

# **CLIM805**

# Climate Change: Policies, Management and Adaptation

S2 Evening 2015

Department of Geography and Planning

## Contents

General Information	2
Learning Outcomes	3
General Assessment Information	3
Assessment Tasks	4
Delivery and Resources	7
Unit Schedule	7
Policies and Procedures	8
Graduate Capabilities	9

#### Disclaimer

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#### **General Information**

Unit convenor and teaching staff

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Kate McCauley

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Credit points

4

#### Prerequisites

Admission to MClimCh or MEnv or PGDipEnv or PGCertEnv or MWldMgt or PGDipWldMgt or PGCertWldMgt or MSc in Biodiversity Conservation or PGDipSc in Biodiversity Conservation or PGCert in Biodiversity Conservation or MSusDev or GradDipEnv or GradCertSusDev or GradDipSusDev or MEnvPlan or MConsBiol or GradDipConsBiol

Corequisites

Co-badged status

#### Unit description

Global climate change is one of the important issues facing humanity in the 21st century. The ability to mitigate or adapt to projected climate change depends on developing an integrated perspective on the physical, biological, biogeochemical, socio-economic and cultural factors that influence the climate system. This unit focuses on the legal and socio-economic frameworks for understanding mitigation and adaptation to climate change, and covers (a) the legal and regulatory frameworks for climate change, (b) technological and economic strategies for climate mitigation, (c) risk management, (d) the ethical context of climate change specifically with respect to sustainability and cultural diversity and (e) climate-change governance. It also examines human adaptation to climate change from a diversity of perspectives. It will provide students with the background to critically evaluate the complex interactions that influence human responses to climate change and our ability to change future climate trajectories through political, economic and legislative means. The course is taught by a team of internationally renowned experts drawn from the University's Concentration of Research Excellence (CORE) in Climate Futures.

## Important Academic Dates

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

## **Learning Outcomes**

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

Demonstrated understanding of current progress on climate change policy, particularly in regards to mitigation and adaptation

Ability to compare and contrast different approaches to climate change from perspectives of equity and justice

Ability to identify diverse ethical, political, social and economic influences on human responses to climate change

A demonstrated understanding of the scalar dimensions of human responses to climate change

Skills to promote and pursue pathways to climate resilient futures through a variety of communicative means

Ability to work as a team on climate related issues

## **General Assessment Information**

Marking rubrics will be provided in class for each piece of assessment.

If you require an extension for an assignment please write to the unit convenor and explain why you need an extension.

Late assignments that have not already been given an extension will have 5% deducted per day.

#### **Assessment Tasks**

Name	Weighting	Due
Climate policy development	20%	28/08/2015
Mitigation strategies	30%	9/10/2015
Climate resilience conference	40%	2/11/2015
Participation	10%	All semester

## Climate policy development

Due: **28/08/2015** Weighting: **20%** 

Discuss the evolution of climate policy in a country of your choice. Identify the key actors, events and influences that have shaped policy in that country. 1500-2000 words.

In your report you may wish to consider current targets and goals; key climate change policies, programs and institutions; comparisons with other countries, participation in international forums and agreements; influential domestic organisations and actors; barriers to progress; and the socio-cultural, economic and ethical contexts that influence climate policy. You are welcome to write your assignment in report or essay form and should draw from academic as well as non-academic sources (eg government and non-government policy documents, reports, media coverage, etc.)

On successful completion you will be able to:

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## Mitigation strategies

Due: 9/10/2015

Weighting: 30%

One of the challenges for those working on climate change is communicating complex concepts and initiatives to general audiences. This assignment addresses this issue in two parts.

Task 1: Group e-presentation on mitigation strategies (7 minutes - 20%)

Task 1 requires you to work in a small group and create an e-presentation oriented at promoting a particular mitigation strategy of your choice to a general audience (something that might be posted on youtube or a website with information about climate change for example). The e-presentation should be no more than 7 minutes long and can take the form of a podcast, digital story, video, slowmation, blended media or narrated powerpoint. The e-presentation should explain the mitigation strategy and provide convincing arguments for its adoption. The presentations will be shown in class and be followed by a public question and answer session.

If you are not already familiar with e-presentations this assignment will require you to develop some technical communication skills and have access to presentation software (such as powerpoint, imovie or windows movie maker). A library training session will help with this however you are also expected to develop these skills through accessing online and other information. A very valuable website which contains much of the information you require is: http://www.digiexplanations.com/. Each team will be required to submit a sheet outlining the contribution of individual team members.

Task 2: Individual information sheets on mitigation (2 page - 10%)

Task 2 is an individual task rather than a group task. Each member of the group is require to create their own 2 page information sheet that promotes this mitigation strategy to a general audience in a country of their choice. Each student should select a different country. The sheets should include diagrams / pictures rather than dense text, however, to enhance credibility all information should be referenced and full references incorporated. The information sheets should explain why the selected country should adopt this mitigation strategy.

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- A demonstrated understanding of the scalar dimensions of human responses to climate change
- Skills to promote and pursue pathways to climate resilient futures through a variety of communicative means
- Ability to work as a team on climate related issues

#### Climate resilience conference

Due: **2/11/2015** Weighting: **40%** 

For this assessment you are invited to give a 5-10 minute oral presentation and publish in the proceedings of a workshop entitled "Pathways towards ethical and just climate resilient futures". You are welcome to respond to the conference theme however you must submit a one paragraph abstract for approval at least 2 weeks prior to the conference to your tutor. You may like to consider the ethical dimensions of a particular adaptation strategy; human and non-human climate justice issues; climate vulnerabilities; preparing for climate disasters; building capacities in people and places; promising strategies and initiatives from around the world; etc... Your presentation should be solution oriented - preparing society to respond to climate change.

To publish in the proceedings you need to write a fully referenced essay based on your presentation (1500-2000 words).

The presentation is worth 20% of your final grade and the accompanying essay is also worth 20%.

On successful completion you will be able to:

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- A demonstrated understanding of the scalar dimensions of human responses to climate change
- Skills to promote and pursue pathways to climate resilient futures through a variety of communicative means

#### **Participation**

Due: **All semester** Weighting: **10%** 

If we are to address the challenges of climate change it is important that we act as informed and involved citizens. This means participating in climate change debates effectively - in person and online. This final assessment task requires your active participation in class and on online discussion forums. Each week your contribution to class and to online discussion forums will be assessed. This is not a matter of being the loudest voice in class, but a matter of engaging insightfully and effectively with the issues being discussed. For class discussions you are expected to lead the discussion of a session theme at least once, and contribute your ideas

when someone else is leading the discussion. For online discussion you are expected to engage with the questions and debates raised through online discussion forums. You will be assessed according to the overall quality of your contribution to that week's topic. Hence if you don't get a chance to say very much in class you can still get a good grade by putting more effort into commenting through the online discussion forums.

On successful completion you will be able to:

- Demonstrated understanding of current progress on climate change policy, particularly in regards to mitigation and adaptation
- Ability to compare and contrast different approaches to climate change from perspectives of equity and justice
- Skills to promote and pursue pathways to climate resilient futures through a variety of communicative means

## **Delivery and Resources**

This unit will be taught on Mondaynights (6:30-9:30) by climate change experts from across the university. The unit will make use of iLearn where lecture material will be stored. Students are expected to undertake lecture readings prior to class and submit their assignments via iLearn.

#### **Unit Schedule**

Week / date	Theme	Lecturer	Lecture Topic
1 27/7	Introduction	Andrew McGregor	The ethics of climate change – managing the climate
2 3/8	Law, policy and institutions	Alexander Zahar	International and domestic climate change laws and institutions
3 10/8	Law, policy and institutions	Lesley Hughes	Climate change: Australian attitudes, policies and institutions
4 17/8	Mitigation strategies	James Hazelton (flipped classroom)	Introducing mitigation – financing, accounting for and trading carbon
5 24/8	Mitigation strategies	Jon Symons	Global governance of climate mitigation innovations
6 31/8	Mitigation strategies	Sara Fuller	Grassroots mitigation strategies - community action and behaviour change

7	Adaptation	Fiona Miller	Introducing adaptation: vulnerability, resilience and community based adaptation	
Mid-semeste	er break			
8 28/9	Mitigation	Andrew McGregor	Mitigating emissions from agriculture and forests	
9 5/10	Public Holiday - no class			
10 12/10	Adaptation	Richie Howitt	Indigenous dimensions of adaptation	
11 19/10	Adaptation	Peter Davies	Local government and adaptation planning	
12 26/10	Adaptation	Kirsty Davies	Ecosystem services and adaptation	
13 2/11	Conclusions	Conference	Workshop on pathways towards ethical and just climate resilient futures	

#### **Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance\_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption studies/policy.html The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

#### **Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student\_conduct/

#### Results

Results shown in *iLearn*, 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 <a href="extraction-color: blue} eStudent</a>. For more information visit <a href="extraction-color: blue} ask.m</a> <a href="equation-color: blue} e.c.</a>.

## Student Support

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

#### **Learning Skills**

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

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

## Student Services and Support

Students with a disability are encouraged to contact the <u>Disability Service</u> 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

## IT Help

For help with University computer systems and technology, visit <a href="http://informatics.mq.edu.au/hel">http://informatics.mq.edu.au/hel</a>

When using the University's IT, you must adhere to the <u>Acceptable Use Policy</u>. The policy applies to all who connect to the MQ network including students.

## **Graduate Capabilities**

# PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

#### Learning outcomes

- Ability to identify diverse ethical, political, social and economic influences on human responses to climate change
- Skills to promote and pursue pathways to climate resilient futures through a variety of communicative means
- · Ability to work as a team on climate related issues

#### Assessment tasks

- · Climate policy development
- Mitigation strategies
- · Climate resilience conference
- Participation

## PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

#### Learning outcomes

- Demonstrated understanding of current progress on climate change policy, particularly in regards to mitigation and adaptation
- Ability to compare and contrast different approaches to climate change from perspectives of equity and justice
- Ability to identify diverse ethical, political, social and economic influences on human responses to climate change
- A demonstrated understanding of the scalar dimensions of human responses to climate change

#### Assessment tasks

- · Climate policy development
- Mitigation strategies
- · Climate resilience conference
- Participation

## PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and

knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

#### **Learning outcomes**

- Demonstrated understanding of current progress on climate change policy, particularly in regards to mitigation and adaptation
- Ability to compare and contrast different approaches to climate change from perspectives of equity and justice
- Ability to identify diverse ethical, political, social and economic influences on human responses to climate change
- A demonstrated understanding of the scalar dimensions of human responses to climate change

#### Assessment tasks

- · Climate policy development
- · Mitigation strategies
- · Climate resilience conference
- Participation

## PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

## **Learning outcomes**

- Demonstrated understanding of current progress on climate change policy, particularly in regards to mitigation and adaptation
- Ability to compare and contrast different approaches to climate change from perspectives of equity and justice
- Skills to promote and pursue pathways to climate resilient futures through a variety of communicative means

#### **Assessment tasks**

- · Climate policy development
- Mitigation strategies

- · Climate resilience conference
- Participation

#### PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

#### Learning outcomes

- Skills to promote and pursue pathways to climate resilient futures through a variety of communicative means
- · Ability to work as a team on climate related issues

#### **Assessment tasks**

- · Climate policy development
- · Mitigation strategies
- · Climate resilience conference
- Participation

## PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

## **Learning outcomes**

- Ability to identify diverse ethical, political, social and economic influences on human responses to climate change
- Skills to promote and pursue pathways to climate resilient futures through a variety of communicative means
- · Ability to work as a team on climate related issues

#### Assessment tasks

- · Climate policy development
- Mitigation strategies

- · Climate resilience conference
- Participation