



Course Directive ID737002: Game Development Semester One, 2024

Course Information

Level: 7
Credits: 15
Prerequisite: ID511001: Programming 2
Timetable: Tuesday 1.00 PM 105b and Thursday 8.00 AM 105b

Teaching Staff

Name: Grayson Orr
Position: Principal Lecturer and Second/Third-Year Coordinator
Office Location: D309
Email Address: grayson.orr@op.ac.nz

Course Dates

Term 1 (8 weeks): 17th February - 11th April
Term 2 (8 weeks): 28th April - 19th June

Public Holidays and Anniversary Days

A list of public holidays and anniversary days can be found here - <https://www.op.ac.nz/students/importantdates>

Aims

To enable learners to apply game programming techniques and tools to develop an effective game.

Learning Outcome

At the successful completion of this course, learners will be able to:

1. Design and develop a game using industry standard tools, technologies and practices.

Assessments

Assessment	Weighting	Due Date	Learning Outcome
Assignment	30%	Monday 9th June at 7.59 AM	1
Project: Game Development + Demo	70%	Monday 9th June at 7.59 AM	1

Grade Table - Criterion Referenced

Grade	Mark Range
A+	Met all course requirements-mark in range [90-100]
A	Met all course requirements-mark in range [85-89]
A-	Met all course requirements-mark in range [80-84]
B+	Met all course requirements-mark in range [75-79]
B	Met all course requirements-mark in range [70-74]
B-	Met all course requirements-mark in range [65-69]
C+	Met all course requirements-mark in range [60-64]
C	Met all course requirements-mark in range [55-59]
C-	Met all course requirements-mark in range [50-54]
D	There at end. Did not meet course requirements. Mark in range [40-49]
E	There at end. Did not meet course requirements. Mark in range [0-39]

Provisional Schedule

Week	Topics
1/Tahi	SOLID Principles
2/Rua	Design Patterns 1
3/Toru	Design Patterns 2
4/Whā	Designing A Game Idea
5/Rima	Pitching A Game Idea
6/Ono	Clients and Report Writing
7/Whitu	Playtesting
8/Waru	Assessment Work
Mid Semester Break	
9/Whitu	Assessment Work
10/Tekau	Assessment Work
11/Tekau mā tahi	Assessment Workk
12/Tekau mā rua	Assessment Work
13/Tekau mā toru	Assessment Work
14/Tekau mā whā	Assessment Work
15/Tekau mā rima	Assessment Work Due
16/Tekau mā ono	Catch Up Week

Resources

Software

This paper will be taught using **Unity** and **Visual Studio Code**. An installer for **Unity** and **Visual Studio Code** are available - <https://unity3d.com/get-unity/download> and <https://code.visualstudio.com/download>. Please refer any problems with downloads or installers to **Rob Broadley** in D205a.

Readings

No textbook is required for this course. URLs to useful resources will be provided in the lecture notes.

Course Requirements and Expectations

Learning Hours

This course requires **150 hours** of learning. This time includes **60 hours** directed learning hours and **90** self-directed learning hours.

Criteria for Passing

To pass this paper, you must achieve a cumulative pass mark of **50%** over all assessments. There are no reassessments or resits.

Attendance

- Learners are expected to attend all classes, including lectures and labs.
- If you cannot attend for a few days for any reason, contact the course.

Communication

Microsoft Outlook/Teams are the official communication channels for this course. It is your responsibility to regularly check **Microsoft Outlook/Teams** for important course material, including changes to class scheduling or assessment details. Not checking will not be accepted as an excuse.

Snow Days/Polytechnic Closure

In the event **Otago Polytechnic** is closed or has a delayed opening because of snow or bad weather, you should not attempt to attend class if it is unsafe to do so. It is possible that the course lecturer will not be able to attend either, so classes will not physically be meeting. However, this does not become a holiday. Rather, the course material will be made available on [GitHub](#) for classes affected by the closure. You are responsible for any course material presented in this manner. Information about closure will be posted on the **Otago Polytechnic Facebook** page <https://www.facebook.com/OtagoPoly>.

Group Work and Originality

Learners in the **Bachelor of Information Technology** programme are expected to hand in original work. Learners are encouraged to discuss assessments with their fellow learners, however, all assessments are to be completed as individual works unless group work is explicitly required (i.e. if it doesn't say it is group work then it is not group work - even if a group consultation was involved). Failure to submit your original work will be treated as plagiarism.

AI Tools

Learning to use AI tool is an important skill. While AI tools are powerful, you **must** be aware of the following:

- If you provide an AI tool with a prompt that is not refined enough, it may generate a not-so-useful response
- Do not trust the AI tool's responses blindly. You **must** still use your judgement and may need to do additional research to determine if the response is correct
- Acknowledge what AI tool you have used. In the assessment's repository **README.md** file, please include what prompt(s) you provided to the AI tool and how you used the response(s) to help you with your work

Referencing

Appropriate referencing is required for all work. Referencing standards will be specified by the teaching staff.

Plagiarism

Plagiarism is submitting someone else's work as your own. Plagiarism offences are taken seriously and an assessment that has been plagiarised may be awarded a zero mark. A definition of plagiarism is in the Student Handbook, available online or at the school office.

Submission Requirements

All assessments are to be submitted by the time, date, and method given when the assessment is issued. Failure to meet all requirements will result in a penalty of up to **10%** per day (including weekends).

Extensions

Familiarise yourself with the assessment due dates. Extensions will **only** be granted if you are unable to complete the assessment by the due date because of **unforeseen circumstances outside your control**. The length of the extension granted will depend on the circumstances and **must** be negotiated with the course lecturer before the assessment due date. A medical certificate or support letter may be needed. Extensions will not be granted for poor time management or pressure of other assessments.

Impairment

In case of sickness contact the teaching staff or **Head of Information Technology (Michael Holtz)** as soon as possible, preferably before the assessment is due. The policy regarding the granting of a mark that considers impaired performance requires a medical certificate and a medical practitioner's signature on a form. You may refer to the guide on impaired performance on the student handbook.

Appeals

If you are concerned about any aspect of your assessment, approach the teaching staff in the first instance. We support an open-door policy and aim to resolve issues promptly. Further support is available from the **Head of Information Technology (Michael Holtz)** and **Second/Third-Year Coordinator (Grayson Orr)**. **Otago Polytechnic** has a formal process for academic appeals if necessary.

Other Documents

Regulatory documents relating to this course can be found on the **Otago Polytechnic** website.