

## BUSINESS SCHOOL Te Kura Pakihi

# Department of Economics ECON 411: Advanced Macroeconomic Theory Course Outline – Semester 1, 2024

## **Paper Description and Aims**

This paper covers advanced theories in macroeconomics. It covers tools for building and solving macroeconomic models, with applications to monetary policy, fiscal policy, inflation, business cycles, and economic growth. By the end of the paper you should have enhanced your ability to understand and critically assess contemporary advanced economic modelling across a broad spectrum of macroeconomic topics.

Prerequisites: ECON 377 or (ECON 270 and ECON 376). Restriction: ECON 401

Students are expected to comply with all University rules and regulations. Students are expected to independently inform themselves about those rules and regulations and the details about this paper, especially its assessments.

## **Learning Outcomes**

Upon successful completion of this paper, you should be able to:

[1] understand and critically evaluate contemporary advanced macroeconomic models and identify how such theories can provide a basis for further theoretical and applied research;

[2] explain how the theory can be used to analyse and understand contemporary economic problems, and to apply theory to specific problems;

[3] communicate theoretical ideas using written English, mathematics, and statistics, as appropriate.

#### **Course Delivery**

Lecture Day/Time: Monday: 10.00am-12.00 noon Tuesday: 2.00-3.00pm Room: tba

Lectures present the key conceptual material through discussion and interaction between teaching staff and students. All lectures are mandatory. Lectures are supported by readings.

### **Teaching Staff**

*Lecturer* (*weeks 1-7*) Alfred Haug Office: OBS 615 Email: <u>alfred.haug@otago.ac.nz</u> Office hours: tba *Lecturer (weeks 8-13)* Dennis Wesselbaum Office: OBS 622 Email: <u>dennis.wesselbaum@otago.ac.nz</u> Office Hours: On demand

You should contact the Economics Reception Desk (ERD) with any administrative enquiries about the paper. The ERD is located on the 6th floor of the OBS and operates 11.00am - 12.00pm and 2.00 - 3.00pm daily, unless otherwise advised.

### **Course Learning Resources**

#### Readings

Lecture notes or overviews and reading lists will be provided by each lecturer as needed. Readings will be either provided, be made available on reserve at the Central Library, be accessible online via the University of Otago Library, or be generally accessible online.

#### Blackboard

*Blackboard* provides you with access to some course materials. Blackboard is used to email the whole class so it is important that you check your student email and *Blackboard* regularly, or redirect your emails to your personal account.

#### Computation

Computing resources for assigned work are available on the student desktop and in computer labs in the Commerce building.

#### Assessment

All material presented during the term is assessable (except where stated otherwise) by assignments and the tests. All important assessment information such as due dates and times, content, guidelines and so on will be discussed in lectures. *Students are responsible for ensuring that they are aware of this information, keeping track of their own progress, and catching up on any missed classes.* 

#### Internal Assessments

For weeks 1 to 7, there will be one assignment, worth **25%** of the final course mark. In addition, there will be one tests during regular class times, one on Tuesday, **16 April 2024** with a weight of **25%** of your final course mark. The assignment and tests will include a variety of questions and will test your critical understanding of the course material (Learning outcome #1) and your written communication skills (Learning outcome #3).

For weeks 8 to 13, two assessment items will be done, the first worth **25%** of your final mark is an end-ofsemester test and the second item is a project worth **25%** of your final mark. Details on assignments will be given in class. The deadline for the project will be announced in class. Internal assessments will test your ability to apply the course material (Learning outcome #2) and your written communication skills (Learning outcome #3). Official dates will be announced in lectures.

#### Grading

The grading scheme used at Otago is

 A+
 90-100

 A
 85-89

 A 80-84

 B+
 75-79

 B
 70-74

 B 65-69

 C+
 60-64

 C
 55-59

 C 50-54

 D
 40-49

 E
 <40</td>

#### Policies

#### Academic Integrity

Academic integrity means being honest in your studying and assessments. It is the basis for ethical decision-making and behaviour in an academic context. Academic integrity is informed by the values of honesty, trust, responsibility, fairness, respect and courage. Students are expected to be aware of, and act in accordance with, the University's Academic Integrity Policy.

Academic Misconduct, such as plagiarism or cheating, is a breach of Academic Integrity and is taken very seriously by the University. Types of misconduct include plagiarism, copying, unauthorised collaboration, submitting work written by someone else (including from a file sharing website, text generation software, or purchased work) taking unauthorised material into a test or exam, impersonation, and assisting someone else's misconduct. A more extensive list of the types of academic misconduct and associated processes and penalties is available in the University's Student Academic Misconduct Procedures.

It is your responsibility to be aware of and use acceptable academic practices when completing your assessments. To access the information in the Academic Integrity Policy and learn more, please visit the University's Academic Integrity website at <u>www.otago.ac.nz/study/academicintegrity</u>, or ask at the Student Learning Centre (HEDC) or the Library, or seek advice from your paper co-ordinator.

For further information: Academic Integrity Policy http://www.otago.ac.nz/administration/policies/otago116838.html

Student Academic Misconduct Procedures http://www.otago.ac.nz/administration/policies/otago116850.html

#### Turnitin on Blackboard

Turnitin is a text-matching software tool which reports matches between sections of student work submitted to it, and other material to which Turnitin has access (i.e. material available via the internet, and content of other student assignments which have previously been submitted to Turnitin). Turnitin is also often referred to as a plagiarism detection tool. All assignments submitted electronically through Blackboard are uploaded via Turnitin, and the report is available to the marker. You are able to check your draft assignment via Turnitin before you submit your final assignment. Full instructions and guidance for the use of Turnitin can be found at: <a href="https://help.otago.ac.nz/blackboard/assessing-your-students/turnitin

#### Untimely Submission of Assessment Items

Late assignments will be accepted for evaluation for university-approved reasons only (in the event of illness, family emergency, or conflict with a university-sponsored event). Supporting documentation must be provided.

## Calendar

The calendar and its content below are subject to change during the semester. Changes will be announced during lectures.

# Week of 26 February (Professor Haug) Empirical studies of fiscal and

monetary policy (part 1)

• Fiscal and monetary policy shocks: covariance stationary processes, unit roots, cointegration; basics of VAR modelling

# **Week of 4 March (Professor Haug)** Empirical studies of fiscal and monetary policy (part 2)

- Vector Autoregressions (VARs) setup, lag choice, estimation; policy transmission channels
- Empirical fiscal and monetary policy transmission in VARs: impulse response functions
- Non-linear VAR models; fiscal and monetary policy in non-linear VARs

# **Week of 11 March (Professor Haug)** Empirical studies of fiscal and monetary policy (part 3)

• Issues with structural identification (short-run, long-run, sign restrictions), unit roots, and cointegration for impulse response function analysis

# Week of 18 March (Professor Haug) Test 1 & Theory of Money (part 1)

- The role of money in various mainstream macroeconomic models: basic concepts and an overview; Lucas critique; micro-foundations of macroeconomics
- a simple partial-equilibrium model of money demand and its flaws

# Week of 25 March (Professor Haug) Theory of money (part 2)

- Overlapping generations models of money
- Cash-in-advance-constraint models of money
- Money-in-the-utility-function models

# Week of 1 April (Mid-semester break)

# Week of 8 April (Professor Haug) Theory of money (part 3)

- Search-theoretic models of money
- Assignment due 23 May

# Week of 15 April (Professor Haug)

- Summery and overview; practice questions for the in-class test
- In-class Test on Tuesday, 16 April 2024

# Week of 22 April (Assoc. Professor Wesselbaum) The Real Business Cycle Model

• Develop and solve the widely used business cycle model

# Week of 29 April (Assoc. Professor Wesselbaum) Numerical Methods

• Applied view on how to solve DSGE models

# Week of 6 May (Assoc. Professor Wesselbaum) The New Keynesian Model

• Extending the RBC model by introducing sticky prices

# Week of 13 May (Assoc. Professor Wesselbaum) Unemployment

• Building a business cycle model with equilibrium unemployment

## Week of 20 May (Assoc. Professor Wesselbaum) Financial Frictions

• Extending the New Keynesian model by incorporating financial frictions

# Week of 27 May (Assoc. Professor Wesselbaum) Financial Frictions

• Review and test

# Student Learning Support and Information Student Charter

http://www.otago.ac.nz/about/otagooo5275.html

#### Guidelines for Learning at Otago

https://www.otago.ac.nz/hedc/otago616123.pdf

#### **Student Learning Centre**

The Student Learning Centre, which is part of the Higher Education Development Centre, provides learning support, free of charge, to ALL enrolled students. Their services include:

- a workshop programme designed to help students to improve their learning strategies and their generic skills;
- individual assistance with learning issues;
- on-line study skills advice
- a student leadership programme
- a student-led peer support programme for students of all ages and backgrounds.
- conversational English groups for students from a non-English speaking background

The Centre also provides two very helpful study guides, "Guidelines for Writing and Editing" and "Writing University Assignments" and these are available on the SLC website. <u>http://slc.otago.ac.nz/</u>

#### Library Support

The Library website <u>http://www.otago.ac.nz/library</u> provides access to resources and services, including group room bookings, library hours and locations, past exam papers, subject guides, article databases and more.

If you need assistance either check out the self-help guides <u>http://otago.libguides.com/selfhelp</u>, or ask Library staff at the ground floor service desks, or email <u>ask.library@otago.ac.nz</u>

#### **Pacific Student Support Facilitators**

Malo e lelei

Falaviena Faiva works part-time in the Dean's Office at the Otago Business School, Division of Commerce. Falaviena is of Tongan descent and one of our two Pacific Student Support Facilitators. She responsible for all second-year Pacific students within the division.

Falaviena is a University of Otago, Humanities and Commerce graduate and is currently completing a Postgraduate Commerce degree in International Business.

Deans Office, Otago Business School Division of Commerce Email: viena.faiva@otago.ac.nz Cell Phone: 021 279 0914 Bula Vinaka Jekope Ramala Maiono also works part time in the Dean's Office at the Otago Business School, Division of Commerce.

Maiono is of Fijian descent and our other Pacific Student Support Facilitator. He is responsible for all first-year Pacific students in the division.

Maiono is a University of Otago Commerce graduate, also studying a PHD degree in the Division of Humanities.

Deans Office, Otago Business School

**Division of Commerce** 

Email: jekope.maiono@otago.ac.nz

Cell Phone: 021 279 0871

#### Kaiāwhina Māori | Māori student support

Ben is the Kaiāwhina Māori (Māori student support) for Te Kura Pākihi | Otago Business School. He is able to answer any questions you may have about studying here at the University of Otago. He can provide information about scholarships, campus services, pastoral and financial care. Ben is also here to support those students who are studying away from their whānau, hapū and iwi, to ensure they feel safe and supported. He has a passion for the development of Rangatahi and understands the struggles that can come with academic life.



Tel +64 27 513 6991

Email ben.sommerville@otago.ac.nz

#### **Disability Information and Support**

Students are encouraged to seek support if they are having difficulty with their studies due to disability, temporary or permanent impairment, injury or chronic illness. It is important to seek help early, through one of the contacts below:

Website: http://www.otago.ac.nz/disabilities

65 Albany St, West Lane, ISB, Student Services

Tel: +64 3 479 8235 Email: disabilities@otago.ac.nz

# **Student Feedback**

We encourage your feedback. This can be in the form of contacting staff, participating in course evaluation surveys, and communicating with class representatives. Continual improvements will be made to this course based in part on student feedback.

#### **Class Representatives**

The class (or student) representative system is an avenue for encouraging communication and consultation between staff and students. It provides you with a vehicle for communicating your views on the teaching and delivery of the paper and provides staff with an opportunity to communicate information and gain constructive feedback from students. It contributes to the development of a sense of community within a department and it adds a further dimension to the range of support services offered to students.

Volunteers for the role of class representatives will be called early in the semester. The OUSA invites all class representatives to a training session, conducted by OUSA, about what it means to be a class representative and some of the possible procedures for dealing with issues that arise. They also provide information on the services that OUSA offers and the role OUSA can play in solving problems that may occur. The OUSA provides support to class representatives during the semester. Departmental staff will also meet with class representatives during the semester to discuss general issues or matters they wish to have considered.

Your class representative's name and contact details will be posted on Blackboard early in the semester.

### Concerns about the Course

We hope you will feel comfortable coming to talk to us if you have a concern about the course. The Course Co-ordinator will be happy to discuss any concerns you may have. Alternatively, you can report your concerns to the Class Representative who will follow up with departmental staff. If, after making approaches via these channels, you do not feel that your concerns have been addressed, there are University channels that may aid resolution. For further advice or more information on these, contact the departmental administrator or head of department.

# Disclaimer

While every effort is made to ensure that the information contained in this document is accurate, it is subject to change. Changes will be notified in class and via Blackboard. Students are encouraged to check Blackboard regularly. It is the student's responsibility to be informed.