

School of Economics and Finance

## **MMAF 514 DERIVATIVES**

Trimester 2 2012

### **COURSE OUTLINE**

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#### **Names and Contact Details**

The course coordinator is Graeme Guthrie, Room RH326. Preferred contact is by email at [graeme.guthrie@vuw.ac.nz](mailto:graeme.guthrie@vuw.ac.nz)

The administrator for this course is Anna Potts, RH307. She can be contacted on (04) 463 6148 or [viaf-programme@vuw.ac.nz](mailto:viaf-programme@vuw.ac.nz)

#### **Trimester Dates**

Monday 16 July – Saturday 17 November

#### **Withdrawal from Course**

1. Your fees will be refunded if you withdraw from this course on or before Friday 27 July 2012.
2. The standard last date for withdrawal from this course is Friday, September 28. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an 'Application for Associate Dean's Permission to Withdraw Late' including supporting documentation. The application form is available from either of the Faculty's Student Customer Service Desks.

#### **Class Times and Room Numbers**

- 9:30am Monday, September 3 until 12:30pm Wednesday, September 5
- 9:30am Tuesday, October 30 until 12:30pm Thursday, November 1

Classes will take place in AM104 and KK216. A detailed schedule of each block release will be supplied closer to the September and October sessions. Attendance at all sessions of both block releases is compulsory.

#### **Course Content**

Block Release I: Fundamentals of derivative pricing

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

Block Release II: Interest rate derivatives

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

### **Course Learning 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 Delivery**

The contact hours of the course will be during the two block releases detailed above. During the rest of the trimester, students will be expected to engage in self-directed study using their textbooks and material posted on Blackboard, and completing assignments that will be posted on Blackboard.

### **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 contact hours.

### **Group Work**

None.

### **Readings**

Comprehensive lecture notes will be provided. These lecture notes and any supplementary material distributed at the block releases constitute the examinable material for the course. While reading more widely may help you in the tests, everything you will need to answer the test questions will be contained in the 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* (7<sup>th</sup> edn.). Upper Saddle River, New Jersey: Prentice Hall.

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.

### **Materials and Equipment**

It is necessary to bring a calculator to the block courses. A good financial calculator such as the HP17BII or HP10BII is strongly recommended. During tests students will be allowed to use calculators, but not hand held or other computers.

## **Assessment Requirements**

- One 90 minute test at each block release session (each worth 35%) based on reading assigned for the period leading up to the block release and material presented at the block release.
- Two assignments, each worth 15%. Scheduled due dates for the assignments are
  - 4 pm, Monday, September 17
  - 4 pm, Monday, November 12

*Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and audit purposes. The findings may be used to inform changes aimed at improving the quality of FCom programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.*

## **Examinations**

MMAF514 has no formal examination, but does have the two tests detailed above.

## **Penalties**

Each of the assignments will be marked out of a maximum that diminishes by 5% for every day late. The date of submission shall be taken as the date of delivery. Please carefully read the assignment guidelines for details of how assignments should be submitted. 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 total course assessment; (iii) obtain an average mark of at least 45% over the two tests.

## **Class Representative**

A class representative will be elected in the first class, and that person's name and contact details made available to VUWSA, the Course Coordinator and the class. The class representative provides a communication channel to liaise with the Course Coordinator on behalf of students.

## **Communication of Additional Information**

Additional information including assignment questions, details of the block course schedule, feedback on course assessments, etc will be provided via Blackboard, email or by post. Students are responsible for ensuring that the VIAF administrator (email: [viaf-programme@vuw.ac.nz](mailto:viaf-programme@vuw.ac.nz)) has their up to date email and postal addresses.

## **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 compares submitted work with a very large database of existing material. At the discretion of the Head of School, handwritten work may be copy-typed by the School and subject to checking by Turnitin. 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.

**For the following important information follow the links provided:**

## **Academic Integrity and Plagiarism**

<http://www.victoria.ac.nz/home/study/plagiarism.aspx>

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

Find key dates, explanations of grades and other useful information at

[www.victoria.ac.nz/home/study](http://www.victoria.ac.nz/home/study)

Find out about academic progress and restricted enrolment at

<http://www.victoria.ac.nz/home/study/academic-progress.aspx>

The University's statutes and policies are available at [www.victoria.ac.nz/home/about/policy](http://www.victoria.ac.nz/home/about/policy), except qualification statutes, which are available via the Calendar webpage at

<http://www.victoria.ac.nz/home/study/calendar.aspx> (See Section C).

Further information about the University's academic processes can be found on the website of the Assistant Vice-Chancellor (Academic) at

[www.victoria.ac.nz/home/about\\_victoria/avcacademic/default.aspx](http://www.victoria.ac.nz/home/about_victoria/avcacademic/default.aspx)

### **AVC (Academic) Website: information including: Conduct, Academic Grievances, Students with Impairments, Student Support**

[http://www.victoria.ac.nz/home/about\\_victoria/avcacademic/Publications.aspx](http://www.victoria.ac.nz/home/about_victoria/avcacademic/Publications.aspx)

### **Faculty of Commerce Office**

<http://www.victoria.ac.nz/fcom/studenthelp/>

### **Te Putahi Atawhai**

### **Maori and Pacific Mentoring Programme**

<http://www.victoria.ac.nz/tpa/>