Special Topic: Database System Development - Course Outline
SWEN 439: 2016 Trimester 3

Under construction! Details are not yet complete.

This document sets out the workload and assessment requirements for SWEN 439. 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 understanding of the principles of database systems generally and the relational database model in particular,
2. Design databases of web applications,
3. Explain and apply the basic principles and common trade-offs in designing a relational database,
4. Set up, query, and update a relational database using interactive SQL,
5. Design stored procedures and triggers in a relational database system,
6. Explain the basic principles and common trade-offs in relational database query optimization, and
7. Explain the basic principles of database concurrency control and recovery, and implement them within a program.

Objective 1 demonstrates the ability to apply mathematical and engineering sciences to a software engineering problem (BE graduate attribute 3(a)).
Objectives 2, 3, 4, 5 and 7 develop the ability to synthesize efficient solutions to complex engineering problems (BE graduate attribute 3(b)).
Objective 6 develops ability to solve models that predict behaviour of an engineering system (BE graduate attribute 3(c)).

Textbook

The textbook for SWEN 439 is: R. Elmasri and S. Navathe, *Fundamentals of Database Systems; 6th edition,* Pearson/Addison Wesley, 2014.

There is also a reading list of material that may be of use which are available in the library.

Lectures, Tutorials, Laboratories, and Practical work

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

Lectures for SWEN 439 are:

Tuesday 12:00 – 12:50 pm, Tuesday 04:10 – 05:00 pm, Thursday 12:00 – 12:50 pm, Friday 03:30 – 04:20 pm.

All lectures are in CO431.

Workload

In order to maintain satisfactory progress in SWEN 439, you should plan to spend an average of at least *10-12* hours per week on this paper, which includes attending lectures, solving homework assignments, doing projects, and reviewing lecture material.

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 lecturer for SWEN 439 is: Pavle Mogin. His contact details are:

- *Dr Pavle Mogin*
- Room: Cotton 230
- Phone: +64 4 463 5352

- email: Pavle.Mogin@ecs.vuw.ac.nz

The SWEN 439 class representative is:
- *Ellie Coyle*, elliermcoyle@gmailcom

Announcements and Communication

The main means of communication outside of lecture will be the SWEN 439 web area at
http://ecs.victoria.ac.nz/Courses/SWEN439_2016T3/. There you will find, among other things, this document, the
Lecture Schedule, Assignment Handouts, and the SWEN 439 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 439 will be determined based on the following assessment weightings:

Item	Weight
Assignment 1	5%
Assignment 2	5%
Assignment 3	5%
Assignment 4	5%
Project 1	15%
Project 2	15%
Final examination	50%

Assignment 1, Assinment 2, and Assignment 4 should be handed in to the SWEN 439 assignment box on level 2 of the
Cotton Building. In view of the Privacy Act, you are free to use your STUDENT NUMBER instead of your name on
assignments. Assignment 3, Project 1, and Project 2 should be submitted via the school electronic submission system.

Any assignment or project submitted after the due date will be penalized at the rate of 5% per day (a weekend counts as
one day). Approval to submit assignments and projects late without penalty will only be granted in exceptional
circumstances and if the arrangement is made prior to the due date. Any medical excuse must be accompanied by a
doctor's certificate.

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 two 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 study and
examination period for trimester T3 is REPLACE_EXAM_PERIOD.

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

To pass SWEN 439 a student must achieve at least 40% of all marks for projects and assignments.

Passing SWEN 439

To pass SWEN 439, a student must pass the mandatory requirements, achieve at least a D grade for the final
examination, and at least a C- grade overall.

Withdrawal

The last date for withdrawal from SWEN 439 with entitlement to a refund of tuition fees is REPLACE_WITHDRAWAL_DATE_REFUND 2016. The last date for withdrawal without being regarded as having failed the course is REPLACE_WITHDRAWAL_DATE_NOT_FAILED 2016 -- 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