

Computer Game Development - Course Outline

COMP 313: 2016 Trimester 1

This document sets out the workload and assessment requirements for COMP 313. 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 course is co-taught with MDDN 343 and NZSM496.

Objectives

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

1. Understand the range of design skills and activities required to develop computer games, and be able to interact knowledgeably 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. Be able to use integrated game development tools to build interactive computer games. (BE graduate attributes [1](#))
4. Be able to work in a team with media design students and music students to design, develop, and evaluate an interactive computer game. (BE graduate attribute [5](#))

Lectures, Tutorials, Laboratories, and Practical work

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

The lecture for COMP 313 is on Monday at 4:10pm - 6:00pm in HMLT104 (Kelburn Campus). There are two lab streams, and students will pick one lab stream during the first Monday lecture and attend that lab stream for the entirety of the trimester. The two lab streams are on Tuesday and Friday, from 9:30am - 11:20am in WG401 (Te Aro Campus).

Note that WG401 is at the School of Design, Wigan Street (main entrance on Vivian Street, Wigan Building is at the back of Vivian Building).

Texts and Readings

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.

Assignments and Projects

There will be two assignments and a project in COMP313.

- 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. It addresses part of the first two objectives of the course.
- An individual programming assignment to give you practice in the skills of using Unity to create, animate, and control characters in a 3D game world. It addresses the first three objectives of the course.
- 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. It addresses all the objectives of the course. 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 COMP313 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 [Assignments](#), along with intermediate deadlines for components of the projects.

The final deadlines for the assignments and projects are:

- Game proposal [NOTE: this is optional, and does not count towards your grade]: One page document due Monday, 7 March at 9:00am. Presentation (1-2 minutes long) delivered in lab during week two.
- Assignment 1: Wednesday, 23 March at 5:00pm.

- Assignment 2: Friday, 22 April at 5:00pm.
- Group Project presentation: TBA (during the exam period, scheduled as an exam in the exam timetable)
- Group Project submission and individual reports: TBA (shortly after the presentation).

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.

School of Engineering and Computer Science

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

Staff

The course organiser for COMP 313 is [Stuart Marshall](#). Peter Freer will be organising and lecturing MDDN343. Dr Dugal McKinnon will be organising and lecturing NZSM496. Their contact details are:

- Stuart Marshall
- [Cotton 342](#)
- +64 4 463 6730
- Stuart.Marshall@ecs.vuw.ac.nz

- Peter Freer
- Room 4.08 Wigan Building (Te Aro)
- +64 4 463 6234
- Peter.Freer@vuw.ac.nz

- Dugal McKinnon
- Room 305, Music Building (Kelburn)
- +64 4 463 6448
- Dugal.McKinnon@vuw.ac.nz

Several other guest lecturers from the local industry will also be contributing to the course.

Announcements and Communication

The main means of communication outside of lectures will be the COMP 313 web area at http://ecs.victoria.ac.nz/Courses/COMP313_2016T1/. There you will find, among other things, this document, the [lecture schedule](#) and [assignment handouts](#), and the [COMP 313 Forum](#). The forum is a web-based bulletin board system. Questions, answers, and comments can be posted to the forum, and staff will read these posts and frequently respond to them.

Practical Work

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 7-8 and OSX based machines. There is a free version of Unity available at <http://www.unity3d.com>.

Assessment

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

Your grade for COMP 313 will be determined based on the following assessment weightings:

<u>Item</u>	<u>Weight</u>
Assignment 1	25%
Assignment 2	25%
Group Project: group assessment	20%
Group Project: individual assessment	30%

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.

Tests and Exams

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.

Plagiarism

Working Together and Plagiarism

We encourage you to discuss the principles of the course and assignments with other students, and to help and seek help with the development tools. The group project will involve substantial collaboration. However, any work you present as your own individual work must be accomplished by you; any work presented as the work of the group must be accomplished by members of the group. It is essential that you give appropriate credit to part of the work that came from any other sources (whether other students in the course or outside).

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. If you have had help from someone else (other than a tutor), it is always safe to state the help that you got.

Mandatory Requirements

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

Passing COMP 313

To pass COMP 313, a student must satisfy mandatory requirements and gain at least a **C-** grade overall.

Withdrawal

The last date for withdrawal from COMP 313 with entitlement to a refund of tuition fees is Friday 11 March 2016. The last date for withdrawal without being regarded as having failed the course is Friday 13 May 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.

