



ENV 267

Australian Environmental Futures

S2 Day 2018

Dept of Environmental Sciences

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General Information

Unit convenor and teaching staff

Unit Convenor

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Credit points

3

Prerequisites

GEOS114 or ENV118 or GEOS118

Corequisites

Co-badged status

GEOP605

Unit description

This interdisciplinary unit critically examines key environmental, social, economic, cultural and political processes and relationships that underpin environmental management. It examines, using theory and case studies, how the environment is managed within and across urban, rural and remote areas in Australia. The unit will cover contemporary environmental and social issues affecting areas such as water security, land and ecosystem conservation, population growth, urban development, climate extremes and variability and how these are informed by government policy and programs and actions. The content and assessment tasks will support the development of technical and social skills and knowledge for those seeking careers in environmental science, policy, social science, planning and geography.

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:

Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures

Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges

Carry out independent research in environmental management and the practical applications of that research.

Write for different target audiences and critically read, think about, interpret and evaluate environmental and social science data.

General Assessment Information

Marking rubrics:

Marking rubrics will be provided in class for each assessment task.

Penalty for late submission of assessment tasks:

Assessment tasks are to be submitted on the date listed under the Assessment Tasks section of this Unit Guide. A penalty of 10 % will be deducted off the final mark for the assessment task for each day that the assessment task is late. For example, for an assessment worth 20 %, a penalty of 2 marks will be deducted for each 24 hour period that the assessment is late.

Extensions:

Extensions must be requested in advance and in writing by submitting a request to ask.mq.edu.au. In the request, please ensure that you have a valid reason and explicitly state this. Provide supporting evidence where possible, such as a medical certificate.

Assessment Tasks

Name	Weighting	Hurdle	Due
Mapping and data analysis	20%	No	24 Aug 2018
Oral presentation	10%	No	Week 7 tutorials
Sustainability essay	40%	No	5 Oct 2018
Briefing report	30%	No	2 Nov 2018

Mapping and data analysis

Due: **24 Aug 2018**

Weighting: **20%**

The aim of this assessment is to use different types of maps and additional data to answer an environmental question, and to present this analysis in a map format with up to 2 pages of supporting text. Students can choose which question they would like to focus on for the assessment out of four hypothetical, but real-world challenges that are facing Lane Cove National Park and surrounds. Much of the mapping work will be done in the tutorials in Weeks 2 and 3, with additional research to be done in the students own time.

Maximum word length: 750 words, excluding references

On successful completion you will be able to:

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures
- Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges
- Carry out independent research in environmental management and the practical applications of that research.
- Write for different target audiences and critically read, think about, interpret and evaluate environmental and social science data.

Oral presentation

Due: **Week 7 tutorials**

Weighting: **10%**

This assessment requires each student to give a short oral presentation on one key critique of the sustainability initiative that you are engaging with for the Sustainability Essay assessment task.

The presentations for internal students will be held in the tutorials in Week 7, hence attendance is mandatory. External students will need to compile a video and submit it online for assessment.

Time limit: 3 minutes (ENV267 students) or 4 minutes (ENVS605 students), with a maximum of one slide as a support aid.

On successful completion you will be able to:

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures
- Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges
- Carry out independent research in environmental management and the practical applications of that research.

Sustainability essay

Due: **5 Oct 2018**

Weighting: **40%**

This assessment task presents students with the opportunity to carry out independent research and review an environmental management case study in which they take personal interest. In particular, students have the chance to critically use their understanding of the environmental management contexts and issues in order to analyse the success, or potential for success, of a specific sustainability initiative in Australia.

Students will need to choose an Australian-based sustainability initiative as a case study, and discuss the decision-making processes involved in its design and implementation. This will include identification of various stakeholders and an analysis of their relationships. The conclusion should address the level of success to date, or potential for success, of the project.

Maximum word length: 1500 words (ENV267 students) or 2000 words (ENVS605 students), excluding references.

On successful completion you will be able to:

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures
- Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges
- Carry out independent research in environmental management and the practical applications of that research.
- Write for different target audiences and critically read, think about, interpret and evaluate environmental and social science data.

Briefing report

Due: **2 Nov 2018**

Weighting: **30%**

The aim of this assessment is to first undertake a critical review of the structure of different Australian local government business papers, and then prepare your own briefing report for a local council or one of its committees on the future planning and delivery of water resources for the local area. Students will gain experience in writing using a standard report template.

The critical review should briefly (in one page) examine how different councils structure their reports, and how this influences content and decision-making. The briefing report (max of three pages) needs to consider whether the water authority or council's strategic planning is, or plans to, respond to future drought conditions that may or may not be related to climate change.

Maximum page length: 4 pages, excluding references.

On successful completion you will be able to:

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures
- Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges
- Carry out independent research in environmental management and the practical applications of that research.
- Write for different target audiences and critically read, think about, interpret and evaluate environmental and social science data.

Delivery and Resources

Modules

This unit is delivered across three modules and will be led by different lecturers:

Module 1 - Australia's unique environment and the need to manage impacts. This module will be delivered by Dr Kerrie Tomkins and will examine the physical challenges posed by Australia's unique environment including: climate; hydrology; soils; vegetation and bushfires; ecosystems; coasts; impacts of humans on the environment; and impacts of the environment on humans

Module 2 - Politics, people and the environment. This module will be delivered by Dr Jess McLean and Dr Miriam Williams, and will explore several themes including: resource governance; stakeholder engagement; community participation in resource governance; climate change futures and carbon governance; urban spaces; and the Anthropocene in Australia.

Module 3 - Role of Environmental Legislation and Policy. This module will be delivered by Dr Peter Davies and will focus on how law and policy impacts on the environment from a strategic planning, statutory development assessment and day to day decisions. This module will tie together your understanding of the physical environment its relationship to people and politics.

Blended Learning and Experiential Learning Approaches

This unit uses multiple approaches in teaching and delivery, including blended learning, particularly for the People, Politics and Environment module. Blended learning combines diverse teaching and learning methods in digital and face-to-face learning environments. It can include elements of learning at the same time (e.g. face-to-face lectures) and learning activities that you can do at the times that work best for you.

In this unit, blended learning involves reading texts, watching videos and/or listening to audio resources. You may also need to do structured activities before coming to class or write short blogs in response to set questions. External students will have digital activities that replace face-to-face workshops which will be outlined on iLearn. Preparing in this way before group discussions will enable you to engage meaningfully with the in-class activities (internal students)

and the online discussion forums (external students)

The unit also adopts experiential learning where possible, to enable students to learn through first-hand experiences such as field trips. Examples of these include the campus creek walk in Module 1, and a trip to the Herring Road/Macquarie Park precinct in Module 3.

Unit Schedule

Below is the planned Unit Schedule. The content will be delivered through weekly lectures (on campus and pre-recorded) and tutorials. The tutorials will include in-class and field based learning to enable students to understand and apply various techniques used to manage the environment. External students will need to refer to the iLearn site for on-campus dates for tutorials and assessment due dates. Any updates or changes will be announced through iLearn.

Week 1 - On campus lecture: Understating the big picture and major drivers (Dr Kerrie Tomkins)
- No tutorial (2hrs)

Week 2 - On campus lecture: Our dry climate, droughts and flooding rains (Dr Kerrie Tomkins)
- On campus tutorial (2hrs)

Week 3 - On campus lecture: Impoverished soils and flammable vegetation (Dr Kerrie Tomkins)
- On campus tutorial (2hrs)

Week 4 - On campus lecture: Ecosystems and habitats under threat (Dr Kerrie Tomkins)
- Optional campus creek walk (1 hour) 10:00 am Mon 20 Aug
- External on campus session for Module 1 tutorials

Week 5 - On campus lecture: Australia in the Anthropocene (Dr Jess McLean)
- On campus tutorial (2hrs)

Week 6 - Pre-recorded lecture: Climate justice, power and scale (Dr Jess McLean)
- On campus tutorial (2hrs)

Week 7 - Pre-recorded lecture: Decision makers and resources in Australia (Dr Jess McLean)
- On campus tutorial - In-class presentations (2hrs)

Week 8 - No lecture (public holiday)
- No tutorial (public holiday)

Week 9 - On campus lecture: Australian Climate Futures (Dr Jess McLean)
- On campus tutorial (2hrs)

Week 10 - On campus lecture: Background and history of environmental law and policy (Dr Peter Davies)
- On campus tutorial (2hrs)

Week 11 - On campus lecture: Land use zoning, development and environmental protection (Dr

Peter Davies)

- On campus tutorial (2hrs)
- External on campus session for Module 3 tutorials

Week 12 - On campus lecture: Strategic planning and the environment and unit summary (Dr Peter Davies)

- Field trip tutorial - Herring Road / Macquarie Park precinct (2 hrs)

Week 13 - No lecture or tutorials

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>). 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](#) (**Note:** *The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.*)

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

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/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/study/getting-started/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 [eStudent](#). For more information visit [ask.m](#)

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 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 [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

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.

Graduate Capabilities

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

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures

Assessment tasks

- Oral presentation

- Sustainability essay
- Briefing report

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 outcomes

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures
- Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges
- Carry out independent research in environmental management and the practical applications of that research.
- Write for different target audiences and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- Oral presentation
- Sustainability essay
- Briefing report

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 outcome

- Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges

Assessment tasks

- Oral presentation

- Sustainability essay

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

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures
- Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges
- Carry out independent research in environmental management and the practical applications of that research.
- Write for different target audiences and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- Mapping and data analysis
- Oral presentation
- Sustainability essay
- Briefing report

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

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures
- Explain the physical, social and political drivers and their interrelationships associated

with contemporary environmental management challenges

- Carry out independent research in environmental management and the practical applications of that research.
- Write for different target audiences and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- Mapping and data analysis
- Oral presentation
- Sustainability essay
- Briefing report

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

- Apply knowledge of concepts and integrated discipline approaches at multiple scales to manage Australia's environmental futures
- Carry out independent research in environmental management and the practical applications of that research.

Assessment tasks

- Mapping and data analysis
- Oral presentation
- Sustainability essay
- Briefing report

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

- Explain the physical, social and political drivers and their interrelationships associated with contemporary environmental management challenges
- Carry out independent research in environmental management and the practical applications of that research.
- Write for different target audiences and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- Mapping and data analysis
- Oral presentation
- Sustainability essay
- Briefing report

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:

Assessment tasks

- Oral presentation
- Sustainability essay

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 outcome

- Carry out independent research in environmental management and the practical applications of that research.

Assessment tasks

- Oral presentation
- Sustainability essay

Changes from Previous Offering

This unit has been redesigned from previous offerings. It now includes an introduction module on environmental law and policy and an corresponding assessment task to integrate this knowledge within a coupled natural and human environmental lens.

Assessment Submission and General Assessment Criteria

Assessment submission

This unit uses electronic submission and marking. The required format and mode of submission is as follows. Note: there is no requirement to submit hard copies as well. Further details on how to use Turnitin will be provided separately.

Assessment 1 Mapping and data analysis - to be submitted through Turnitin (See iLearn for the relevant Assessment Link)

Assessment 2 Oral Presentation - to be submitted through Turnitin - Internals need to submit their 1 slide; Externals need to submit their videos (See iLearn for the relevant Assessment Link)

Assessment 3 Sustainability Essay - to be submitted through Turnitin (See iLearn for the relevant Assessment Link)

Assessment 4 Briefing Report - to be submitted through Turnitin (See iLearn for the relevant Assessment Link)

General assessment criteria

The general assessment criteria that is used to examine the overall attainment of knowledge, skills and abilities includes the following, where the level of achievement is expected to be at the standard of a post-graduate student in each of the criteria. GradeMark Rubrics will be used to mark and grade parts A and B of the Final Report.

General Assessment Criteria	Expectation of achievement at the post-graduate level
<ul style="list-style-type: none">• Addressing the task that is specified (or answering the question that is asked) for each assessment, including staying within the word limit unless otherwise specified.	<ul style="list-style-type: none">• Students are able to complete the assessments as instructed.

<ul style="list-style-type: none"> Demonstration of knowledge and research skills through written material and verbal presentations. 	<ul style="list-style-type: none"> Students have engaged in the subject matter and task. Students can show understanding of the topic through an analysis and well-developed discussion of the topic.
<ul style="list-style-type: none"> Demonstration of independent thinking through written material and verbal presentations. 	<ul style="list-style-type: none"> Students are able to demonstrate in-depth thinking through discussion that places the topic in the broader context. Students are able to demonstrate initiative and independent contributions through new ideas.
<ul style="list-style-type: none"> Appropriate use and citation of a wide range of relevant literature, including scientific research papers and reports. Citation of references within the text and reference list is correct and consistent, with no abbreviations. 	<ul style="list-style-type: none"> Students will undertake thorough literature searches and demonstrate appropriate selection of relevant articles in support of their arguments.
<ul style="list-style-type: none"> Demonstration of good planning with a clear structure, headings, and a logical argument based firmly on the literature cited. 	<ul style="list-style-type: none"> Students are able to structure written (and verbal) work to convey ideas clearly and logically.
<ul style="list-style-type: none"> Presentation of legible work with: correct grammar and spelling, correct use of professional terminology as appropriate, and correct use of SI units, abbreviations and acronyms. 	<ul style="list-style-type: none"> Students will submit work that is presented in a professional manner.
<ul style="list-style-type: none"> Figures, tables and other supporting information are legible and necessary, with reference to these in the text. Full and appropriate captions are included on each as well as the source where relevant. 	<ul style="list-style-type: none"> Students are able to use figures and tables to summarise or present information and data effectively.
<ul style="list-style-type: none"> Effective communication of research outcomes. 	<ul style="list-style-type: none"> Students are able to get their message across clearly and concisely.

Field work, health and safety

There may be opportunities to visit sites on or off campus as part of the tutorial program.

The safety of you and those around you is our highest priority. Consequently, ALL participants in fieldwork activities are obliged to work and behave appropriately in the field, and to take care to protect their own health, safety and welfare and that of fellow fieldwork participants. You are required to follow instructions from the Fieldwork Leader at all times.

Prior to the fieldwork, you must let the Fieldwork Leader know of any allergies, special dietary requirements or medical considerations that may affect your ability to participate in fieldwork. You will need to complete a declaration of a known medical condition form, outlining a treatment plan for your condition. Details of your responsible next of kin must also be provided in case of

emergencies.

You are required to wear and carry clothing and footwear as appropriate to the fieldwork situation. Your Fieldwork Leader will advise you as to what these are prior to the fieldtrip. Irrespective of the activity, footwear must be worn. For terrestrial fieldwork, ankle to knee protection must be worn either in the form of either long trousers or gaiters. For marine fieldwork, appropriate clothing to protect against sunburn and exposure should be worn. For all fieldwork activities, a hat, sunscreen, insect repellent and items to protect against unexpected weather changes, such as rain & cold, are strongly recommended. The Fieldwork Leader reserves the right to exclude anyone that is ill-equipped from the activity.

If you are taking any medication, please ensure that you take sufficient supplies with you on the field trip. The University's staff are unable, by law, to provide this to you. This includes pain relief, such as panadol or nurofen, cold and flu medication and anti-histamines for allergies.

If you need to leave the field location for any reason prior to completion of the scheduled activities, you must first inform the Fieldwork Leader. In the event of illness or injury, please let the Fieldwork Leader know immediately. All injury's or incidents must be reported via the on-line reporting system: <http://www.ohs.mq.edu.au/form5a.php>

Alcohol is a significant contributing factor in many incidents and acts of prejudicial conduct. Alcohol must not be consumed when undertaking fieldwork activities or when using a motor vehicle/machinery. After-hours consumption of alcohol is at the discretion of the Fieldwork Leader. Anyone acting irresponsibly or in any way deemed to be a danger to themselves or others by the Fieldwork Leader will be required to leave the field trip, return to Sydney at their own expense and report to the Head of Department. The consequences of this may include exclusion from the Unit of study or your Degree program.

For more information, contact:

Russell Field

Fieldwork Manager (Dept of Environmental Sciences)

Macquarie University NSW 2109.

(W) 98508341

Unit Homepage

This unit has a home page that can be accessed through the Macquarie University online facility (ilearn.mq.edu.au). It contains the usual discussion page, mail page and lecture notes page. As the semester progresses, it will be used to circulate data and other materials related to the course, field trips and assessments.