

PROPOSAL TO REVISE A COURSE

1. COURSE DETAILS

1.1 Course ID

COMP3111/COMP9008

1.2 Course name - Long

Software Engineering

1.3 Course name - Abbreviated

Software Engineering

1.4 Course Authority

Albert Nymeyer

ext/email

54028 / anymeyer@cse.unsw.edu.au

1.5 Organisational Unit responsible for course

School/Department: CSE

AOU Code:

1.6 Revision of Course Summary Checklist

To amend the handbook entry.

1.7 Justification of Proposal

The course is being revised because:

1. The general feedback from students for this course is very negative. A crucial objective of the course is to promote the use of a formal method in s/w development, and demonstrate the important role it plays. The course is failing to meet this objective.
2. The integration between the formal method and classical s/w development is poor. The students do not see any significant connection, and view the course as being disjoint.
3. Experience with teaching the formal method suggests that the method needs to be taught in its entirety. There is simply not enough time in the course to do this. In fact, one could certainly argue that a full 6uoc course needs to be devoted to the method. COMP2111 has of course become such a course.
4. While the course is ostensibly project based, this has been difficult to organise because of the ramp-up time needed to get students up-to-speed in the formal method. In practice, students tackle the project in just the 2nd half of the course.
5. To better cater for the needs of postgraduate students.

In essence, this revision involves replacing the formal-methods component in the course with more classical software development practices that are used in industry, and more emphasis on the group project. The result should be a more integrated and satisfying course for students, and better prepare them for a career in industry.

1.8 Consultation Process

The Teaching Committee in CSE has considered and approved the change.

1.9 Units of credits

Session/s offered

Hours Per Week

No change.

**1.10 Pre-requisites:
Co-requisites:
Exclusions:**

No change.

1.11 Proposed Entry in the Faculty Handbook (only the course description has changed)

COMP3111

Software Engineering

School of Computer Science and Engineering

Staff Contact: A Nymeyer

UOC6 HPW5 S1 S2

Prerequisite: COMP2011 or COMP2711

Excluded: COMP9008

The phases of the software lifecycle: requirements, specification, (informal and formal) analysis, design, implementation, testing, integration, and maintenance are studied. Also focuses on software project management. A major group-based software development project is undertaken.

1.12 Is this course replacing an existing course?

It is a revision of an existing course.

1.13 Undergraduate and Postgraduate

The number of undergraduate to postgraduate students is typically about 10 to 1. The course is designed to accommodate the needs of both, in the following way:

- Lectures: the course is given twice per year, once from 6 to 9pm to cater for postgraduate students and part-timers
- Mentoring: sessions will be available after 5pm (based on demand)
- Group project: postgraduate students form their own project groups as much as possible (needed because their timetables are usually more restrictive than undergraduates)
- Assessment: the project topic will be taken out of industry (as this course is industrially-oriented). There are no assignments as such, just deliverables as part of the project. The project deliverables will be assessed taking into account the different background of postgraduate students.

1.14 Core

No change.

1.15 Program stage

No change.

1.16 Program/s in which course is be available

No change.

1.17 Proposed teaching methods and assessment practices

The teaching and assessment methods will cater better for postgraduate students in this new form. This is also consistent with the aim of the course of being more industrially relevant.

1.18 Assessment grades to be used

No change.

1.19 Mode of delivery

The course is project driven, with lectures being used to synchronise progress, address common problems, and carry out administrative tasks. Most of the instruction of groups will be done in mentoring sessions that are conducted by academics and tutors. As postgraduates are generally working in separate groups, their needs will be specifically catered for by mentors.

1.20 Information Technology Requirements for students

No change.

1.21 Textbooks

The only text for the course is now Stephen Schach "Object-Oriented and Classical Software Engineering", 6th Edition, McGraw Hill, 2005.

1.22 Industrial experience component

Not applicable.

2. RESOURCE STATEMENT

2.1 Enrolments

No change.

2.2 Additional Resource Requirements Resulting from Revision

No change.

2.3 Servicing Implications:

No change.

2.4 Teaching Arrangements:

No change.

2.5 Alternative Delivery Arrangements:

No change.

2.6.1 Multi-mode Delivery Guidelines.

Not applicable.

2.7 Details of Tuition Fees:

No change.

3. AUTHORISATION

3.1 University Librarian's Endorsement

I have examined the Library needs related to the above proposal and certify that existing Library holdings, staffing, services and accommodation are adequate / inadequate (delete one) to cover the demands that are inherent in it.

Appropriate arrangements for the use of digitised material to support this course have been made by the Course Authority with the University Librarian.

Further Comments:

University Librarian
/ /2004

3.2 Head of School's Approval

I have examined the resource implications of the above proposal in regard to staff, space, materials, equipment, capital funds, and computing, and certify that the School can cover the demands that are inherent in it.

Further Comments:

Head of School
/ /2004

3.3 Dean's Approval

I have examined the resource implications of the above proposal in regard to staff, space, materials, equipment, capital funds, and computing, and certify that:

(Tick whichever is applicable)

- 3.3.1 (i) the proposal involves no additional resources. (A statement from the Head of School explaining how this can be achieved must be provided); or
- (ii) the proposal involves additional resources and it is proposed to redeploy existing resources within the faculty. (A statement from the Head of School explaining how this will be achieved must be provided); or
- (iii) the proposal involves additional resources to be obtained as set out below; or

- (iv) the additional resources essential to bring the proposal into effect cannot be found within resources available to the faculty.

3.2.2 **Fees** (delete if not applicable):

- a fee will not be charged for this program (other than HECS)
- a fee will be charged for this program for local fee-paying students
- a fee will be charged for international students

If a fee is to be charged the Dean certifies as follows:

I have ensured that the Vice-Chancellor has been advised of the proposed fee arrangements, and note that approval of fee arrangements is needed before the new program can be implemented.

3.3.3 the proposal conforms to the University's commitment to Equal Opportunity in Education.

Statement from Head of School on Source of Additional Resources and/or Further Comments:
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Dean

/ /2004