
Department of Computer Science, Australian National University
COMP1100 — Introduction to Programming and Algorithms
Semester 1, 2006

General Course Information

Course Outline

COMP1100 *Introduction to Programming and Algorithms* is the first in a sequence of two courses, the second being COMP1110 *Introduction to Software Systems* (or COMP1510 *Introduction to Software Engineering*). COMP1100 is specifically designed to lead into these second courses.

The course provides an introduction to the basic principles of programming. It provides a foundation for further studies in computer science, information systems and software engineering. In combination with COMP1110, it also provides a basic knowledge of programming and software construction for future practising engineers. The course syllabus is built around the basic concepts of programming, including data structures, control structures, abstraction and modularisation. There will be an emphasis on data-directed program design.

The course has a strong practical emphasis and students will be expected to spend considerable effort on designing, developing and testing numerous small programs.

Lecturers

The lecturers for the course will be Clem Baker-Finch and Malcolm Newey. Their offices are CSIT N317 and N318 and their phone numbers are x54625 and x54506 respectively. See the course web pages for their consultation hours.

Organisation

COMP1100 Introduction to Programming and Algorithms is a 6 unit course offered in first semester. There will be at least 30 one-hour lectures and 10 two-hour laboratory sessions. You should attend all lectures and one laboratory session each week. Unless otherwise advised there will be three lectures per week: Monday 4–5pm, Thursday 9–10am and Friday 2–3pm, all in Manning Clark Centre, Theatre 1.

The two hour laboratory sessions will commence in Week 2, but there is a set of familiarisation exercises for you to do in your own time during Week 1. Every student must register for one practical group as soon as possible. Registration is through the **StReAMS** tutorial and practical enrolment system, accessible on the web at URL:

<http://cs.anu.edu.au/streams/>

Information Sources

The course web site is the main information resource. All documents and announcements relevant to COMP1100 will be available from these pages. The URL is

<http://cs.anu.edu.au/student/comp1100/>

Lecture notes, sample code, practical exercises, assignments and other handouts will be published on the course web site. Recordings of lectures will be available from the course's WebCT sister site.

Notices and announcements may be posted on the *COMP1100 announcements board* accessible from the course web site. We encourage you to use the *COMP1100 discussion board* for student generated issues related to COMP1100.

The main textbook for the course is

Haskell: The Craft of Functional Programming (2e), Simon Thompson, (Addison-Wesley)

Later in the semester we will also be using

Big Java (2nd edition), Cay Horstmann (Wiley)

which is also the prescribed text for COMP1100 and COMP1510 in second semester. Copies of both will be available on short loan in the library but you are strongly encouraged to obtain your own copies.

Assessment

There are several components to the assessment scheme for COMP1100.

Assignments (35%) There will be three assignments, the first and third worth 10% each and the second worth 15%. Their respective due dates will be near to weeks 6, 9 and 12.

Lab participation (5%) This mark will be based on your participation in practical classes and the satisfactory completion of set exercises.

Mid-semester quiz (10%) There will be a one hour open-book exam in week 7 to test your comprehension of the lecture material. It will be redeemable in the sense that if you score better on the final exam, we will use that percentage for the mid-semester quiz.

Final Exam (50%) There will be a three hour final exam during the regular ANU examination period. It will not be open-book, but you will be permitted to take in two A4 pages of hand-written notes. This exam will test material from the entire course.

(In other words, the mid-semester quiz and the final exam count for a total of 60%. If your mark on the mid-semester quiz is *better* than your mark on the final exam, they will count for 10% and 50% respectively. If your mark on the mid-semester quiz is *worse* than your mark on the final exam, your mid-semester mark will be ignored and your final exam will count for 60%.)

Marks may be scaled to determine final results.

Deadlines

In general, there will be no extensions for assignments, the exception being for illness serious enough to stop you working, supported by a medical certificate. Other similarly unforeseeable and serious circumstances will also be considered if similarly verified. Without an explicit extension from the course lecturers, late assignments will be penalised at the rate of 10% per day (or part thereof). It is your responsibility to ensure that you have successfully submitted an assignment before its deadline.

Programming assignments can take an unexpectedly long time so you should try to complete most of the work well before the deadline. In the cases where we are using on-line submission, you should make a preliminary submission well before the deadline. You can then submit later versions after that, up to the deadline.

Seeking Assistance

We're here to help. You can ask the course lecturers, tutors, consultants and other students. See the Assistance link on the COMP1100 web pages for more details about how and when.