ENVS2115

Climate Change, Energy and our Future

Session 2, Special circumstances 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
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Credit points
10

Prerequisites
60cp at 1000 level or above

Corequisites

Co-badged status

Unit description
Climate change is one of the most serious challenges facing humanity now and into the future. This topical unit explores key aspects of climate change including the underlying science and the role of human activity, the impacts, and adaptation and mitigation solutions. The unit examines the climate system, current observations and future projections of climate change, and the significance of sectoral and regional climate risks to natural and human systems. The unit also provides an in-depth examination of the role of energy in the climate change issue, from fossil fuel use as a major driver of climate change, to renewable energy as a fundamental solution to this crisis. The unit will empower students to engage in informed discussion about this issue.

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 an informed, holistic world view of the climate change issue, including the ability to differentiate natural climate variability from global warming.

ULO2: Demonstrate knowledge of the fundamental physical mechanisms driving climate variability and climate change.

ULO3: Describe the links between fossil fuels, agriculture, population growth and climate change, and the present and future impacts on physical, biological and human systems.

ULO4: Explain the role of government, community and industry in determining climate change policy, including adaptation and mitigation options such as renewable energy.

ULO5: Assess the validity of information from a range of sources, including scientific communications and popular media.

General Assessment Information

ssessment 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.

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
Research report	30%	No	week 8
Weekly assessment of knowledge on lectures and/or practical/tutorial tasks	20%	No	weekly
Final Exam	40%	No	week 14
ReadinGame quiz	10%	No	Week 13

Research report

Assessment Type [1]: Report

Indicative Time on Task [2]: 30 hours
Due: **week 8**
Weighting: **30%**

You will write a report on an aspect of climate change and energy usage.

On successful completion you will be able to:

- Demonstrate an informed, holistic world view of the climate change issue, including the ability to differentiate natural climate variability from global warming.
- Demonstrate knowledge of the fundamental physical mechanisms driving climate variability and climate change.
- Describe the links between fossil fuels, agriculture, population growth and climate change, and the present and future impacts on physical, biological and human systems.
- Explain the role of government, community and industry in determining climate change policy, including adaptation and mitigation options such as renewable energy.
- Assess the validity of information from a range of sources, including scientific communications and popular media.

Weekly assessment of knowledge on lectures and/or practical/ tutorial tasks

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 20 hours
Due: **weekly**
Weighting: **20%**

Short quizzes or tests will be used on a weekly basis to maintain everyone's engagement with the unit content. Some weeks this will be on lecture content, some weeks on practical/tutorial content, sometimes on both.

On successful completion you will be able to:

- Demonstrate knowledge of the fundamental physical mechanisms driving climate variability and climate change.
- Describe the links between fossil fuels, agriculture, population growth and climate change, and the present and future impacts on physical, biological and human systems.
- Explain the role of government, community and industry in determining climate change policy, including adaptation and mitigation options such as renewable energy.

Final Exam

Assessment Type [1]: Examination
Indicative Time on Task [2]: 20 hours

Due: **week 14**
Weighting: **40%**

Final exam on material from lectures, assignment and practicals/tutorials.

On successful completion you will be able to:

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- Demonstrate knowledge of the fundamental physical mechanisms driving climate variability and climate change.
- Describe the links between fossil fuels, agriculture, population growth and climate change, and the present and future impacts on physical, biological and human systems.
- Explain the role of government, community and industry in determining climate change policy, including adaptation and mitigation options such as renewable energy.
- Assess the validity of information from a range of sources, including scientific communications and popular media.

ReadinGame quiz

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 15 hours
Due: **Week 13**
Weighting: **10%**

We will be using a custom designed and built, online learning tool; “The ReadinGAME”. This game is designed to operate on a calendar week cycle, and involves you being able to ask a question related on the week’s material from the readings and lectures. You will then be able to answer questions posed by other students, and most importantly, you will not only be able to score points for correctly answering the questions, but you will also be able to comment and discuss the questions, and rate whether they are good/not so good questions etc. Importantly, in the process you will be learning and reinforcing the week’s material as well as having a lot of fun- it can be quite addictive. To play, follow the link in iLearn, and simply ask a question relevant to the weeks material. You will then be able to play, by answering other questions and watching how your score accumulates. You will also be able to give feedback on other people’s questions and monitor your performance. There are multiple scoring paths, and different types of scores to achieve, depending on your interests. At the end of the semester, there will be a quiz based on questions derived from the ReadinGAME.

On successful completion you will be able to:

- Demonstrate knowledge of the fundamental physical mechanisms driving climate variability and climate change.
- Describe the links between fossil fuels, agriculture, population growth and climate

change, and the present and future impacts on physical, biological and human systems.
- Explain the role of government, community and industry in determining climate change policy, including adaptation and mitigation options such as renewable energy.

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[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

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 weekly topics. There are two lectures and a practical each week. The organisation of these is outlined in a detailed unit schedule which is available on iLearn.

Classes

The class timetable for this unit can be found through the Timetable portal. You need to enrol in a specific practical class. Attendance and participation in practicals are important for learning in this unit and successful completion of assessment tasks.

Workload

The expected workload for this 10-credit point unit is 150 hours of activity.

Recommended Materials

The primary recommended materials for this unit will be the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) and other recent IPCC reports (available from https://www.ipcc.ch/) and published research papers, books, and chapters relevant to each lecture topic.

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). 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) 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.