

VICTORIA INTERNATIONAL APPLIED FINANCE PROGRAMME
School of Economics and Finance

MMAF514 Derivatives

Trimester Two 2008

COURSE OUTLINE

Contact Details

The course coordinator, Professor Graeme Guthrie, is located in Room 326 of Rutherford House and can be reached by email at graeme.guthrie@vuw.ac.nz.

Block Release Dates

Attendance at all sessions for both block releases is compulsory.

Tuesday 26th August – Thursday 28th August, 2008
and Tuesday 21st October - Thursday 23rd October, 2008

Course Objectives

To develop the building blocks required to hedge and price derivative securities. To develop the adjustments needed to handle different underlying assets, as well as the specifics of different instruments. To develop the adjustments needed to handle standard features of many derivatives.

Course Content

Part I: Fundamentals of derivative pricing

- Building blocks
- Modelling stock prices
- Binomial option pricing model
- Dividends
- Early exercise
- Futures and options on futures

Part II: Interest rate derivatives

- Uncertain interest rates
- Term structure of interest rates
- Fitting the yield curve
- Interest rate derivatives

Expected Workload

Total average workload of 200 hours. During the approximately 6 weeks of term prior to each block release, students will need to allow about 14 hours per week for study, research

and preparation of assignments for this course. The two block courses each involve approximately 18 hours of work.

Textbook

Comprehensive lecture notes will be provided. These lecture notes constitute the examinable material for the course. While reading more widely may potentially help you in the tests, everything you will need to answer the test questions will be contained in these lecture notes and any supplementary material distributed at the block releases. However, reference will also be made to the following text, which is provided as part of the course material:

- Hull, John C. (2005). *Fundamentals of Futures and Options Markets* (5th edn.). Upper Saddle River, New Jersey: Prentice Hall.

It must be stressed that it is the lecture notes which comprise the examinable material for the course. You will not be examined on material appearing in Hull's book — unless, of course, it also appears in the lecture notes. The references to Hull's book are designed to help you understand parts of the lecture notes, and to provide you with some information on the mechanics of derivative markets.

If you would like a (relatively) non-technical break from the course, the following books are excellent.

- Dunbar, Nicholas (2001). *Inventing Money: The Story of Long-Term Capital Management and the Legends Behind it*. Chichester: John Wiley and Sons Ltd.
- Lowenstein, Roger (2001). *When Genius Failed: The Rise and Fall of Long-Term Capital Management*. London: Fourth Estate.

They offer insights into the real-world uses and abuses of the derivative pricing models we present in MMAF 514. They are not a formal part of the course, and are therefore not examinable.

Materials and Equipment

A calculator will be essential for the tests.

Assessment Requirements

The following schedule of assessment applies:

Exams:	One test at each block release session based on reading assigned for period leading up to the block release and material presented at the block release. These are worth 35% each. Please bring your calculator.	70%
Assignments:	Two assignments which count together for 30%. Scheduled due dates for the assignments are: 4 pm Monday 15 th September 2008 (15%) 4 pm Monday 10 th November 2008 (15%)	30%
Total Assessment:		100%

Note that students must attain an overall mark of 50% in order to achieve a passing grade.

Assignment Submission

Assignments must be submitted in hard copy to the VIAF office. Posted assignments will be dated according to the postmark on the envelope. All assignments are due at 4pm on the due date. Students are responsible for ensuring their name and student ID appears on each page of all submitted work.

Penalties

Each of the assignments will be marked out of a maximum that diminishes by 5% for every day late, with a weekend counting as one day. The date of submission shall be taken as the date of delivery or the day of postmark, if by post. There will be a final cut off date, one week after the due date for each assignment, after which no assignment can be accepted.

The assignments will each carry a specified word limit. If an assignment exceeds the word limit, credit will be given only from the beginning of the assignment up to the word limit. No credit will be given for the portion of work extending beyond the word limit.

Mandatory Course Requirements

To pass, a student must: (i) attend all sessions of both block release courses; (ii) obtain an average mark of at least 50% over the two tests.

Communication of Additional Information

Additional information including assignment questions, details of the block course schedule, feedback on course assessments, etc will be provided online via Blackboard. Students are responsible for logging onto Blackboard regularly to check for any updates or announcements, and for ensuring that the VIAF Senior Administrator, has their up to date email and postal addresses. Viaf-programme@vuw.ac.nz

If you have, or become aware of, any health condition that could prevent you attending a VIAF compulsory block release, then you should notify the Programme Director immediately, preferably by email, dawn.lorimer@vuw.ac.nz.

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 on the ground floor (EA005). This counter is the first point of contact for :

- 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.

Use of Turnitin

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine <http://www.turnitin.com>. Turnitin is an on-line plagiarism prevention tool which identifies material that may have been copied from other sources including the Internet, books, journals, periodicals or the work of other students. Turnitin is used to assist academic staff in detecting misreferencing, misquotation, and the inclusion of unattributed material, which may be forms of cheating or plagiarism. *At the discretion of the Head of School, handwritten work may be copy-typed by the School and subject to checking by Turnitin.* You are strongly advised to check with your tutor or the course coordinator if you are uncertain about how to use and cite material from other sources. Turnitin will retain a copy of submitted materials on behalf of the University for detection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

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 www.victoria.ac.nz/home/about/policy/students.aspx

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

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

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. The University defines plagiarism as follows:

The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other students or staff.

It is still plagiarism even if you re-structure the material or present it in your own style or words.

Note: including the work of others will not be considered plagiarism as long as the work is acknowledged by appropriate referencing.

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalised severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning

- cancellation of your mark for an assessment or a fail grade for the course
- suspension from the course or the University.

Find out more about plagiarism, and how to avoid it, on the University's website:

www.victoria.ac.nz/home/studying/plagiarism.html

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 manaaki-pihipihinga-programme@vuw.ac.nz or phone (04) 463 6015. To contact the Pacific Support Coordinator, email pacific-support-coord@vuw.ac.nz or phone (04) 463 5842.