



Course Directive ID511001: Programming 2 Semester One, 2024

Course Information

Level: 5 Credits: 15

Prerequisite: ID510001: Programming 1

Rōpū Mangu Timetable: Monday 3.00 PM D207 and Wednesday 1.00 PM D105b

Teaching Staff

Name: Rachel Trounson Grayson Orr

Position: Senior Lecturer Senior Lecturer and Second/Third-Year Coordinator

Office Location: D316a D309

Email Address rachel.trounson@op.ac.nz grayson.orr@op.ac.nz

Course Dates

Term 1: Monday 26 February - Friday 12 April Mid Semester Break: Monday 15 April - Friday 26 April Term 2: Monday 29 April - Thursday 27 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 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% | 21-06-2024 (Friday at 4.59 PM) | 1 and 2 |
| Project 2 | 35% | 03-05-2024 (Friday at 4.59 PM) | 1 and 2 |
| Theory Examination | 30% | 26-06-2024 (Wednesday at 3.00 PM) | 1 and 2 |
| Classroom Tasks | 10% | 03-05-2024 (Friday at 4.59 PM) | 1 and 2 |

Provisional Schedule

| Week | Date Starting | Topics | | |
|------------------|---------------|---|--|--|
| 1/Tahi | 26-02-2024 | GitHub and C# | | |
| 2/Rua | 04-03-2024 | Lists and LINQ | | |
| 3/Toru | 11-03-2024 | Windows Forms Application | | |
| 4/Whā | 18-03-2024 | Classes, Objects and Encapsulation | | |
| 5/Rima | 25-03-2024 | Inheritance and Polymorphism | | |
| 6/Ono | 01-04-2024 | Interfaces and Enumerations | | |
| 7/Whitu | 08-04-2024 | Debugging and Unit Testing | | |
| Mid Term Break | | | | |
| 8/Waru | 29-04-2024 | Assessment Work | | |
| 9/Iwa | 06-05-2024 | Timer Control, Graphics Class and SoundPlayer Class | | |
| 10/Tekau | 13-05-2024 | More Graphics Class | | |
| 11/Tekau mā tahi | 20-05-2024 | Key Events | | |
| 12/Tekau mā rua | 27-05-2024 | Assessment Work | | |
| 13/Tekau mā toru | 03-06-2024 | Assessment Work | | |
| 14/Tekau mā whā | 10-06-2024 | Assessment Work | | |
| 15/Tekau mā rima | 17-06-2024 | Theory Examination Preparation | | |
| 16/Tekau mā ono | 24-06-2024 | 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.