Agile Methods - Course Outline

SWEN 302: 2015 Trimester 2

This document sets out the workload and assessment requirements for SWEN 302. 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

This course introduces agile methods for software engineering, including continuous deployment, in-use acceptance testing, refactoring, unit testing, hacking, incremental design, retrospective analysis, iterative planning and lean engineering management.

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

1. Demonstrate an understanding of the main issues involved in the software architecture, engineering design, and development of medium to large software systems, particularly in dynamic business environments. (BE graduate attributes 3(b), 3(d), 3(e))
2. Understand and compare various agile development practices suitable for different types of software engineering projects. (BE graduate attributes 1(b), 3(e), 3(f))
3. Design agile processes suitable for different types of project, and assess a software process to evaluate how effective it is at promoting quality, cost effectiveness, and sustainability. (BE graduate attributes 1(b), 3(e))
4. Continually negotiate project requirements during an ongoing agile software project, and perform risk management, dynamically adjusting project plans. (BE graduate attributes 1(b), 3(d), 3(f))
5. Use test driven development to ensure software quality. (BE graduate attribute 3(b))
6. Carry out all stages of an agile software process in a team, to produce working software. (BE graduate attributes 2(a)) In addition, students will gain experience in giving oral presentations during the course, and in providing written critiques. (BE graduate attributes 2(b))

Textbook

There is no required textbook for SWEN 302. Students in the course may however find it useful to purchase (or borrow from the library) a range of books on Extreme Programming, Scrum, and Agile Development.

Lectures, Tutorials, Laboratories, and Practical work

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

Lectures for SWEN 302 are: 3pm - 5pm Monday in LB LT118

This course is taught in the second trimester of 2015, from Monday 13 July to Friday 18 October.

Labs are held Monday - Friday from 9am - 5pm in Cotton 236.

Assignments and Projects

Unlike many other courses, there is little time spent in lectures in SWEN 302, and all of the coursework is based around a single project. Most of the assessment is based on the deliverables you produce and the processes you follow within the project. While assessment involves group work, the course coordinator and lecturer will ensure the marks you receive will reflect an holistic assessment of your overall demonstrated contribution to each assessment item. All objectives are tested in the project and other assigned work. In this course we will expect you to use your initiative and resources as a group (such as material from past courses and industry experience) to gather information and to ask questions of relevant staff and members from around the University.

Workload

In order to maintain satisfactory progress in SWEN 302, 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: 2 Hours
- Readings / Reports: 1-2 Hours
- Labs: 6-8 Hours

School of Engineering and Computer Science

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

The notice board for SWEN 302 is located on the second floor of the Cotton Building.

Staff

The course organiser for SWEN 302 is Alex Potanin. The lecturer for the course is Roman Klapaukh. Their contact details are:

- Alex Potanin
- alex@ecs.vuw.ac.nz

- Roman Klapaukh
- roma@ecs.vuw.ac.nz

The tutors for this course are:

- Alexandre Sawczuk Da Silva
- Francisco Bustamante
- Julian Mackay
- Matthew Stevens

The student representative for this course is:

- James Greenwood-Thessman
- greenwjame1@ecs.vuw.ac.nz

Announcements and Communication

The main means of communication outside of lectures will be the SWEN 302 web area at http://ecs.victoria.ac.nz/Courses/SWEN302_2015T2/. There you will find, among other things, this document, the lecture schedule and assignment handouts, and the SWEN 302 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 302 will be determined based on the following assessment weightings:

Item	Weight	Deadline
Group Mark		
Following Agile Processes	30%	Week 12
Final Deliverable	30%	Week 12
Individual Mark		
10 Weekly Reflection Reports (under 1 page each)	10%	Every Week
Final Essay (14 November)	30%	Exam Break

NB! The weekly reports must be completed for the weeks 2 - 11 (10 reports in total). Each report is worth 1%.

All the assessment items contribute towards all of the learning objectives.

Tests and Exams

There are no tests (other than unit tests and acceptance tests) in SWEN 302. There is no final exam for SWEN 302.

Practical Work

The main content of SWEN 302 will be a substantial group project. This will be conducted in four three-week iterations of an Agile process, from weeks 1 to week 12. Each team will be required to work on their project *only during their scheduled lab hours*. Teams must be present for at least six hours total per week (on a single day), and may not attend more than eight hours total on their day or multiple days.

The final report should be handed in via the online submission system (found on the course homepage). Individual

The final report should be handed in via the online submission system (found on the course homepage); individual reports must be physically handed in to the relevant tutors. Late individual work will be penalised at 10% a day that it is late. All group work components must be presented on time - and may be marked "as it is" at the deadline. Approval for late submission will only be given in exceptional circumstances, as the marking will occur at preset presentation times. Assessment for the group project will include individual and group components. The Group Project will be conducted under the group work policy.

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 Course Requirements

1. *Attending 6-8 hours of scheduled labs each on the assigned day of the week for all 12 weeks*
2. *Submitting all of the weekly reports*
3. *Submitting the final report*

Any student who is concerned that they have been (or might be) unable to meet any of the mandatory course requirements because of exceptional personal circumstances, should contact the course coordinator as soon as possible.

Passing SWEN 302

To pass SWEN 302, a student must satisfy mandatory requirements and gain at least a **C-** grade overall.

Withdrawal

The last date for withdrawal from SWEN 302 with entitlement to a refund of tuition fees is Friday 24 July 2015. The last date for withdrawal without being regarded as having failed the course is Friday 25 September 2015 -- 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.

Course Outline as PDF