

**MACQUARIE UNIVERSITY**



Division of Economic and Financial Studies

**ECON201 MACROECONOMIC ANALYSIS**

<http://www.econ.mq.edu.au/courses/econ201>

**UNIT OUTLINE**

**2005**

## 1. AIMS OF THIS UNIT

ECON201 builds on the 100-level economics program. As a unit in macroeconomic theory, it provides a better understanding of how the economy works. We follow a model-based approach emphasising the common core of theory accepted by most economists. The syllabus develops concepts and tools necessary for the study of more applied areas in economics and provides insight into the macroeconomic environment of business.

For the economics major, this unit is a stepping-stone toward training to become a professional economist. Economists follow sound rules and are good at thinking logically and consistently about real world issues. In developing this methodology, we show how to analyse economic issues rather than just giving the answer to any one particular question.

Professional economists are expected to acquire analytical skills for the application of macroeconomic theory to practical problems. In ECON201, we develop skills in the interpretation of economic data and encourage rigorous and logical thinking through the analysis of policy issues. A variety of techniques including conceptual questions, numerical problems and analytical questions to test understanding of theory, tutorial presentations to encourage group-work skills, and a major research essay, assist in promoting these skills.

For students taking just a few courses in economics, the objective is to learn how different parts of the economy fit together so we can understand economic issues and participate in macroeconomic debates. In ECON201, we motivate the use of theory by reference to real world factual examples, by linking models to policy issues, by focusing on international experience and by analysing how different countries interact within this system.

In brief, we aim to (i) build a picture of how the macro-economy works using a model-based approach; (ii) show the relevance of socio-economic institutions to the performance of the economy; and (iii) encourage critical thinking about the major policy debates.

### ***Econ201 builds a picture of how the economy works....***

This unit develops a sequence of models. First we extend the basic model of the goods and money markets, adding a labour market and an external sector, and refining the consumption and investment relations. Next we introduce bonds and equities to show the relation between short and long-term interest rates and the role of expectations in macroeconomics. Finally we construct dynamic models to explore key policy issues such as inflation, unemployment, and economic growth. All these models are related and the student will learn how to select an appropriate model to analyse a particular problem.

### ***.... that shows the relevance of socio-economic institutions to macro performance***

The strength of institutions and the efficiency of markets are critical to macro performance. Since the 1990's, the Australian economy has experienced low inflation, sustained growth, and falling unemployment. Economists attribute the long expansion to structural reform, improved socio-economic institutions and better management of the economy.

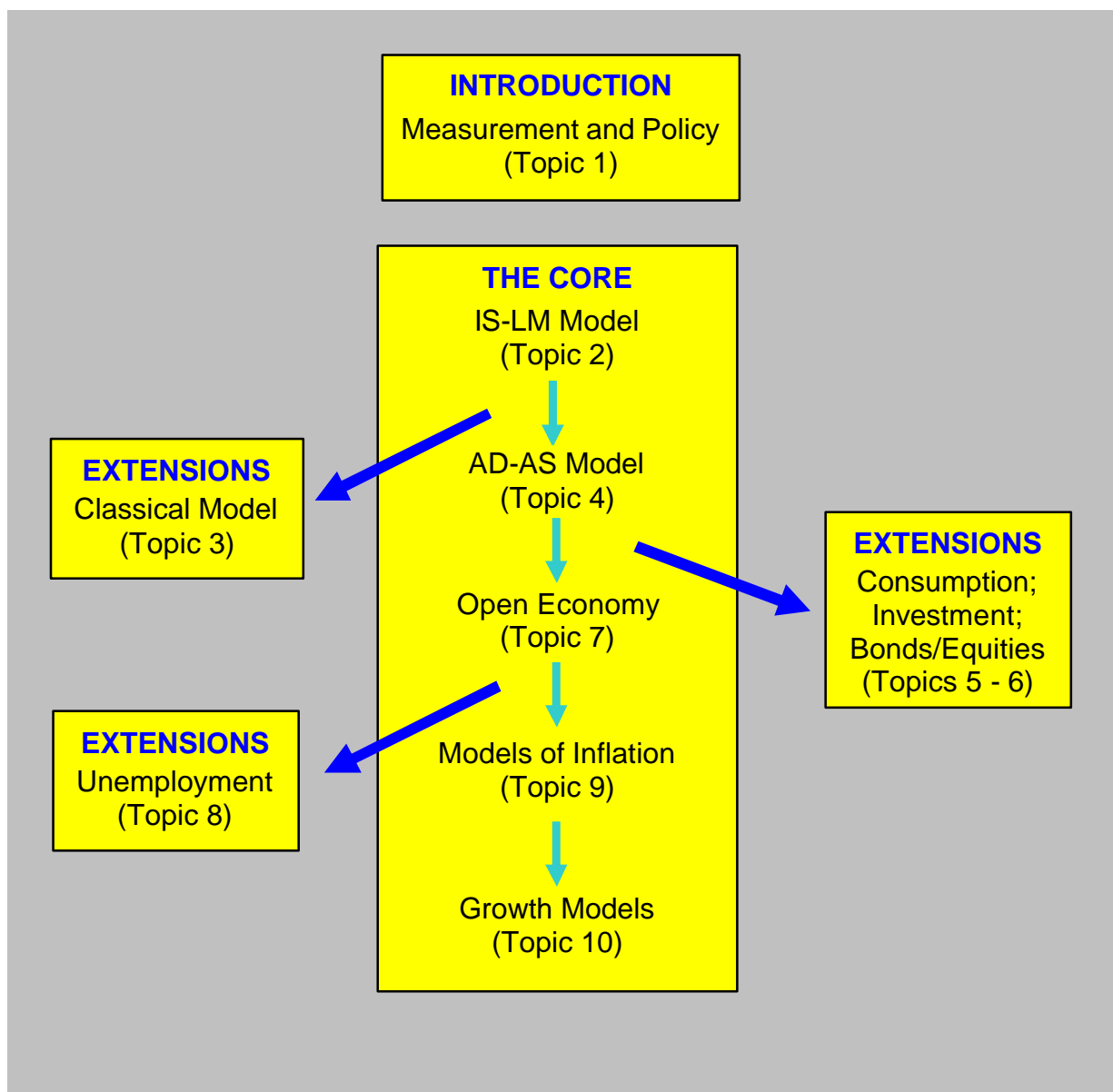
### ***.... and encourages critical thinking about the major policy debates***

To promote critical thinking, website resources are used to explore questions such as can Australia sustain rapid growth when the world economy is in recession. Recent experience is encouraging because the Australian economy expanded strongly during the Asian crisis of 1997 and also when the world economy was in recession in 2001. Notwithstanding these successes, economists believe Australia's future prospects will largely be governed the strength of major trading partners such as the USA and China.

***Econ201 provides a foundation for a more detailed study of macroeconomic policy***

Although this is not a policy unit, we wish to know why Australia pursues medium-term macroeconomic policy goals such as maintaining inflation in the 2%-3% range and balancing the budget over the business cycle. Policies to improve the performance of the economy are explored in greater depth in ECON311 Macroeconomic Policy.

## 2. ROAD MAP TO THE SYLLABUS



**1. Measurement and Policy:** Here we survey policy problems confronting Europe, the United States, Japan, and Asia. We clarify relationships among macroeconomic variables by presenting the key concepts and procedures involved in measuring GDP.

**2. The IS-LM Model:** The spirit of Keynes' General Theory is captured by the IS-LM model. This fixed-price model describes the interaction of goods and financial markets and illustrates much of what happens in the economy in the short run.

**3. The Classical Model:** Classical economics was the dominant school of thought prior to Keynes. The classical model distinguishes labour, capital and money markets in order to explain changes in employment, output, wages, prices and interest rates. A key result is that real variables such as output and employment are not affected by changes in the money supply. Although classical ideas are useful for explaining economic growth, most economists believe they cannot explain short-run fluctuations in output and employment.

**4. Models of Aggregate Demand and Supply:** We use the AD-AS framework to study economic fluctuations. Assuming an interest rate rule, the central bank will reduce interest rates as prices fall. Thus the AD curve slopes downward. We consider three 'stories' of aggregate supply. In the "sticky wage" model, real wages fall as prices rise, increasing employment and output. The "imperfect-information" model relies on temporary misperceptions of wages to explain short and long run behaviour. The "new-Keynesian" model allows market imperfections to influence wage and price-setting. Each of these models relies on lagged adjustment of price expectations to explain the short and long run effects of policy. Recent versions of these models incorporate rational expectations.

**5. Micro-Foundations of Consumption and Investment:** The permanent-income model distinguishes temporary from permanent changes in income to explain why the multiplier might be very small. In the life-cycle model, consumption is influenced by demographic considerations and changes in wealth explain the cyclical variation in the C/Y ratio. If borrowing constraints apply or future income expectations are uncertain, these models produce a close relationship between current consumption and income. Investment is a volatile element of demand and is crucial for short and long run analysis.

**6. Financial Markets: Bonds and Equities:** Here we use expectations to explore the relation between short and long-term interest rates. We also learn how stock prices are determined, why they move, and how they influence aggregate demand. On distinguishing short-term and long-term bonds and equities, we amend the IS-LM approach to re-evaluate the way in which monetary and fiscal policy affect the economy.

**7. The Open Economy:** The Mundell-Fleming model, an open economy IS-LM model, is used to analyse the influence of the exchange rate system and explore important issues such as policy in the small and large open economy. We examine interest rate shocks, exchange-rate expectations, overshooting and currency crises. We are also interested in why some countries prefer a floating to a fixed exchange rate system or vice versa.

**8. Wages and Unemployment:** Business economists often conclude that a policy of wage cuts will increase employment. By concentrating upon the macroeconomic effects of wage cuts, we demonstrate that output may fall rather than rise.

**9. Models of Inflation:** On deriving the Phillips curve from an aggregate supply relation, we explore policy options for dealing with inflation. We also examine the conflict model which is able to generate a range of inflation and unemployment outcomes. This model also provides insight into the effects of reform of the industrial relations system.

**10. Theories of Growth:** The neo-classical growth model identifies the forces determining the growth rate of an economy over long periods. It attributes cross-country variation to differences in investment. To account fully for these differences, we focus on the role of human capital and institutions. Endogenous technological progress is introduced to show how rich countries may continue to enjoy persistent growth. Based on our extended model, we examine various policies that governments may use to influence the growth rate.

### 3. LECTURES

There are three one-hour lectures at the following times and places:

#### Day Lectures

|           |     |                   |
|-----------|-----|-------------------|
| Tuesday   | 2pm | Macquarie Theatre |
| Wednesday | 2pm | Macquarie Theatre |
| Thursday  | 2pm | Macquarie Theatre |

#### Evening Lectures

|           |     |       |
|-----------|-----|-------|
| Wednesday | 6pm | W5AT1 |
| Thursday  | 6pm | W5AT1 |
| Thursday  | 7pm | W5AT1 |

Day and evening lectures are given in parallel so students may attend either. There will be a ten-minute break in the middle of the double lecture on Thursday evening.

### 4. TUTORIALS

Class lists will be posted on the Website Bulletin Board before week 3. Each student must check to ensure they are allocated to a group. If you need to change tutorials, you may arrange this by e-mailing the tutor-in-charge. Please give your name and student number and two tutorial preferences. You must attend your allocated group.

There are eight tutorials in total. The tutorial schedule is given below:

| <u>No</u> | <u>Week</u> | <u>Tutorial Topic</u> |
|-----------|-------------|-----------------------|
| 1         | 3           | IS-LM Model           |
| 2         | 4           | Classical Model       |
| 3         | 6           | AD-AS Model           |
| 4         | 7           | Consumption           |
| 5         | 10          | Open Economy          |
| 6         | 11          | Unemployment          |
| 7         | 12          | Inflation             |
| 8         | 13          | Growth Theory         |

Tutorials comprise numerical problems and discussion questions. These will be circulated in advance. The tutorials aim to improve understanding of macroeconomic theory and of the policy debates. There should be the opportunity to explore issues raised in lectures.

Tutorial Presentations: In the first tutorial class, students will be placed into groups of 3 - 4 students. Groups will be allocated a question for one of the tutorial topics and required to make a presentation to the class. A written response (no more than 1000 words) should be submitted by the group to the tutor for grading. To facilitate discussion, we suggest each group circulate a summary of its presentation to members of the class.

To pass ECON201, students are required to attend and participate in at least six tutorials. If unforeseen circumstances cause you to miss a tutorial, you may attend another group on a once-off basis without notification.

## 5. ECON201 ON THE WEB

The website for this unit can be found at:

<http://www.econ.mq.edu.au/courses/econ201>

The public pages provide basic information contained in this handout. You can access the password-protected pages for announcements, consultation hours of your tutor, and course materials. Select the notes icon to download lecture slides and the tutorial and essay guides. You may access the website bulletin board to ask questions, or to see the questions/answers of other students, or for optional exercises on current policy issues.

To login you need a username and password as follows:

User-Name: Student ID Number (as found on your campus card)

Password: Same as used to access myMQ Student Portal (<http://my.mq.edu.au>).

A wide range of information for Economics students has been collected under 'Student Support' on the Divisional home page at:

<http://www.efs.mq.edu.au/services/index.htm>

Under 'student resources', there is a Resources Directory. The 'important processes' link contains useful 'how to' information (eg how to appeal a grade etc).

## 6. ASSESSMENT

The components of assessment in this unit are as follows:

|                         |             |
|-------------------------|-------------|
| Tutorial Participation  | 5%          |
| Two Class Tests         | 20%         |
| One Essay               | 15%         |
| Final Examination       | 60%         |
| <b>Total Assessment</b> | <b>100%</b> |

Class Tests: These will be held in Week 5 and Week 10 as follows:

Test No 1    Wednesday 31 August            Topics 1 - 4 are examinable.

Test No 2    Wednesday 19 October            Topics 4 - 7 are examinable.

Students unable to attend due to misadventure should advise the tutor-in-charge within 48 hours, and submit an Advice of Absence form to the Student Centre.

Essay: The essay is due by Tuesday 27 September. Details of topics, suggested readings and requirements, will be provided in the essay guide to be distributed separately.

Final Examination: The examination paper is in two parts:

Part A:    Multiple-Choice Questions            (20% of unit assessment)

Part B:    Three Essay Questions                    (40% of unit assessment)

To pass ECON201, students must satisfy three separate requirements:

- (1) Attend at least six (6) tutorials and make one group presentation;
- (2) Perform satisfactorily in the class tests and the essay;    AND
- (3) Pass the final examination.

**It is Economics Department policy that failure in the final examination means automatic course failure notwithstanding any other circumstances.**

## 7. ENQUIRIES

The lecturer-in-charge, Mr Trevor Whitehead, will present 11 weeks of lectures. Dr Wylie Bradford will present 2 weeks of lectures. The tutor-in-charge, Ms Alison Vicary, should be contacted for administrative matters.

The names of tutors and their email addresses are listed below. Contact details and consultation times will be released on the Unit Home Page when they are available.

| Tutor                                | Room | Consultation Times      | E-Mail Address   |
|--------------------------------------|------|-------------------------|--|
| Badri Bhattarai                      | 387  | Tue5 (Tut weeks only)   | <a href="mailto:bbhattar@efs.mq.edu.au">bbhattar@efs.mq.edu.au</a> |
| Siyao Jiang                          | 377  | Mon 11 (Tut weeks only) | <a href="mailto:sjiang@efs.mq.edu.au">sjiang@efs.mq.edu.au</a>     |
| Karen Mills                          | 377  | Wed 12 (Tut weeks only) | <a href="mailto:kmills@efs.mq.edu.au">kmills@efs.mq.edu.au</a>     |
| Alison Stegman                       | 383  | Mon1, Tue2, Thu1,2      | <a href="mailto:astegman@efs.mq.edu.au">astegman@efs.mq.edu.au</a> |
| Alison Vicary                        | 314  |                         | <a href="mailto:avicary@efs.mq.edu.au">avicary@efs.mq.edu.au</a>   |
| Trevor Whitehead                     | 387  | Tue11,12, Wed12, Thu4   | <a href="mailto:twhitehe@efs.mq.edu.au">twhitehe@efs.mq.edu.au</a> |
| Change of Tutorial<br>Michael Munoru | 312  | Ph: 9859-8499           | <a href="mailto:mmunoru@efs.mq.edu.au">mmunoru@efs.mq.edu.au</a>   |

General enquiries about course content should be directed in the first instance to your tutor. For clarification of points in lectures, consult the relevant lecturer. If you cannot contact a staff member, you should email specifying the issue you wish to discuss together with your contact phone or email. We will contact you as soon as possible.

## 8. SPECIAL CONSIDERATION FOR EXAMINATIONS

If you attempt the exam when affected by illness and apply for special consideration, you will be offered a supplementary, regardless of your performance in the final examination. This supplementary will replace the final examination in determining your final grade.

**NOTE: If you are seriously inconvenienced by illness, please apply for special consideration but do not attend the final examination.**

Requests for consideration must clearly identify the circumstances - illness, accident or other unavoidable disruption - that justify any special concession. In the case of illness, students should submit a professional authority form that can be accessed on the web:

<http://www.reg.mq.edu.au/Forms/APSCons.pdf>

All requests must be lodged in writing with the Registrar no later than the day after the end of the examination period including full supporting documentation.

Special consideration will NOT be granted in cases of unsatisfactory coursework.

To check if you are offered a supplementary examination, students should consult a list to be posted on the web at:

<http://www.efs.mq.edu.au/supexams.htm>

Students must make themselves available for an examination normally held in December.

## 9. CHEATING AND PLAGIARISM

For details of the policy on plagiarism approved by Academic Senate, please refer to:

<http://www.student.mq.edu.au/plagiarism>

Also refer to the document on the home page for the Division of Economic and Financial Studies: [www.efs.mq.edu.au/ugrad.html](http://www.efs.mq.edu.au/ugrad.html) and click on "Cheating and Plagiarism".

## 10. USEFUL REFERENCES

There is NO compulsory textbook for the unit. A two-part package comprising course notes (Topics 1 to 7) and readings (Topics 8 to 10) can be purchased from the Bookshop. Lecture slides will be available for all topics and can be downloaded from the website.

The following texts are cited frequently in the list of readings for each lecture topic.

Blanchard, O and Sheen, J. (2004), *Macroeconomics*, Prentice-Hall, Australian edition.

This Australian edition of a US text gives increased emphasis to expectations in macroeconomics. It is the most important reference for Topics 4, 6 and 7.

Colander, D and Gamber, E. (2001), *Macroeconomics*, Prentice Hall.

This book offers a sympathetic interpretation of Keynesian and Classical viewpoints.

Dornbusch, R, Bodman, P, Crosby, M, Fischer, S, and Startz, R. (2005), *Macroeconomics*, McGraw-Hill, (2nd edition).

This text uses Australian examples, data and institutional features. It offers straightforward explanations of more difficult material and incorporates state-of-the-art research.

Mankiw, N.G. (2003), *Macroeconomics*, Worth Publishers, 5th edition.

This text provides a balanced coverage between short and long run issues, and integrates Keynesian and classical ideas. It also offers web-based, interactive software.

Sachs, J.D. and Larrain, F.B. (1993), *Macroeconomics in the Global Economy*, Harvester.

This advanced text emphasises the role of expectations, inter-temporal choices of households, firms and government, and the implications of time consistency.

### **Official Australian Publications**

The Reserve Bank Bulletin: This contains media releases, speeches and useful articles. The February, May, August and November issues publish detailed statements on monetary policy. All these resources are available on the Reserve Bank's website. Click on the RBA's Chart Pack for graphs of the latest economic statistics.

Australian Treasury: For a detailed analysis of the Australian economy, refer to the 2005-2006 Commonwealth Budget, Paper No.1, Budget Strategy and Outlook, (May). The budget papers can be viewed at the Treasury's website.

## 11. READING GUIDE

### **MEASUREMENT AND POLICY ISSUES**

**(2 hours)**

The concerns of macroeconomists - Policy issues confronting the United States, Japan, and Europe - Australia's macroeconomic performance - Problems in measuring economic aggregates - Sources of macroeconomic data in Australia.

Blanchard, ch1,2

Dornbusch et al, ch1,2

### **THE IS - LM MODEL**

**(4 hours)**

(The IS-LM model integrates goods and money markets into the one graph. It is an essential building block.)

Equilibrium in goods and financial markets - Derivation and properties of the IS and LM curves - Policy analysis with IS-LM - Using IS-LM to analyse the Great Depression.

Colander and Gamber, ch8,9

Mankiw, ch9,10

Dornbusch et al, ch7,8,9

Sachs and Larrain, ch12



## THE CLASSICAL MODEL

(3 hours)

The classical system: labour, capital and money markets - Disturbances in the classical model - Keynes' critique of the classical model.

Sachs and Larrain, ch3

Trevithick, ch1-5 \*

\* Trevithick, J. A. (1992), *Involuntary Unemployment: Macroeconomics from a Keynesian Perspective*, Harvester Wheatsheaf. This text offers a comprehensive analysis of the classical model.

## THE AD-AS MODEL

(4 hours)

Deriving the AD relation using an interest rate rule - Alternative models of aggregate supply - 'Sticky-Wages' - 'Imperfect Information' - New-Keynesian - Macroeconomic policies and supply shocks in the AD-AS framework.

Blanchard, ch5,6 \*

Sachs and Larrain, ch3,16

Dornbusch et al, ch5,6

\* Blanchard, ch5,6 is compulsory reading for the new-Keynesian model and policy using the AD-AS model.

## MICRO-FOUNDATIONS: CONSUMPTION AND INVESTMENT

(4 hours)

(This topic examines the role of expectations in consumption and investment decisions).

Consumption: Traditional versus inter-temporal approaches - Life cycle and permanent income models - Borrowing constraints, uncertainty, and bequests - Demographic trends and saving - Strategies to increase national saving

Investment: Neo-classical theory and accelerator models of investment

Dornbusch et al, ch12,13

Sachs and Larrain, ch4,5 \*

Mankiw, ch16,17

\* Sachs and Larrain is the most comprehensive reference. It is highly recommended for this topic.

## FINANCIAL MARKETS: MONEY, BONDS AND EQUITIES

(3 hours)

(We examine the role of expectations in financial markets and extend the analysis of the IS-LM model to take another look at the role and the limits of policy in an economy in which expectations play a major role).

The yield curve linking short and long-term interest rates - Stock prices and wealth effects - Policy in an expectations-amended IS-LM model

Blanchard, ch15,17 \*

Dornbusch et al, ch14,16

\* Blanchard, ch17, extends the IS-LM model to examine the policy implications of expectations.

## THE OPEN ECONOMY

(5 hours)

(We consider issues such as policy under fixed and floating exchange rates, role of expectations in triggering exchange rate crises, and how the exchange rate adjusts in the long run).

Exchange rate concepts - Interest rate parity relation - 'J' Curve - Australia's current account deficit - Mundell-Fleming model - Policy under fixed and floating exchange rates - Large country case - Allowing for exchange rate risk - Open-economy AD-AS model - Expectations, overshooting and exchange rate crises.

Blanchard, ch18-21 \*

Sachs and Larrain, ch10,13,14

Dornbusch et al, ch10,11

\* Blanchard, ch21, is important for exchange rate risk and advanced policy issues.

## **UNEMPLOYMENT: MACROECONOMICS AND THE LABOUR MARKET (2 hours)**

(Based on the work of Keynes, we ask if output may fall rather than rise if there is a policy of wage cuts).  
Aggregate demand, wages and unemployment in Neoclassical and Keynesian theory -  
Can unemployment be reduced by cutting wages?

Davidson, ch11 \*

Trevithick, ch5

Keynes, *General Theory*, ch19

\* Davidson, P. (1984), *Post Keynesian Macroeconomic Theory*, Elgar, Aldershot

## **INFLATION: DEMAND AND CONFLICT (4 hours)**

(We examine the policy options for dealing with inflation based on the Phillips curve and conflict models. A range of inflation and unemployment outcomes is possible).

Theories of inflation, the Phillips curve and anti-inflation policies - Conflict models and the behaviour of inflation under alternative policy regimes

### (a) Orthodox/Neoclassical Models of Phillips Curve

Blanchard, ch8-9

Mankiw, ch13

Dornbusch et al, ch17

Sachs and Larrain, ch15

### (b) Conflict Model

Palley, T. (1996), *Post Keynesian Macroeconomics: Debt, Distribution and the Macroeconomy*, Macmillan, ch11.

## **GROWTH THEORY (5 hours)**

(Focusing on the neo-classical growth model, we examine the facts of growth and policies to influence the growth performance of economies).

Sources of growth - Harrod model and basic Neoclassical (Solow) model - Endogenous growth theory - Explanations of cross country variation in growth performance - Neo Institutional approaches.

Colander and Gamber, ch5,6.

Dornbusch et al, ch3,4

Jones, C. (2002), *Introduction to Economic Growth*, 2nd edition, W.W. Norton, ch2,3.2,7,8

Jones, H. G. (1975), *An Introduction to Modern Theories of Economic Growth*, Van Nostron Rheinhold, ch3.

Thirlwall, A.P. (1999), *Growth and Development*, 6th edition, Macmillan, London, ch4.

(NB: Jones, H, and Thirlwall deal with the Harrod model).

## 12. UNIT DIARY

| WEEK                    | TOPICS   | CLASS WORK   |
|-------------------------|--|--|
| 01 Aug<br>(1)           | Measurement and Policy (2)<br>IS-LM Model (1)  |  |
| 08 August<br>(2)        | IS-LM Model (3)  | <b>Study Skills Workshop 1 **</b>                                |
| 15 August<br>(3)        | Classical Model (3)  | Tutorial 1: IS-LM Model  |
| 22 August<br>(4)        | AD-AS Model (3)  | Tutorial 2: Classical Model<br><b>Study Skills Workshop 2 **</b> |
| 29 August<br>(5)        | AD-AS Model (1)<br><b>Class Test No 1 *</b><br>Consumption (1)   |  |
| 05 Sept<br>(6)          | Consumption (2)<br>Investment (1)  | Tutorial 3: AD-AS Model<br><b>Study Skills Workshop 3 **</b>     |
| 12 Sept<br>(7)          | Money, Bonds and Equities (3)  | Tutorial 4: Consumption  |
| 19 Sept<br>to<br>03 Oct | Mid-Semester Break (2 Weeks)   | <b>Essay: Tues 27 September</b>                                  |
| 04 Oct<br>(8)           | The Open Economy (3)   |  |
| 10 Oct<br>(9)           | The Open Economy (2)<br>Unemployment and the Labour Market (1)   | <b>Study Skills Workshop 4 **</b>                                |
| 17 Oct<br>(10)          | Unemployment and the Labour Market (1)<br><b>Class Test No 2 *</b><br>Inflation: Demand and Conflict (1) | Tutorial 5: Open Economy<br><b>Study Skills Workshop 4 **</b>    |
| 24 Oct<br>(11)          | Inflation: Demand and Conflict (3)   | Tutorial 6: Unemployment   |
| 31 Oct<br>(12)          | Growth Theory: Basics (3)  | Tutorial 7: Inflation  |
| 07 Nov<br>(13)          | Growth Theory: Extensions (2)  | Tutorial 8: Growth Theory  |

\* Class Test 1      Wednesday 31 August      Day: MTh, 2pm      Evening: W5AT1, 6pm.  
Class Test 2      Wednesday 19 October      Day: MTh, 2pm      Evening: W5AT1, 6pm.

\*\* ECON201 Study Skill Workshops offered by the International Office will run on Tuesday and Wednesday mornings, 10am - 11.30am on the following topics:

Week 2      Tutorials and Lectures  
Week 4      Mid-Term Test Preparation  
Week 6      Essay Writing  
Week 9/10      Exam Preparation and Strategies

Because space is limited, students who are interested should register at ERIC. For further details of the program, please collect a copy of the leaflet from ERIC.