



## 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. 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).
5. Reflect on the quality of their work and identify opportunities to learn and improve.

## Course content

The course is co-taught with MDDN 321. Lectures will be livestreamed and recorded with those students wanting to participate in person being part of the interactive lecture format.

There will be online alternatives for all the components of the course for students who cannot attend in-person. The course involves group work, and remote students must be able to participate in the group activities.

Students taking this course remotely must have access to a computer with camera and microphone and a reliable high speed internet connection that will support real-time video plus audio connections and screen sharing. Students must be able to use Zoom; other communication applications may also be used. A mobile phone connection only is not considered sufficient. The computer must be adequate to support the programming required by the course: This course requires access to a computer capable of running Unreal Engine. Android or IOS tablets will not satisfy this requirement.

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## Withdrawal from Course

Withdrawal dates and process:

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

# Lecturers

## Simon McCallum (Coordinator)

simon.mccallum@vuw.ac.nz 04 4635352

230 Cotton, Kelburn

# Teaching Format

This course will be offered in-person and online. For students in Wellington, the lectures will have in-person interaction and will be live-streamed and recorded. It will also be possible to take the course entirely online for those who cannot attend on campus.

# Student feedback

Student feedback on University courses may be found at:  
[www.cad.vuw.ac.nz/feedback/feedback\\_display.php](http://www.cad.vuw.ac.nz/feedback/feedback_display.php)

# Dates (trimester, teaching & break dates)

- Teaching: 05 July 2021 - 08 October 2021
- Break: 16 August 2021 - 29 August 2021
- Study period: 11 October 2021 - 14 October 2021
- Exam period: 15 October 2021 - 06 November 2021

# Class Times and Room Numbers

## 05 July 2021 - 15 August 2021

- **Thursday** 13:10 - 14:00 – LT118, Laby, Kelburn

## 30 August 2021 - 10 October 2021

- **Thursday** 13:10 - 14:00 – LT118, Laby, Kelburn

# Other Classes

Lab times are 11:30am - 1pm on Monday or Wednesday in Wigan WG401 on Te Aro Campus. COMP313 Students will work with Design students for at least 1 hours per week during these times. The specific hour will be determined by which group you are working with.

# 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 three assessed parts in COMP 313.

1. Learning to develop in a game engine (30 hours)
2. Game Development Project (60 hours)
3. Professional Game Development Documentation (30 hours)

Assessment Item	Due Date or Test Date	CLO(s)	Percentage
Assignment 1	Week 4	CLO: 1,2	30%
Group Project	Week 12	CLO: 1,2,3	40%
Professional Game Development Documentation	assessment period	CLO: 1,2,3,4	30%

## Penalties

Late submission will incur a penalty of 10% shrinking cap per day after the available 3 late days on that assessment item unless previously negotiated. Shrinking cap reduces the maximum mark achievable per day - so for example after 3 days the maximum grade is 70%.

## Extensions

The course allows 3 late days on individual assignments, which cannot be used on group assignments. Individual extensions will only be granted when it benefits the student and in exceptional personal circumstances. Extensions 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 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.

## Required Equipment

The practical work for the individual and group projects will be done using Unreal Engine , 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 Unreal Engine available at <https://www.unrealengine.com/en-US/>

## 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: 3 hours per week.
- Independent and group work on assignments: 7 hours per week.

## Teaching Plan

See [https://ecs.wgtn.ac.nz/Courses/COMP313\\_2021T2/LectureSchedule](https://ecs.wgtn.ac.nz/Courses/COMP313_2021T2/LectureSchedule)

## Communication of Additional Information

Links to all online material for this course can be accessed at [https://ecs.wgtn.ac.nz/Courses/COMP313\\_2021T2/](https://ecs.wgtn.ac.nz/Courses/COMP313_2021T2/)

## Links to General Course Information

- Academic Integrity and Plagiarism: <https://www.wgtn.ac.nz/students/study/exams/integrity-plagiarism>
- Academic Progress: <https://www.wgtn.ac.nz/students/study/progress/academic-progress> (including restrictions and non-engagement)
- Dates and deadlines: <https://www.wgtn.ac.nz/students/study/dates>
- Grades: <https://www.wgtn.ac.nz/students/study/progress/grades>
- Special passes: Refer to the Assessment Handbook, at <https://www.wgtn.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf>
- Statutes and policies, e.g. Student Conduct Statute: <https://www.wgtn.ac.nz/about/governance/strategy>
- Student support: <https://www.wgtn.ac.nz/students/support>
- Students with disabilities: [https://www.wgtn.ac.nz/st\\_services/disability/](https://www.wgtn.ac.nz/st_services/disability/)
- Student Charter: <https://www.wgtn.ac.nz/learning-teaching/learning-partnerships/student-charter>
- Terms and Conditions: <https://www.wgtn.ac.nz/study/apply-enrol/terms-conditions/student-contract>
- Turnitin: <http://www.cad.vuw.ac.nz/wiki/index.php/Turnitin>
- University structure: <https://www.wgtn.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:** 05 July 2021 - 07 November 2021

**Starts:** Trimester 2

**Campus:** Kelburn

