

School of Economics and Finance

ECON 340: Environmental and Resource Economics

Trimester One 2016

COURSE OUTLINE

Name and Contact Details

Paul Calcott RWW113 463-6585 paul.calcott@vuw.ac.nz (course coordinator)
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Class times and room numbers

lectures	Mon, Wed	11:30–12:20	GBLT3
tutorials	Mon	12:40–1:30	RWW129
	Wed	9:30–10:20	GBG04
	Wed	2:40–3:30	RWW413

office hours: Please email to arrange a time.

Prescription

Topics include property rights and transactions costs; environmental externalities and associated missing markets; valuation of environmental resources; irreversibility and its economic implications under uncertainty; economics of pollution control; economics of natural resource use; decision-making under New Zealand's Resource Management Act.

Course Learning Objectives

Students passing this course should be able to:

1. articulate the implications for socially desirable decisions of environmental externalities
2. articulate the principles of socially desirable decisions regarding the use of natural resources
3. explain and critique methods used to conduct valuations of environmental resources and cost-benefit analyses of environmental regulations
4. apply economic theory to model decisions that have impacts on the environment or resource stocks.

Course Content

This course aims to provide students with an understanding of the major results of environmental and resource economics. There is a list of topics to be covered on page 4 below.

Assumed background

We will assume that you have a basic knowledge of partial differentiation and the core concepts of Intermediate Microeconomics. If you have successfully completed ECON 201, you should be in good shape.

Trimester Dates

Teaching Period: Monday 29 Feb - Friday 3 June
Study Period: Monday 6 June - Thursday 9 June
Examination Period: Friday 10 June - Wednesday 29 June (inclusive)

Withdrawal from course

1. Your fees will be refunded if you withdraw from this course on or before Friday 11 March.
2. The standard last date for withdrawal from this course is Friday 13 May. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an 'Application for Associate Deans Permission to Withdraw Late' including supporting documentation. The application form is available from either of the Faculty's Student Customer Service Desks.

Course delivery

There are 24 lectures of 50 mins each, plus eight 50 min tutorials. However some lecture and tutorial times will be allocated to student presentations.

Tutorial signup

You need to sign up for a tutorial group online: <https://student-sa.victoria.ac.nz/>. Tutorial signup will be available from 2:00pm on Tuesday 1 March until 2:00pm on Thursday, 10 March.

Reading

The textbook is:

Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray.
Natural resource & environmental economics, 4th Edition. Pearson (Intl), 2013.

There is a copy available for three day loan at the Commerce Library:1773766. There are some online appendices associated with this book:

<http://www.pearsoned.co.uk/highereducation/resources/permannaturalresourceandenvironmentaleconomics4e/>.

We will certainly refer to Appendix A6.1, and possibly to other appendices as well.

There is a massive amount of material covered in the textbook, and we will not have time to cover it all. You will only be responsible for material that is covered in the lectures.

Additional readings may be made available on <http://blackboard.vuw.ac.nz>. The following book is particularly useful for resource economics:

Larry Karp, *Natural resources as capital: theory and policy*, In progress.

If you would like a less technical exposition, you may wish to have a look at:

Tom Tietenberg and Lynne Lewis, *Environmental & natural resource economics* 9th ed., Prentice Hall, 2012.

There is a copy available at the Commerce Library: [1386268](#).

Expected Workload

The expected workload is a total of 150 hours. In addition to the lecture and tutorial times, this might include tutorial preparation of 16 hours, reviewing material for the test and exam of 80 hours and working on assignments for 20 hours.

Assessment

The Assessment Handbook will apply to all VUW courses: see www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf.

Assessment will take a variety of forms. You will be asked to write short explanations, to interpret and construct theoretical diagrams and to solve simple mathematical problems.

Assignment 1	12.5%	04 April, by 5:00pm
Midterm test	20%	18 April, 11:30–12:20
Assignment 2	12.5%	16 May, by 5:00pm
Group presentation	5%	23 May – 01 June
2 hour final exam	50%	10 June – 29 June

Assignments can be handed in to the appropriate box on the first floor of the Railway Building; #74 (Paul) or #76 (Jacek). Assignments that are late without permission will attract **penalties** of 5% points a day.

A list of topics for **student presentations** will be posted on blackboard in the first week of teaching, and you will be asked to email Paul with your preferences by or on **Mar 21**. They will all be applied issues in resource or environmental economics. On the basis of your reported preferences, we will allocate you to a small team to work on your assigned topic. This is a low stakes (only 5%) opportunity to get some experience in presenting and working in a team.

Silent non-programmable calculators will be permitted in the **exam**. You are expected to be able to attend an exam at the University at any time during the formal examination period. The final exam for this course will be some time from Friday 10 June – Wednesday 29 June (inclusive).

There are no **mandatory course requirements**.

If you cannot complete an assignment or sit a test or examination, refer to www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat.

Student feedback

Student feedback on University courses may be found at www.cad.vuw.ac.nz/feedback/feedback_display.php.

Class representative

A Class representative will be selected in the first week. That person's name and contact details will be available to VUWSA, the Course Coordinator and the class. The class rep provides a communication channel to liaise with the Course Coordinator on behalf of students.

Communication of Additional Information

Course documents, **announcements**, assignment questions, the links to the papers and other information will also be available on the blackboard website: <http://blackboard.vuw.ac.nz>.

Link to general information

For general information about course-related matters, go to:
www.victoria.ac.nz/vbs/studenthelp/general-course-information.

Note to students

Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and academic audit. The findings may be used to inform changes aimed at improving the quality of VBS programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

Tentative schedule

week	dates	Lecture topic	Tutorial	Textbook
1.	Feb 29 – Mar 02	Uniformly Mixed Flow Pollutants	–	PC chaps 5,6
2.	Mar 07 – Mar 09	Pollution & policy	–	PC chaps 5,6
3.	Mar 14 – Mar 16	International coordination	T1	PC chap 9
4.	Mar 21 – Mar 23	Cost Benefit Analysis	–	PC chap 11
	Mar 24 – Mar 30	Break	–	
5.	Apr 04 – Apr 06	Nonmarket valuation	T2	PC chap 12
6.	Apr 11 – Apr 13	Natural resources	T3	JK chap 14
7.	Apr 18 – Apr 20	Midterm test / Resources		JK chap 14
	Apr 25 – Apr 29	Break	–	
8.	May 02 – May 04	Non-renewable resources	T4	JK chap 15
9.	May 09 – May 11	Renewable resources	T5	JK chap 17
10.	May 16 – May 18	Forestry	T6	JK chap 18
11.	May 23 – May 25	Presentations	Presentations	
12.	May 30 – Jun 01	Presentations	Presentations	
	Jun 06 – Jun 09	study period		
	Jun 10 – Jun 29	exam period		