

ENV 200

Environment and Sustainability

S2 Day 2014

Dept of Environment & Geography

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General Information

Unit convenor and teaching staff

Unit Convenor

Adrienne Keane

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E7A 607

by appointment. Send me an email or call to arrange

Credit points

3

Prerequisites

12cp

Corequisites

Co-badged status

Unit description

With an emphasis on the Australasian region, this is an exciting interdisciplinary unit exploring humankind's attitudes to, relationships with and impacts on the environment. It is designed to be self-contained, for students from a range of backgrounds, including those without a scientific background. The concepts of environment and sustainability, together with their conflicting priorities are discussed along with the difficulties of incorporating them into the current socio-political and economic systems. The major physical and biophysical systems of environments are explained in relation to current issues including population pressure, energy use, land degradation, climate change, water resources, transport and urban living. The current planning frameworks and management processes, including the legal and legislative mechanisms are also considered, with suggested strategies to alleviate existing and predicted problems. The role of sustainable development in managing environmental issues and the role of planning for a more sustainable future are explored. Students are engaged in learning through guest lecturers who are experts in their field, and through role plays, interactive case study examples and active communication in tutorials.

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:

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 2. a knowledge of the major environmental issues in the Australian region, including their origins and underlying causes
- 3. an overview of the current management strategies of major problems and suggested remedial measures
- 4. a basic understanding of planning and the implications of management strategies
- 5. an understanding of sustainability and the interplay of multiple stakeholders to achieve an improved balance of social, environmental and economic priorities for effective environmental management
- 6. developed their skills in assessing, sorting and synthesizing information as well as presenting it verbally in small group discussions or in written form

General Assessment Information

In order to complete this unit satisfactorily, students must:

- attend all (>80 %) tutorials, participate in tutorial discussions and submit written summaries on each tutorial topic;
- attempt a mid-semester test on Wednesday 10 September 2014;
- submit a 2500 word essay (details below) on or before Friday 10 October 2014;
- attempt a two hour end-of-unit examination (refer to the official Examination Timetable for date, time and venue).

Late penalties apply to written summaries and the essay.

Assessment Tasks

Name	Weighting	Due
Tutorial	25%	Weekly (see tutorial schedule)
Mid-semester test	15%	10 September 2014
Essay	25%	10 October 2014
Final exam	35%	Examination timetable

Tutorial

Due: Weekly (see tutorial schedule)

Weighting: 25%

You are required to register online for a tutorial and attend that tutorial session throughout the

semester. It is emphasized that these tutorials are designed to be interactive - to develop arguments, justify or defend particular view-points and for individual students to form opinions about specified environmental issues. Tutorial attendance is required with an 80% attendance rate required.

All students will be required to read and analyze a short reading in preparation for each tutorial. One or more readings for each tutorial will be suggested and readings will be made available through the unit's iLearn site. A one page summary is to be written and submitted via iLearn on the day before the tutorial. The summary must:

- be no more than 1 page long (Arial, 11pt, single space, normal margins). Large font and double-line spacing will not be accepted.
- include the title of the article and its author at the top of the summary
- · include your name and student number
- no quotes you cannot quote from the article. Every word must be yours.
- · do not include in-text referencing. The title at the beginning of the summary will suffice.
- Written summaries cannot be given in point form and must be in narrative form.
- The written summary is to be submitted on the unit's iLearn site the day before the tutorial. Turnitin will be used to evaluate similarity with the original article. As a guide, any similarity score over 10% will be reviewed to ascertain if the student's work is in accordance with the University's policy regarding academic honesty. Should a student's work be considered to be an act of dishonesty the Academic Honesty policy will apply.
- In addition, at the beginning of the tutorial, a hard copy of the written summary is to be given to your tutor. The tutor will mark on that copy rather than the electronic copy in iLearn and return it to you at the next scheduled tutorial.
- Each summary is to include your own opinion about the article you reviewed. Your
 opinion must be restricted to the topic. No opinions regarding the quality of the author's
 writing will be accepted. If an opinion is not included in the summary the mark awarded
 cannot exceed a pass grade.

In addition, marks are allocated for participation – not attendance. All students must contribute to each tutorial. All tutorial participants are to ensure a collegial, polite and respectful environment .

Late tutorial papers will attract a penalty of 1 mark per week.

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- 4. a basic understanding of planning and the implications of management strategies
- 5. an understanding of sustainability and the interplay of multiple stakeholders to achieve an improved balance of social, environmental and economic priorities for effective environmental management

Mid-semester test

Due: 10 September 2014

Weighting: 15%

The mid-semester test will exam the lecture materials from Weeks 1 to Week 5. There will be 12 short-answer questions and one short essay (you can choose from 3 questions). The test will be held in the lecture venue from 9am and will take approximately 80 minutes. Students can not leave the venue until the time is completed. You must attempt this exam.

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Essav

Due: 10 October 2014

Weighting: 25%

Each student is required to submit a 2500 word essay on one of several topics on **or before Friday 10 October 2014.**

A small selection of essay topics will be posted on iLearn in the first two (2) weeks of the semester.

Further information on presentation of written assignments and hints on essay preparation will be provided on the unit's iLearn site.

Important: All essays are to be submitted at the Science Centre (Ground Level, Building E7A)

AND uploaded into iLearn on or before the due date. When submitting the hard copy remember to sign and include the required Cover Sheet for the Faculty of Science.

Late essays attract a penalty of 20% per day. After 5 days, the piece of work will be assessed only on the basis of Pass or Fail; no marks will be allocated to it. Please note the above requirement that all pieces of assessable work must be submitted in order to pass the Unit.

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 presenting it verbally in small group discussions or in written form

Final exam

Due: Examination timetable

Weighting: 35%

The final exam will comprise short answer questions and essays. In the past the exam has comprised 15 short answer questions + 2 essays and 2 hours is set aside for it. This composition for the 2014 exam will be similar.

The date, time and venue for this exam will be determined by the University's examination timetable but will be held in the examination period.

On successful completion you will be able to:

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 2. a knowledge of the major environmental issues in the Australian region, including their origins and underlying causes

- 3. an overview of the current management strategies of major problems and suggested remedial measures
- 4. a basic understanding of planning and the implications of management strategies
- 5. an understanding of sustainability and the interplay of multiple stakeholders to achieve an improved balance of social, environmental and economic priorities for effective environmental management

Delivery and Resources

Technology ENV200 has a website which is accessible via www.mq.edu.au/iLearn. Here you can get access to unit materials, copies of lecture slides, notices and a general discussion place to pose questions to staff.

Students are not required to acquire any technology for this unit but are expected to access the iLearn site and to use computers to produce their assignments.

Unit Schedule

Schedule of lectures (subject to change)			
Week	Date	Topic	Lecturer
1	6 August	Welcome 1.Before humans and other concepts 2. Aboriginals and megafaunas	Adrienne Keane Marilu Zurita Marilu Zurita
2	13 August	Attitudes to the environment Communicating about environment	Andrew McGregor John Merrick
3	20 August	5. Population and resources6. Marine environments	Adrienne Keane John Merrick
4	27 August	7. Land degradation 8. Renewable energy alternatives	John Pickard Xiaofeng Li
5	3 September	Environmental economics To Freshwater resources	Rogelio Perez John Merrick

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6	10 September	Mid-semester test	Adrienne Keane, Marilu Zurita
7	17 September	11. Air pollution and climate change	Vlad Strezov
		12. Importance of biodiversity	Andy Beattie
Midsemest	er break		
8	8 October	13. Sustainable development	Wendy Goldstein
		14. International Agreements	Wendy Goldstein
9	15 October	15.Where they live and why	Sunita Chaudhary
		16. Marine conservation OR REDD+	Rini Astuti
10	22 October	17.Climate Change management	Stuart Browning
		18. Endangered species	Nicholas Carlile
11	29 October	19. Environmental management	Marilu Zurita
		20. Protected area management	Marilu Zurita
12	5 November	21. Urban issues	Adrienne Keane
		22. Environmental planning	Adrienne Keane
13	12 November	23. Future planning challenges	Adrienne Keane
		24. Drawing things together	Adrienne Keane

Tutorial schedule:

Week	Date	TUTORIAL NUMBER	Topic
1	6 August		NO TUTORIAL
2	13 August	1	Values, messages and practice
3	20 August	2	Population and resources

4	27 August	3	Agriculture and food security
5	3 September	4	Wastewater resources / treatment
6	10 September		NO TUTORIAL
7	17 September	5	Preventing biodiversity loss and conservation
Mid-Semes	Mid-Semester Break		
8	8 October	6	Sustainability
9	15 October	7	Urban natural values
10	22 October	8	Climate change
11	29 October	9	Transport
12	5 November	10	Cities
13	12 November	Revision	Elective tutorial

Learning and Teaching Activities

Alignment with objectives

The overall Unit Objectives are: 1. to provide an overview of the influences, factors and perspectives that have to be considered in relation to environment and sustainability; 2. to describe major environmental issues, discuss causes and suggest planning options and management to improve the situation. Lectures from a range of guest lecturers presenting the latest research results on major environmental issues provide core content. These lectures are supplemented by a series of participatory small-group tutorials – tutorial topics are co-ordinated and allied to the lecture subjects for that week. In addition, a 2000 word essay (on one of several set subjects) is due in the second week of October. Key background theory is assessed by two short answer exams. The four types of progressive assessment are designed to spread the demands and to give all students flexibility and a fair opportunity to demonstrate knowledge and competence, while permitting benefit from particular interests or skills.

Policies and Procedures

Macquarie University policies and procedures are accessible from <u>Policy Central</u>. 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.ht ml

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 <u>Learning and Teaching Category</u> 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/

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 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 http://informatics.mq.edu.au/hel
p/.

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

Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

Learning outcome

 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems

Assessment tasks

- Tutorial
- Mid-semester test
- Essay
- · Final exam

Commitment to Continuous Learning

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

Learning outcomes

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 2. a knowledge of the major environmental issues in the Australian region, including their origins and underlying causes
- 5. an understanding of sustainability and the interplay of multiple stakeholders to achieve an improved balance of social, environmental and economic priorities for effective environmental management

Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge,

scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

Learning outcomes

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 2. a knowledge of the major environmental issues in the Australian region, including their origins and underlying causes
- 3. an overview of the current management strategies of major problems and suggested remedial measures
- 4. a basic understanding of planning and the implications of management strategies
- 5. an understanding of sustainability and the interplay of multiple stakeholders to achieve an improved balance of social, environmental and economic priorities for effective environmental management

Assessment tasks

- Tutorial
- · Mid-semester test
- Essay
- Final exam

Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

Learning outcomes

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 6. developed their skills in assessing, sorting and synthesizing information as well as
 presenting it verbally in small group discussions or in written form

Assessment tasks

- Tutorial
- Mid-semester test
- Essay
- Final exam

Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

Learning outcomes

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 6. developed their skills in assessing, sorting and synthesizing information as well as
 presenting it verbally in small group discussions or in written form

Assessment tasks

- Tutorial
- · Mid-semester test
- Essay
- · Final exam

Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

Learning outcome

 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems

Assessment tasks

- Tutorial
- Essay

Final exam

Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

Learning outcomes

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 2. a knowledge of the major environmental issues in the Australian region, including their origins and underlying causes

Assessment tasks

- Tutorial
- · Mid-semester test
- Essay
- Final exam

Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

Learning outcomes

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 2. a knowledge of the major environmental issues in the Australian region, including their origins and underlying causes
- 3. an overview of the current management strategies of major problems and suggested remedial measures

Assessment task

Tutorial

Socially and Environmentally Active and Responsible

We want our graduates to be aware of and have respect for self and others; to be able to work with others as a leader and a team player; to have a sense of connectedness with others and country; and to have a sense of mutual obligation. Our graduates should be informed and active participants in moving society towards sustainability.

This graduate capability is supported by:

Learning outcomes

- 1. an understanding of the natural systems and the man-made factors that interact to cause environmental problems
- 2. a knowledge of the major environmental issues in the Australian region, including their origins and underlying causes
- 3. an overview of the current management strategies of major problems and suggested remedial measures

Assessment task

Tutorial

Changes from Previous Offering

This unit was previously titled 'Introduction to Environmental Studies '. Since 2010 lectures have been updated, with changes in order and topics related to guest lecturer availability. Tutorial readings have been reviewed and updated.