/student-conduct>

Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- [Getting help with your assignment](#)
- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module](#)

The Library provides online and face to face support to help you find and use relevant information resources.

- [Subject and Research Guides](#)
- [Ask a Librarian](#)

Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.