

School of Economics and Finance

MOFI 403 MONETARY ECONOMICS A

Trimester ONE 2006

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Course Objective

The purpose of this course is for us to develop a box of technical tools that is frequently used for understanding and studying modern monetary and dynamic economics. In putting together our tool box, we are going to derive the most fundamental results in monetary theory. To make this course as useful as possible, we are also going to study computational methods that are capable of analyzing a variety of intertemporal problems.

We will utilize General Algebraic Modeling System for the computing topics. GAMS is a very flexible, high-level programming language that can handle a large array of mathematical modeling problems. The Honors computer lab is equipped with the fully-licensed version of GAMS. You are welcome to download the student version onto your own computer by visiting GAMS official website at <<http://www.gams.com>>.

Prerequisites

The economics background required for this class is a good course in Microeconomics, including calculus-based treatments of Consumer Theory, Producer Theory, and General Equilibrium.

There is going to be a liberal dosage of mathematics in this course. I cannot overemphasize this – it is absolutely paramount that you feel very comfortable with Multi-Variate Calculus. It will be extremely useful if you have had previous exposure to Differential Equations.

If you are uncertain regarding your economic or mathematic background, PLEASE do let me know right after the first lecture. This is very important.

Proposed Topics

We are going to start the course with a two-period (almost static) model of economic exchange, that establishes the idea of interest rate determination under a market equilibrium framework. Then we extend this two-period framework to an infinite horizon economy that consists of a sequence of overlapping generations. We will be using this overlapping generations structure to study the role of

fiat money, its policy implications, and its interaction with other real assets. Drawing on both analytical and numerical techniques, we will be studying the model economy's steady-state properties and its non-stationary dynamics. Next we extend the overlapping generations structure further and study the monetary implications of a cash-in-advance constraint under a representative agent framework.

Very broadly speaking, the topics are

- Irving Fisher's Theory of Interest Rate Determination
- Paul Samuelson's Overlapping Generations Theory of Fiat Money
- Peter Diamond's Optimal Growth Model under Overlapping Generations
- Optimal Monetary Growth Model – The Importance of Saddle Dynamics
- Frank Ramsey's Optimal Growth Model in Discrete Time
- Optimal Monetary Growth with a Cash-in-Advance Constraint.

Textbooks

There is no textbook for this course. Our discussions are going to be entirely lecture-based.

Course Requirement

There will be a number of homework assignments throughout the trimester. They are designed to encourage you to think more about economic modeling and solution techniques. Hence there will be no intermediate due dates during the term. All assignments are due on the day before the official final exam date. This is meant to maximize your own control over your time.

There will not be a set of model answers. The assignments will be graded according to how you approach the questions and how well you carry out the mathematical arguments.

Option I (Default):

Comprehensive Final Exam	50%
Assignments	50%

Additionally, if you choose to write a paper, Option II is also available:

Option II:

Comprehensive Final Exam	20%
Assignments	20%
Paper	60%

Paper

The goal of this paper, if you decide to invoke this option, is to incorporate the techniques developed in this course to address a topic of your own choosing. The scope is very broad – the topic can be either a monetary phenomenon or any dynamic, economic issue. There is only one primary requirement – the paper needs to be an original construction of ***YOUR*** own model, not a literature survey of existing papers. In addition to the final draft, you will present a short seminar on your topic to the class. Depending on the pace, we may have to schedule these seminars outside of our regular meetings.

The paper is due on the day of the final exam.

Faculty of Commerce and Administration Offices

Railway West Wing (RWW) - FCA Student Administration Office

The Student Administration 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 office on (04) 463 5376.

Easterfield (EA) - FCA/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce & Administration 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.
- FCA Student Administration forms (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

Check with the Student Administration Office for opening times (04) 463 5376.

General University Policies and Statutes

Students should familiarise themselves with the University's policies and statutes, particularly those regarding assessment and course of study requirements, and formal academic grievance procedures.

Student Conduct and Staff Conduct

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps can be taken if there is a complaint. For queries about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor. This Statute is available in the Faculty Student Administration Office or on the website at: www.vuw.ac.nz/policy/StudentConduct.

The policy on Staff Conduct can be found on the VUW website at:

www.vuw.ac.nz/policy/StaffConduct.

Academic Grievances

If you have any academic problems with your course you should talk to the tutor or lecturer concerned or, if you are not satisfied with the result of that meeting, see the Head of School or the Associate Dean (Students) of your Faculty. Class representatives are available to assist you with this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievances Policy which is published on the VUW website:

www.vuw.ac.nz/policy/AcademicGrievances.

Academic Integrity and Plagiarism

Academic integrity is about honesty – put simply it means **no cheating**. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. Plagiarism is **prohibited** at Victoria.

The University defines plagiarism as follows:

Plagiarism is presenting someone else's work as if it were your own, whether you mean to or not.

'Someone else's work' means anything that is not your own idea, even if it is presented in your own style. It includes material from books, journals or any other printed source, the work of other students or staff, information from the Internet, software programmes and other electronic material, designs and ideas. It also includes the organization or structuring of any such material.

Plagiarism is not worth the risk.

Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct (www.vuw.ac.nz/policy/studentconduct) and may be penalized severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- suspension from class or university
- cancellation of your mark for an assessment or a fail grade for the course.

Find out more about plagiarism and how to avoid it, on the University's website at: www.vuw.ac.nz/home/studying/plagiarism.html.

Students with Disabilities

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities an equal opportunity with all other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, then please contact the Course Coordinator as early in the course as possible. Alternatively you may wish to approach a Student Adviser from Disability Support Services to confidentially discuss your individual needs and the options and support that are available. Disability Support Services are located on Level 1, Robert Stout Building, or phoning 463-6070, email: disability@vuw.ac.nz. The name of your School's Disability Liaison Person can be obtained from the Administrative Assistant or the School Prospectus.

Student Support

Staff at Victoria want students' learning experiences at the University to be positive. If your academic progress is causing you concern, please contact the relevant Course Co-ordinator, or Associate Dean who will either help you directly or put you in contact with someone who can.

The Student Services Group is also available to provide a variety of support and services. Find out more at www.vuw.ac.nz/st_services/ or email student-services@vuw.ac.nz.

VUWSA employs two Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and

faculty delegates. The Education Office is located on the ground floor, Student Union Building, phone 463 6983 or 463 6984, email education@vuwsa.org.nz.

Manaaki Pihipihinga Maori and Pacific Mentoring programme (Faculties of Humanities and Social sciences and Commerce and Administration).

- **What:-**Academic Mentoring for Maori and Pacific students studying at all levels in the above schools. Weekly sessions for an hour with a mentor to go over assignments and any questions from tutorials or lectures. Registered students can use the facilities study rooms and computer suite, at any time, at Kelburn and Pipitea.
- Mature student and Post grad network

If you would like to register as a mentor or mentee please contact the coordinator.

Where:

Melissa Dunlop
Programme Coordinator
Room 109 D
14 Kelburn Parade: back courtyard
Ph: (04) 463 6015
Email: Maori-Pacific-Mentoring@vuw.ac.nz

Please Note: A mentoring room will also be running at Pipitea Campus starting January. Please contact the Programme Coordinator for details.