



CVEN9702 Project Planning and Control

Semester 1, 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 | Thursday, 10:00am – 1:00pm | Chemical Science M18 |
| Course Coordinator and Lecturer | Steven Davis email: s.davis@unsw.edu.au office: 208 Civil Engineering Building phone: +61 (2) 9385 5052 | |

INFORMATION ABOUT THE COURSE

This course teaches professional skills related to the planning and control of projects. In particular projects that have the characteristics of Civil Engineering construction projects, namely: a large number of interrelated activities, substantial cost, a large number of workers, a variety of resources, etc. Within this framework the theory can be generally applied to a variety of types of projects. No knowledge of construction is required, although the examples used by the lecturer will tend to be from construction scenarios.

HANDBOOK DESCRIPTION

www.handbook.unsw.edu.au/postgraduate/courses/2016/CVEN9702.html

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 |
| Workshops | <ul style="list-style-type: none"> For most weeks example 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 questions. Solutions to these problems will be provided on Moodle. It is recommended that you work on the 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) | <ul style="list-style-type: none"> Demonstrate your knowledge and skills Demonstrate higher understanding and problem solving |
| Private Study | <ul style="list-style-type: none"> Review lecture material Do set problems and assignments Join Moodle discussions of problems Reflect on class problems and assignments Keep up with notices and download materials from Moodle find out marks via Maple TA |

EXPECTED LEARNING OUTCOMES

After completion of the course you will be able to:

- Schedule the activities of a project allowing for logical and resource constraints
- Determine the most efficient method of compressing a project
- Use project management software for simple tasks
- Deal with uncertainty in activity estimates
- Use specialised techniques for repetitive projects
- Apply project planning and control theory to real 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 planning and control procedures. 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 3. 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 Thursday 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.

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 | Online quiz | |
|------|------|---|-------------|------------|
| | | | Given | Due |
| 1 | 3/3 | Planning | Given | Due |
| 2 | 10/3 | Estimating + Network Techniques and Formation | | |
| 3 | 17/3 | Network Analysis Overlapping Relationships | Web Quiz 1 | |
| 4 | 24/3 | Resource Scheduling | | |
| | | Session Recess | Web Quiz 2 | Web Quiz 1 |
| 6 | 7/4 | Computer Workshop: Room 201 Civ Eng Bldg | | |
| 5 | 14/4 | Project Compression | Web Quiz 3 | Web Quiz 2 |
| 7 | 21/4 | Linear Projects | | |
| 8 | 28/4 | Stochastic Methods 1 | Web Quiz 4 | Web Quiz 3 |
| 9 | 5/5 | Stochastic Methods 2 | | |
| 10 | 12/5 | Monitoring and Reporting | Web Quiz 5 | Web Quiz 4 |
| 11 | 19/5 | Control | | |
| 12 | 26/5 | Time and Contracts | | Web Quiz 5 |
| 13 | 2/6 | No lecture | | |

TEXTBOOK

There is no prescribed textbook for this course.

ADDITIONAL READINGS

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

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

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.engineering.unsw.edu.au/civil-engineering/resources/academic-advice>