

**School of Agricultural and Resource
Economics**

Natural Resource Economics 2

ECON2211

Unit Outline

Semester 2

Campus: Crawley

Mode: On Campus

Author: Dr Ben White

Revised: May 2007

Introduction

This unit follows on from first year economics (NRE110) and aims to give students an introduction to more technical microeconomics. The faculty views understanding economics as an important component of applied science degrees as most students will find careers in industry, government and research where concepts such as economic efficiency, profitability markets and pricing are of great importance. This unit will give you an understanding of these issues. For students who are interested in economics or see it as giving them a competitive advantage in the labour market, this unit provides the necessary background for Natural Resource Economics, Economics of Water Management, Applied Economic Analysis for Agriculture and Natural Resources and an Honours Project in the School of Agricultural and Resource Economics. Economics is an analytical discipline which uses theoretical mathematical models to analyse the behaviour of firms and households in response to price changes. This unit introduces economic models and how they are analysed mathematically. In addition to teaching economic theory, this unit provides a range of generic skills which include numeracy, the use of graphs and the use of models. These skills are of key importance as computer-based mathematical models have become widely used in science. The unit is organised around three lectures a week which cover the principles and a weekly tutorial which concentrates on specific numerical problems.

Goal

By the end of this unit students should be able to demonstrate how basic economic models of firm and household behaviour can be applied to analyse economic issues in agriculture and natural resource management.

Broad learning outcomes

On completion of this unit, you should be able to:

- demonstrate your comprehension of economic theory by being able to solve simple numerical problems
- communicate economic concepts using mathematics, graphs and written commentary
- demonstrate an appreciation of how models can be applied to real world problems
- express and solve problems using mathematical and graphical methods

Contact details

Unit web site URL: http://Webct.uwa.edu.au/
Name of Unit coordinator: Dr Ben White

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Consultation hours : Monday 10:00 to 11:00 or by appointment	
Other teaching staff	
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Name:	
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Lecture times :	Refer to UWA timetable on the UWA Web page: http://www.timetable.uwa.edu.au/
Lab/prac/tute times :	Check timetable above and instructions from coordinator

Unit-specific prerequisites

This unit assumes that students have completed the following:

Natural Resource Economics 704.110

First year Maths Unit

Technical requirements

None

Software requirements

None

Unit structure and strategies

Lectures

Three 1-hour lectures per week. One lecture per week may be run as a workshop session to help students with assignments

Tutorials

One hour long tutorial per week. To discuss weekly assignments. Attendance is compulsory.

Unit schedule

Week No	Topic	Chapter in Varian
Module 1 Introduction		
1 (29)	1. What is Economics and why is it relevant to Agriculture and Natural Resource Management	1
Module 2 Consumer Theory		
1	2.1 Budget constraint	2
2	2.2 Preferences	3
2	2.3 Utility Chapter 4	4
3	2.4 Choice Chapter 5	5
3	2.5 Demand (Chapter 6 and 8)	6 and 8
4	2.6 Market demand Chapter 15	15
4	2.7 Further topic in consumer theory	Papers on Webct
5	2.8 Further topic in consumer theory	
5	2.9 Further topic in consumer theory	
3. Theory of the Firm		
6	3.1 Profit maximisation Chapter 19	19
6	3.2 Cost minimization Chapter 20	20
7	3.3 Cost curves Chapter 21	21
7	3.4 Firm supply Chapter 22	22
8	3.5 Industry supply Chapter 23	23
8	3.6 Imperfect competition Chapter 24, 25 and 27	24,25,27
9	3.7 Further topics in theory of the firm	
9	3.8 Further topics in theory of the firm	
10	Mid-semester break	
11	3.9 Further topics in theory of the firm	
11	3.10 Further topics in theory of the firm	
4. Market Equilibrium and Welfare Analysis		
12	4.1 Equilibrium Chapter 16	16
12	4.2 Consumer and producer surplus Chapter 14	14
13	4.3 Factor markets	
5. Market Failure		
13	5.1 Externalities	
13 (43)	5.2 Public goods	

Textbook(s)

Recommended/required text(s)

Varian, H. *Intermediate Microeconomics: A Modern Approach*, Norton, New York. 7th Edition.

Alternate text(s)

Wonnacott, P. and Wonnacott, R. *Microeconomics*, John Wiley & Sons, New York.

McTaggart, D., Findlay, C. and Parkin, M. *Microeconomics*, Addison-Wesley Publishing Company, Sydney. [This is an introductory microeconomics text written in non-mathematical form]

Nicholson, W. *Microeconomic Theory: Basic Principles and Extensions* (4th Edition), The Dryden Press, Orlando, Florida. [This contains more mathematical descriptions of microeconomic concepts and may be available in the second-hand bookshop]

Nicholson, W. *Intermediate Microeconomics and its Application* (4th Edition), The Dryden Press, Orlando, Florida. [This contains non-mathematical descriptions of microeconomic concepts and may be available in the second-hand bookshop]

Wallace, N. (Ed) (1992) *Natural Resource Management: an economic perspective*, (Ed.: N. Wallace), ABARE, Canberra. [This is a collection of descriptive analyses of the main natural resource issues affecting Australia. It provides a useful overview of the economic perspective on these issues.]

Unit web site

WebCT

There is a WEBCT site available for this module at <http://webct.uwa.edu.au/webct/homearea/homearea>. This site includes Powerpoint lecture notes, a bulletin board and more. You can reach the WebCT site directly by entering <http://webct.uwa.edu.au> into your Web browser. At the WebCT Welcome screen, click on **Log into My WebCT** and you will be prompted for a WebCT ID and password. Your WebCT ID will be your student number. Any letters must be in upper case (capitals) and do not include the slash.

Your password will be the barcode as displayed on your campus card.

Assessment

Component	Weight	Due date
4 quizzes	In total 30% - 10% each	During lectures in weeks 3, 6, 9 and 12
Final exam	70 %	N/A
Weekly assignments	0%	Discussed in tutorials (unmarked)

Assessment details:

Quizzes

Test student understanding of basic microeconomics and their ability to analyze economic models. Absence from quizzes without medical evidence will result in a zero mark being recorded. The questions in the quizzes will be similar to the weekly assignments. No graphics calculators are allowed in quizzes.

Quiz 1 Consumer theory Wednesday lecture week 31

Quiz 2 Theory of the firm 1 Wednesday lecture week 34

Quiz 2 Theory of the firm 2 Wednesday lecture week 37

Quiz 4 Market equilibrium and welfare Wednesday lecture week 41

Weekly Assignments

Gives students the opportunity to demonstrate their comprehension of economic models. These are discussed in lectures and gone through in detail in the tutorial.

Final exam

The exam is three hours long. Students are required to answer twelve questions four from each section. The exam allows students to demonstrate their ability to solve microeconomic problems. No graphics calculators are allowed in the exam.

Tutorials

Attendance at tutorials and completion of weekly assignments is compulsory .

Plagiarism

All forms of cheating, plagiarism and copying are condemned by the University as unacceptable behaviour. The Faculty's policy is to ensure that no student profits from such behaviour. Generally a failure will be recorded for the subject in which the cheating has occurred. Serious cases shall be referred to the University's Board of Discipline. All students should note that cases of copying are automatically reported to the Dean and documentary evidence along with associated correspondence is placed on the student's permanent record.

Appeals against academic assessment

Full regulations governing appeals procedures are available in the University Handbook, available online at <http://www.publishing.uwa.edu.au/handbooks/interfaculty/PFAAAA.html> .

Charter of student rights

See: http://www.guild.uwa.edu.au/info/student_help/student_rights/charter.shtml

Guild Student Centre contact details

See: http://www.guild.uwa.edu.au/info/student_help/contact/index.shtml