Programming Languages - Course Outline
COMP 304: 2015 Trimester 1

This document sets out the workload and assessment requirements for COMP 304. It also provides contact information for staff involved in the course. If the contents of this document are altered during the course, you will be advised of the change by an announcement in lectures and/or on the course web site. A printed copy of this document is held in the School Office.

The Course

COMP 304 will broaden your knowledge about programming languages by introducing you to functional and logic programming. These programming paradigms are very different from the imperative underpinning of the programming languages discussed at 100 and 200 level. Understanding these paradigms and their associated programming techniques and idiomatic usages will not only put you into a better position to evaluate language designs but also will allow you to use a number of these techniques in conventional programming languages. COMP 304 also looks at the history of programming languages, enabling you to place the discussed programming languages into their respective context and thus obtain a broader perspective.

Objectives

By the end of the course, you should be able to:
- understand and describe the underlying principles of a variety of programming languages.
- read, design and write programs in a functional programming language.
- read, design and write programs in a logic programming language.
- understand the various advantages and disadvantages of the imperative, functional, and logic paradigms.

The assignments will allow you to practice the practical aspects of these topics, and help you to understand the basic concepts. The final examination will assess your understanding of the topics of the course.

Prerequisites

The prerequisites for COMP 304 are:
- COMP 261 or SWEN 221 or NWEN 241
- SWEN 224

Trimester Dates and Lecture Times

Comp304 is a trimester 1 course. The trimester starts on Monday 2rd March. The examination period at the end of the course is 12 June - 1 July.

Lectures and Tutorials

Classes for COMP 304 are Monday, Tuesday and Thursday, 2.10-3.00pm, in Cotton 119. Usually, Monday and Tuesday will be lectures, and Thursday will be used for tutorials.

Lectures will discuss material beyond what is on the slides, and tutorials will aim to reinforce learning through problem solving exercises and allowing more open discussions. Although attendance is not compulsory it is strongly recommended.

We will usually hand out copies of the lecture slides, though we cannot guarantee to always have them ready for the lecture. It will always be possible to download slides from schedule of lecture topics after the lecture.

Assignments

There will be six assignments which are aimed at developing your programming skills and deepening your knowledge about functional and logic programming.

No.	Title	Due Date
1	Functional Programming 1	19 March
2	Functional Programming 2	2 April
3	Functional Programming 3	30 April

4	Logic Programming 1	7 May
5	Logic Programming 2	21 May
6	Logic Programming 3	4 June

Use the electronic submission system to submit your work.

Assignments are due at midnight on the stated date. Late submissions will only be accepted in exceptional circumstances and after prior consultation with the course coordinator. Instructions for assignments will be provided in lectures and on the course web site.

Exam

There will also be a 2 hour final exam in the official examination period 12 June - 1 July. The timetable for final examinations will be posted on the notice board outside the faculty office.

No computers, or programmable electronic calculators or similar devices will be allowed. Non-electronic foreign language dictionaries will be allowed.

Workload

In order to maintain satisfactory progress in COMP 304, you should plan to spend an average of at least 10 hours per week on this paper. An approximate breakdown for these hours is:

Activity	Time
Lectures and tutorials	3 hours
Readings, revision and preparation	2 hours
Assignments	5 hours

Some students will need less time than this; others will need more.

Working Together and Plagiarism

We encourage you to discuss the principles of the course and assignments with other students, to help and seek help with programming details, problems involving the lab machines. However, any work you hand in must be your own work.

Please read the School Policy on Plagiarism. We will penalise anyone we find plagiarising, whether from students currently doing the course, or from other sources. Students who knowingly allow other students to copy their work may also be penalised. If you have had help from someone else (other than the course tutor or lecturer), it is always safe to state the help that you got. For example, if a student had help from someone else with some detail, it is not plagiarism as long as the student states who provided help regarding that detail.

Passing COMP 304

Your grade for COMP 304 will be determined based on the following assessment weightings:

Item	Weight
Assignments	30% (5% each)
Final Examination (2 hours)	70%

To pass COMP 304 you must meet the following mandatory requirements:

- You must gain at least a **D** grade in the final exam.
- You must submit reasonable attempts for at least 4 of the assignments.

You must also gain at least an average of **C-** over all the assessment.

Withdrawal

The last date for withdrawal from COMP 304 with entitlement to a refund of tuition fees is Friday 13 March 2015. The last date for withdrawal without being regarded as having failed the course is Friday 15 May 2015, though later withdrawals may be approved by the Dean in special circumstances. Where applicable, you may want to consult the StudyLink rules about failing courses.

Additional Information

Staff

- Lindsay Groves, lecturer and course coordinator, Room: Co257, Phone: 463 5656, Email: linsday@ecs.vuw.ac.nz
- Tim Jones, tutor, Room Co256, Phone 463 5233 x8485, Email: tim@ecs.vuw.ac.nz
- James Greenwood-Thessman, class rep, Email james@greenwood.net.nz

Textbook

There is no official course textbook. The lecture notes cover the basic material of the course, recommendations for additional reading will also be provided. In particular, we suggest the following free on line Haskell book

Announcements and Communication

The main means of communication outside of lectures will be the web pages at http://ecs.victoria.ac.nz/Courses/COMP304_2015T1/. There you will find, among other things, this document, the lecture schedule, assignments and the COMP 304 Forum. Questions and comments can be posted to this web-based bulletin board system, and staff will read these posts and frequently respond to them.

Rules & Policies

Find key dates, explanations of grades and other useful information at http://www.victoria.ac.nz/home/study.

Find out about academic progress and restricted enrolment at http://www.victoria.ac.nz/home/study/academic-progress.

The University's statutes and policies are available at http://www.victoria.ac.nz/home/about/policy, except qualification statutes, which are available via the Calendar webpage at http://www.victoria.ac.nz/home/study/calendar (See Section C).

Further information about the University's academic processes can be found on the website of the Assistant Vice-Chancellor (Academic) at http://www.victoria.ac.nz/home/about/avcacademic

All students are expected to be familiar with the following regulations and policies, which are available from the school web site:

Grievances
Student and Staff Conduct
Meeting the Needs of Students with Disabilities
Student Support
Academic Integrity and Plagiarism
Dates and Deadlines including Withdrawal dates
School Laboratory Hours and Rules
Printing Allocations
Expectations of Students in ECS courses

The School of Engineering and Computer Science strives to anticipate all problems associated with its courses, laboratories and equipment. We hope you will find that your courses meet your expectations of a quality learning experience.

If you think we have overlooked something or would like to make a suggestion feel free to talk to your course organiser or lecturer.

Course Outline as PDF