

ECON4100/5300

Advanced Microeconomic Analysis

Course Outline

Semester 1, 2017

Part A: Course-Specific Information

Students are also expected to have read and be familiar with **Part B Supplement to All Course Outlines**. This contains Policies on Student Responsibilities and Support, Including Special Consideration, Academic Misconduct and Plagiarism, and Key Dates.

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1 STAFF CONTACT DETAILS

Lecturer-in-charge: Gabriele Gratton
Room: UNSW Business School 470A
Phone: The best way to contact me is via email.
Email: g.gratton@unsw.edu.au
Consultation Times: Thu 5-7pm

Other lecturers: Carlos Pimienta
Room: QUAD 3125
Phone: The best way to contact me is via email.
Email: c.pimienta@unsw.edu.au
Consultation Times: Thursdays 3-5pm

1.1 Communications with staff

You should feel free to contact your lecturer(s) about any academic matter. However, we strongly encourage, for efficiency, all enquiries about the subject material be made at lectures or tutorials or during consultation time. Discussion of course subject material will not be entered into via lengthy emails. Phone calls are strongly discouraged.

Email correspondence on administrative matters (e.g. advising inability to attend a lecture) will be responded to within 48 hours, but not over weekends. Please note that the lecturer has no advance notice of the date and time of the exam.

2 COURSE DETAILS

2.1 Teaching Times and Locations

Lectures start in Week 1 (to Week 13), with no class held in Week 7. The Time and Location is:
Mondays 3:00-6:00pm, UNSW Business School 105.

2.2 Units of Credit

The course is worth 6 units of credit.

2.3 Summary of Course

The first part of the course (taught during the first six weeks) deals with individual decision making and basic game theory. We first consider the decision maker in an abstract setting before moving to a market environment. Here we derive the consumer's demand function and its properties. Fundamental topics covered include utility maximization, expenditure minimization, duality, welfare changes, and decision making under uncertainty. Time permitting, we also briefly touch on producer theory and market equilibrium. We conclude this part of the course by introducing basic game theory, which is an essential tool to analyse strategic behaviour.

The second part of the course builds on the first by exploring economic environment with asymmetric information (asymmetric information, signalling and screening), as well as other topics in contract theory such as principal-agent problems. Time permitting; we also briefly introduce mechanism design and social choice theory.

2.4 Aims and Relationship to Other Courses

Relative to your pass-level studies in economics, you will acquire an extra layer of professional knowledge. The fourth year as a whole provides an entree to premium economics jobs in elite institutions like the Australian Treasury and the Reserve Bank of Australia, and leading private banks and fund managers. It is also a gateway for economics students contemplating study towards a higher degree.

The role of ECON4100 within the economics fourth year is to provide core analytical skills in advanced microeconomics. This course describes the foundations of modern microeconomics as well as other topics that have been the subject of economic research in recent years.

2.5 Student Learning Outcomes

The Course Learning Outcomes are what you should be able to DO by the end of this course if you participate fully in learning activities and successfully complete the assessment items.

The Learning Outcomes in this course also help you to achieve some of the overall Program Learning Goals and Outcomes for all coursework students in the Business School. Program Learning Goals are what we want you to BE or HAVE by the time you successfully complete your degree. You demonstrate this by achieving specific Program Learning Outcomes - what you are able to DO by the end of your degree.

For more information on the Undergraduate Program Learning Goals and Outcomes, see Part B of the course outline.

The following table shows how your Course Learning Outcomes relate to the overall Program Learning Goals and Outcomes, and indicates where these are assessed:

Program Learning Goals and Outcomes		Course Learning Outcomes	Course Assessment Item
<i>This course helps you to achieve the following learning goals</i>		<i>On successful completion of the course, you should be able to:</i>	<i>This learning outcome will be assessed in the following items:</i>
1	Knowledge	Formulate economic as constrained or unconstrained optimisation problems. Demonstrate familiarity with the mathematical fundamentals of optimisation theory.	<ul style="list-style-type: none"> • Class Participation • Exam
2	Critical thinking and problem solving	Critically apply optimisation techniques to solve microeconomic problems in a variety of contexts.	<ul style="list-style-type: none"> • Class Participation • Exam
3a	Written communication	Construct written work which is logically and professionally presented.	<ul style="list-style-type: none"> • Exam
3b	Oral communication	Communicate ideas in a succinct and clear manner.	<ul style="list-style-type: none"> • Class Participation
4	Teamwork	Work collaboratively to complete a task.	Not specifically assessed.

5a.	Ethical, environmental and sustainability considerations	Not specifically addressed in this course.	Not specifically assessed
5b.	Social and cultural awareness	Not specifically addressed in this course.	

3 LEARNING AND TEACHING ACTIVITIES

3.1 Approach to Learning and Teaching in the Course

The philosophy underpinning this course and its Teaching and Learning Strategies are based on “Guidelines on Learning that Inform Teaching at UNSW. These guidelines may be viewed at: www.guidelinesonlearning.unsw.edu.au. Specifically, the lectures, tutorials and assessment have been designed to appropriately challenge students and support the achievement of the desired learning outcomes. A climate of inquiry and dialogue is encouraged between students and teachers and among students (in and out of class). The lecturers and tutors aim to provide meaningful and timely feedback to students to improve learning outcome.

Understanding and using economic models is key element in economic analysis and in undertaking research in economics. The best way to gain a deep understanding of these models is by working through the models yourself using a pen and paper. Look at the equations and write them out (or draw the diagrams). Note what variables enter into the models and make sure you can provide an intuitive explanation as to why they are there. Think about the assumptions used in the model and ask why they are used. Look at how the model is solved and then look at the solution and see if it makes economic sense. It usually takes time to build-up these skills so it is good practice to begin early in the session and do a little at a time. In the lectures we will work through important models; however the numerous problem sets will give you practice at working with and solving economic models and help you to acquire the necessary skills.

3.2 Learning Activities and Teaching Strategies

The examinable content of the course is defined by the references given in the Lecture Schedule and the content of Lectures.

Lectures

The purpose of Lectures is to provide a logical structure for the topics that make up the course; to emphasize the important concepts and methods of each topic, and to provide relevant examples to which the concepts and methods are applied.

Out-of-Class Study

While students may have preferred individual learning strategies, it is important to note that most learning will be achieved outside of class time. Lectures can only provide a structure to assist your study.

An “ideal” strategy (on which the provision of the course materials is based) might include:

- Reading of the relevant chapter(s) of the text and any readings **before the lecture**. This will give you a general idea of the topic area.

- Attendance at lectures. Here the context of the topic in the course and the important elements of the topic are identified. The relevance of the topic should be explained.

4 ASSESSMENT

4.1 Formal Requirements

In order to pass this course, you must:

- achieve a composite mark of at least 50 out of 100; and
- make a satisfactory attempt at ALL assessment tasks.

4.2 Assessment Details

Assessment Task	Weighting	Length	Due Date
Class participation (weeks 1-6)	3%	See 4.3 below	See 4.3 below
Class participation (weeks 7-12)	3%	See 4.3 below	See 4.3 below
Problem Sets	28%	See 4.3 below	See 4.3 below
Final Exam	66%	2 hours	University Exam Period
	100%		

4.3 Class Participation and Problem Sets

Attendance is mandatory. Active class participation can be a mitigating consideration in case of poor performance in the final.

Problem Sets are due in weeks 3, 5, 7, 10, 12, and 2 June. Students are required to submit solutions at the beginning of lecture (no more than 10 minutes late). Students are allowed to work in groups, although assessment is individual. 14% of the total mark will be decided by the mark of a randomly selected problem set among those due in weeks 3, 5, and 7. The remaining 14% of the total mark will be decided by the mark of a randomly selected problem set among those due in weeks 10, 12, and 2 June.

4.4 Final Exam Format

The final exam covers all the material studied in the course. 33 marks will be allocated to material taught during the first 6 weeks and 33 marks will be allocated to the last 6 weeks. Further details about the structure of the exam will be announced either in class or on the course website.

4.5 Quality Assurance

The Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being achieved. The information is required for accreditation purposes, and aggregated findings will 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 will not be related to course grades.

5 COURSE EVALUATION AND DEVELOPMENT

Each year feedback is sought from students and other stakeholders about the courses offered in the School and continual improvements are made based on this feedback. UNSW's myExperience Survey Tool is one of the ways in which student evaluative feedback is gathered. You are strongly encouraged to take part in the feedback process.

6 COURSE RESOURCES

The website for this course is on UNSW Moodle at: <http://moodle.telt.unsw.edu.au>

The textbook for this course is:

(MWG) A. Mas-Colell, MD. Whinston and JR. Green, *Microeconomic Theory*, Oxford University Press, 1995

7 COURSE SCHEDULE

7.1 Lecture Schedule

Lectures start in Week 1 and finish in Week 13. There is no class in Week 7.

LECTURE SCHEDULE		
Week	Topic	Reference
Week 1 27 February	Preferences and consumer choice	MWG: 1,2
Week 2 6 March	Classical Demand Theory	MWG: 3
Week 3 13 March	Producer Theory and Market Equilibrium	MWG: 4,10,15
Week 4 20 March	Choice under uncertainty	MWG: 6
Week 5 27 March	Game Theory: Normal form games	MWG: 7,8
Week 6 03 April	Game Theory: Extensive form games	MWG: 7,9
Week 7 10 April	NO LECTURE <i>(Friday 14 April is Good Friday public holiday)</i>	
Mid-semester break: Friday 14 – Saturday 22 April inclusive		
Week 8 24 April	Beliefs and Sequential Rationality <i>(Tuesday 25 April is Anzac Day public holiday)</i>	MWG 9C
Week 9 1 May	Adverse Selection and Screening	MWG 13A,B,D
Week 10 8 May	Signaling	MWG 13C
Week 11 15 May	Principal Agent Models	MWG14A,B
Week 12 22 May	Elements of Mechanism Design and Social Choice Theory	MWC 14C
Week 13 29 May	Writing Theory	Thomson, W (1999) "The Young Person's Guide to Writing Economic

		Theory" <i>Journal of Economic Literature</i> , 37: 157–183.
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