

Software Engineering Practice 6808

Unit Outline 2009

**Faculty of Information Sciences and Engineering
University of Canberra**

*Australian Government Higher Education (CRICOS)
Registered Provider number: #00212K*

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This Unit Outline must be read in conjunction with:

- a) *Studying at the University of Canberra: A Guide to Policies and Procedures*, which sets out University-wide policies and procedures, including information on matters such as plagiarism, grade descriptors, moderation, feedback and deferred exams, and is available at <http://www.canberra.edu.au/student-services>
- b) *Guide to Student Services at the University of Canberra*, and is available at <http://www.canberra.edu.au/student-services>
- c) Any additional information specified in section 6f.

1: General Information

- 1a Unit title** Software Engineering Practice
- 1b Unit number** 6808
- 1c Semester and year offered** First Semester 2009
- 1d Credit point value** 3
- 1e Unit level** G
- 1f Unit Convener** Charles Palmer, Room: 11C19,
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- Unit Moderator** Dale Kleeman, Room: 11B18
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2: Academic Content

2a Unit description and learning outcomes

This unit examines the methods and issues in the management of informatics projects. It is based in standards for project management and quality assurance. Topics include techniques of project scope and success criteria, work breakdown analysis and monitoring, task estimating and scheduling; resource, risk and cost management and project closure and review. Interpersonal and group facilitation skills to focus IT and business teams on identifying and solving the right problem are addressed.

Technology that supports project and quality management is an integral part of the unit. The social and ethical environment of systems and their development is discussed.

Learning Outcomes

At the successful completion of this unit students will be able to use current methods to produce information technology based systems on time, within budget and within a quality management framework. They will be able to prepare and evaluate the various documents associated with project planning, monitoring, review and quality assurance. They will be able to facilitate discussions between clients and IT professionals. Students will be able to analyse group work, and the social and ethical issues associated with project development.

2b Prerequisites and/or co-requisites

Pre-requisite: Database Design (6672 *or* 5915) *or* Information Systems in Organisations (6675 *or* 6348)

Co-requisite: You should have completed Systems Analysis and Modelling (SAM – 6365 *or* 6677) before you can enrol or you must enrol in SAM as a co-requisite.

Exclusion: You may not take this unit in conjunction with or in addition to System Project Quality Management (SPQM - 6678).

3: Delivery of Unit and Timetable

3a Delivery mode

This unit will be delivered on campus as a 1 hour lecture each week and a workshop/tutorial session of 2 hours each week. Lecture and tutorial rooms and times are advertised on the website. Tutorial times are not open until group formation has been completed.

3b Schedule of lectures and tutorials

The weekly contact sessions will comprise lectures, tutorial/workshops and discussions with visiting professionals (as available).

Students should regularly consult the website for a more detailed schedule of activities. The order and emphasis of some activities may change

4: Unit Resources

4a Lists of required texts/readings

There is no required text but the following recommended texts should be consulted for research:

The unit is based on the Project Management Body of Knowledge (PMBok) with reference to Prince 2™, Sigma 6™, 10 Step™ and ITIL©.

Some sources for this unit include:

Heerkens, G. 2002, *Project Management*, Briefcase Books

Schwalbe, K. 2006, *Information Technology Project Management* 4th ed. Thomson Course Technology, Boston, MA

Baca, C. 2007, *Project Management for Mere Mortals*, Addison-Wesley

Yourdon, E. 2004, *Death March*, 2nd ed. Prentice Hall Professional Reference

Various papers and relevant articles will be made available through the unit web site.

4b Materials and equipment

No special requirements

4c Unit website

<http://learnonline.canberra.edu.au/studentSupport.php>

5: Assessment

5a Assessment overview

Assessment Item (including exams held in the exam period)	Assignments Due	Weighting (total to equal 100%)
1. Intermediate Presentation	Tutorial in week 7	15%
2. Individual Project Reflection	Tutorial in week 15	6%
3. Final Project Presentation	Tutorial in week 15	10%
4. Project Documentation	Tutorial in week 15	20%
5. Examination	Exam period	40%
6. Weekly Group Presentations	Each tutorial	9%
TOTAL		100%

5b Details of each assessment item

1. *Intermediate Presentation*

This component is a scenario-based achievement presentation that each group uses to illustrate their progress to-date as well as their expected progress for the remainder of the semester.

2. *Individual Project Reflection*

This component is assessed against each student's reflections and insights about their group's project.

3. *Final Project Presentation*

This component is a culmination of the project that each group has been developing throughout the unit and is presented to the cohort.

4. *Project Documentation*

This assignment is a group exercise that requires group members to develop project management specifications. Each team member adopts a role as the member of a project office team.

5. *Examination*

The examination will be held in the exam period at the end of the semester. The examination is intended to explore your understanding of the key concepts covered during the semester. The examination is closed book.

6. *Weekly Presentations*

This component is assessed for each group's participation in weekly workshops and presentations.

Each student in a group will normally receive the marks awarded to the group for assessment items 1, 3, 4 and 6.

5c Special assessment requirements

In order to pass this unit you must submit your Individual Project Reflection (Item 2.) as well as passing *both* the following **a)** and **b)** components:

Assessment Components

- a) The Final Presentation *and* your group's Project Documentation;
and
- b) The Examination.

You must achieve a mark of 50% or greater for the assessment as a whole and 50% of the examination marks or greater for the examination. Higher grades will be awarded on the basis of the total mark being ≥ 65 for a credit, \geq for a distinction and ≥ 85 for a high distinction.

In all submitted written and presented work, the author-date or 'Harvard' system, should be used for referencing as outlined in the University Library Citation Guide available online at: http://www.canberra.edu.au/library/attachments/pdf/Abridged_Guide-Harvard_Examples_EE_final-version.pdf

5d Supplementary assessment

Students who have failed a single unit in their final semester with a final mark between 45-49%, where the unit is required for course completion, are eligible for supplementary assessment.

5e Text-matching software

Text-matching software (such as Turnitin and/or an internet text matching package) may be used to check for plagiarism. The lecturer reserves the right to conduct verbal examination where work is considered to be at risk of plagiarism.

6: Student Responsibility

6a Workload

The amount of time you will need to spend on study in this Unit will depend on a number of factors including your prior knowledge, learning skill level and learning style. Nevertheless, in planning your time commitments you should note that for a 3cp Unit the total notional workload over the fifteen week semester is assumed to be 150 hours or an average of 10 hours per week. These hours include time spent in classes.

The following table is a guide that may help you plan your semester's effort levels:

Activity	Hours per week	Semester Total
Lectures	1	15
Tutorials/Workshops	2	30
Tutorial Presentation Preparation	2	30
Intermediate Presentation		10
Final Presentation	1	15
Final documentation	2	30
Exam Preparation	1	15
Exam		3
Personal reflection		2
TOTAL		150

6b Special needs

Students who need assistance in undertaking the unit because of disability or other circumstances should inform their Unit Convener or the Disabilities Office as soon as possible so the necessary arrangements can be made.

6c Attendance requirements

You are strongly advised to attend all lectures and to fully participate in all tutorials. There is recurring and ongoing group work throughout the unit. The lecture slides and other material are published on the website. These slides should not be considered a substitute for attending the lectures.

Announcements made in lectures or published using the website are deemed to have been read by all students in the unit.

6d Required IT skills

You are expected to be a competent computer user and familiar with word processing, presentation software and project packages (such as Microsoft project) or similar in this unit. It is expected that you will teach yourself how to use the packages by working through the exercises in the software's tutorials and/or studying examples supplied with the software.

6e Costs

There are no unusual costs

6f Additional information

Sources of other information will be announced in lectures and the website

7: Student Feedback

All students enrolled in this Unit will have an opportunity to provide anonymous feedback on the Unit at the end of the Semester via the Unit Satisfaction Survey which will be presented to you on OSIS. Your lecturer or tutor may also invite you to provide more detailed feedback on their teaching through an anonymous in-class questionnaire administered through the University's Teaching and Learning Centre (TLC).

8: Authority of this Unit Outline

Any change to the information contained in Section 2 (Academic content), Section 3 (Delivery of Unit and timetable) and Section 5 (Assessment) of this document, will only be made by the Unit Convener if the written agreement of staff and a majority of students has been obtained; and if written advice of the change is then forwarded to each student enrolled in the Unit at their registered term address. Any individual student who believes him/herself to be disadvantaged by a change is encouraged to discuss the matter with the Unit Convener.