ECON359

Environmental Economics

S2 Day 2015

Dept of Economics

Contents

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General Information

Unit convenor and teaching staff
Unit Convenor, Lecturer
Dr Wylie Bradford
wylie.bradford@mq.edu.au
Contact via via email/iLearn
E4A 425
TBA

Credit points
3

Prerequisites
6cp at 200 level including (ECON200 or ECON203)

Corequisites

Co-badged status

Unit description
The application of economic principles to the management of environmental assets throws up fundamental practical and conceptual challenges. An understanding of the nature and causes of environmental problems, and ways to achieve efficient and sustainable use of environmental resources, is vital for the future welfare of the human race. In this unit we examine the theoretical foundation of optimal exploitation of assets such as energy, minerals, water, forests and fisheries, and the management of water, air and soil pollution. The implications of economic theory are contrasted and combined with contributions from ecological economics where appropriate, and the role of institutional function is emphasised throughout. Case studies are drawn from Australian and international experience.

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:

Evidence competence in the use of terminology and concepts associated with the economic analysis of environmental issues.

Identify the relevant economic aspects of environmental problems including key

stakeholders and important incentive effects and their determinants.

Show cognisance of the major theoretical approaches to the analysis of environmental issues, the assumptions on which they are based and their implications regarding the effects of changes in key parameters.

Demonstrate knowledge of the data needs for a meaningful economic analysis of environmental problems, and be able to identify potential data sources and methods for collecting data.

Manifest the capacity to assess and compare policy alternatives in relation to environmental issues.

General Assessment Information

Detailed information on assessment tasks, including specific submission and assessment dates, will be supplied via iLearn.

All assessments will involve either online submission (tutorials) or online completion (assignment and reflective writing exercise, both executed as wikis).

As the timing of contributions to assessment tasks in ECON359 is completely within the control of the student, the following conditions apply to all assessment tasks:

No extensions will be granted. Students who have not submitted the task prior to a deadline will be awarded a mark of 0 for the task, except in cases in which an application for Disruption to Studies is approved and a determination made that *serious and unavoidable disruption* has occurred.

Note that for the assignment and the reflective writing exercise there are no 'due dates' *per se*. The content on the relevant wikis will be assessed at particular, stated times.

Assessment Tasks

Name	Weighting	Due
Tutorial Submission	25%	Ongoing/Weekly
Group Assignment	35%	Week 10
Reflective Writing Exercise	40%	Week 4, Week 8, Week 13

Tutorial Submission

Due: **Ongoing/Weekly**
Weighting: **25%**

On successful completion you will be able to:
- Evidence competence in the use of terminology and concepts associated with the economic analysis of environmental issues.
- Identify the relevant economic aspects of environmental problems including key stakeholders and important incentive effects and their determinants.
- Show cognisance of the major theoretical approaches to the analysis of environmental issues, the assumptions on which they are based and their implications regarding the effects of changes in key parameters.
- Manifest the capacity to assess and compare policy alternatives in relation to environmental issues.

Group Assignment

Due: **Week 10**
Weighting: **35%**

On successful completion you will be able to:
- Identify the relevant economic aspects of environmental problems including key stakeholders and important incentive effects and their determinants.
- Show cognisance of the major theoretical approaches to the analysis of environmental issues, the assumptions on which they are based and their implications regarding the effects of changes in key parameters.
- Demonstrate knowledge of the data needs for a meaningful economic analysis of environmental problems, and be able to identify potential data sources and methods for collecting data.
- Manifest the capacity to assess and compare policy alternatives in relation to environmental issues.

Reflective Writing Exercise

Due: **Week 4, Week 8, Week 13**
Weighting: **40%**

On successful completion you will be able to:
- Evidence competence in the use of terminology and concepts associated with the economic analysis of environmental issues.
- Identify the relevant economic aspects of environmental problems including key

stakeholders and important incentive effects and their determinants.

- Show cognisance of the major theoretical approaches to the analysis of environmental issues, the assumptions on which they are based and their implications regarding the effects of changes in key parameters.

- Demonstrate knowledge of the data needs for a meaningful economic analysis of environmental problems, and be able to identify potential data sources and methods for collecting data.

- Manifest the capacity to assess and compare policy alternatives in relation to environmental issues.

Delivery and Resources

Classes

1 x 2 hour lecture and 1 x 1 hour tutorial per week.

The timetable for classes can be found on the University web site at: http://www.timetables.mq.edu.au/

Recommended Texts and/or Materials

Grafton, R. Quentin, Adamowicz, W., DuPont, D., Nelson, H., Hill, R.J. & Renzetti, S. *Economics of the Environment and Natural Resources* (Blackwell, 2004).

The text combines a direct and intuitive approach to theoretical issues with an appropriate degree of rigour that is missing in many other texts in the field.

The text can be purchased from the Macquarie University Co-op Bookshop. A copy will be made available in the Reserve section of the Library.

Technology Used and Required

Powerpoint presentations,visualiser.

Technology requirements: nil beyond standard e.g. computer access.

UNIT WEB PAGE

Course material is available on the learning management system (iLearn) The web page for this unit can be found at: https://ilearn.mq.edu.au/

Teaching and Learning Strategy

The course material will be delivered via lectures and tutorial classes.

Students should read at least the assigned materials before each lecture and prepare responses to all tutorial questions prior to each class.

Unit Schedule

Week	Lecture (Text Chapter)
1	Introduction and overview (1)
2	Non-renewable resources (7)
3	Fishery economics (4)
4	Forestry economics (5)
5	Water economics (6)
6	Pollution control (3)
7	Property rights (2)
	Session 2 recess
8	Environmental valuation [Theory] (8-10)
9	Environmental valuation [Techniques] (8-10)
10	Growth and the environment (11)
11	Environmental accounting and measurement issues (12)
12	Climate change (11,14)
13	Ethics and Environmental Policy

Learning and Teaching Activities

Lectures - Large Group teaching

Lectures are intended to provide an overview of basic theory in environmental economics and examples of applications. Lectures should be supported by independent reading of the set text and other sources.

Tutorials - Small group teaching

Tutorials constitute an important learning experience in this unit and students are expected to attend. The tutor will facilitate a student-centred discussion of answers to mostly pre-set tutorial questions and problems. A tutorial is also an active forum to discuss with the tutor and the other students difficulties you encountered when preparing for the tutorial questions. Thorough preparation is required to get the most benefit from the tutorial program.

Reading game - Independent reflective and analytical activity

http://teche.ltc.mq.edu.au/the-reading-game-explained/ The reading game will allow you scope to conceptualise the course material in your own way, challenging other students and benefiting from exposure to their perspectives. Your performance in the Reading Game will be notionally assessable: where your score in the game (as assessed by the unit convenor on the basis of the

number and quality of questions generated) exceeds your worst 10% in any other assessment task, it will replace that 10% (i.e. increase your overall mark).

Policies and Procedures

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

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

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

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

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

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

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

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

Student Code of Conduct

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

Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au.

Academic Honesty

The nature of scholarly endeavour, dependent as it is on the work of others, binds all members of the University community to abide by the principles of academic honesty. Its fundamental principle is that all staff and students act with integrity in the creation, development, application and use of ideas and information. This means that:

- all academic work claimed as original is the work of the author making the claim

- all academic collaborations are acknowledged

- academic work is not falsified in any way

- when the ideas of others are used, these ideas are acknowledged appropriately.

Further information on the academic honesty can be found in the Macquarie University Academic Honesty Policy at http://www.mq.edu.au/policy/docs/academic_honesty/policy.html

Grades

Macquarie University uses the following grades in coursework units of study:

- HD - High Distinction
- D - Distinction
- CR - Credit
- P - Pass
- F - Fail

Grade descriptors and other information concerning grading are contained in the Macquarie University Grading Policy which is available at:

http://www.mq.edu.au/policy/docs/grading/policy.html

Grading Appeals and Final Examination Script Viewing

If, at the conclusion of the unit, you have performed below expectations, and are considering lodging an appeal of grade and/or viewing your final exam script please refer to the following website which provides information about these processes and the cut off dates in the first instance. Please read the instructions provided concerning what constitutes a valid grounds for appeal before appealing your grade.

http://www.businessandeconomics.mq.edu.au/new_and_current_students/undergraduate_current_students/how_do_i/grade_appeals/

Special Consideration Policy

The University is committed to equity and fairness in all aspects of its learning and teaching. In stating this commitment, the University recognises that there may be circumstances where a student is prevented by unavoidable disruption from performing in accordance with their ability. A special consideration policy exists to support students who experience serious and unavoidable disruption such that they do not reach their usual demonstrated performance level. The policy is available at:

http://www.mq.edu.au/policy/docs/special_consideration/policy.html

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://informatics.mq.edu.au/help/.

When using the University's IT, you must adhere to the Acceptable Use 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 and teaching activities

- http://teche.ltc.mq.edu.au/the-reading-game-explained/ The reading game will allow you scope to conceptualise the course material in your own way, challenging other students and benefiting from exposure to their perspectives. Your performance in the Reading Game will be notionally assessable: where your score in the game (as assessed by the unit convenor on the basis of the number and quality of questions generated) exceeds your worst 10% in any other assessment task, it will replace that 10% (i.e. increase your overall mark).

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

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Assessment tasks

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- Group Assignment
- Reflective Writing Exercise

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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:

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overall mark).

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:

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your worst 10% in any other assessment task, it will replace that 10% (i.e. increase your overall mark).

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 and teaching activities

- http://teche.ltc.mq.edu.au/the-reading-game-explained/ The reading game will allow you scope to conceptualise the course material in your own way, challenging other students and benefiting from exposure to their perspectives. Your performance in the Reading Game will be notionally assessable: where your score in the game (as assessed by the unit convenor on the basis of the number and quality of questions generated) exceeds your worst 10% in any other assessment task, it will replace that 10% (i.e. increase your overall mark).

Changes from Previous Offering

The unit has reverted to the structure it had from 2009-2013. Wylie Bradford was on leave in Session 2 2014, and so the unit was taught by another member of staff.

This offering does not have a final examination, nor does it have a within-session test.

Requirements to pass ECON359

In addition to meeting the Learning Outcomes as required by the Grading Policy, it is necessary for a passing grade in ECON359 that you:

- score at least 40% of the available marks for the Assignment;
- score at least 40% of the available marks for the Reflective Writing Exercise.