

COSC121S1: Introduction to Programming

Initial Course Handout

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1 What's all this then?

This document contains important material about the way COSC121S1 is organised and things that you need to do.

Please read it carefully and take note of all dates. An online version is available via *Learn* (<http://learn.canterbury.ac.nz/>) together with other resources and information. See the section *Online Resources* for more instructions on accessing *Learn*.

2 Aims of the course

In COSC121 you will learn the fundamentals of computer programming using the Python language. Programming is the nuts and bolts of computer science; it is an essential tool but only a small part of the overall subject. Programming involves using a special language to issue a series of instructions to the computer in order to have it solve a particular problem. COSC121 is a prerequisite for all 200 level COSC courses and is normally required as preparation for COSC122.

Most of the information about COSC121, including dates, contacts and assessment, is available from the Course Information System at <http://www.canterbury.ac.nz/courseinfo/GetCourseDetails.aspx?course=COSC121&source=courses>. This document provides some extra details specific to the course. Once you enrol, the information you need will be available through the Learn system.

| Week | Beginning | Lecturer | Lectures | Lab |
|------|-------------|----------|---------------------------------------|-----------------------------------|
| 1 | 24 February | Andy | Introduction to the Course and Python | No lab this week |
| 2 | 3 March | Andy | Strings and Modules | Lab 1: Getting Started |
| 3 | 10 March | Kourosch | Objects, methods and lists | Lab 2: Strings and Modules |
| 4 | 17 March | Kourosch | Conditionals: the <i>if</i> statement | Lab 3: Objects, Methods and Lists |
| 5 | 24 March | Kourosch | Iteration (looping) | Lab 4: Conditionals |
| 6 | 31 March | Kourosch | File Processing | Lab 5: Iteration |
| 7 | 7 April | Kourosch | Style and Program Design | Lab 6: Files + Revision |
| | 14 April | | | |
| | 21 April | | | |
| | 28 April | | | |
| 8 | 5 May | Andy | Sets and Dictionaries | Lab 7: Style and design |
| 9 | 12 May | Andy | Objected Oriented Programming | Lab 8: Sets and dictionaries |
| 10 | 19 May | Andy | Graphical User Interfaces | Lab 9: OO |
| 11 | 26 May | Andy | Introduction to Software Engineering | Revision/Assignment |
| 12 | 2 June | Andy | Overflow (probably no lectures) | Revision/Assignment |

3 Assessment

There are four assessment components: weekly laboratory online quizzes, a mid-semester test, a so-called “assignment” and the final exam. The assignment will be a series of programs for you to write, handed out at regular intervals throughout the course. They will for the most part be automatically marked by our online program tester, but some of them will also be assessed by

staff for readability and ‘style’. This set of assignment programs will also be referred to as the *assignment superquiz*.

The mark distribution is as follows:

| What | Weight | Due | Where |
|----------------------|--------|---|-----------------------|
| Lab Quizzes | 10% | Weekly | Electronic submission |
| Mid-course quiz/test | 15% | Mid-course (tba) | Electronic submission |
| Assignment Superquiz | 20% | At regular intervals through the course | Electronic submission |
| Examination | 55% | See CIS | See CIS |

3.1 Mid-Course Quiz/Test

An online test will be administered in the middle of the course: details to be announced. The quiz/test will be worth 15% of your course grade. The test will be an open book online examination, similar in style and question-type to the lab quizzes, but invigilated and with a strict time limit.

3.2 Programming Assignment

As explained above, the programming assignment is actually a series of stand-alone programs handed out throughout the course, starting in the third week. These will be submitted through the same online quiz system that is used in labs. Each quiz question will have a due date and unless specified otherwise in the task description late submissions will not be accepted.

3.3 Examination

The examination will be 3 hours long (to be confirmed) and will count for 55% of the final grade. It is a closed book examination — textbooks, written material and calculators will *not* be allowed. The date and location of examinations is determined by the Registry, not the department. They’ll be sent to you by email when they’ve been finalised. Also, they will be available through the University Course Information System.

If you have an examination clash then please consult the course supervisor *immediately*.

Enjoy the Course!