SCHOOL OF CIVIL AND ENVIRONMENTAL ENGINEERING

THE UNIVERSITY OF NEW SOUTH WALES

SESSION 1, 2013

CVEN9710 MANAGEMENT OF RISK

COURSE DETAILS

Units of Credit	6
Contact hours	3 hours per week
Class	Monday, 2:00 – 5:00 Room 101 Civil and Environmental Engineering Building
Course Coordinator and Lecturer	Steven Davis email: s.davis@unsw.edu.au office: 208 Civil Engineering Building phone: 9385 5052 fax: 9385 6139

INFORMATION ABOUT THE COURSE

This subject explores risk management. It follows the process of risk management through the various stages as presented in ISO 31 000. Mathematical techniques applicable to risk analysis will be covered. Applications to project management, particularly Civil Engineering projects, will be discussed.

This course will contain both internal and distance students.

HANDBOOK DESCRIPTION

http://www.handbook.unsw.edu.au/undergraduate/courses/2013/CVEN9710.html

TEACHING STRATEGIES

Lectures	• Find out what you must learn • Follow worked examples • Hear announcements on course changes • Lectures will be recorded and made available to distance students
Tutorials	• For most weeks tutorial questions will be provided for you to work on. • If the lecture finishes in less than three hours then the remaining time will be allocated to working on these tutorial questions. • Solutions to these problems will be provided on Moodle. • It is recommended that you work on the tutorial questions before looking at the solutions so that you can identify what parts of the question you find most difficult and would benefit most from practice.
Assessments (examinations and assignments)	• Demonstrate your knowledge and skills • Demonstrate higher understanding and problem solving
Private Study	• Review lecture material and textbook • Do set problems and assignments • Join Moodle discussions of problems • Reflect on class problems and assignments

	• Download materials from Moodle • Keep up with notices and find out marks online

EXPECTED LEARNING OUTCOMES

Upon completing this course you will be able to describe the risk management process and carry out the steps involved. You will also have a variety of quantitative analysis tools that you can use.

ASSESSMENT

Lecture material will be assessed in a closed book exam, which will take 2 hours during the formal exam period, and will cover the whole course. Approved calculators will be permitted in the exam. To find out how to get your calculator approved please see https://my.unsw.edu.au/student/academiclife/assessment/examinations/Calculator.html.

The Exam date is set by Exams Branch, and is confirmed in about Week 10 of session. You can access the time and date of the exam via your MyUNSW.

Distance students undertake the exam at their place of work on the same day as the internal exam, under the supervision of a responsible, non-related person who agrees in writing to provide appropriate exam conditions and supervision. It is the student's responsibility to arrange for exam supervision. The University does not make payment to the student's exam supervisors.

The formal exam scripts will not be returned. Students who perform poorly in the quizzes and tutorials are recommended to discuss progress with the lecturer during the session.

.A series of assignments will be administered as online quizzes. Generally these will be due two weeks after the relevant material has been covered in the class. The quizzes will be administered through MapleTa, which can be found at https://mapleta.telt.unsw.edu.au.

The web based interface will be demonstrated in week 4. The exact weighting for each of the quizzes will vary depending on the sizes of the individual quizzes.

1. Exam 50%
2. Online quizzes 50%

All assignments and online quizzes will be due at 1pm on the Monday in the week shown below.

Note: The Coordinator or Lecturer reserves the right to adjust the final scores by scaling if agreed to by the Head of School.

COURSE PROGRAM

Week	Date	Topic	Assessments	
1	4/3	Introduction to Risk The Risk Management Process	Given	Due
2	11/3	Identification of Risk Sources		
3	18/3	Qualitative Analysis Semi-Quantitative Analysis		
4	25/3	Review of Probability	Web Quiz 1	
		Session Recess		
5	8/4	**No lecture** to allow other courses to hold field trips		
6	15/4	Statistical Inference	Web Quiz 2	Web Quiz 1
7	22/4	Fault and Event Trees	Web Quiz 3	
8	29/4	Decision Trees and FMEA	Web Quiz 4	Web Quiz 2
9	6/5	Monte Carlo Simulation	Web Quiz 5	Web Quiz 3
10	13/5	Reliability	Web Quiz 6	Web Quiz 4
11	20/5	Portfolio Theory	Web Quiz 7	Web Quiz 5
12	27/5	Human Error		Web Quiz 6
13	3/6	Project Issues, Contract Issues		Web Quiz 7

ASSIGNMENTS

No extensions will be given for online quizzes. This is a risk management course, being prevented from completing your assignment or quiz at the last minute shows that you have poor risk management skills.

If you need to submit your quiz late then type your answers into an email and send it to me. **No attachments** unless a question asks for a picture. You will be penalised 10% per day late based on the time of arrival in my inbox.

TEXTBOOK

There is no prescribed textbook for this course

ADDITIONAL READINGS

The Australian/New Zealand Standard AS/NZS ISO 31 000:2009, "Risk Management" (Standards Australia, Standards New Zealand) (Available to students online through UNSW library via SAI Global) **It is highly recommended that you read this**.

Project Management Institute (USA), 1996, *Guide to the Project Management Body of Knowledge*, Chapter 11, "Risk Management", Project Management Institute, Sylvia.

There are numerous books in the library covering risk management. If you are having trouble following the lectures then it is recommended that you look at one of these.

MOODLE

This subject has a Moodle site. It will contain additional resources for you. This will include all lecture notes, some worked examples, links to Maple TA and the help desk, solutions to exams from previous years, and discussion groups for raising questions.

It can be accessed from the Moodle link on the home page in MyUNSW or via **https://moodle.telt.unsw.edu.au**

DATES TO NOTE

Refer to MyUNSW for Important Dates available at:

https://my.unsw.edu.au/student/resources/KeyDates.html

PLAGIARISM

Beware! An assignment that includes plagiarised material will receive a 0% Fail, and students who plagiarise may fail the course. Students who plagiarise are also liable to disciplinary action, including exclusion from enrolment.

Plagiarism is the use of another person's work or ideas as if they were your own. When it is necessary or desirable to use other people's material you should adequately acknowledge whose words or ideas they are and where you found them (giving the complete reference details, including page number(s)). The Learning Centre provides further information on what constitutes Plagiarism at:

http://www.lc.unsw.edu.au/onlib/plag.html

ACADEMIC ADVICE

For information about:

- Notes on assessments and plagiarism,
- School policy on Supplementary exams,
- Special Considerations,
- Solutions to Problems,
- Year Managers and Grievance Officer of Teaching and Learning Committee, and
- CEVSOC.

Refer to Academic Advice on the School website available at:

http://www.civeng.unsw.edu.au/info-about/our-school/policies-procedures-guidelines/academic-advice