Unit Outline*

ECON7491
Microeconomic Theory and Applications

Semester 1, 2011
Campus: Crawley

Unit Coordinators
Associate Professor Paul McLeod
Associate Professor Anu Rammohan

Business School
www.business.uwa.edu.au

* This Unit Outline should be read in conjunction with the Business School Unit Outline Supplement available on the Current Students website http://www.business.uwa.edu.au/students
UNIT DESCRIPTION

Introduction

Welcome to Microeconomic Theory and Applications 7491. This course aims to extend some of the material from earlier economics frameworks to expand upon your previous work in microeconomics through an in depth analysis of central propositions in and applications of microeconomic theory. This unit will be interactive with a lot of class discussions, where students learn to apply advanced microeconomic concepts to current market developments.

The course will be taught jointly by Associate Professors Paul McLeod and Anu Rammohan. The first part of the course, taught by Associate Professor McLeod will focus on extending aspects of consumer choice, demand analysis, production and welfare economics developed in second year. The focus will be on the application of these theoretical extensions.

The second part of the course, taught by Associate Professor Rammohan will extend the theoretical tools studied in Intermediate Microeconomics to analyse the behaviour of agents in the labour markets and health markets. This part of the course will focus on Information economics, human capital theory, labour supply, pay differentials in firms, demand for skilled labour and rational addiction models.

Associate Professor McLeod teaches microeconomics, resource economics and public economics. He also teaches in the MBA program and in the Executive MPA program at the Australian and New Zealand School of Government. He teaches the economics of gas pricing and price regulation in the China Gas Program of the Australian Centre for Natural Gas Management. His research interests are in resource economics, business economics and public policy. He has published, articles and reports across a wide area of applied economics including: consumer choice, transport demand, the demand for housing characteristics, advertising and demand for tobacco, estimating multi-product production functions, estimating the economic impact of major resource projects and the use of survey techniques to value resources and economics of natural resource allocation.

He has had a number of senior roles at the University including, Dean Faculty of Economics and Commerce, Head, Department of Economics, Executive Dean, Faculties of Education, Economics and Commerce and Law. He was the inaugural Dean of the UWA Business School.

Away from the University he has served on a number of government policy reviews and committees including: inquiries into land transport deregulation, the operation of Stateships, the future development options for the Port of Fremantle, Chairperson of the independent State Water Allocation Committee, of the Task Force Reviewing Long Term Development and Management Strategies for the South West Irrigation System, and of the Task Force for the Review of Natural Resource Legislation in Agriculture. Currently he is a member of the economics panel of the Economic Regulation Authority.

Associate Professor Rammohan joined UWA in 2009 from the University of Sydney. She teaches in the MBA program. Her research interests are in the areas of Microeconometrics, specifically in applications to Development Economics, Health Economics and Labour Economics. She has published extensively in these areas and is currently holding a number of competitive research grants.

Unit content

This course builds on the microeconomics, market models and welfare economics from previous courses to develop the advanced theoretical and applied tools required in modern microeconomics. The focus of the course will be in providing students with an understanding of how the tools of microeconomics can be applied to specific economic issues.
Economists are routinely asked to make sense of a wide range of market outcomes, for example; the prices that regulators should set for gas and electricity supplied by monopolies, the determination of prices when two large supermarkets interact, the correct basis for indexing pensions, the proper way to value houses, the best way to manage hospital waiting lists, the most efficient organise health insurance.

The list is virtually endless. For most economists the starting point for all such analysis will be the application of theory to the problem. Theory informs the real world understanding, the interpretation of available data and ultimately, the decision making. The theoretical understanding then needs to be applied using appropriate data collection and analysis techniques.

This course takes a range of microeconomic issues and demonstrates how theory can be applied in the understanding of these issues and how well developed applied analysis can inform our understanding of the theory and allow the application of the theory in policy development.

The goal of the unit

Why do we want to do this? There are perhaps two answers we could give. We could say that understanding microeconomics is important because it focuses on a question central in all economies – the efficient and socially optimal allocation of scarce resources. This is an important and often quoted view. However, if this is what you answer when asked about economics your friends will probably wander off to talk to someone more interesting.

A better answer might be that the application of microeconomic principles underpins almost everything that happens in a society. Why? Because microeconomics deals with the way we organise society and the choices we make about the institutional arrangements that structure out everyday activities. It’s also about assessing how those institutions can be improved to make society (meaning the real individuals and groups who comprise society) better off. And when we say institutions we do not just mean markets in some generic sense. We mean individuals, government agencies, private firms, legal and relationship contractual arrangements, and the whole societal arrangement (such as tax rules, competition rules, gas price regulation, environmental standards, road rules, health insurance arrangements) in which we go about our personal and business lives.

By extending the understanding of consumer behaviour and firm behaviour you will be well placed to understand how consumers and firms influence their individual outcomes and by gaining an in depth understanding of market arrangements we will be in a position to understand how consumers and firms interact to affect the institutional arrangements and collective outcomes in a modern economy.

How do we interact? How should we interact? Firms and individuals want to do the best with what they have. Sometimes they pursue this in cooperation with other individuals and firms, sometimes in competition with larger numbers of other individuals and firms and sometimes in competition with a limited number of other individuals and firms. There is a big difference (both in operation and outcome) between auction with three bidders and one with a hundred. Our study of imperfect competition and game theory, asymmetric information and moral hazard, will deepen our understanding of the way market interaction occurs and how outcomes vary across various arrangements.

But as they say there’s more. It’s one thing to understand how individuals and firms operate and how they interact in markets. It’s quite another to know whether this makes use better off or worse off and what we could do to change the institutional and market arrangements for the better. Our study of public economics goes straight to this question. What does it mean to say that something makes society better off? If we make a change in economic and market arrangements (e.g. we allow GM modified crops, we provide free health care), does this make us better off? After all doesn’t the market take care of all of these issues? Our study of public economics principles encompassing
externalities, public goods, voting and regulation will give us a greater depth of understanding as to when and why the market should be left alone and when and why the behaviour of individuals and firms should be constrained in some way and the government should take a greater role in influencing outcomes.

**Learning outcomes**

Where will this get us?

One answer might be the following. At the end of the course you will understand a range of basic principles in microeconomics and be able to use the associated theoretical models to predict the economic behaviour of individuals and firms. Through the application of public/welfare economics principles you will be able comment on and evaluate the various microeconomic policies which are in place and proposed by government and others as ways to improve overall economic welfare.

Another and better answer might be this. At the end of the course, from first principles, you should be able to make a meaningful assessment on almost everything that is occurring in the market economy in which you live and will ultimately work. Everything from housing affordability to the setting of petrol prices to the regulation of electricity prices to the freeing up of retail trading hours, to pricing hospital bed spaces should be amenable to a first principles assessment by you.

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

- Appreciate the role that microeconomic theory and assumptions play in interpreting markets and policies;
- Be able to utilize advanced microeconomic models to reason how consumers and producers will react in a range of market circumstances;
- Be able at articulate the role that advanced microeconomics plays in understanding the issues that confront business and government decision makers in a modern market economy;
- Have an understanding of the way that policies affecting business and individuals are formed based on microeconomic principles.
- Have an understanding the way data and analytical techniques are brought together to inform the application of theory to a range of problems such as demand for private health insurance, the costs and benefits of investments in education and compensating wage differentials.
- Be able to conduct an industry/market/policy economic analysis based on selecting the correct theoretical model and matching it with appropriate assumptions and information.

**Educational principles and graduate attributes**

In this unit, you will be encouraged and facilitated to develop the ability and desire to:

- Demonstrate the ability to apply, analyse, synthesise and evaluate information from multiple sources to undertake evaluations of the economic performance of markets;
- Demonstrate the ability to communicate orally to a professional standard to peers in class room discussion in relation to economics matters;
- Demonstrate an ability to work effectively in independent analysis and to produce clear and concise written evaluations of economics material and the performance of markets; and
- Recognise, understand and respond to potential the various equity and efficiency issues confronting government and policy makers.
TEACHING AND LEARNING RESPONSIBILITIES

Teaching and learning strategies

For this unit, students are required to be prepared for lectures. You should spend time reading the required chapters and related material before each lecture.

If you are having difficulty understanding the economic theory and concepts, you can seek assistance from the lecturer during tutorials or consultation times. The focus of the assignments and final examination is to assess your level of understanding of the relevant theory and ability to apply economic concepts.

During tutorials, the focus will be on application of economic theory and concepts. Hence, you are expected to contribute and participate in discussions on the nominated topics and the way that theory informs the analysis of economic issues.

Tutorials commence in week 2.

Teaching and learning evaluation

You may be asked to complete two evaluations during this unit. The Student Perception of Teaching (SPOT) and the Students' Unit Reflective Feedback (SURF). The SPOT is optional and is an evaluation of the lecturer and the unit. The SURF is completed online and is a university wide survey and deals only with the unit. You will receive an email from the SURF office inviting you to complete the SURF when it is activated. We encourage you to complete the forms as your feedback is extremely important and can be used to make changes to the unit or lecturing style when appropriate.

Attendance

Participation in class, whether it be listening to a lecture or getting involved in other activities, is an important part of the learning process. It is therefore important that you attend classes. More formally, the University regulations state that 'to complete a course or unit students shall attend prescribed classes, lectures, seminars and tutorials'.

CONTACT DETAILS

We strongly advise students to regularly access their student email accounts. Important information regarding the unit is often communicated by email and will not be automatically forwarded to private email addresses.
TEXTBOOK(S) AND RESOURCES

Unit website

http://www.webct.uwa.edu.au

Recommended/required text(s)

There is no text book for this unit.

Detailed reading lists that will be handed out for each major topic. The course uses a selection of book chapters, journal articles and report chapters. The relevant books will be available in the reserve collection. The journal articles will in the required reading will be available in the journals in the library. Most will be available electronically (e.g. in JSTOR in the Library). Where required they will be made available to you via the WEBCT site for the course.
Additional resources and reading material

There are a large number of books in the library covering the topics we are covering. They operate at different levels of mathematical complexity and different levels of verbosity. The following books are all excellent texts covering a range of topics at various levels. They are good supplements to the main text. The detailed topic reading lists will indicate which chapters are most relevant to look at for any given topic.

On most topics you could start with your second year text and then move on to the more advanced texts.


Advanced text. Level to which you should aspire.


Russell, R.R. and Wilkinson, M. Microeconomics, Wiley. 1979

Older advanced text with less extensive consideration of each topic.

The following texts are intermediate texts which all are good starting points on the various topics.


## UNIT SCHEDULE

<table>
<thead>
<tr>
<th>Week#</th>
<th>Topic</th>
<th>Core readings</th>
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<tbody>
<tr>
<td>1</td>
<td>Measuring the benefits or price changes, revealed preference and index numbers</td>
<td>Gravelle, H. and Rees, R. Chapter 3 plus handout lecture notes.</td>
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</tbody>
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| 2     | Extending consumer choice – time allocation and attribute choice models | Gravelle, H. and Rees, R. Chapter 4 Part, parts B, C and D plus handout lecture notes.  
| 3     | Intertemporal choice - inter-temporal allocation decisions and intertemporal demand functions | Gravelle, H. and Rees, R. Chapter 11                                                                                                               |
| 5     | Monopoly regulation                                                   | Gravelle, H. and Rees, R. Chapter 9, and monopoly section from Chapter 14  
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Text References</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Information economics- Uncertainty and expected utility, agency theory, moral hazard and adverse selection</td>
<td>Folland, S., Goodman, A. and Stano, M. Chapters 8 and 10 Plus lecture notes and handouts</td>
</tr>
<tr>
<td>8</td>
<td>Labour supply: Household production, the family and the life-cycle</td>
<td>Ehrenberg, R.G and Smith, R.S. Chapter 7 Plus lecture notes and handouts</td>
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<tr>
<td></td>
<td><strong>Break no classes</strong></td>
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<tr>
<td>9</td>
<td>Human capital theory- applications to education, health</td>
<td>Ehrenberg, R.G and Smith, R.S. Chapter 9 Plus lecture notes and handouts</td>
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<tr>
<td>10</td>
<td>Pay and productivity: Wage determination within the firm</td>
<td>Ehrenberg, R.G and Smith, R.S. Chapter 11 Plus lecture notes and handouts</td>
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<tr>
<td>11</td>
<td>Market for skilled labour- monopsony, backward bending labour supply curve, Supplier-induced demand; applications to medical labour market</td>
<td>Ehrenberg, R.G and Smith, R.S. Chapter 5, pages 129-144 Folland, S., Goodman, A. and Stano, M. Chapter 15 Plus lecture notes and handouts</td>
</tr>
<tr>
<td>12</td>
<td>Rational addiction models- demand for drugs, alcohol and cigarettes</td>
<td>Folland, S., Goodman, A. and Stano, M. Chapter 23 Clements and Zhao, Chapters 2 and 3</td>
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<tr>
<td>13</td>
<td>Revision</td>
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**ASSESSMENT MECHANISM**

**The purpose of assessment**

There are a number of reasons for having assessable tasks as part of an academic program. The assessable tasks are designed to encourage you to explore and understand the subject more fully. The fact that we grade your work provides you an indication of how much you have achieved. Providing feedback on your work also serves as part of the learning process.

In this unit both formative and summative assessment is used. The assignments are designed to assess your understanding of the learning outcomes listed for each topic covered and your ability to develop your economic reasoning in “small scale” context. They are designed to develop skills in assessing market situations, selecting the appropriate economic models and presenting clear written communication about the associated economic outcomes. This is an important employability skill. The final exam will assess knowledge of the learning outcomes in all topics.
Assessment mechanism summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
<th>Due date</th>
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</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>10%</td>
<td>Week 6</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>10%</td>
<td>Week 11</td>
</tr>
<tr>
<td>Research Project</td>
<td>20%</td>
<td>TBA</td>
</tr>
<tr>
<td>Tutorial Participation</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Final exam</td>
<td>50%</td>
<td>TBA</td>
</tr>
</tbody>
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**Note 1:** Results may be subject to scaling and standardisation under faculty policy and are not necessarily the sum of the component parts.

**Note 2:** Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning outcomes as required for accreditation and audit purposes. The findings may be used to inform changes aimed at improving the quality of Business School programs. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the unit.

**Assessment components**

Assignments 1 will contain three questions designed to test your ability to use theoretical reasoning to elaborate real world issues and interpret data. This assignment is not meant to be simply a matter of searching for the book with the right answer in it nor of reproducing masses of lecture material. Rather you will be required to think clearly about each question using whatever analytical framework you believe appropriate stating the necessary assumptions clearly. Each answer, excluding diagrams, will not need to be more than a page and questions will be weighted equally.

Assignment 2 will be in the same format but will cover the material that is taught after week 6.

Final Exam
The final exam will be two hours and will have three sections – Part A -20 multiple choice questions. Part B-3 short answer questions and Part C- 1 essay. Each section will include questions from both parts of the course.

**Submission of assignments**

If you submit manually please remember to attach an Assignment Cover Sheet to the front of your assignment. You can download and print your Assignment Cover Sheet from the Current Students web page [http://www.business.uwa.edu.au/students/assessments](http://www.business.uwa.edu.au/students/assessments).

- Students can hand in over the counter at the Postgraduate Student Centre.

**Student Guild**

Phone: (+61 8) 6488 2295
Facsimile: (+61 8) 6488 1041
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Website: [http://www.guild.uwa.edu.au](http://www.guild.uwa.edu.au)
Charter of Student Rights and Responsibilities


Appeals against academic assessment

The University provides the opportunity for students to lodge an appeal against assessment results and/or progress status (refer http://www.secretariat.uwa.edu.au/home/policies/appeals).