



CVEN9701 Engineering Economics and Financial Management

Semester 2, 2016

Never Stand Still

Faculty of Engineering

School of Civil and Environmental Engineering

COURSE DETAILS

Units of Credit	6	
Contact hours	3 hours per week	
Class	Tuesday, 6.00 – 9.00pm	Central Lecture Block 7
Course Coordinator and Lecturer	Steven Davis email: s.davis@unsw.edu.au office: 208 Civil and Environmental Engineering Building phone: 9385 5052	

INFORMATION ABOUT THE COURSE

This course teaches professional skills related to the money side of projects. These skills include estimating project costs, deciding if projects are economically viable, selection between projects, basic accounting, and appreciation of some other economic and financial issues facing projects.

HANDBOOK DESCRIPTION

See link to virtual handbook:

www.handbook.unsw.edu.au/undergraduate/courses/2016/CVEN9701.html

OBJECTIVES

The objectives of this course are to:

- Introduce you to the theory of engineering economics
- Provide you with tools that will help you to appraise projects
- Understand project financial procedures
- Gain an insight into the associated skills
- Enable you to perform more effectively

TEACHING STRATEGIES

Lectures	<ul style="list-style-type: none"> • Find out what you must learn • Follow worked examples • Hear announcements on course changes • Lectures will be recorded and made available to students
Private Study	<ul style="list-style-type: none"> • Review lecture material • Do set problems and assignments • Reflect on class problems and assignments • Download materials from Moodle
Workshops	<ul style="list-style-type: none"> • Be guided by demonstrators • Practice solving set problems • Ask questions
Assessments	<ul style="list-style-type: none"> • Demonstrate your knowledge and skills • Demonstrate higher understanding and problem solving
Moodle Site	<ul style="list-style-type: none"> • Interactive discussion • Homework solutions, Past exam solutions

This course has both internal students and distance students. The assessment is exactly the same, and the same materials will be made available via Moodle to all students, including the lecture recordings.

The lecture notes are fairly simple and are primarily provided so that students have an outline to annotate during the lecture. As such they do not contain the stories and anecdotes that I use to illustrate the theory and the numerical examples that I work through on the screen. Thus if you are a distance student then you are expected to watch the lecture recordings.

EXPECTED LEARNING OUTCOMES

After completion of the course you will be able to:

- Estimate costs
- Discount cash flows to enable project comparisons
- Understand some of the main accounting practices used on projects

For each hour of contact it is expected that you will put in at least 1.5 hours of private study.

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://student.unsw.edu.au/exam-approved-calculators-and-computers>.

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 MyUNSW.

Distance students who reside outside of Sydney may apply to sit their exam externally. For details please see <http://www.engineering.unsw.edu.au/civil-engineering/student-resources/policies-procedures-and-forms/exam>. It is the student's responsibility to organize this before the university census date. Any costs involved in sitting the exam externally (eg for the exam venue) must be paid by the student.

The formal exam scripts will not be returned. Students who perform poorly in the quizzes 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://mapletap.telt.unsw.edu.au:8443/mapleta/login/login.do>.

The online quiz assignments will focus on quantitative techniques taught in several of the lectures. They will enable you to get a better understanding of the detail involved in some of the tools used in procedures dealing with costs and money. You will have two weeks to do each quiz. There is no time limit, you can print out the questions one day and type the answers into the computer on another day.

The web based interface will be demonstrated during the lecture in week 2. The exact weighting for each of the quizzes will vary depending on the sizes of the individual quizzes.

The final grade for this course will normally be based on the sum of the scores from each of the assessment tasks. The Final Examination is worth 60% of the Final Mark if class work is included and 100% if class work is not included. The class work is worth 40% of the Final Mark if included. A mark of at least 40% in the final examination is required before the class work is included in the final mark.

For students who score over 40% in the final exam			For students who score under 40% in the final exam		
1.	Exam	60%	1.	Exam	100%
2.	Online quizzes	40%			

All assignments and online quizzes will be due at 9am on the Tuesday in the week shown below.

The weighting for each quiz will be proportional to the number of points for the quiz displayed in Maple TA. They will not necessarily be all the same value.

If you need to submit your quiz late then type your answers into an email and send it to me. The answers should be in the body of the email. 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 email inbox, unless appropriate medical documentation is attached. Late work will not be accepted more than 1 week (168 hours) after the due date/time.

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	Assessment	
1	26/7	Cost Estimation	Given	Due
2	2/8	Time Value of Money	Web Quiz 1	
3	9/8	Project Appraisal Criteria		
4	16/8	Project Appraisal Issues	Web Quiz 2	Web Quiz 1
5	23/8	Risk and Uncertainty		
6	30/8	Real Options	Web Quiz 3	Web Quiz 2
7	6/9	Introduction to Accounting		
8	13/9	Depreciation	Web Quiz 4	Web Quiz 3
9		No classes (field trips for other courses)		
		Semester Recess		
10	4/10	Cost Planning and Reporting	Web Quiz 5	Web Quiz 4
11	11/10	Supply and Demand		
12	18/10	Macroeconomics		Web Quiz 5
13	25/10	Value Management		

RELEVANT RESOURCES

Textbook

There is no prescribed textbook for this course

Several of the topics covered in this course are detailed in many textbooks that you can find in the library.

Moodle

This subject has a Moodle site. The address is <http://moodle.telt.unsw.edu.au>.

The site will contain additional resources for you. The assignments will be given in the form of online quizzes.

Questions about the course, assignments, exams etc are best asked through the Moodle discussion tool, so that all students can see the replies.

In addition one of the Moodle discussion groups will be used as a class email list. Any announcements that cannot be made in the lecture will be posted to this group, and will be forwarded to your Unimail address. It is University policy that information sent to your unimail address has been received by you. It is therefore recommended that you check your email regularly for any announcements that might not be made in lectures etc.

Echo 360 (Lecture recordings)

All lectures in this course will be recorded using the Echo 360 system. You can access these recordings through the Moodle site. Instructions for how to do this can be found in Moodle. If you are not able to attend the lecture then you are expected to watch the recording. This includes distance students.

Lecture notes will be provided on Moodle. However, these notes only provide a broad outline of the theory covered. They do not contain the stories and anecdotes used to illustrate the theory and the numerical examples. These numerical examples are worked out on the screen so that you can follow them in the lecture recordings. Also the lecture recordings will contain demonstrations of the assignments and other information that may be important for completing the assignments.

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:

<https://student.unsw.edu.au/plagiarism>

ACADEMIC ADVICE

(Formerly known as Common School Information)

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:

<https://www.engineering.unsw.edu.au/civil-engineering/student-resources/policies-procedures-and-forms/academic-advice>