

ECON6002

Macroeconomic 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. It also contains the BUSINESS SCHOOL PROGRAM LEARNING GOALS.

Table of Contents

| | | |
|-----|---|----|
| 1 | STAFF CONTACT DETAILS | 3 |
| 1.1 | Communications with staff | 3 |
| 2 | COURSE DETAILS | 4 |
| 2.1 | Teaching Times and Locations | 4 |
| 2.2 | Units of Credit | 4 |
| 2.3 | Summary of Course | 4 |
| 2.4 | Aims and Relationship to Other Courses | 4 |
| 2.5 | Student Learning Outcomes | 4 |
| 3 | LEARNING AND TEACHING ACTIVITIES | 5 |
| 3.1 | Approach to Learning and Teaching in the Course | 5 |
| 3.2 | Learning Activities and Teaching Strategies | 6 |
| 4 | ASSESSMENT | 7 |
| 4.1 | Formal Requirements | 7 |
| 4.2 | Assessment Details | 7 |
| 4.3 | Assignments | 7 |
| 4.4 | Midsession Exam | 7 |
| 4.5 | Final Exam | 8 |
| 4.6 | Quality Assurance | 8 |
| 5 | COURSE EVALUATION AND DEVELOPMENT | 8 |
| 6 | COURSE RESOURCES | 9 |
| 7 | COURSE SCHEDULE | 11 |

1 STAFF CONTACT DETAILS

Lecturer-in-charge: Benoit Julien

Room UNSW Business School 405

Phone No: 9385 3678

Email: benoit.julien@unsw.edu.au

Consultation Times: TBA

1.1 Communications with staff

You should feel free to contact your lecturer about any academic matter. However, I strongly encourage, for efficiency, all enquiries about the subject material be made at tutorials or during consultation time. The lecturers will hold regular office hours starting Week 2 until Week 13.

Email is the recommended means of initial communication with the teaching staff for this course. Discussion of course subject material will not be entered into via lengthy emails.

Lecturers will reply to email within 48 hours, except on weekends, with the following provisions:

- The question should require a one (or two) sentence response (maximum). If it takes more, office hours are the more appropriate venue.
- We will never answer emails that request information that can be found on the website or the syllabus.
- We will not reply to emails concerning grading. For such matters, office hours are more appropriate.
- It is also (strongly) preferable that you use an UNSW email address: Our spam filter is set to maximum. Moreover, university policy stipulates a preference for these email addresses.
- Always identify yourself and the course code in your email.
- Please do not send attachments of any kind unless requested by the lecturers.
- Please do not submit term work by email unless requested by the lecturers.

We encourage you to provide course feedback and comments via email, if you wish.

Please note that the lecturer has no advance notice of the date and time of the final exam.

2 COURSE DETAILS

2.1 Teaching Times and Locations

Lectures start in Week 1 (to Week 12): The Time and Location are:

Thursday 18:00-21:00 UNSW Business School 232.

2.2 Units of Credit

The course is worth 6 units of credit. There is no parallel teaching in this course.

2.3 Summary of Course

The first half of course will focus on dynamic macroeconomics based on general equilibrium theory with added emphasis on neoclassical growth models and dynamic programming, models with uncertainty, overlapping generation models, real business cycle theory, and monetary policy models. The second half is on the dynamics of labour markets, unemployment, and micro-foundations of macroeconomics. For each topic, we will also learn problem solving and numerical techniques and apply them in the particular topic in discussion. In the second half of the course, some data analysis is also part of the learning process.

2.4 Aims and Relationship to Other Courses

This course is a graduate course (for PhD and MEd students) on advanced macroeconomics. It will build on the material that is taught in intermediate courses in macroeconomics. Relative to your past-level studies in economics, you will acquire an extra layer of professional knowledge and core analytical skills in advanced macroeconomics.

2.5 Student Learning Outcomes

The course covers leading topics in advanced 'big-picture' economics. It includes topics in new classical economics, which draws on microeconomic techniques (see below.)

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 undergraduate coursework in the Business School. Program Learning Goals are what we want you to BE or HAVE by the time you successfully complete your degree. For more information on the Undergraduate Program Learning Goals and Outcomes, see Part B of the course outline.

The following table illustrates the Course Learning Outcomes and Program Learning Goals and Outcomes:

| 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 | Explain the assumptions and structure of standard models in macroeconomics Analyse and manipulate these models Use statistical skills to present data relevant to problems in macroeconomics. | <ul style="list-style-type: none"> • Assignments • Exams |
| 2 | Critical thinking and problem solving | Use the standard models of advanced macroeconomics to interpret and analyse real problems in macroeconomics | <ul style="list-style-type: none"> • Assignments • Exams |
| 3a | Written communication | Construct written work which is logically and professionally presented. | <ul style="list-style-type: none"> • Assignments • Exams |
| 3b | Oral communication | Communicate ideas in a succinct and clear manner. | <ul style="list-style-type: none"> • In class |
| 4 | Teamwork | Work collaboratively to complete a task. | Not assessed specifically assessed. |
| 5a. | Ethical, environmental and sustainability considerations | Not specifically addressed in this course. | Not assessed specifically assessed. |
| 5b. | Social and cultural awareness | Not specifically addressed in this course. | Not assessed specifically assessed. |

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. In some cases, you will should work through the data and convince yourself that the model is an appropriate specification. 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, the content of Lectures, and the content of the Tutorial Program.

Lectures

The purpose of lectures is to provide a logical structure for the topics that make up the course, to emphasise the important concepts and methods of each topic, and to provide relevant examples to which the concepts and methods are applied. As not all topics will be presented extensively, students should refer to the textbook for further details and be sure to attempt the tutorial exercises.

Tutorials

There are no official tutorials in graduate courses.

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, and tutorial time is limited.

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.
- Attending tutorials and attempting the tutorial questions.

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.

4.2 Assessment Details

| Assessment Task | Weighting | Length | Due Date |
|------------------|-----------|-----------------|------------------------|
| Assignments | 30% | See section 4.3 | See section 4.3 |
| Mid-session Exam | 35% | 2 hours | Week 7 |
| Final Exam | 35% | 2 hours | University Exam period |

4.3 Assignments

The problem sets will be based on the theoretical models covered in lectures. They are designed to provide students with practice in obtaining the necessary skills to analyse and solve economic models. Collaboration among classmates is encouraged, however, students must acknowledge any help received from other students. Failure to acknowledge will be considered plagiarism. Please see Section for Academic Misconduct and Plagiarism in the Economics Course Outline Part B.

There will be 3 or 4 assignments depending on the evolution of the course.

4.4 Midsession Exam

A mid-session test will be held during **WEEK 7**. It will be of 2 hours in duration and will relate to the topics covered during the first six weeks of lectures. The purpose of the assessment is to test knowledge of the concepts introduced up to this point.

There will be **NO supplementary tests** offered for the mid-session exam. You should make every effort to take the mid-session exam. The material covered in the midsession exam will not be examinable in the final exam.

Applications for special consideration for this assessment item must be lodged online through myUNSW within 3 working days of the assessment (Log into myUNSW and go to My Student Profile tab > My Student Services channel > Online Services > Special Consideration). Then submit the originals or certified copies of your completed [Professional Authority form \(pdf - download here\)](#) and any [supporting documentation](#) to Student Central. Students who are found to be genuinely too ill to have attended the mid-session exam will have their mark in the remaining assessment tasks re-weighted to include the mark reserved for the missed exam. In all other cases of non-attendance students will receive a grade of zero.

Employment obligations or holiday plans of any kind are not acceptable reasons for absence from any test/examination.

4.5 Final Exam

The final examination will test material covered in Weeks 8 to 12. The duration of the final exam will be two hours. Be aware that your final examination may fall at any time during the semester's examination period. The scheduling of examinations is controlled by the University administration. No early examinations are possible.

Further information on the content of the Final Exam will be provided towards the end of session. The purpose of the final examination is to assess knowledge of basic macroeconomic concepts and theory covered in the second half.

4.6 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>

Additional materials such as solutions to the tutorial exercises, lecture notes, slides, etc. will be provided through the course website on UNSW Moodle.

There is no prescribed textbook for the first half of course. Students may find the following graduate textbooks (available in the UNSW library) useful for some parts of the course. But you are not required to purchase any textbook.

Lars Ljungqvist and Thomas J. Sargent, *Recursive Macroeconomics Theory*, 2nd edition, The MIT Press (2004)

Nancy L. Stokey and Robert E. Lucas, with Edward C. Prescott, *Recursive Methods in Economic Dynamics*, Harvard University Press (1989)

Thomas Cooley, *Frontiers of Business Cycle Research*, Princeton University Press (1995)

Jerome Adda and Russell Cooper, *Dynamic Economics*, The MIT Press (2003)

David Romer, *Advanced Macroeconomics*, 3rd edition, McGraw Hill (2006)

Christopher A. Pissarides, *Equilibrium Unemployment Theory*, 2nd edition, MIT Press (2000)

Douglas C. Maynard and Daniel C. Feldman, *Underemployment: Psychological, Social, and Economic Challenges*, Springer (2011)

Philippe Aghion and Peter Howitt, *Endogenous Growth Theory*, MIT Press (1999).

Other useful books and papers:

Rogerson, Shimer, Wright, "Search-theoretic Models of Labor Market: A Survey", *NBER Working Paper* 10655, 2004.

Mortensen and Pissarides "Job Creation and Job Destruction in a Theory of Unemployment", *Review of Economic Studies*, 61(3), 1994, page 397.

Rosen, "Implicit Contracts: A Survey", *Journal of Economic Literature*, 23(3), 1985, page 1144.

Shapiro and Stiglitz, "Equilibrium Unemployment as a Worker Discipline Device", *American Economic Review*, 74(3), 1984, page 433.

Tor Klette and Samuel Kortum, "Innovating Firms and Aggregate Innovation", *Journal of Political Economy*, 112(5), 2004, page 986.

Xavier Gabaix, "The Granular Origins of Aggregate Fluctuations", *Econometrica*, 79(3), 2011, page 733.

Caballero and Hammour, "The Cleansing Effects of Recessions", *American Economic Review*, 84(5), 1994, page 1350.

Simon Gilchrist and John Williams "Putty-Clay and Investments: A Business Cycle Analysis", *Journal of Political Economy*, 108(5), 2000, page 928.

Lars Ljungqvist and Thomas J. Sargent, *Recursive Macroeconomics Theory*, 2nd edition, The MIT Press (2004)

Rabi Bhattacharya and Mukul Majumdar, *Random Dynamical Systems: Theory and Applications*, 1st edition, Cambridge Press (2007)

7 COURSE SCHEDULE

| LECTURE SCHEDULE | | |
|-----------------------|--|---|
| Week | Topic | Reference |
| Week 1 27 February | Microeconomic Foundations in Dynamic Macroeconomics - Competitive Equilibrium and Pareto Optimality | Lecture notes (provided courtesy of Professor Dirk Krueger) Ljungqvist and Sargent, Ch. 8 Kehoe, T. (1989): "Intertemporal General Equilibrium Models," in F. Hahn (ed.) <i>The Economics of Missing Markets, Information and Games</i> , Clarendon Press, 363-393. |
| Week 2 6 March | Same as Week 1 | Same as Week 1 |
| Week 3 13 March | Introduction to Neoclassical Growth Model and Dynamic Programming | Lecture notes Ljungqvist and Sargent, Ch. 3-5 Stokey and Lucas, Ch. 2-4 Cooley, Ch. 1-2 Kydland, F.E. and E.C. Prescott (1982): "Time to Build and Aggregate Fluctuations," <i>Econometrica</i> , 50, 1345-1370. |
| Week 4 20 March | Same as Week 3 | Same as Week 3 |
| Week 5 27 March | Solow-Swan growth model, and models of endogenous growth | Lecture notes Ljungqvist and Sargent, Ch. 3-5 Stokey and Lucas, Ch. 2-4 Cooley, Ch. 1-2 Adda and Cooper, Ch. 2-3 |
| Week 6 03 April | Overlapping Generations Model | Lecture notes Samuelson, P.A. (1958): "An Exact Consumption Loan Model of Interest, With or Without the Social Contrivance of Money," <i>Journal of Political Economy</i> , 66, 467-482. |

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|---|--|---|
| | | <p>Barro, R. (1974): "Are Government Bonds Net Wealth?" <i>Journal of Political Economy</i>, 82, 1095-1117.</p> <p>Diamond, P. (1965): "National Debt in a Neo-Classical Growth Model," <i>American Economic Review</i>, 55, 1126-1150.</p> <p>Ljungqvist and Sargent, Ch. 9-10</p> |
| Week 7 10 April | Midterm Exam 2 hours | |
| Mid-semester break: Friday 14 – Saturday 22 April inclusive | | |
| Week 8 24 April | Models of Job Search and Labour Market | <p>Lecture notes</p> <p>Samuelson, P.A. (1958): "An Exact Consumption Loan Model of Interest, With or Without the Social Contrivance of Money," <i>Journal of Political Economy</i>, 66, 467-482.</p> <p>Barro, R. (1974): "Are Government Bonds Net Wealth?" <i>Journal of Political Economy</i>, 82, 1095-1117.</p> <p>Diamond, P. (1965): "National Debt in a Neo-Classical Growth Model," <i>American Economic Review</i>, 55, 1126-1150.</p> <p>Ljungqvist and Sargent, Ch. 9-10</p> |
| Week 9 1 May | Same as Week 8 | Same as Week 8 |
| Week 10 8 May | Theories of Involuntary Unemployment | Rosen (1985), Romer (2006) Shapiro & Stiglitz (1984), Pissarides (2000) |
| Week 11 15 May | Recent developments in Search Theory and Applications | TBA |
| Week 12 22 May | Same as Week 11 | Same as Week 11 |
| Week 13 29 May | NO LECTURES | |