

# ECON991 Economics for Actuaries

S1 Day 2017

Dept of Economics

# Contents

General Information	2
Learning Outcomes	3
Assessment Tasks	3
Delivery and Resources	7
Unit Schedule	9
Policies and Procedures	12
Graduate Capabilities	13
Research and Practice	15

#### Disclaimer

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

### **General Information**

Unit convenor and teaching staff Unit Convenor Craig MacMillan craig.macmillan@mq.edu.au Contact via craig.macmillan@mq.edu.au E4A 427 Monday 12 - 2pm Lecturer Michael Dobbie michael.dobbie@mq.edu.au Contact via michael.dobbie@mq.edu.au E4A 416 To be advised - check iLearn page

Stephanie Brooks stephanie.brooks@mq.edu.au Contact via stephanie.brooks@mq.edu.au To be advised - check iLearn page To be advised - check iLearn page

Lecturer Edwin Franks edwin.franks@mq.edu.au Contact via edwin.franks@mq.edu.au E4A 421 To be advised - check iLearn page

Kathy Ge kathy.ge@mq.edu.au

Credit points

4

Prerequisites Admission to MActPrac

Corequisites

Co-badged status

#### Unit description

The aim of this unit is to provide a postgraduate-level foundation in modern economic analysis, with applications to decision making in business, for postgraduate actuarial students. The unit provides students with the knowledge and tools to use microeconomic and macroeconomic theory and concepts in analysing business decision making and an understanding of the broader social, economic and regulatory environment in which businesses operate.

### Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <a href="https://www.mq.edu.au/study/calendar-of-dates">https://www.mq.edu.au/study/calendar-of-dates</a>

# **Learning Outcomes**

On successful completion of this unit, you will be able to:

Understand the key economic concepts, models and theories of introductory

microeconomics and macroeconomics

Apply, analyse, evaluate, and suggest solutions using these concepts, models and

theories to real world economic problems or practical situations

Identify and then use relevant economic diagrams to assist with explanations and applications

Understand the behaviour of individuals and firms and the operation of markets in the economy

Understand the role of the government and the central bank in the economy and the instruments available to them to manage the economy

# **Assessment Tasks**

Name	Weighting	Hurdle	Due
Online Quiz	10%	No	Week 4
Assignment 1	15%	No	Week 9
Assignment 2	15%	No	Week 11
Final Examination	60%	No	University Examination Period

### Online Quiz

Due: Week 4 Weighting: 10% The purpose of this quiz is to examine your understanding of the concepts and models covered in the first 3 weeks. This task's aim is also to provide you with some early feedback about your progress in the course. The quiz will consist of a series of multiple choice style questions.

The quiz will be completed online during week 4 and more details will be made available by the end of week 2.

#### Penalties

If you do not complete the quiz you will be awarded a mark of zero (0). The only exception is due to illness and/or unavoidable disruption. In these circumstances you may wish to consult the University's Disruption to Studies policy.

#### http://www.mq.edu.au/policy/docs/disruption\_studies/policy.html

If a student satisfies the Disruption to Studies policy they will be required to complete a supplementary assessment task and this could take the form of an oral task.

On successful completion you will be able to:

- Understand the key economic concepts, models and theories of introductory microeconomics and macroeconomics
- Apply, analyse, evaluate, and suggest solutions using these concepts, models and theories to real world economic problems or practical situations

# Assignment 1

Due: Week 9 Weighting: 15%

The purpose of the assignment is to examine your ability to understand and apply (i) microeconomic concepts learned in the first seven weeks of the course and (ii) macroeconomic concepts that will require you to do some independent reading. The assignment will consist of a number of calculation based problem solving questions. The assignment will be available to students in week 4 on the unit web page.

#### Submission

The assignment must be submitted by **4pm on Friday 12 May, 2017 (week 9) both at Business and Economics Student Services, E4B 106 and via Turnitin.** 

Your marked assignment with comments will be returned in Week 13.

**Extensions and Penalties** 

No extensions will be granted. There will be a deduction of 10% of the total

available marks made from the total awarded mark for each 24 hour period or part thereof that the

submission is late (for example, 25 hours late in submission – 20% penalty). This penalty does not

apply for cases in which an application for disruption of studies is made and approved.For further information

please consult the University's Disruption to Studies policy:

http://www.mq.edu.au/policy/docs/disruption\_studies/policy.html

No submission will be accepted after solutions have been posted.

If a student satisfies the Disruption to Studies policy and solutions have been posted they may be required to complete a supplementary assessment task and this could take the form of an oral task.

On successful completion you will be able to:

- Understand the key economic concepts, models and theories of introductory microeconomics and macroeconomics
- Apply, analyse, evaluate, and suggest solutions using these concepts, models and theories to real world economic problems or practical situations
- Identify and then use relevant economic diagrams to assist with explanations and applications
- Understand the behaviour of individuals and firms and the operation of markets in the economy

### Assignment 2

Due: Week 11 Weighting: 15%

The purpose of the assignment is to examine your ability to understand and apply concepts learned through independent study on a variety of topics - imperfect competition, international trade, international macroeconomics and globalization. The assignment will consist of a number of calculation based problem solving questions. The assignment will be available to students in week 4 on the unit web page.

#### Submission

The assignment must be submitted by **4pm on Friday 26 May**, **2017 (week 11) both at Business and Economics Student Services**, **E4B 106 and via Turnitin**.

Your marked assignment with comments will be returned in Week 13.

**Extensions and Penalties** 

No extensions will be granted. There will be a deduction of 10% of the total

available marks made from the total awarded mark for each 24 hour period or part thereof that the

submission is late (for example, 25 hours late in submission – 20% penalty). This penalty does

#### not

apply for cases in which an application for disruption of studies is made and approved.For further information

please consult the University's Disruption to Studies policy:

http://www.mq.edu.au/policy/docs/disruption\_studies/policy.html

No submission will be accepted after solutions have been posted.

If a student satisfies the Disruption to Studies policy and solutions have been posted they may be required to complete a supplementary assessment task and this could take the form of an oral task.

On successful completion you will be able to:

- Understand the key economic concepts, models and theories of introductory microeconomics and macroeconomics
- Apply, analyse, evaluate, and suggest solutions using these concepts, models and theories to real world economic problems or practical situations
- Identify and then use relevant economic diagrams to assist with explanations and applications
- Understand the behaviour of individuals and firms and the operation of markets in the economy
- Understand the role of the government and the central bank in the economy and the instruments available to them to manage the economy

# **Final Examination**

### Due: University Examination Period

Weighting: 60%

A 2 hour final examination for this unit will be held during the Macquarie University final examination period.

All topics studied during the semester, except those covered by the second assignment, are examinable. The exam will consist of multiple choice questions and questions requiring written answers which may also involve making calculations - more detail about the structure will be provided towards the end of the session. The final exam will give you an opportunity to demonstrate the depth and breadth of your knowledge of basic economic concepts, the economic way of thinking and in using your knowledge to solve economic problems.

The Macquarie University examination policy details the principles and conduct of examinations at the University. The policy is available at:

http://www.mq.edu.au/policy/docs/examination/policy.html

Penalties

Failure to sit the final exam at the designated day and time will result in a mark of zero(0) being awarded. The only exception is if a student has experienced illness and/or unavoidable disruption. In such circumstances students should consult the University's Disruption to Studies policy using the following link:

http://www.mq.edu.au/policy/docs/disruption\_studies/policy.html

In the event of meeting the criteria outlined in the policy students will be awarded a supplementary exam to undertake.

On successful completion you will be able to:

- Understand the key economic concepts, models and theories of introductory microeconomics and macroeconomics
- Apply, analyse, evaluate, and suggest solutions using these concepts, models and theories to real world economic problems or practical situations
- Identify and then use relevant economic diagrams to assist with explanations and applications
- Understand the behaviour of individuals and firms and the operation of markets in the economy
- Understand the role of the government and the central bank in the economy and the instruments available to them to manage the economy

# **Delivery and Resources**

#### Classes

- There is one 3 hour lecture per week that you must attend.
- You are expected to attend the lecture group you are formally enrolled in. Changes are not permitted. If you have any questions or issues regarding your timetable please see the staff at the Business and Economics Graduate Centre on Level 2, E4A for assistance.
- The timetable for classes can be found on the University web site at: http://www.timetables.mq.edu.au/
- There will be three workshops held during the semester. These workshops are designed to review and reinforce the material covered in lectures and in the required reading.
- These workshops will be held during normal lecture times during weeks 5, 7 and 13.
- Details concerning the questions to be covered during the workshops can be downloaded from the unit web page.

#### **Required and Recommended Texts and/or Materials**

#### Textbook

• The textbooks for this course are:

Frost, L., Taylor, J., Weerapana, A. and Schuwalow, P. (2017) *Microeconomics: Principles and Practice*, Cengage Learning.

Littleboy, B., Taylor, J. and Weerapana, A (2017) *Macroeconomics: Principles and Practice*, Cengage Learning.

The textbooks can be purchased from the Co-op bookstore located on campus.

- The textbooks are available to borrow from the Macquarie University library.
- The publisher provides access to the online learning resource Aplia through the iLearn website for this course.

#### Technology Used and Required

- Students will require a non-programmable calculator for completion of all assessment tasks. A calculator is non-programmable if it does not have any memory, or if it is capable of storing only numerical data within its memory.
- Students will also require access to a computer to view the unit website, view the publisher's website for the set text, and for email communication with staff. The University provides students access to computers on campus – for more information please enquire at Business and Economics Student Services centre (BESS).

#### **Unit Web Page**

- Course material is available on the learning management system (iLearn)
- The web page for this unit can be found at: https://ilearn.mq.edu.au/login/MQ/

#### **Teaching and Learning Activities**

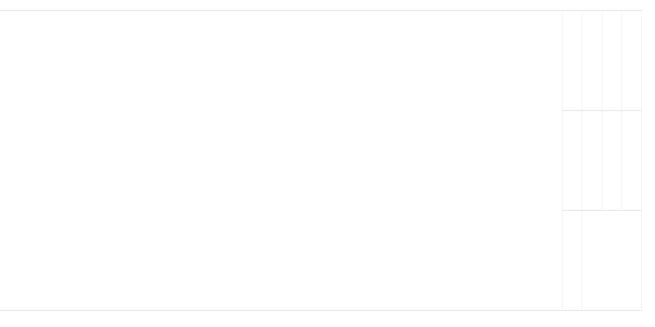
- This unit will be taught using a combination of both lectures and workshops.
- It is expected that students will:
- Attend all lectures and workshops
- Read the set chapters from their textbook and any supplementary readings preferably in advance of lecture attendance
- · Prepare for workshops in advance
- A comprehensive calendar of topics to be covered on a week by week basis can be found in the Unit Schedule.

# **Unit Schedule**

#### Unit guide ECON991 Economics for Actuaries

Microeconomics	Week	Торіс	Required Reading	Reminders
	1 Feb 2 <b>7</b> – Mar 3	Introduction, the Economic Way of Thinking and the Production Possibility Frontier	Frost et al., Chs 1 (including appendix), & 2	
	2 Mar 6 – 10	The Supply and Demand Model	Frost et al., Ch 3	
	3 Mar 13 – 17	Elasticity & The Consumer	Frost et al., Chs 4 & 5	
	4 Mar 20 – 24	The Firm and the Industry	Frost et al., Ch 6	Online Quiz
	5 Mar 27 – 31	The Competitive Market	Frost et al., Ch 7	Workshop 1
	6 Apr 3 – 7	Monopoly	Frost et al., Ch 8	
	7 Apr 10 – 13	Public Goods, Common Resources and Externalities	Frost et al., Ch 11	Workshop 2
	Apr 14 - 28	Mid Semester Break		
Macroeconomics	8 May 1 – 5	Introduction to Macroeconomics: GDP, Business Cycles and Inflation	Littleboy et al., Chs 1,2 & 3	
	9 <i>May</i> 8 – 12	Introduction to Macroeconomics: Labour and Money and Banking	Littleboy et al., Chs 5 & 6	Assignment 1 Due

10 May 15 - 19Understanding Economic Fluctuations and the Aggregate Expenditure ModelLittleboy et al., Chs 7 & 8Littleboy et al., Chs 7 & 811 May 22 - 26Monetary Policy and Macroeconomics in MotionLittleboy et al., Chs 9 & 10Assignment 2 Due12 May 29 - Jun 2The Economic Fluctuations Model & Fiscal Policy (Part 1)Littleboy et al., Chs 11 & 12Assignment 2 Due13 Jun 5 - 9Fiscal Policy (Part 2) Jun 5 - 9Littleboy et al., Ch 13 Morkshop 3 Assignment ReturnedJun 10Final Exam PeriodLittleboy et al., Ch 13 Morkshop 3 Assignment Returned					
May 22 - 26MotionMotion& 102 Due12 12 May 29 - Jun 2The Economic Fluctuations Model & Fiscal Policy (Part 1)Littleboy et al., Chs 11 & 12Image: Character of the second	May 15 –				
May 29 - Jun 2Policy (Part 1)& 1213 Jun 5 	May 22 –				
Jun 5 - 9 Jun 2 Jun 2 Final Exam Period	May 29 –				
	Jun 5	Fiscal Policy (Part 2)	Littleboy et al., Ch 13	3 Assignment	
73 – 30					
	13 —	Final Exam Period			
	13 —	Final Exam Period			
	13 —	Final Exam Period			
	13 —	Final Exam Period			



# **Policies and Procedures**

Macquarie University policies and procedures are accessible from <u>Policy Central</u>. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic\_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy\_2016.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Complaint Management Procedure for Students and Members of the Public <u>http://www.mq.edu.a</u> u/policy/docs/complaint\_management/procedure.html

Disruption to Studies Policy (in effect until Dec 4th, 2017): <u>http://www.mq.edu.au/policy/docs/disr</u>uption\_studies/policy.html

Special Consideration Policy (in effect from Dec 4th, 2017): <u>https://staff.mq.edu.au/work/strategy-</u>planning-and-governance/university-policies-and-procedures/policies/special-consideration

In addition, a number of other policies can be found in the <u>Learning and Teaching Category</u> of Policy Central.

### **Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student\_conduct/

#### **Results**

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <u>eStudent</u>. For more information visit <u>ask.m</u> <u>q.edu.au</u>.

# Student Support

Macquarie University provides a range of support services for students. For details, visit <u>http://stu</u> dents.mq.edu.au/support/

### Learning Skills

Learning Skills (<u>mq.edu.au/learningskills</u>) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

# Student Services and Support

Students with a disability are encouraged to contact the **Disability Service** who can provide appropriate help with any issues that arise during their studies.

### **Student Enquiries**

For all student enquiries, visit Student Connect at ask.mq.edu.au

# IT Help

For help with University computer systems and technology, visit <u>http://www.mq.edu.au/about\_us/</u>offices\_and\_units/information\_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

# **Graduate Capabilities**

# PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

### Learning outcomes

- Understand the key economic concepts, models and theories of introductory microeconomics and macroeconomics
- Apply, analyse, evaluate, and suggest solutions using these concepts, models and theories to real world economic problems or practical situations
- · Identify and then use relevant economic diagrams to assist with explanations and

applications

- Understand the behaviour of individuals and firms and the operation of markets in the economy
- Understand the role of the government and the central bank in the economy and the instruments available to them to manage the economy

#### Assessment tasks

- Online Quiz
- Assignment 1
- Assignment 2
- Final Examination

### PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

#### Learning outcomes

- Understand the key economic concepts, models and theories of introductory microeconomics and macroeconomics
- Apply, analyse, evaluate, and suggest solutions using these concepts, models and theories to real world economic problems or practical situations
- Identify and then use relevant economic diagrams to assist with explanations and applications
- Understand the behaviour of individuals and firms and the operation of markets in the economy
- Understand the role of the government and the central bank in the economy and the instruments available to them to manage the economy

### Assessment tasks

- Online Quiz
- Assignment 1
- Assignment 2
- Final Examination

# PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

#### Learning outcomes

- Understand the key economic concepts, models and theories of introductory microeconomics and macroeconomics
- Understand the behaviour of individuals and firms and the operation of markets in the economy

#### **Assessment tasks**

- Assignment 1
- Assignment 2

# **Research and Practice**

This unit uses research from external sources (references) to illustrate theories and concepts.

This unit gives you practice in applying theory to economic problems and questions encountered in the real world in your assignments