



1. General Course Information

1.1 Course Details

Course Code:	1001ICT
Course Name:	Programming 1
Trimester:	Trimester 1, 2020
Program:	Diploma of Information Technology
	Mt Gravatt
Credit Points:	10
Course Coordinator:	Dr. Seyedali Mirjalili
Document modified:	5th February 2020

Course Description

Programming 1 is a 10 credit point course within the Diploma of Information Technology. The course is situated within the first semester of the program. The Diploma of Information Technology is designed to provide students with a pathway to:

- further university study in Information Technology and related degrees, or
- employment opportunities within the IT industry.

Programming I is the first programming course students encounter in the Diploma of Information Technology. The course introduces modern programming concepts and techniques and provides a foundation for subsequent programming courses within the Diploma of Information Technology. You will learn how to code in a creative context, utilising a practical and hands-on approach, producing generative art, data visualisations, and interactive interfaces.

Assumed Knowledge

There is no prerequisite for 1001ICT. However, please note that 1001ICT is a prerequisite for courses 2002ICT, 2508ICT, 3642ICT and 1802ICT. This means that you need to achieve a Pass or above to progress to any of these courses. If you achieve only a PC, you will need to repeat 1001ICT before progressing to 2002ICT, 2508ICT, 3642ICT or 1802ICT.

1.2 Teaching Team

Your lecturer/tutor can be contacted via the email system on the portal.

Name	Email
Dr. Seyedali Mirjalili	ali.mirjalili@griffithcollege.edu.au

1.3 Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. A list of times and rooms will be published on the Griffith College Portal under the "Support and Services/Teacher Consultation Times" link.

1.4 Timetable

Your timetable is available on the Griffith College Portal at Class Timetable in Student and Services.

1.5 Technical Specifications

All students must have access to a computer or suitable mobile device.

2. Aims, Outcomes & Generic Skills

2.1 Course Aims

This course introduces practical computer programming concepts and skills through creative ideas and challenges. Students will develop programs that can generate images, animations and sound and learn how to interact with them to change their behavior. Starting with simple processes, the course will develop students' programming skills by introducing algorithmic techniques for increasingly complex visual and sonic digital projects.

2.2 Learning Outcomes

After successfully completing this course you should be able to:

1. Create interactive programs using graphics pipeline and handling user events in a programming language
2. Solve programming problems that involve simple programming constructs such as variables, sequence, selection, iteration, and arrays in a programming language
3. Develop software which is able to transform data over the network into visualisations and sonic experiences
4. Construct a modular program using functions and objects in a programming language
5. Demonstrate the integration of visualisations into web pages using JavaScript libraries

2.3 Generic skills

For further details on the Generic Skills please refer to the Graduate Generic Skills and Capabilities policy.

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

Generic Skills	Taught	Practised	Assessed
Knowledge and skills with critical judgement		✓	✓
Communication and collaboration skills	✓	✓	✓
Self-directed and active learning skills	✓	✓	✓
Creative and future thinking skills		✓	
Social responsibility and ethical awareness		✓	
Cultural competence and awareness in a culturally diverse environment		✓	

3. Learning Resources

3.1 Required Resources

McCarthy, L., Reas, C., & Fry, B. (2015). Getting Started with P5.js: Making Interactive Graphics in JavaScript and Processing. Maker Media, Inc..

3.2 Recommended Resources

Please refer to the course webpage.

3.3 College Support Services and Learning Resources

The College provides many facilities and support services to assist students in their studies. Links to information about College support resources that are available to students are included below for easy reference.

[Digital Library](#) – Databases to which Griffith College students have access to through the Griffith Library Databases.

MyStudy – there is a dedicated website for this course via MyStudy on the Griffith College Portal.

[Academic Integrity Tutorial](#) - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of breaches of academic integrity, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

Services and Support provides a range of services to support students throughout their studies including personal support such as Counselling; Academic support; and Welfare support.

Jobs and Employment in the [Student Hub](#) can assist students with career direction, resume and interview preparation, job search tips, and more.

[IT Support](#) provides details of accessing support, information on s numbers and internet access and computer lab rules.

3.4 Other Learning Information

Attendance

You are expected to attend all lectures and tutorials and to actively engage in learning during these sessions. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook. In addition, you may BYOD (bring your own device) to class such as a laptop or tablet. This is not a requirement as computer lab facilities are available on campus, however, the use of such devices in the classroom is encouraged with appropriate and considerate use principles being a priority.

Preparation and Participation in Class

In order to enhance learning, prepare before lectures and tutorials. Read the relevant section of your text book before a lecture, and for a tutorial read both the textbook and the relevant lecture notes. If you have been given tutorial exercises, make sure you complete them. Active participation in lectures and tutorials will improve your learning. Ask questions when something is unclear or when you want to bring some issue to your lecturer or tutor's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

Consultation Sessions

Teachers offer extra time each week to assist students outside the classroom. This is known as 'consultation time.' You may seek assistance from your teacher on email or in person according to how the teacher has explained this to the class. Attendance during consultation time is optional but you are encouraged to use this extra help to improve your learning outcomes.

Course Materials

Lecture notes will be made available to you in MyStudy on the Griffith College Portal and you are advised to either print these out and bring them to each class so that extra notes can be added or BYOD (bring your own device) and add extra notes digitally.

Self-Directed Learning

You will be expected to learn independently. This means you must organise and learn the course content even when you are not specifically asked to do so by your lecturer or tutor. This involves revising the weekly course material. It also means you will need to find additional information for some assessment items beyond that given to you in textbooks and lecture notes, and to construct your own response to a question or topic. All of this requires careful planning of your time. Expect to spend, on average, at least 10 hours per week including class time for each of your courses.

Program Progression

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80%, and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - Program Progression Policy - for more information].

Teacher and course Evaluation

Your feedback is respected and valued by your lecturers and tutors. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your lecturer and tutor or by completing course and lecturer evaluations via Griffith College's evaluation tool whenever these are available.

4. Learning and Teaching Activities

4.1 Weekly Learning Activities

Week	Topic	Activity	Readings	Learning Outcomes
1	Introduction to programming, compilers, and IDEs	Workshop and lab	Chapter 1 Chapter 2	1
2	Variables and drawings	Workshop and lab	Chapter 3 Chapter 4	1, 2
3	Animation and mouse interaction	Workshop and lab	Chapter 5	1, 2
4	Loops, images and strings	Workshop and lab	Chapter 7	1,2
5	Keyboard interaction and collision detection	Workshop and lab	Chapter 5	1,2
6	Arrays and GUI components	Workshop and lab	Chapter 11	1,2
7	Software design and user-defined functions	Workshop and lab	Chapter 9	4
8	Video and Sound	Workshop and lab	Chapter 13	1
9	3D, physics, and particle systems	Workshop and lab	Refer to the course webpage	1
10	Access and visualise data	Workshop and lab	Chapter 12	1, 3
11	Object oriented programming	Workshop and lab	Chapter 1	4
12	Publishing to the web and mobile and revision	Workshop and lab	Refer to the course webpage	5

5. Assessment Plan

5.1 Assessment Summary

Item	Assessment Task	Weighting	Learning Outcomes	Due Date
1	Weekly workshops	20%	1,2,3,4,5	Week 2 to Week 11
2	Quizzes	20%	1,2,3,4	Week 4 & Week 11
3	Assignment 1	30%	1,2	Week 8
4	Assignment 2	30%	1,2,3,4	Week 12

5.2 Assessment Detail

Title: Weekly workshops

Type: Assignment - Problem Solving Assignment

Learning Outcomes Assessed: 1, 2, 3, 4, 5

Due Date: Week 2 to Week 11

Weight: 20%

Marked out of: 20

Task Description:

10 in-class assessed workshops starting from week 2.

Criteria & Marking:

Each workshop will be marked out of 2. Mark breakdowns will be provided in the workshop worksheet.

Submission: Demonstrate to tutor in class.

This assessment item:

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a resubmission provision

Title: Assignment 1

Type: Assignment - Problem Solving Assignment

Learning Outcomes Assessed: 1, 2

Due Date: Week 7

Weight: 30%

Marked out of: 30

Task Description:

Produce a data visualisation, sourcing data from an online data source and presenting it in a meaningful way based on the concepts learned in the first 5 weeks of the course.

Criteria & Marking:

Assignment details and marking rubric will be made available through the portal.

Submission: Project must be submitted through portal and demonstrated in class.

This assessment item:

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a resubmission provision

Title: Quizzes

Type: Test or quiz

Learning Outcomes Assessed: 1, 2, 3, 4

Due Date: Week 4 & Week 11

Weight: 20%

Marked out of: 20

Task Description:

Two in-class quizzes assessing content from the lectures and workshops.

Criteria & Marking:

Quizzes will be held in the computer labs and conducted via the portal. Results will be made available after completion of the quiz.

Submission: Quiz will be conducted through the portal

This assessment item:

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a resubmission provision

Title: Assignment 2

Type: Assignment - Problem Solving Assignment

Learning Outcomes Assessed: 1, 2, 3, 4

Due Date: Week 12

Weight: 30%

Marked out of: 30

Task Description:

Produce a game (arcade or mobile type) using a combination of images, videos, sounds, 3D graphics, animation, and interaction

Criteria & Marking:

Details for the assignment and marking rubrics will be made available on the portal.

Submission: Submitted through the portal and demonstrated in class.

This assessment item:

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a resubmission provision

Submission and Return of Assessment Items

Normally you will be able to collect your assignments in class within fourteen [14] days of the due date for submission of the assignment.

5.3 Late Submission

An assessment item submitted after the due date, without an approved extension from the Course Coordinator, will be penalised. The standard penalty is the reduction of the mark allocated to the assessment item by 5% of the maximum mark applicable for the assessment item, for each working day or part working day that the item is late. Assessment items submitted more than five working days after the due date are awarded zero marks.

Please refer to the Griffith College website - Policy Library > Assessment Policy for guidelines and penalties for late submission.

5.4 Other Assessment Information

Retention of Originals

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

Requests for extension

To apply for an extension of time for an assignment, you must submit an [Application for Extension of Assignment](#) form to your teacher at least 24 hours before the date the assignment is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. [Griffith College Student Medical Certificate](#)]. Please refer to the Griffith College website - Policy Library - for guidelines regarding extensions and deferred assessment.

Return of Assessment Items

1. Marks awarded for in-trimester assessment items, except those being moderated externally with Griffith University, will be available on the Student Portal within fourteen [14] days of the due date. This does not apply to the final assessment item in this course (marks for this item will be provided with the final course result).
2. Students will be advised of their final grade through the Student Portal. Students can review their exam papers after student grades have been published (see relevant Griffith College Fact Sheet for allocated times at Support> Factsheets). Review of exam papers will not be permitted after the final date to enrol.
3. Marks for **all** assessment items including the final exam (if applicable) will be recorded in the Moodle Course Site and made available to students through the Moodle Course Site.

The sum of your marks overall assessment items in this course does not necessarily imply your final grade for the course. Standard grade cut off scores can be varied for particular courses, so you need to wait for the official release of grades to be sure of your grade for this course.

6. Policies & Guidelines

Griffith College assessment-related policies can be found in the [Griffith College Policy Library](#) which include the following policies:

Assessment Policy, Special Consideration, Deferred Assessment, Alternate Exam Sitting, Medical Certificates, Academic Integrity, Finalisation of Results, Review of Marks, Moderation of Assessment, Turn-it-in Software Use. These policies can be accessed using the 'Document Search' feature within the [Policy Library](#)

Academic Integrity Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, pre-meditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of an allegation of a breach of academic integrity being made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor.

Please ensure that you are familiar with the Griffith College Academic Integrity Policy; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Griffith College website - Policy Library > Academic Integrity Policy

Reasonable Adjustments for Assessment – The Disability Services policy

The Disability Services policy (accessed using the Document Search' feature with the [Policy Library](#)) outlines the principles and processes that guide the College in making reasonable adjustments to assessment for students with disabilities while maintaining academic robustness of its programs.

Risk Assessment Statement

There are no out of the ordinary risks associated with this course.

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