

School of Economics and Finance

## **FINA 303 DERIVATIVES**

Trimester 2, 2013

### **COURSE OUTLINE**

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

Course Coordinator & Lecturer	Hai Lin <a href="mailto:hai.lin@vuw.ac.nz">hai.lin@vuw.ac.nz</a> Office Hours: Mondays, Wednesdays 13:00-14:30 or by appointment.	RH 302	463 5239
Course Administrator	Julie-Mary Boles de Boer <a href="mailto:Julie-Mary.bolesdeboer@vuw.ac.nz">Julie-Mary.bolesdeboer@vuw.ac.nz</a> Office Hours: Monday-Friday 9am-1pm	RH 321	463 5380

#### **Trimester Dates**

Teaching Period: Monday 15 July – Friday 18 October  
Study Period: Monday 21<sup>st</sup> October – Thursday 24 October  
Examination Period: Friday 25 October – Saturday 16 November (inclusive)

#### **Withdrawal from Course**

1. Your fees will be refunded if you withdraw from this course on or before Friday 26 July 2013.
2. The standard last date for withdrawal from this course is Friday 27 September. 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**

**Lectures:** Tuesdays and Thursdays 11:30-12:20 in GBLT1 (Government Building Lecture Theatre 1)

**Tutorials:** Sign up for a tutorial on S-cubed. (<http://signups.victoria.ac.nz>).

#### **Course Delivery**

The course will be delivered by two lectures per week and tutorials in 8 out of the 12 weeks. One mid-term test, four assignments and a final examination will be used to evaluate the performance of students.

### **Expected Workload**

Overall it is expected that you will spend approximately 150 hours on completing this course. This involves attending all the lectures and tutorials, completing all assignments, and preparations for all exams.

### **Prescription**

This course examines futures, options and other common derivative contracts, including the details of derivatives markets quotation and trading. Topics include pricing derivatives and their use for hedging and speculation.

### **Course Learning Objectives**

By the end of this course, students should be able to

- C1. understand the main derivatives that are traded in the financial market, such as forward, futures, swaps and options.
- C2. use diagram to analyse the possible payoff of derivatives
- C3. apply the derivatives in risk management
- C4. apply no arbitrage theory in the pricing of derivatives
- C5. Use binomial tree to price the options.

### **Course Content**

The content and timing of the course might differ slightly from the information given in the following table

Week	Topic	Chapters	Test	Submitted	Tutorials
1	Introduction	1		set	
2	Futures	2, 3	1		
3	Interest rate	4			T
4	Forward and futures pricing	5	2	1	T
5	Swap	7			T
6	Options Market (1)	9		2	T
7	Mid-term test	1-5, 7, 9	Test		
8	Options Market (2)	10	3		T
9	Options Market (3)	11			T
10	Binomial Tree (1)	12	4	3	T
11	Binomial Tree (2)	18			T
12	Exotic Options	22,24		4	

### **Readings**

Hull, J. C., Fundamentals of Futures and Options Market (eighth edition), Pearson Publisher (Main textbook).

Hull, J.C., Options, Futures and Other Derivatives (eighth edition), Pearson Publisher.

Jarrow, R.A., Chatterjea, A., An Introduction to Derivative Securities, Financial Markets, and Risk Management, W.W. Norton & Company Inc.

### **Materials and Equipment**

A calculator is necessary for the mid-term test and the final exam, as well as for the tutorials and assignments.

## **Assessment**

- 10% Average of four assignment marks (CLO 1, 2, 3, 4, 5)
- 40% Mid-term test, held in a lecture time-slot in week 7 (CLO 1, 2, 3, 4)
- 50% Two hour final examination, in the examination period Friday 25 October – Saturday 16 November (inclusive) (CLO 1, 2, 3, 4, 5)

Assignments will usually be set on Friday, normally to be submitted into Box 84 on the Mezzanine floor in Rutherford House no later than 5 p.m. on the Friday two weeks later. Late assignments will not be accepted, and answers will be posted on the blackboard.

Assignments that appear to be copied will be marked as zero. Appeals on assignment marking may be made to the coordinator, associate professor Hai Lin ([Hai.lin@vuw.ac.nz](mailto:Hai.lin@vuw.ac.nz)).

## **Penalties**

Late assignment submissions are not accepted.

## **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 submitted to Turnitin. A copy of submitted materials will be retained 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.

## **Examinations**

Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period. The final examination for this course will be scheduled at some time during the following period:

Friday 25 October – Saturday 16 November (inclusive)

## **Mandatory Course Requirements**

Attendance at both the mid-term test and the final examination is compulsory.

If you cannot complete an assignment or sit a test or examination, refer to [www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat](http://www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat)

## **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 will be sent to the students via Blackboard and/or email.

## **Student feedback**

Student feedback on University courses may be found at [www.cad.vuw.ac.nz/feedback/feedback\\_display.php](http://www.cad.vuw.ac.nz/feedback/feedback_display.php)

**Link to general information**

For general information about course-related matters, go to

<http://www.victoria.ac.nz/vbs/studenthelp/general-course-information>

**Note to Students**

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 academic audit. The findings may be used to inform changes aimed at improving the quality of VBS programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

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