

ENVS362

Environmental Management

S2 External 2016

Dept of Environmental Sciences

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General Information

Unit convenor and teaching staff

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Credit points

Prerequisites

39cp including [(ENV267(P) or GEOS267(P) or ENVE214 or ENVS214) and (3cp in ENV or ENVE or ENVG or ENVS or GEOP units at 300 level)]

Corequisites

Co-badged status

Unit description

This unit provides an advanced understanding of the interdisciplinary links between environmental research, management strategies and policy frameworks that are fundamental to environmental management. We explore significant issues and challenges associated with managing our dynamic environment, including catchment assessment and prioritisation, river and wetland rehabilitation, land degradation and recovery, coastal erosion, atmospheric pollution, climate change, and variability. To emphasise practical applications and outcomes, the unit includes a field visit to sites of environmental importance in the Sydney region and students develop skills in environmental impact assessment and professional literacy that are designed to enhance employability.

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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:

related to environmental management.

Identify and define the key terms, concepts and approaches in environmental management.

Review and understand the principal threats to environmental systems and key approaches to environmental management.

Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems. Utilise maps, graphs, statistics and text to construct, analyse and interpret information

Articulate current and future strategies to meet the needs of environmental management in Australia.

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

Assessment Tasks

Name	Weighting	Due
Assessment 1	10%	19/8/2015
Assessment 2	25%	9/9/2015
Assessment 3	5%	Weeks 9, 10 and 11
Assessment 4	20%	28/10/2015
Assessment 5	40%	TBA in exam period

Assessment 1

Due: 19/8/2015 Weighting: 10%

Submit online through turnitin

This assessment task requires you to complete:

1. A synopsis of some key threatening environmental issues and management strategies

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within the Manly Dam catchment area.

2. A fully annotated land use map of the catchment and surrounding area.

You must review available scientific, management and policy information and prepare a brief overview of key environmental pressures and current management approaches for the Manly Dam catchment.

On successful completion you will be able to:

- Identify and define the key terms, concepts and approaches in environmental management.
- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

Assessment 2

Due: **9/9/2015** Weighting: **25%**

Environmental impact assessment in a coastal catchment

Submit online through turnitin

This assignment requires you to prepare a brief report akin to a Statement of Environmental Effects (SEE) for a hypothetical community centre development in the Manly Dam (Curl Curl Creek) catchment.

On successful completion you will be able to:

- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.
- Articulate current and future strategies to meet the needs of environmental management in Australia.

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

Assessment 3

Due: Weeks 9, 10 and 11

Weighting: 5%

Attend weekly practical classes

On successful completion you will be able to:

- Identify and define the key terms, concepts and approaches in environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.

Assessment 4

Due: **28/10/2015** Weighting: **20%**

Submit online through turnitin

On successful completion you will be able to:

- Identify and define the key terms, concepts and approaches in environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.
- Articulate current and future strategies to meet the needs of environmental management in Australia.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

Assessment 5

Due: TBA in exam period

Weighting: 40%

Formal examination closed book

On successful completion you will be able to:

- Identify and define the key terms, concepts and approaches in environmental management.
- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.
- Articulate current and future strategies to meet the needs of environmental management in Australia.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

Delivery and Resources

Delivery

Classes

The timetable for ENVE362 can be found at: https://timetables.mq.edu.au/ A detailed class schedule with lecture and practical topics will be made available to all enrolled students through iLearn.

ENVE362 is taught via lectures, practicals, readings and assessment tasks. Students should make use of iLearn to access teaching and learning materials, to submit assignments, to stay in touch with the unit, to contact lecturers, and to discuss issues and concepts with classmates.

Workload

ENVE362 earns 3 credit points towards your degree. University guidelines state that this will involve at least 3 hours per week, per credit point. Therefore, for a 3 credit point unit you are expected to put in at least 9 hours of study per week on average over the semester; around 135 hours in total. This requires planning on your part to do all the work required in lectures, practicals, assignments, reading and the final exam.

Resources

iLearn

The ENVE362 iLearn page can be found at: https://ilearn.mq.edu.au/login/MQ/

Information about how students can access iLearn can be found at: http://www.mq.edu.au/ iLear n/student info/index.htm

The iLearn page uses Macquarie University's standard interface and has links, discussion threads and access to lectures (as audio files through Echo360, and as downloadable PDF presentations) and practical material. Important announcements will be made through iLearn,

so please check the ENVE362 page regularly.

Echo360

Information about how to access lecture recordings through the Echo360 EchoCenter page in iLearn can be found at: http://mq.edu.au/iLearn/student_info/lecture_recordings.htm

Turnitin

Macquarie University promotes student awareness of information management and information ethics. As well as training and the provision of information, the University tackles the issue of academic honesty through the use of the online program Turnitin.

Information about how to submit assignments to Turnitin in iLearn can be found at: http://mq.ed u.au/iLearn/student_info/assignments.htm

As well as being a key tool for assignment submission, marking and feedback, Turnitin compares your work with the work of your classmates, with previous students from Macquarie and other universities, with material available on the Internet, and with freely available and subscription based electronic journals. The results are sent only to your lecturers, who will analyse them in reference to the University's Academic Honesty Policy.

You will be able to access the results of the Turnitin academic honesty scan for your own assignments, known as your 'originality report'. In ENVE362, we will allow you to overwrite the initial submission file with a second submission if you choose to do so, but only up until the final due date and time for the assignment. We consider this opportunity to fine-tune your academic honesty a considerable resource, and we hope that you will use this review process constructively to ensure you are referencing other material correctly and effectively.

Recommended Texts

There is no prescribed textbook for ENVE362, however, you are expected to complete the weekly readings and the following books may be of particular interest:

- Allan, C. and Stankey, G.H. (Eds.) 2009. Adaptive Environmental Management: A Practitioner's Guide. Springer, New York, and CSIRO Publishing, Collingwood, Victoria.
- Conacher, A. and Conacher, J. 2000. Environmental Planning and Management in Australia. Oxford University Press, U.K.
- Dovers, S. and Wild River, S. (Eds.) 2003. Managing Australia's Environment.
 The Federation Press, Leichhardt, New South Wales.
- Hatton, T.J., Cork, S., Harper, P., Joy, R., Kanowski, P., Mackay, R., McKenzie, N. and Ward, T. (State of the Environment 2011 Committee). 2011. Australia State of the Environment 2011: An independent report presented to the Australian Government Minister for Sustainability, Environment, Water, Population and Communities. Available online at http://www.environment.gov.au/soe/index.html
- Holling, C.S. 1978. Adaptive Environmental Assessment and Management. John

Wiley and Sons, Chichester.

We also recommend that students majoring in this field secure a copy of:

 Hay, I. 2012. Communicating in Geography and the Environmental Sciences (Fourth Edition). Oxford University Press, Melbourne.

The following journals may also be particularly useful:

- · Air Quality and Climate Change
- Australasian Journal of Environmental Management
- · Environment International

Unit Schedule

ENVE362 relies on a structured program to facilitate your learning and critical thinking. The unit is taught via lectures, practicals, readings and assessment tasks. A detailed class schedule will be made available to all enrolled students through iLearn, as will lecture and practical materials.

Students must attend two lectures and one practical per week (Note: there are no practicals in Weeks 1 or 13).

In Week 4 there is a one day fieldtrip in the Sydney area for all students. Full details will be provided on iLearn.

In Week 11 there is a one day on-campus session for students enrolled in the external mode (X2) of ENVE362. Full details will be provided on iLearn.

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.html

New Assessment Policy in effect from Session 2 2016 http://mq.edu.au/policy/docs/assessment/policy_2016.html. For more information visit http://students.mq.edu.au/events/2016/07/19/ne w_assessment_policy_in_place_from_session_2/

Assessment Policy prior to Session 2 2016 http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy prior to Session 2 2016 http://mq.edu.au/policy/docs/grading/policy.html

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

Complaint Management Procedure for Students and Members of the Public http://www.mq.edu.au/policy/docs/complaint_management/procedure.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/

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. For more information visit <a href="extraction-color: blue} ask.m q.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 <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://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. 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 outcomes

- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.
- Articulate current and future strategies to meet the needs of environmental management in Australia.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- Assessment 3
- Assessment 4
- Assessment 5

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

- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.
- Articulate current and future strategies to meet the needs of environmental management in Australia.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

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

- Identify and define the key terms, concepts and approaches in environmental management.
- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

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

- Identify and define the key terms, concepts and approaches in environmental management.
- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.

Assessment tasks

- Assessment 1
- · Assessment 2
- Assessment 4
- Assessment 5

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

- Identify and define the key terms, concepts and approaches in environmental management.
- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.
- Articulate current and future strategies to meet the needs of environmental management in Australia.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- Assessment 2
- · Assessment 4
- Assessment 5

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

- Identify and define the key terms, concepts and approaches in environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.

- Articulate current and future strategies to meet the needs of environmental management in Australia.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- Assessment 2
- Assessment 3
- · Assessment 4

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

- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics and text to construct, analyse and interpret information related to environmental management.
- Articulate current and future strategies to meet the needs of environmental management in Australia.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- Assessment 2
- Assessment 3
- · Assessment 4
- Assessment 5

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

- Identify and define the key terms, concepts and approaches in environmental management.
- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.

Assessment tasks

- Assessment 1
- Assessment 2
- · Assessment 3
- Assessment 4

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

- Identify and define the key terms, concepts and approaches in environmental management.
- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.

Assessment tasks

- Assessment 2
- · Assessment 3
- Assessment 4