Structured Methods - Course Outline
SWEN 301: 2010 Trimester 1

This document sets out the workload and assessment requirements for SWEN 301. It also provides contact information for staff involved in the course. If the contents of this document are altered during the course, you will be advised of the change by an announcement in lectures and/or on the course web site. A printed copy of this document is held in the School Office.

Objectives

By the end of the course, students should be able to:

1. Demonstrate an understanding of the main issues involved in the development of medium to large software systems:
   - advantages and disadvantages of various methodologies ((BE graduate attribute 1(a)).)
   - techniques for gathering and documenting requirements analysis (BE graduate attribute 2(b)). ,
   - designing software solutions (BE graduate attribute 3(f)). ,
   - testing engineered software ((BE graduate attribute 3(e)).), and
   - implementing designed solutions (BE graduate attribute 3(f)).

2. Demonstrate a level of competence in using a Computer Aided Software Engineering (CASE) tool for software equirements analysis and software implementation (BE graduate attribute 3(c) and 3(f)).

Assignments and a team project will help you to understand the basic concepts of these topics and allow you to practice the practical aspects of the topics. Project presentation and writing project user manual will help you to further develop your communications skills (BE graduate attribute 2(b)). The final exam will assess your understanding of the course topics.

Textbook

There is no prescribed textbook for SWEN 301. Students in the course may however find it useful to purchase (or borrow from the library) a range of books on Software Engineering published in recent years.

Lectures, Tutorials, Laboratories, and Practical work

A schedule of lecture topics, tutorial topics and assignment due dates is available online

Lectures and tutorials for SWEN 301 are:

> Monday, Tuesday and Friday at 10.00am-10.50am in Murphy LT102

There are no additional timetabled laboratories in SWEN 301. In most of the weeks Monday slots will be used for tutorials, laboratory sessions, and project presentations. There will be helpdesks available for the project, and the helpdesk hours will be announced within the first three weeks of the course.

Workload

In order to maintain satisfactory progress in SWEN 301, you should plan to spend an average of at least *10* hours per week on this paper. A plausible and approximate breakdown for these hours would be:
- Lectures and tutorials: 3 hours,
- Readings: 2-3 hours, and
- Assignments and project: 4-5 hours.

School of Engineering and Computer Science

The School Office is located on level three of the Cotton Building (Cotton 358).

Staff

The course organiser and the lectuer of SWEN 301 is Hui Ma. Her contact details are:
- Dr Hui Ma
- Cotton 259

- +64 4 463 5657
- hui.ma@ecs.vuw.ac.nz

The course tutors' details will be provided once they are available.

Announcements and Communication

The main means of communication outside of lectures will be the SWEN 301 web area at http://ecs.victoria.ac.nz/Courses/SWEN301_2010T1/. There you will find, among other things, this document, the lecture schedule, assignment handouts, and the SWEN 301 Forum. The forum is a web-based bulletin board system. Questions and comments can be posted to the forum, and staff will read these posts and frequently respond to them.

Assessment

Your grade for SWEN 301 will be determined based on the following assessment weightings:

Item	Weight
Assignment 1 (Software Lifecycles Essay)	15%
Assignemnt 2 (Testing & Architecture)	10%
Group Project	15%
Project Presentation	5%
Project User Documentation	5%
Final Examination	50%

Assignment 1, an essay on software lifecycle, will help students to understand advantages and disadvantages of various methodologies. Assignment 2 will help students to understand different concepts of designing software architecture and testing software, specified in course objectives above.

The group project will involve teams of four or five students designing and implementing a solution to a given problem. Individuals will receive a group-wide mark that contributes towards their final grade. Each group will give a presentation on their project at a scheduled time. Every group member needs to contribute to the presentation and will receive an individual mark for his/her presentation. Each student will submit a project user documentation for his/her team project prototype and will receive an individual mark.

Students' work should be submitted electronically to the school's servers. Instructions on how to achieve this will be provided closer to assessment deadlines.

Late submissions will incur an automatic penalty of 20% of the final mark per day. Any request for an extension must be made to the lecturer in charge *prior* to the due date. Any extensions requested on the basis of medical grounds must be supported by a doctor's certificate.

Bachelor of Engineering students should be aware that copies of their assessed work may be retained for inspection by accreditation panel.

Final Exam

The timetable for final examinations will be available from the University web site and will be posted on a notice board outside the faculty office. The final examination will be three hours long. No computers, electronic calculators or similar device will be allowed in the final examination. Paper non-English to English dictionaries will be permitted. The examination period for trimester 1 is 7 June - 30 June.

Plagiarism

Working Together and Plagiarism

We encourage you to discuss the principles of the course and assignments with other students, to help and seek help with programming details, problems involving the lab machines. However, any work you hand in must be your own work.

The School policy on Plagiarism (claiming other people's work as your own) is available from the course home page. Please read it. We will penalise anyone we find plagiarising, whether from students currently doing the course, or from other sources. Students who knowingly allow other students to copy their work may also be penalised. If you have had help from someone else (other than a tutor), it is always safe to state the help that you got. For example, if you had help from someone else in writing a component of your code, it is not plagiarism as long as you state (eg, as a comment in the code) who helped you in writing the method.

Mandatory Requirements

1. A satisfactory group journal must be submitted and the project must be presented.

2. A student must achieve at least **40%** of the marks available in the final examination.

Passing SWEN 301

To pass SWEN 301, a student must satisfy mandatory requirements and gain at least a **C** grade overall.

Withdrawal

The last date for withdrawal from SWEN 301 with entitlement to a refund of tuition fees is 12 March 2010. The last date for withdrawal without being regarded as having failed the course is 14 May 2010 -- though later withdrawals may be approved by the Dean in special circumstances.

Rules & Policies

Find key dates, explanations of grades and other useful information at http://www.victoria.ac.nz/home/study.

Find out about academic progress and restricted enrolment at http://www.victoria.ac.nz/home/study/academic-progress.

The University's statutes and policies are available at http://www.victoria.ac.nz/home/about/policy, except qualification statutes, which are available via the Calendar webpage at http://www.victoria.ac.nz/home/study/calendar (See Section C).

Further information about the University's academic processes can be found on the website of the Assistant Vice-Chancellor (Academic) at http://www.victoria.ac.nz/home/about/avcacademic

All students are expected to be familiar with the following regulations and policies, which are available from the school web site:

Grievances
Student and Staff Conduct
Meeting the Needs of Students with Disabilities
Student Support
Academic Integrity and Plagiarism
Dates and Deadlines including Withdrawal dates
School Laboratory Hours and Rules
Printing Allocations
Expectations of Students in ECS courses

The School of Engineering and Computer Science strives to anticipate all problems associated with its courses, laboratories and equipment. We hope you will find that your courses meet your expectations of a quality learning experience.

If you think we have overlooked something or would like to make a suggestion feel free to talk to your course organiser or lecturer.