



ENVS362

Environmental Management

S2 External 2019

Dept of Environmental Sciences

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Disclaimer

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

General Information

Unit convenor and teaching staff

Unit convenor/ Senior Lecturer

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By email appointment

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Credit points

3

Prerequisites

39cp at 100 level or above including [(ENV267 or GEOS267 or ENVE214 or ENV5214) and (3cp in ENV or ENVE or ENVG or ENV5 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.

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:

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, images and text to construct, analyse and interpret information for diverse stakeholders in 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

Name	Weighting	Hurdle	Due
1. Module quizzes	40%	Yes	At the end of each module
3. REF and peer commentary	30%	No	5pm 30/9/2019
5. Grant Application	30%	No	5pm 18/11/2019

1. Module quizzes

Due: **At the end of each module**

Weighting: **40%**

This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)

Each student will need to complete each online Module quiz by the following dates. They are worth 10% of your final mark each.

Module 1: 5pm Monday 26th August

Module 2: 5pm Monday 16th September

Module 3: 5pm Monday 21st October

Module 4: 5pm Monday 11th November

On successful completion you will be able to:

- Identify and define the key terms, concepts and approaches in environmental management.
- Utilise maps, graphs, statistics, images and text to construct, analyse and interpret information for diverse stakeholders in environmental management.

3. REF and peer commentary

Due: **5pm 30/9/2019**

Weighting: **30%**

Submit online through turnitin. **There are 2 parts to this assignment.** More information will be provided through ilearn and in class.

Part 1 Review of Environmental Factors (REF)

The aim of this assessment is to strategically assess the environmental impact of a specific activity on the environment. This will test your application of environmental and planning knowledge, problem based skills and working in a group. You will need to understand the legal requirements relevant to the development of a review of environmental factors, consider the specific site impacts and broader planning and policy landscape and contextualise your proposal and argue for its support.

This is group assignment. You be assigned to a group in your first on campus session.

Part 2 Peer to Peer feedback

Once your group has completed a draft REF (that may be the consolidation of your individually allocated tasks), you are each required to review the draft and provide a 1 page written feedback on the document. In effect for this task you are taking on the role of an internal project reviewer.

On successful completion you will be able to:

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- 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, images and text to construct, analyse and interpret information for diverse stakeholders in 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.

5. Grant Application

Due: **5pm 18/11/2019**

Weighting: **30%**

Submit online through turnitin

This assessment task requires you to use the template provided in class to write an Expression of Interest for a grant application focusing on an environmental monitoring project. Further details will be provided in module 4.

On successful completion you will be able to:

- Identify and define the key terms, concepts and approaches in environmental management.
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- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.
- Utilise maps, graphs, statistics, images and text to construct, analyse and interpret information for diverse stakeholders in 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 ENV5362 can be found at: <https://timetables.mq.edu.au/>. A detailed class schedule with lecture and practical topics (including external students' compulsory on-campus days) is provided below. Check iLearn regularly for any class schedule updates.

ENV5362 is taught via lectures, practicals, field trips, readings and assessment tasks. It is offered to internal and external students. 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

ENV5362 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, and the readings.

Resources

iLearn

The ENV5362 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/iLearn/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 ENV5362 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.edu.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 ENV362, 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 ENV362, 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.
- 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.
- Burns, E., D. Lindenmayer, A. Lowe and N. Thurgate (Eds.) 2014. Biodiversity and Environmental Change: Monitoring, Challenges and Direction, CSIRO Publishing.
- Hay, I. 2012. Communicating in Geography and the Environmental Sciences (Fourth Edition). Oxford University Press, Melbourne.
- Keen, M., V. A. Brown and R. Dyball. 2005. Social learning in environmental management: towards a sustainable future, Routledge.

The following journals may also be particularly useful:

- *Journal of Environmental Management*
- *Australasian Journal of Environmental Management*
- *Environment International*
- *Ecological Management and Restoration*
- *Science of the Total Environment*

Also check out the following websites for the latest information on global and Australian environments and their management:

- Australia State of the Environment 2016. Available online at <http://www.environment.gov.au/soe/index.html>
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services <http://www.ipbes.net/about-us>

- United Nations Environment Program <http://www.unep.org>

Unit Schedule

ENV5362 relies on a structured program that links lectures to practicals, field work and assessment tasks to facilitate your learning, skill development and critical thinking. We have also included some Masterclasses to build your practical skills based on feedback from Environmental Management workplaces. The Unit schedule is provided in the table below. Full details and any changes will be provided on iLearn.

Internal students must attend two lectures and one practical per week.

External students should listen to lectures via Echo360. For external students all practical classes (and field work) will be run over 2 compulsory on-campus sessions: all day Saturday 17th August (9am - 5pm) and all day Saturday the 19th of October (9am - 5pm). Meet your lecturers at the entrance of 11 Wally's Walk.

Wk	Lecture Dates	Lecture Topics (Weds 3-5pm) 14 Sir Christopher Ondaatje Ave - 100 Theatrette	Practical Classes E5A270: W 12-2; Th 9-11; F 9-11 E5A260: F 3-5	Assessment Tasks/ External Student Sessions
MODULE 1: Multidisciplinarity in Environmental Management (Emilie Ens)				
1	31 July	L1 Contexts and challenges in Environmental Management (EM) L2 People in EM	P1 Mars Creek mapping and AHIMS data (GIS)	
2	7 Aug	L3 Indigenous Cultural awareness (Guest Lecturer -Ben Kitchener) L4 Indigenous land and Sea Management	P2 Making your own field data collection App	
3	14 Aug	L5 Global conservation strategies L6 Australian conservation strategies	P3 <u>FIELD TRIP</u> Mars Creek Record biocultural values using your App	External On-campus 1: Pracs 1-7, Sat 17 th August 9am-5pm
4	21 Aug	L7 Conservation and the "market" L8 Effective communication in EM	P4 I. Adding your field data to your GIS map. MASTERCLASS: What plant is that? Australian plant identification skills	MODULE 1 Quiz Due: Mon 26 th August 5pm (10%)
MODULE 2: Environmental Planning and Assessment (Jo Spicer)				

5	28 Aug	L9 Environmental Planning L10 Development Assessment	P5 Introduction to the REF assignment	
6	4 Sep	L11 Urban Water Planning L12 MASTERCLASS: How to give peer to Peer feedback	P6 FIELD TRIP Mars Creek Site visit and inspection	
7	11 Sep	L13 and L14: GUEST LECTURE: Environmental Defenders Office NSW	P7 Group REF meetings (for Assessment 3) - Self-directed	MODULE 2 Quiz Due: Mon 16 th September 5pm (10%)
Mid-Semester Break (16th Sept – 28th September)				
MODULE 3: Environmental Management and the Sustainable Development Goals (Wendy Goldstein)				
8	2 Oct	L15 World views on environment L16 It's all in the system!	P11 Life cycle analysis	ASSESSMENT 2 (REF and Feedback) DUE: Mon 30 th September, 5pm (30%)
9	9 Oct	L17 Sustainable Development: what? why? L18 Sustainable Development Goals	P12 Sustainable campus	
10	16 Oct	L19 Engaging society in sustainable development L20: Leading action for sustainable development	P13 Planning action for sustainable development	External On-campus 2: Pracs 8-13, Sat 19th Oct 9am-5pm
MODULE 4: Preparing for work in Environmental Management (Neil Saintilan)				
11	23 Oct	L21 Monitoring and Evaluation in EM L22 Integrated and adaptive environmental management	P11 MASTERCLASS: Grant Writing workshop (includes project planning, expected outcomes, budget etc).	MODULE 3 Quiz Due: Mon 21 st October 5pm (10%)
12	30 Oct	L23 Career Literacy L24 Researching your future career options	P12 Preparing a job application and interview techniques	
13	6 Nov	L25 Workplace Ethics L26 Project Management and Leadership	P13 Negotiation in the workplace	MODULE 4 Quiz Due: Mon 11 th Nov 5pm (10%) ASSESSMENT 3 (Mock ET Grant FOI) DUE: Mon 18 th November 5pm (30%)

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 published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study

strategies to 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

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

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, images and text to construct, analyse and interpret information for diverse stakeholders in 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

- 1. Module quizzes
- 5. Grant Application

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

- Review and understand the principal threats to environmental systems and key approaches to environmental management.
- Utilise maps, graphs, statistics, images and text to construct, analyse and interpret information for diverse stakeholders in 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

- 1. Module quizzes
- 3. REF and peer commentary
- 5. Grant Application

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.
- Interpret and communicate complex issues in environmental management and match appropriate management strategies to particular environmental settings and problems.

- Utilise maps, graphs, statistics, images and text to construct, analyse and interpret information for diverse stakeholders in environmental management.
- Write for a target audience and critically read, think about, interpret and evaluate environmental and social science data.

Assessment tasks

- 1. Module quizzes
- 3. REF and peer commentary
- 5. Grant Application

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, images and text to construct, analyse and interpret information for diverse stakeholders in environmental management.
- Articulate current and future strategies to meet the needs of environmental management in Australia.

Assessment tasks

- 1. Module quizzes
- 3. REF and peer commentary
- 5. Grant Application

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, images and text to construct, analyse and interpret information for diverse stakeholders in 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

- 1. Module quizzes
- 3. REF and peer commentary
- 5. Grant Application

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.
- 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, images and text to construct, analyse and interpret information for diverse stakeholders in 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

- 1. Module quizzes
- 3. REF and peer commentary
- 5. Grant Application

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, images and text to construct, analyse and interpret information for diverse stakeholders in 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

- 3. REF and peer commentary
- 5. Grant Application

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.
- 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

- 1. Module quizzes
- 3. REF and peer commentary
- 5. Grant Application

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.
- 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

- 1. Module quizzes
- 3. REF and peer commentary
- 5. Grant Application

Changes from Previous Offering

The field trip location for 2018 has changed from previous offerings. We have created more diverse Assessment Tasks and introduced Masterclasses to develop students "work ready" skills.

Changes since First Published

Date	Description
26/07/2019	The Teaching staff and Assessment Tasks have been updated.