



Prescription

The course will investigate tools, techniques and concepts for building interactive computer games, including software engineering techniques, HCI principles, AI methods and design strategies. The course will be co-taught with Media Design and will involve a substantial group project consisting of students from both disciplines.

Course learning objectives

Students who pass this course should be able to:

1. Understand the range of design skills and activities required to develop computer games, and be able to interact knowledgably with experts with skills complementary to their own. (BSc graduate attributes 2, 5).
2. Understand and be able to apply a variety of programming and software engineering techniques to the design and implementation of computer games. (BSc graduate attribute 1).
3. Use integrated game development tools to build interactive computer games. (BE graduate attributes 1).
4. Work in a team with designers from other disciplines to design, develop, and evaluate an interactive computer game. (BE graduate attribute 5).

Course content

The course is co-taught with MDDN 243 and NZSM 496.

Withdrawal from Course

Withdrawal dates and process:

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

Lecturers

Simon McCallum (Coordinator)

simon.mccallum@vuw.ac.nz 04 4635352

230 Cotton, Kelburn

Teaching Format

During the trimester there will be lectures, tutorials, laboratories and practical work.

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 - 18:00 – LT101, Murphy, Kelburn

02 September 2019 - 13 October 2019

- **Wednesday** 16:10 - 18:00 – LT101, Murphy, Kelburn

Other Classes

Lab times are 9:30am - 12:20pm on Tuesdays and Thursday in Wigan 401 on Te Aro Campus. Students should subscribe to one lab stream (either Tuesday or Thursday) and will need to stay in that stream for the duration of the course.

Set Texts and Recommended Readings

Required

There are no required texts for this offering.

Recommended

There are no assigned texts for the course. There will be a list of readings and other resources that you may find helpful, and some Game Development books will be placed on closed reserve in the library.

Mandatory Course Requirements

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

- get at least a 'D' in the individual assessment component of the group project.

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

There will be two assignments and a project in COMP 313.

- An individual written assignment that will give you practice in researching a specific area of software engineering and/or computer science as it relates to the current (or past) state of the art for computer games.
- A paired assignment to give you practice in the skills of using Unity to create and design a game prototype, working alongside a Media Design student (although this is still mostly individually assessed)
- A group project to design a 3D game and implement a "Proof of Concept". Each group will typically consist of three COMP students and three MDDN students and a NZSM student, although other permutations may be necessary. The project will require a group presentation, group submission of a game, and individual reports on the project.
- [OPTIONAL] A proposal for a game. The class, together with the staff, will select the best proposals for groups to work on in the group project. *The game proposal will not contribute to the assessment for COMP 313 students, and is not mandatory.* It will have no impact on any aegrotat calculations if an aegrotat is applied for.

The details of the assignments and projects will be available at the course web site along with intermediate deadlines for components of the projects.

There are no tests or examinations for this course, but the group presentations for your group project will be scheduled during the examination period as if they were an exam.

Assessment Item	Due Date or Test Date	CLO(s)	Percentage
Assignment 1	week 5	CLO: 1,2	20%
Assignment 2	week 6	CLO: 1,2,3	20%
Group Project: group assessment	exam period	CLO: 1,2,3,4	15%
Group Project: individual assessment	exam period	CLO: 1,2,3,4	45%

Penalties

Late submission will incur a penalty of one grade point per day on that assessment item, unless previously negotiated.

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

All work is submitted through the ECS 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.

Group Work

A significant part of the course is a group project to design a 3D game and implement a "Proof of Concept".

You will also be paired with a Media Design student (or potentially a Computer Science student, depending on numbers) for assignment two, although the assessment will largely be individually-based.

Peer Assessment

Please note that 2.5% of your group assessment will be based on peer assessment from the audience at one of your beta presentations. As well as this, the peer assessment that you yourself submit on your fellow students will itself be assessed by staff, and this is worth 2.5% of your individual assessment.

Required Equipment

The practical work for the individual and group projects will be done using Unity 3D, which runs on windows and OSX. You will be using OSX labs at the School of Design. You may also use your own computers, although this is limited to Windows 7-10 and OSX based machines. There is a free version of Unity available at <http://www.unity3d.com>.

Workload

In order to maintain satisfactory progress in COMP 313, you should plan to spend ten hours per week on this course; A plausible and approximate breakdown for these hours would be:

- Lectures and labs: 4 hours per week.
- Independent and group work on assignments: 6 hours per week.

Teaching Plan

See https://ecs.victoria.ac.nz/Courses/COMP313_2019T2/LectureSchedule

Communication of Additional Information

All online material for this course can be accessed at https://ecs.victoria.ac.nz/Courses/COMP313_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-enrol/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: [25049](#)

Points: 15

Prerequisites: 30 pts from (COMP 261, NWEN 241, 243, SWEN 222, 225)

Duration: 08 July 2019 - 10 November 2019

Starts: Trimester 2

Campus: Kelburn