VICTORIA

UNIVERSITY OF WELLINGTON

School of Economics and Finance

FINA 307   RISK MANAGEMENT AND INSURANCE

Trimester One 2013

COURSE OUTLINE

Lecturer   Leigh Roberts, RH 323, phone 463-5937   (coordinator)
                    office hour: 13.40 - 14.30 Thursdays in RH 323
                    email: leigh.roberts@vuw.ac.nz

Administrator   Bonnie Riley, RH 321, phone 463-5380
                    email: bonnie.riley@vuw.ac.nz

Lecture times   Thursday, Friday 15.40 - 16.30, RH LT3

Tutorials   Tutorials are held in weeks 3-6, and in weeks 9-12 inclusive.

Trimester dates

Teaching Period: Monday 4 March to Friday 7 June 2013
Study Period: Monday 10 June to Thursday 13 June 2013
Examination Period: Friday 14 June to Wednesday 3 July 2013 (inclusive)

Note: Students who enrol in courses with examinations should be able to attend an examination at the University at any time during the formal examination period.

Withdrawal from the course

Your fees will be refunded if you withdraw from this course on or before Friday 15 March 2013.

The standard last date for withdrawal from this course is Friday 17 May 2013. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on the form 'Application for Associate Dean's permission to Withdraw Late', and include supporting documentation. This form is available from the Faculty's Student Customer Service Desks.

Course Content

The content and timing of the course, and the order of presentation, may differ slightly from the information given in the following table. Note that the two halves of week 4 of the course are separated by the Easter break.

Date, 2013	Week	Theme	Essay	Ass set	Ass sub	Tuts
4 - 8 March	1	Introduction				
11 - 15 March	2	Characteristics of risk management		1		
18 - 22 March	3	Case studies: MG, Barings				Tut
25 - 27 March	4			2		
Easter break, 1 week:		*Thursday 28 March - Wednesday 3 April 2013*				
4 - 5 April	4	Insurance, reinsurance			1	Tut
8 - 12 April	5	Loss distributions, premiums				Tut
15 - 19 April	6	Economic capital, RAROC	App	3	2	Tut
Mid trimester break, 1 week:		*Monday 22 - Friday 26 April 2013*				
29 April - 3 May	7	Hedge Funds				
6 - 10 May	8	Libor, swap rates; duration			3	
13 - 17 May	9	GFC				Tut
20 - 24 May	10	Case studies: HIH, OC	Due			Tut
27 - 31 May	11	Regulation				Tut
3 - 7 June	12	Revision				Tut

Under the essay column, 'App' denotes approval of the essay topic by the coordinator.

Assignments are set in the week indicated above, to be handed in by the Friday two (course) weeks later. Mathematical assignments are due to be handed in by 5 pm to Box 40 on the Mezzanine floor, Rutherford House. Assignments not containing mathematics are to be submitted electronically to Blackboard, by midnight on the due date.

Essay topics will be chosen from a list to be circulated within the first two weeks of the course. Topics are subject to approval by the coordinator, by email, no later than the end of week 6.

The essay is due by the end of week 10, Friday 24 May, and is to be submitted electronically to Blackboard, by midnight on the due date. Notes on the requirements for essays in this course are available on Blackboard: http://www.blackboard.vuw.ac.nz/

Course Learning Objectives

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

1. identify and discuss the principles of risk management, and the role of risk management in a modern economy

2. identify and discuss the role of financial markets and derivative securities in allocating and managing risk

3. identify and discuss the role of insurance markets in allocating and managing risk

4. discuss the use of value at risk and economic capital in financial risk management

5. identify and discuss the role of quantitative modelling of catastrophe and other risks

6. identify and discuss the role of risk neutrality in allocating and managing risk

7. discuss selected cases of poor risk management from the recent past in the financial sector

8. identify and discuss the purposes of regulation of the financial sector and its impact on the risk manager

Course Delivery

The course will be delivered by two lectures per week and tutorials in 8 out of the 12 weeks.

There are three assignments and an essay. Essay topics are to be chosen from a list to be circulated within the first two weeks of the course. Topics are subject to approval by the coordinator, by email, no later than the end of week 6. Students are however encouraged to think about essay topics from inception of the course, and to seek the coordinator's approval of their topic well before week 6.

There is a two hour final examination.

Expected Workload

In weeks when there is a tutorial (see the course content) you should expect to spend 3 hours in class per week (2 lectures and 1 tutorial); in the remaining weeks you should expect to spend 2 hours in class per week (2 lectures).

You should expect to spend about 7 to 9 hours per week reading, studying and completing essays and assignments. Overall it is expected that you will spend approximately 150 hours on completing this course.

Readings

Lecture notes and readings will be available on Blackboard.

It is *not* recommended that you purchase any text books for this course.

Parts of the course will be based on Hull 2012:

- J C Hull (2012), *Risk Management and Financial Institutions*. Third edn, Pearson.

This book is available as an e-book in the VUW library. If you are unfamiliar with the use of e-books in the library, either just follow the catalogue; or look up the Library's *Finding and using e-books* webpage.

Further books which may provide useful background for the course include:

- C L Culp (2002), *The ART of Risk Management*. Wiley.

- F X Diebold, N A Doherty and R J Herring (2010), *The Known, the Unknown and the Unknowable in Financial Risk Management*. Princeton.

- J C Hull (2007), *Risk Management and Financial Institutions*. First edn, Pearson.

- J Teale (2008), *Insurance and Risk Management*. Wiley.

- B Tuckman and A Serrat (2012), *Fixed Income Securities: Tools for Today's Markets*. Third edn, Wiley.

The first edition of Hull's book is less suitable for the course, inasmuch as the third edition contains new material which is incorporated into the course.

Materials and Equipment

A calculator is needed for the final exam, as well as for tutorials and assignments. The calculator must be able to work out powers, and have the exponential and the logarithmic functions. Statistical functions (mean, variance etc) are not required. In addition, the calculator must be silent and have its own power source.

More advanced calculators, such as graphics and programmable calculators, are not needed for this course. Programmable calculators must be reset prior to the exam.

If you do not already have a calculator, talk to the lecturer before you buy one. A basic calculator suitable for the course should cost no more than about $20.

Assignments may involve the use of the computer package R, available to students in RWW 201. No previous knowledge of R is assumed, and assignments set involving R should not take longer to complete than non-mathematical assignments. If they wish, students may download R onto their own computers: it is open-source software, and free.

Assessment Requirements

- 24%   Three assignments, each worth 8%
- 36%   Essay, of 2000-3000 words, to be submitted electronically to Blackboard by the end of week 10, Friday 24 May.
- 40%   Two hour final examination, in the examination period, Friday 14 June - Wednesday 3 July 2013.

Essays and assignments appearing to be copied will be marked as zero. Appeals on marking may be made to the coordinator.

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 VBS programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

Examinations

Students who enrol in courses with examinations are obliged to attend an examination at the university at the required time during the formal examination period.

The final examination for this course will be scheduled at some time during the period from Friday 14 June to Wednesday 3 July 2013 (inclusive).

Penalties

Essays and assignments are marked out of a maximum which diminishes by 5% for each day late. The final cut-off date for submission is the earlier of one week after the due date, and when answers are posted to Blackboard.

Non-mathematical assignments and essays are to be submitted electronically to Blackboard, no later than midnight on the due date; mathematical assignments may be submitted in hard copy, by 5 pm on the due date, to Box 40 on the Mezzanine floor, Rutherford House.

Submitted work should list the approximate number of words, and have page numbers inserted. Penalties may be imposed if the length of work submitted does not lie within the recommended range of the number of words.

Mandatory course requirements

Submission of the essay and attendance at the exam are compulsory.

Class representative

A class representative will be elected in the first class, whose name and contact details will be 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 conveyed to students via Blackboard and/or email.

Emails may be sent to the address that you supplied with your enrolment; but they may also be sent to your SCS email address, which is your official university email address. You should keep an eye on both email 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.

Link to general information

For general information about course-related matters, see
http://www.victoria.ac.nz/vbs/studenthelp/general-course-information