

School of Economics and Finance

FINA 303 DERIVATIVES

Trimester 2, 2014

COURSE OUTLINE

Names and Contact Details

Course Coordinator Hai Lin RH 302 463 5239

& Lecturer <u>hai.lin@vuw.ac.nz</u>

Office Hours: Mondays, Wednesdays 13:00-14:30 or by appointment.

Course Administrator TBA RH 321 463 6386

tba@vuw.ac.nz
Office Hours: TBA

Trimester Dates

Teaching Period: Monday 14th July – Friday 17th October Study Period: Monday 20th October – Thursday 23rd October

Examination Period: Friday 24th October – Saturday 15th November (inclusive)

Withdrawal from Course

- 1. Your fees will be refunded if you withdraw from this course on or before Friday 25th July 2014.
- 2. The standard last date for withdrawal from this course is Friday 26th 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: Wednesday and Fridays 10:30-11:20 in GBLT4 (Government Building Lecture Theatre

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 covers options, forward contracts, futures contracts, and other common derivative contracts. Topics include how these contracts work, how they are used, and how they are priced.

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 and Black-Scholes option pricing formula 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	Assignment		Tutorials
				Set	Submitted	
1	Introduction	1				
2	Futures	2, 3		1		T
3	Interest rate	4				T
4	Forward and futures pricing	5		2	1	T
5	Swap	7				T
6	Options Market (1)	9			2	
7	Options Market (2)	10	Test	3		
8	Options Market (2, 3)	10, 11				T
9	Binomial Tree (1)	12		4	3	T
10	Binomial Tree (2)	18				T
11	Black-Scholes Model	13			4	T
12	Exotic Options	22,24				

Readings

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

From Trimester 1, 2014, a revised Assessment Handbook will apply to all VUW courses: see http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf.

In particular, there will be a new grade scheme, in which the A+ range will be 90-100% and 50-54% will be a C-.

- 10% Average of four assignment marks (CLO 1, 2, 3, 4, 5)
- 30% Mid-term test, held in a lecture time-slot in week 7 (CLO 1, 2, 3, 4)
- 60% Two hour final examination, held in the examination period (CLO 1, 2, 3, 4, 5)

Assignments will usually be set on Friday, normally to be submitted into the assignment box on the Mezzanine floor in Rutherford House no later than 4 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).

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 24th October – Saturday 15th November (inclusive)

Mandatory Course Requirements

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

In addition to obtaining an overall course mark of 50 or better, students must achieve a minimum of 40% on the final exam to pass the course.

If you cannot complete an assignment or sit a test or examination, refer to 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 or information on changes will be conveyed to students via Blackboard.

Student feedback

Student feedback on University courses may be found at 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.
