
School of Economics and Finance

QUAN 371 FINANCIAL MATHEMATICS

Trimester 1, 2007

COURSE OUTLINE

Lecturers Leigh Roberts, RH 323, phone 463-5937 (coordinator)
email: leigh.roberts@vuw.ac.nz

Helen Huang, RH 329, phone 463-6918
email: hui.huang@vuw.ac.nz

Administrator Suzanne Freear, RH 327, phone 463-5380
email: suzanne.freear@vuw.ac.nz

Lecture times Tuesday, Wednesday, Thursday 9.30 - 10.20, GB LT1

Tutorial times Tuesday, Wednesday 10.30 - 11.20, GB G07
Thursday 10.30 - 11.20, GB G04
Wednesday 11.30 - 12.20, GB G07

The tutorials are in the nature of help sessions, and students are not required to sign up for particular tutorials. Depending on student demand, one of the tutorials may be cancelled; but this will be done in consultation with the class.

The lecturers prefer to be contacted by email or through the tutorials, and are in addition generally unavailable on Mondays and Fridays.

Course Objectives

To be introduced to the principal ideas underpinning the mathematics of finance, and to gain some experience of the application of these ideas to the financial and business worlds. To be introduced to the principles of risk management, insurance and derivative securities.

Course Content

The content and timing of the course may differ slightly from the following approximate timetable.

Teacher	Week	Topic	Notes Chs.	Test	Assignments set submitted
Leigh Roberts	1	Elementary: $i, i^{(2)}, d, d^{(2)}, \delta$	1,2		1
	2	Annuities: $a_{\overline{n} }, s_{\overline{n} }$	3		2 1
	3	Loans	4		3 2
	4	Accrued interest, duration			4 3
	5	Duration, immunisation			5 4
LR/HH	6	Credit risk, derivatives		T1	
<i>Mid trimester break, 2 weeks 9-20 April 2007</i>					
Helen Huang	7	Derivative securities			6 5
	8	Forwards, swaps			7 6
	9	Forward, swaps			8 7
	10	options			9 8
LR/HH	11	Case study		T2	
	12	Revision			9

Expected Workload

It is expected that the course will require approximately 240 hours of work, including class time.

Readings

Notes will be made available on Blackboard: <http://www.blackboard.vuw.ac.nz/>

Assessment

- 10% Average of the weekly assignment marks
- 20% Test 1, held in a lecture time-slot in week 6
- 20% Test 2, held in a lecture time-slot in week 11
- 50% Two hour final examination, in the examination period 4 June - 1 July 2007

A minimum mark of 40% is required in the final exam for a pass in the course.

Assignments will be set each week at the Tuesday lecture, normally to be handed in at RH 321 no later than the Thursday in the week following (9 days later, by close of business), and to be returned marked by no later than the following Thursday (7 days later again, 16 days after the assignment is set). Marked assignments will be available from RH 321.

Assignments appearing to be copied will be marked as zero, and stapled together. Appeals on this matter may be made to the coordinator.

Mandatory course requirements

Attendance at both tests is compulsory; and in order to pass the course, it is compulsory to obtain at least 40% in the final examination.

Communication

Additional information or information on changes will be posted on Blackboard. Some information may be emailed to you via your SCS address, so check this regularly.

SUPPLEMENTARY INFORMATION

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 <http://www.vuw.ac.nz/policy>.

For information on the following topics, go to the Faculty's website <http://www.vuw.ac.nz/fca>

- 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, phone (04) 463 5233 ext. 8977 or email manaaki-pihipihinga-programme@vuw.ac.nz. To contact the Pacific Support Coordinator, phone (04) 463 5842 or email pacific-support-coord@vuw.ac.nz.