



Prescription

Object-orientation is the basis for many approaches to programming, systems, languages and applications. This course discusses the design principles of object-orientation and studies advanced topics in system design, programming language and development process.

Course learning objectives

Students who pass this course should be able to:

1. Describe what it might mean to label something with the phrase object-oriented.
2. Describe common object-oriented analysis and design techniques.
3. Understand and describe concrete object-oriented designs.
4. Compare different object-oriented programming languages.
5. Discuss, describe, and evaluate the applicability of those techniques, designs, and languages.
6. Have a good background for beginning research on a topic in this area.

Course content

The popularity of the object-oriented term has grown so much that the phrase object-oriented has become something of a catch-phrase for all that is good in Computing, expanding out of the programming language field and influencing (as an example) software engineering and databases. This course attempts to obtain a deep understanding of object oriented concepts and to examine various application of object oriented methodologies. We will read and discuss papers about different topics within OO, including inheritance and method dispatch techniques, reasoning and typing techniques, frameworks and library design and language evolution.

Withdrawal from Course

Withdrawal dates and process:

<https://www.victoria.ac.nz/students/study/course-additions-withdrawals>

Lecturers

Marco Servetto (Coordinator)

marco.servetto@vuw.ac.nz 04 4635820

258 Cotton, Kelburn

Teaching Format

During the trimester there will be two lectures per week. There are no labs, tutorials, or help desks, however the forum is a fundamental tool used in this course to provide help and clarifications.

Student feedback

Student feedback on University courses may be found at:
www.cad.vuw.ac.nz/feedback/feedback_display.php

Dates (trimester, teaching & break dates)

- Teaching: 08 July 2019 - 13 October 2019
- Break: 19 August 2019 - 01 September 2019
- Study period: 14 October 2019 - 17 October 2019
- Exam period: 18 October 2019 - 09 November 2019

Class Times and Room Numbers

08 July 2019 - 18 August 2019

- **Wednesday** 16:10 - 17:00 – 104, Te Toki a Rata, Kelburn
- **Friday** 16:10 - 17:00 – 104, Te Toki a Rata, Kelburn

02 September 2019 - 13 October 2019

- **Wednesday** 16:10 - 17:00 – 104, Te Toki a Rata, Kelburn
- **Friday** 16:10 - 17:00 – 104, Te Toki a Rata, Kelburn

Set Texts and Recommended Readings

Required

Lecture readings are accessible via Talis Aspire (linked from the course website).

Mandatory Course Requirements

In addition to achieving an overall pass mark of at least 50%, students must:

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

If you believe that exceptional circumstances may prevent you from meeting the mandatory course requirements, contact the Course Coordinator for advice as soon as possible.

Assessment

Assessment Item	Due Date or Test Date	CLO(s)	Percentage
Assignment 1	Week 6	CLO: 1,2,3,4,5,6	20%
Assignment 2	Week 11	CLO: 1,2,3,4,5,6	20%
Final Exam (3 hours)	tba in exam period	CLO: 1,2,3,4,5,6	60%

Penalties

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 with respect to the corresponding due date*. Approval for late submission will only be given in *exceptional circumstances*.

Extensions

Individual extensions will only be granted in exceptional personal circumstances, and should be negotiated with the course coordinator before the deadline whenever possible. Documentation (eg, medical certificate) may be required.

Submission & Return

Work will be submitted via ECS's submission system, accessible through the course web pages. Marks and comments will be returned through the ECS marking system, also available through the course web pages.

Marking Criteria

Assignments will be marked according to the criteria on the course web page - https://ecs.victoria.ac.nz/Courses/SWEN423_2019T2/Assignments

Group Work

SWEN423 does not incorporate group work.

Peer Assessment

SWEN423 does not incorporate peer assessment.

Workload

In order to maintain satisfactory progress in SWEN 423, you should plan to spend an average of 10 hours per week on this paper. A plausible and approximate breakdown for these hours would be:

- Lectures: 2 hours per week
- Readings: 3 hours per lecture
- Assignments: 2 hours per week

Teaching Plan

See: https://ecs.victoria.ac.nz/Courses/SWEN423_2019T2/LectureSchedule

Communication of Additional Information

All online material for this course can be accessed at https://ecs.victoria.ac.nz/Courses/SWEN423_2019T2/

Links to General Course Information

- Academic Integrity and Plagiarism: <https://www.victoria.ac.nz/students/study/exams/integrity-plagiarism>
- Academic Progress: <https://www.victoria.ac.nz/students/study/progress/academic-progress> (including restrictions and non-engagement)
- Dates and deadlines: <https://www.victoria.ac.nz/students/study/dates>
- Grades: <https://www.victoria.ac.nz/students/study/progress/grades>
- Special passes: Refer to the Assessment Handbook, at <https://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf>
- Statutes and policies, e.g. Student Conduct Statute: <https://www.victoria.ac.nz/about/governance/strategy>
- Student support: <https://www.victoria.ac.nz/students/support>
- Students with disabilities: https://www.victoria.ac.nz/st_services/disability/
- Student Charter: <https://www.victoria.ac.nz/learning-teaching/learning-partnerships/student-charter>
- Terms and Conditions: <https://www.victoria.ac.nz/study/apply-enroll/terms-conditions/student-contract>
- Turnitin: <http://www.cad.vuw.ac.nz/wiki/index.php/Turnitin>
- University structure: <https://www.victoria.ac.nz/about/governance/structure>
- VUWSA: <http://www.vuwsa.org.nz>

Offering CRN: [18663](#)

Points: 15

Prerequisites: COMP 304 or SWEN 301; 15 further 300-level COMP, NWEN, SWEN pts

Duration: 08 July 2019 - 10 November 2019

Starts: Trimester 2

Campus: Kelburn