

# Object-Oriented Paradigms - Course Outline

## SWEN 423: 2011 Trimester 1

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This document sets out the workload and assessment requirements for SWEN 423. 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.

The phrase object-oriented has become something of a catch-phrase for all that is good in Computing - no programming language, software engineering technique, database, spreadsheet, word processor, or cat is worth anything unless it has the magic object-oriented label attached. This course attempts to examine various object-oriented phenomena to determine what is really going on.

### Objectives

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

1. describe what it might mean to label something with the phrase object-oriented, (BE Attribute [2\(b\)](#))
2. describe common object-oriented analysis and design techniques, (BE Attribute [3\(b\)](#))
3. describe object-oriented designs, (BE Attribute [3\(b\)](#))
4. compare object-oriented programming languages (BE Attribute [3\(b\)](#))
5. discuss, describe, and evaluate the applicability of those techniques, designs, and languages (BE Attribute [3\(e\)](#))
6. have a good background for beginning research on a topic in this area. (BE Attribute [3\(d\)](#))

To meet these objectives, we will be reading and discussing papers from the research literature.

### Brief Outline of Course Content

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We will read and discuss literature on the following topics:

- Object-Oriented Programming Languages
- Object-Oriented Design
- Frameworks and Patterns
- Agile Development
- Aspect-Oriented Programming
- Other advanced research topics

### Textbook

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A copy of the SWEN 423 course notes must be purchased.

### Lectures, Tutorials, Laboratories, and Practical work

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A [schedule](#) of lecture topics, readings, and assignment due dates is available online

Lectures for SWEN 423 are: *Monday in AM106 and Thursday in HULT119 at 2:10pm* (there will be an informal discussion on Wednesdays at 2:10pm in VZ105 and you are encouraged to spend that hour discussing the papers with other students)

There are no labs, tutorials, or help desks.

### Assignments and Projects

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The course will have two assignments that must be submitted electronically as pdf files. A short paper summary must be submitted using [VUW Blackboard](#) before every lecture. All course assessment contributes to all objectives.

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

### Workload

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In order to maintain satisfactory progress in SWEN 423, 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 per week

- Discussing course over coffee with other students (suggested time: 2:10pm - 3pm on Wednesdays, can use VZ105 for space!): 1 hour per week
- Readings: 5 hours per lecture
- Assignments: 2-3 days to write each assignment.

Achieving a higher mark may require more workload

## School of Engineering and Computer Science

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

There is no notice board for SWEN 423.

## Staff

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The course organiser for SWEN 423 is [Alex Potanin](#). The lecturers for the course are [Alex Potanin](#) and [Hui Ma](#). Their contact details are:

- [Alex Potanin](#)
- [Cotton 262](#)
- +64 4 463 5302
- [Alex.Potanin@ecs.vuw.ac.nz](mailto:Alex.Potanin@ecs.vuw.ac.nz)
  
- [Hui Ma](#)
- [Cotton 259](#)
- +64 4 463 5657
- [Hui.Ma@ecs.vuw.ac.nz](mailto:Hui.Ma@ecs.vuw.ac.nz)

## Announcements and Communication

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The main means of communication outside of lectures will be the SWEN 423 web area inside the [VUW Blackboard](#).

## Assessment

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Your grade for SWEN 423 will be determined based on the following assessment weightings:

Item	Weight
Assignment One	20%
Assignment Two	20%
Final Examination	60%

All assessment items address all objectives and their associated BE graduate attributes ([2\(b\)](#), [3\(b\)](#), [3\(d\)](#), [3\(e\)](#)).

## Tests and Exams

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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 10 - 29 June.

## Practical Work

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Item	Due
Assignment One	first lecture after midterm break
Assignment Two	last lecture of the course
Paper Summaries	at the beginning of every lecture
Final Examination	TBA in the exam period

Your assignment essays should be approximately 3000 words long, and should cite sources appropriately, both from course material and from your own reading. Any material over the word limit may not be read, and (as a consequence) essays that exceed the word limit are unlikely to be marked as well as those which keep within the word limit.

Your assignment essays are due at 2pm on the due date. Your essay should be submitted electronically using [VUW Blackboard](#).

Due dates are hard deadlines. **Late essays will be penalised.** The penalty is 10% per week day after the deadline and essays more than three days late may not be marked, *unless prior agreement with the course coordinator has been made at least 24 hours in advance*. Approval for late submission will only be given in *exceptional circumstances*.

## Plagiarism

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### 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

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1. *80% of Paper Summaries satisfactory and submitted on time*
2. *Achieve at least a **D** grade on the final exam*

## Passing SWEN 423

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To pass SWEN 423, a student must satisfy mandatory requirements and gain at least a **C** grade overall.

## Withdrawal

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The last date for withdrawal from SWEN 423 with entitlement to a refund of tuition fees is Fri 11 March 2011, *if you have a student loan, you should check with StudyLink as to their rules on withdrawing from courses*. The last date for withdrawal without being regarded as having failed the course is Fri 13 May 2011 -- though later withdrawals may be approved by the Dean in special circumstances.

## Rules & Policies

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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.

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