

### School of Economics and Finance

## ECON 403 ADVANCED MACROECONOMIC THEORY B

Trimester Two 2007

### **COURSE OUTLINE**

#### **Contact Details**

The Course Coordinator is:Professor Viv Hall<br/>Room: RH 401 in Rutherford House, 23 Lambton Quay<br/>Voice/Message: (04) 463 5081<br/>Email: viv.hall@vuw.ac.nzContact is best initiated by email or through making an appointment

Lecturer:

Dr. John McDermott Room: RH 427 in Rutherford House, 23 Lambton Quay Voice/Message: (04) 463 6708 Email: john.mcdermott@vuw.ac.nz

Contact is best initiated by email or through making an appointment

**Lecture Time and Location:** Fridays 9.30 – 12.20 pm - GB G05

Pre-requisites: ECON 305, QUAN 203 (QUAN 201 will be accepted in 2007)

#### **Course Content and Objectives**

The **overall objective of** the two Advanced Macroeconomics courses **ECON 403 and ECON 402** is to provide an in depth understanding of modern macroeconomic theory. ECON 402 focuses on developments in New Classical and Real Business Cycle macroeconomics, while the emphasis in ECON 403 is on New Keynesian macroeconomics and its implications for Dynamic Stochastic General equilibrium (DSGE) models.

The **primary objective of ECON 403** will therefore be to ensure participants gain a thorough appreciation of the key elements of modern New Keynesian macroeconomic theories. The **intended specific learning outcomes** for those successfully completing ECON 403 include:

- (i) a sound appreciation of the role of New Keynesian macroeconomic ideas and theories in modern macroeconomic thinking and macroeconomic modelling;
- (ii) a strong understanding of the important sectoral equations and building-blocks of small New Keynesian open economy models; and
- (iii) a basic appreciation of how key New Keynesian macroeconomic relations are specified within DSGE models, and how these models are estimated and simulated.

#### **Expected Workload**

ECON 403 is a 15-point course, and on the basis of VUW having designated one point = 10 hours work, expected work load would total 150 hours. If that workload were spread over 12 weeks, hours expected would average around 12.5 hours per week. This would involve attending classes (2 lecture hours per week), plus reading, studying and completing assignments for approximately 10.5 hours per week. The 10.5 hours would of course vary for individual students, depending on the student's previous knowledge and understanding, and the final grade at Honours level to which the student aspires.

#### **Assessment Requirements**

For assessment purposes, you are required to sit the final examination in the Trimester Two final examination period, and to complete coursework requirements. The coursework consists of a Referee Report of no more than 1000 words, and one Assignment. Unlike the situation that exists in undergraduate papers, your final grade will be determined on the basis of your overall performance in the Honours programme. However, as a guide to the allocation of your efforts, the assessment in ECON 403 will be based on:

20% for the Referee Report, due no later than Monday 20 August; 20% for the Assignment, due no later than Friday 12 October; and 60% for the final two-hour examination.

#### **Final Examination**

Trimester Two final examination dates are expected to be between Friday 19 October and Saturday 10 November. The ECON 403 final examination could occur any time within the confirmed period.

# Topics and Readings (\* denotes a key reading; denotes available from Commerce Library Reserve Collection)

#### 1 Introduction (1 session)

Historical perspective on New Keynesian models, and the basic 3-equation New Keynesian model.

\* Goodfriend, Marvin and Robert King (1997), "The New Neoclassical Synthesis and the Role of Monetary Policy", in *NBER Macroeconomics Annual* (Ben S Bernanke and Julio Rotemberg (eds), Cambridge, MA: MIT Press, especially s 5.

Carlin, Wendy and David Soskice (2006), *Macroeconomics: Imperfections*, *Institutions & Policies*, Oxford: OUP, ch 15, 563-574.

Romer, David (2006, 3<sup>rd</sup> ed), *Advanced Macroeconomics*, New York: McGraw-Hill Irwin, ch 5, pp 222-258

\* Mankiw, N. Gregory (2006), "The Macroeconomist as Scientist and Engineer", *Journal of Economic Perspectives*, 20(4), 29-46.

\* Clarida, Richard, Jordi Gali and Mark Gertler (1999), "The Science of Monetary Policy: A New Keynesian Perspective", *Journal of Economic Literature*, 37(4), 1661-1671.

Walsh, Carl E (2003), *Monetary Theory and Policy* (2<sup>nd</sup> edition), Cambridge, MA: MIT Press, s 5.4

#### 2. The forward-looking IS curve (1 session)

Consumption, and the role of habit formation

Romer, ch 7, ss 7.2, 7.6 and Conclusion

\* McCallum, Bennett T and Edward Nelson (1999), "An Optimizing IS-LM Specification for Monetary Policy and Business Cycle Analysis", *Journal of Money, Credit and Banking*, 31(3), part 1, 296-316.

Walsh (2003), s 5.4.1

#### **3.** Two key building blocks (1 sessions)

Monopolistic competition, and Dixit-Stiglitz aggregation

\* Blanchard, Olivier Jean and Nobuhiro Kiyatoki (1987), "Monopolistic Competition and the Effects of Aggregate Demand", *American Economic Review*, 77(4), 647-666.

Walsh, s 5.3

Dixit, Avinish K and Joseph E Stiglitz (1977), "Monopolistic Competition and Optimum Product Diversity", *American Economic Review*, 67, 297-308.

# 4. Nominal rigidities, sticky information versus sticky prices, and real rigidities (1 session)

Romer, ch 6, Parts A and B, pp 271-309

\* Mankiw, N Gregory and Ricardo Reis (2002), "Stickey information versus sticky prices: A proposal to replace the New Keynesian Phillips Curve, *Quarterly Journal of Economics*, 117, 1295-1328.

\* Ball, Laurence and David Romer (1990), "Real Rigidities and the Non-Neutrality of Money", *Review of Economic Studies*, 57, 183-203.

#### 5. Deterministic staggered price and wage adjustment (1 session)

Romer, ch 6, Part C, pp 309-339

\* Taylor, John B. (1999), "Staggered price and wage setting in macroeconomics", in *Handbook of Macroeconomics*, John B Taylor and Michael Woodford (eds), volume 1B, ch 15, 1010-1050.

\* Taylor, John B (1979), "Staggered Wage Setting in a Macro Model", *American Economic Review Papers and Proceedings*, 69(2), 188-113.

\* Taylor, John B (1980), "Aggregate Dynamics and Staggered Contracts", *Journal of Political Economy*, 88(1), 1-23.

#### 6. **Open economy building-blocks** (1 session)

Imported intermediate goods, nominal/real exchange rates, world interest rates, terms of trade, tradables and non-tradables inflation

Romer, ch 5.2, pp 231-241

\* McCallum, Bennett T and Edward Nelson (1999), "Nominal income targeting in an open-economy optimizing model", *Journal of Monetary Economics*, 43, 553-578, ss 3, 5

\* McCallum, Bennett and Edward Nelson (2000), "Monetary Policy for an open economy: An alternative framework with optimizing agents and sticky prices", *Oxford Review of Economic Policy*, 16(4), 74-91.

\* Gali, Jordi and Thommaso Monacelli (2005), "Monetary Policy and Exchange Rate Volatility in a Small Open Economy", *Review of Economic Studies*, 72, 707-734, ss1, 2.1, 3.1.1 and 3.2.1

\* Monacelli, Thommaso (2005), "Monetary Policy in a Low pass-Through Environment", *Journal of Money, Credit and Banking*, 37(6), 1047-1066

#### 7. New Keynesian Phillips Curve (1 session)

Ideas underpinning Calvo pricing and the New Keynesian Phillips Curve

Bils, Mark J. and Peter J. Klenow (2004), "Some Evidence on the Importance of Sticky Prices," *Journal of Political Economy*, 112, 947-985.

Calvo, Guillermo (1983), "Staggered Contracts in a Utility-Maximizing Framework," *Journal of Monetary Economics*, 12, 383-398.

Galí, Jordi and Mark Gertler (1999), "Inflation Dynamics: A Structural Econometric Analysis," *Journal of Monetary Economics*, 44, 195-222.

\* Sbordone, Argia (2002), "Prices and Unit Labour Costs: A New Test of Price Stickiness," *Journal of Monetary Economics*, 49, 265-292.

\* Rudd, Jeremy and Karl Whelan (2005), "Does the Labour Share of Income Drive Inflation?" *Journal Money, Credit, and Banking*, 37, 297-312.

\* Woodford, Michael (2003), *Interest and Prices: Foundations of a Theory of Monetary Policy*, Princeton University Press, Princeton, New Jersey, pp 177-200.

#### 8. The Labour Market (2 sessions)

*Efficiency wages, implicit contracts, search and matching, and the implications of wage stickiness* 

Blanchard and Gali (2006), A New Keynesian Model with Unemployment, CFS Working Paper No. 2007/08, see pdf version available from the ECON 403 "Readings" Folder on Blackboard.

Erceg, Christopher J., Dale W. Henderson and Andrew T. Levin (2000), "Optimal Monetary Policy with Staggered Wage and Price Contracts," *Journal of Monetary Economics*, 46, 281-313.

\* Mortensen, Dale T., and Christopher A. Pissarides (1999), "Job Reallocation, Employment Fluctuations and Unemployment," in John B. Taylor and Michael Woodford, eds., *Handbook of Macroeconomics*, 1171-1228. Amsterdam: Elsevier.

Rogerson, Richard, Robert Shimer, and Randall Wright (2005), "Search-Theoretic Models of the Labour Market: A Survey," *Journal of Economic Literature*, XLIII, 959-988.

\* Romer, ch 9.

\* Shapiro, Carl and Joseph E. Stiglitz (1984), Equilibrium Unemployment as a Worker Discipline Device, *American Economic Review*, 74, 433-444.

Solow, Robert (1979), Another Possible Source of Wage Stickiness," *Journal of Macroeconomics*, 1, 79-82.

Woodford, ch 3.4, pp 218-236.

#### **10.** The Credit Market (1 session)

Implications of credit market frictions such as asymmetric information and enforcement of credit relationships in dynamic new Keynesian models.

\* Bernanke, Ben S., Mark Gertler, and Simon Gilchrist (1999), "The Financial Accelerator in a Quantitative Business Cycle Framework," in John B. Taylor and Michael Woodford, eds. *Handbook of Macroeconomics*, Amsterdam: Elsevier, volume 1C, ch 21, 1341-1393.

\* Walsh, Ch 7.

#### 11. DSGE Models (1 session)

Solution strategy for DSGE models, estimations and simulation of DSGE models using MATLAB

Canova, Fabio (2007), *Methods for Applied Macroeconomic Research*, Princeton, Princeton University Press, Ch 11, s 4, especially example 11.13, pp 448-453.

\* Cho, Seonghoon and Antonio Moreno (2006), "A Small-Sample Study of the New-Keynesian Macro Model," *Journal of Money, Credit, and Banking*, 38 (6), 1461-1481.

Christiano, Lawrence J., Martin Eichenbaum and Charles L. Evans (2005), "Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy," *Journal of Political Economy*, 2005, 113 (1), 1-45.

Romer, Ch 6, Part C, pp 309-316.

Sims, Christopher A., (2001), "Solving Linear Rational Expectations Models," *Computational Economics*, 20, 1-20.

#### 12. Central Bank Reactions (1 session)

Monetary policy issues from a New Keynesian perspective

\* Clarida, Richard, Jordi Galí, and Mark Gertler (1999), "The Science of Monetary Policy: A New Keynesian Perspective," *Journal of Economic Literature*, XXXVII, 1661-1707.

Giannoni, Marc P. and Michael Woodford (2005), "Optimal Inflation-Targeting Rules", in Ben S. Bernanke and Michael Woodford, *The Inflation-Targeting Debate*, Chicago, University of Chicago Press, ch 3, pp 93-172.

Romer, Ch 10.6, pp 525-533.

Taylor, John B. (1999), A Historical Analysis of Monetary Policy Rules, in John B. Taylor ed., *Monetary Policy Rules*, Chicago, University of Chicago Press, ch 7, pp 319-341.

Walsh, ch 11.

Woodford, ch 8.4, pp 610-623.

#### Victoria University of Wellington School of Economics and Finance

#### ECON 403

2/3 2007

#### **Referee Report**

Due Monday August 20<sup>th</sup> by close of business (cob), in PDF format via email

The referee report is to be on the following paper, available in pdf format from ECON 403's Assignments Folder on Blackboard:

Dennis, Richard (2004), "New Keynesian Optimal-Policy models: An Empirical Assessment", FRB San Francisco Working Paper 2003-16, November 2004

#### Guidelines

- The maximum length (excluding the list of references, equations, and figures) is 1000 words.
- Neither footnotes nor appendices are permitted.
- The report should be typed or word-processed on A4 paper with adequate margin on both sides and spacing between lines.
- The file of the report must be in PDF format, and should be submitted to Viv Hall (viv.hall@vuw.ac.nz). You should retain a printed copy of your report.
- Note that no form of plagiarism is allowed in FCA. Information on how to access details on VUW policy in this area appears in the Course Outline. Any violation will result in unmarked work. For more extreme cases, University academic disciplinary procedures may be invoked.
- The criteria of the report are as follows:
  - Summarize concisely the key elements of the paper under review, providing a summary objective assessment of the significant contributions of the paper
  - ✤ As backing for your summary judgements, your detailed critique of the paper should include:
    - 1. a review of the current state of the relevant literature and how the current paper moves this literature forward.
    - 2. a comparison of the paper's methods and arguments with alternative methods used in other papers.
      (Subjective statements about whether the paper is good or bad will earn no credit)
    - 3. an indication of what problems have been left unresolved or by-passed
    - 4. suggestions on how future research might tackle these issues.

Viv Hall June 2007

#### **Faculty of Commerce and Administration Offices**

Railway West Wing (RWW) - FCA Student and Academic Services Office

The Faculty's Student and Academic Services Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course status and give further advice about FCA qualifications. To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

#### Easterfield (EA) - FCA/Education/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce and Administration, Education and Law is situated in the Easterfield Building - it includes the ground floor reception desk (EA005) and offices 125a to 131 (Level 1). The office is available for the following:

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- Forms for FCA Student and Academic Services (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

#### **General University Policies and Statutes**

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar or go to <u>www.vuw.ac.nz/policy</u>.

For information on the following topics, go to the Faculty's website <u>www.vuw.ac.nz/fca</u> under Important Information for Students:

- Academic Grievances
- Academic Integrity and Plagiarism
- Student and Staff Conduct
- Meeting the Needs of Students with Impairments
- Student Support

#### Manaaki Pihipihinga Programme

Manaaki Pihipihinga is an academic mentoring programme for undergraduate Māori and Pacific students in the Faculties of Commerce and Administration, and Humanities and Social Sciences. Sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade (back courtyard), Room 109D, and Room 210, Level 2, Railway West Wing. There is also a Pacific Support Coordinator who assists Pacific students by linking them to the services and support they need while studying at Victoria. Another feature of the programme is a support network for Postgraduate students with links to Postgraduate workshops and activities around Campus.

For further information, or to register with the programme, email <u>manaaki-pihipihinga-programme@vuw.ac.nz</u> or phone (04) 463 5233 ext. 8977. To contact the Pacific Support Coordinator, email <u>pacific-support-coord@vuw.ac.nz</u> or phone (04) 463 5842.