COMP9020 Course Information for Session 1 2015

Prerequisites

none

Update Policy

This course introduction should be relatively stable at the beginning of session. Any updates after the initial publication in week one will be discussed in class and announced under the header **Notices** in the menu on the left hand side of the course web page.

Course Overview by Keywords

The official scope is: mathematical methods for designing correct and efficient programs; mathematics for algorithm analysis; logic for proving and verification.

The actual content is taken from a list of subjects that constitute the basis of the tool box of every serious practitioner of computing: set and relation theory; induction, recursion and recurrence relations; order of growth of functions; structured counting (combinatorics); discrete probability; graph theory; trees for algorithmic applications; propositional logic and boolean algebras.

Course Objectives

After successfully completing this course, you will have developed an increased level of mathematical maturity to assist with the fundamental problem of *finding, formulating, and proving properties* of programs.

Graduate Attributes

are important because the disciplinary knowledge that students develop at university is not adequate in itself as the basis for their future lives. Instead, graduates need qualities and skills that equip them for lifelong learning. These include critical thinking and problem-solving skills, communication skills, information literacy skills, and group work skills. says a UNSW policy.

- **Critical thinking and problem-solving skills** will be fostered a.o. in-class quizzes and proof practice sessions.
- **Communication skills**, both oral and written, are sharpened by writing and presenting mathematical thought.

Course Evaluation and Development

This course is being continuously improved and we will conduct a survey through the CATEI (Course and Teaching Evaluation and Improvement) process at the end of session to obtain feedback on the quality of the various course components. Your participation in the survey will be greatly appreciated. Students are also encouraged to provide informal feedback during the session, and to let the lecturer-in-charge know of any problems as soon as they arise.

Student feedback from last offering indicated a preference for more programming examples and more exercises. Students also asked for lectures to be recorded. We will endeavour to achieve this in this offering.

Keeping Informed and Staying in Touch

Course Web Site

Important notices related to this course will be displayed on the *course home page*, which is located at http://www.cse.unsw.edu.au/~cs9020/. It is your responsibility to check this page regularly.

Email

Only in rare cases urgent information may also be sent to your CSE email account.

Requests of a confidential nature should be sent to the lecturer-in-charge by email.

Message Board

A message board has been set up for this course under the header **Course Forums** in the menu on the left hand side of the course web page. All but the truly confidential questions should be posted there.

Staff

Name	Role

Michael Thielscher lecturer-in-charge

Textbook

The textbook associated with this course is

- [RW] KA Ross and CR Wright, *Discrete Mathematics*, 5th edition, Pearson, 2003. This has been the prescribed textbook for the course for the last 10 or more years.

Assessment Summary

The final mark is determined as the sum of the marks for the assessable components for this course:

- 100% exams:
  - a mid-session test (1 hour during the lecture in week 7) worth up to 25 marks
  - a final exam (2 hours) worth up to 75 marks

  Your final mark for this course will be the maximum of $m+f$ and $f * 100/75$, where m is the mid-session test mark and f is the final exam mark.

Disclaimer

(Plagiarism, special considerations, supplementary exams)

Recall that you are bound by the Yellow Form, whose terms you have agreed to. Particularly relevant are the sections on *Special Consideration — Illness & Misadventure* and the *CSE Supplementary Assessment Policy*.

There are several on-line sources to help you understand what plagiarism is and how it is dealt with at UNSW:

- Learning Centre: Plagiarism and Academic Integrity
- MyUNSW: Plagiarism and Academic Misconduct
- CSE: Addendum to UNSW Plagiarism Guidelines

Acknowledgments

Slides, notes, problem sets and other material are partially from previous lecturers of this course, especially Kai Engelhardt and Lavy Libman, and Ross and Wright's book.
