

School of Economics and Finance

FINA 303 DERIVATIVES

Trimester 2, 2015

COURSE OUTLINE

Names and Contact Details

Course Coordinator & Lecturer	Hai Lin hai.lin@vuw.ac.nz Office Hours: Tuesdays 11:00-11:50 or by appointment.	RH 301	463 5239
Course Administrator	Debbie Turner Debbie.Turner@vuw.ac.nz Office Hours: Monday-Friday 9am-midday and 1-3pm	RH 321	463 6386

Trimester Dates

Teaching Period: Monday 13th July – Friday 16th October

Study Period: Monday 19th October – Thursday 22nd October

Examination Period: Friday 23rd October – Saturday 14th November (inclusive)

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 24th July 2015.
2. The standard last date for withdrawal from this course is Friday 25th 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' form including supporting documentation. The application form is available from either of the Faculty's Student Customer Service Desks or [online](#).

Class Times and Room Numbers

Lectures: Mondays and Wednesdays 13:40-14:30 in GBLT4 (Government Buildings Lecture Theatre 4)

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

Course Delivery

The course will consist of lectures, tutorial work, four assignments, one test and a final examination. Formal lecture time will be used to highlight all key ideas. Tutorials will be used to work through examples of how to apply these ideas. Solutions to the assignments and test will be provided via the blackboard.

Expected Workload

This course is a 15-point course. One point is equated to 10 hours of work, which means a total of 150 hours is expected for this course, spread over the 12 teaching weeks, mid-trimester break, study week and the examination period. This involves attending the lectures and tutorials every week, 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 (1)	2		1		T
3	Futures (2)	3				T
4	Forward and futures pricing	5		2	1	T
5	Swap	7				T
6	Options Market (1)	9			2	
			Term break			
7	Options Market (2)	10	Test	3		
8	Options Market (2, 3)	11				T
9	Binomial Tree (1)	12			3	T
10	Black-Scholes Model	13, 19		4		T
11	Greek Letters	17				T
12	Binomial Tree (2)	18			4	

Readings

Hull, J. C., Fundamentals of Futures and Options Market (New international 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

Students will be permitted to use electronic calculators during tests and the exam. These calculators must be non-programmable and cleared of memory prior to the tests and exam. Lecture slides, solutions to the assignments and test will be posted on Blackboard.

Assessment

The Assessment Handbook will apply to all VUW courses: see

<http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf>.

Assessment Requirements

- 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). The final examination will cover **all** material covered in the lectures, tests, practice exercises and assignments; the final examination is a closed book, 2 hour, comprehensive exam.

Assignments will usually be set on Friday, normally to be submitted into the assigned 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.

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 23rd October – Saturday 14th November (inclusive)

Mandatory Course Requirements

In addition to obtaining an overall course mark of 50 or better, students must achieve a minimum of 45% 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 concerning this course will be provided in lectures and posted on Blackboard: <http://blackboard.vuw.ac.nz>. Urgent notices will be circulated by email.

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.
