



# Course Directive ID511001: Programming 2 Semester Two, 2023

#### Course Information

Level: 5 Credits: 15

Prerequisite: ID510001: Programming 1

Rōpū Ōrangitea Timetable: Monday 1 PM D201 and Thursday 10 AM D313 Rōpū Kōwhai Timetable: Monday 3 PM D201 and Wednesday 10 AM D313

Lecturer-Led Tutorial: Thursday 8.30 PM - 10.00 PM Online

Learner-Led Tutorials: Tuesday and Thursday 12.00 PM - 1.00 PM D202

# Teaching Staff

Name: Grayson Orr

Position: Senior Lecturer and Second/Third-Year Coordinator

Office Location: D318

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#### Course Dates

Term 1: Monday 17 July - Friday 22 September
Mid Semester Break: Monday 25 September - Friday 06 October
Term 2: Monday 09 October - Friday 17 November

# 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 build simple object-oriented (OO) applications and to identify situations that are most appropriate for OO implementation.

# Learning Outcome

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

1. Build interactive, event-driven GUI applications using pre-built components.

2. Declare and implement user-defined classes using encapsulation, inheritance and polymorphism.

## Assessments

Assessment	Weighting	Due Date	Learning Outcomes
Project 1	25%	10-11-2023 (Friday at 04.59 PM)	1 and 2
Project 2	35%	22-09-2023 (Friday at 4.59 PM)	1 and 2
Theory Examination	30%	15-11-2023 (Wednesday at 12.10 PM)	1 and 2
Classroom Tasks	10%	22-09-2023 (Friday at 4.59 PM)	1 and 2

# **Provisional Schedule**

Week	Date Starting	Topics		
1/Tahi	17-07-2023	Development Workflow and C#		
2/Rua	24-07-2023	Lists, Sorting Algorithms and LINQ		
3/Toru	31-07-2023	Classes, Objects and Encapsulation		
4/Whā	07-08-2023	Abstract Data Types and Enumerations		
5/Rima	14-08-2023	Inheritance and Polymorphism		
6/Ono	21-08-2023	Debugging and Unit Testing		
7/Whitu	28-08-2023	Project 2 and Classroom Tasks Work		
8/Waru	04-09-2023	Project 2 and Classroom Tasks Work		
9/Iwa	11-09-2023	Windows Forms Apps		
10/Tekau	18-09-2023	Timer Control, Graphics Class and SoundPlayer Class		
Mid Term Break				
11/Tekau mā tahi	09-10-2023	More Graphics Class and Controller Class		
12/Tekau mā rua	16-10-2023	Project 1 Work		
13/Tekau mā toru	23-10-2023	Project 1 Work		
14/Tekau mā whā	30-10-2023	Project 1 Work		
15/Tekau mā rima	06-11-2023	Theory Examination Preparation		
16/Tekau mā ono	13-11-2023	Theory Examination		

# Resources

# Software

This paper will be taught using Microsoft Visual Studio. An installer for Microsoft Visual Studio is available - https://visualstudio.microsoft.com/downloads. 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 64 hours of timetabled class time, and 86 hours of self-directed reading, preparation and completion of assessments.

#### Criteria for Passing

To pass this paper, you  $\mathbf{must}$  achieve a cumulative pass mark of  $\mathbf{50\%}$  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 and GitHub 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 — Te Pūkenga 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 teaching staff 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 — Te Pūkenga 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.

#### ChatGPT

Learning to use **Artificial Intelligence tools** like **ChatGPT** is an important skill. While **ChatGPT** is a powerful tool, you **must** be aware of the following:

- If you provide ChatGPT with a prompt that is not refined enough, it may generate a not-so-useful response
- Do not trust **ChatGPT's** responses blindly. You **must** still use your judgement and may need to do additional research to determine if the response is correct
- Acknowledge that you are using **ChatGPT**. In the assessment's repository **README.md** file, please include what prompt(s) you provided to **ChatGPT** 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 elses 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 **First-Year Coordinator (Elise Allen)**. **Otago Polytechnic** — **Te Pūkenga** has a formal process for academic appeals if necessary.

#### Other Documents

Regulatory documents relating to this course can be found on the Otago Polytechnic — Te Pūkenga website.