COMP9020 Course Information for Session 2 2014

(The present document ($Revision: 1.1 $) is available online at http://www.cse.unsw.edu.au/~cs9020/14s2/admin/intro14s2.html).

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 **Fresh stuff** in the menu on the left hand side of the COMP9020 web site.

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 practioner 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

I take student feedback seriously. I usually run my own more detailed course surveys to find out what works and what doesn't. Fill ratios of these surveys tend to be much higher and feedback more detailed because students can sometimes score a bonus mark for filling in.

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.

Only requests of a confidential nature should be sent to the course account, cs9020. Anything else should go onto the message board described next. If in doubt, send an email and be prepared to receive the one-line answer: *"This can be asked on the board."* Emails originating from non UNSW/CSE accounts are routinely ignored.

Message Board

A message board has been set up for this subject. All but the truly confidential questions should be posted there.

RSS Feed

Notifications about anything deemed noteworthy and related to this subject are maintained as an RSS feed. The newest items of that feed are also displayed first on the subject website.

Staff

Name	Role
Kai Engelhardt	lecturer-in-charge

Consultations

If you need the services of a consultant, make an appointment via email and come to Kai's office (217c in K17). Ring using the phone next to the glass door (x54497).

Textbooks

The textbooks associated with this course are

- [LLM] Discrete Mathematics for Computer Science by Lehman, Leighton, and Meyer. These are comprehensive (5xx pages) lecture notes for a decent course on a similar topic at MIT.
- [RW] KA Ross and CR Wright, *Discrete Mathematics*, 5th edition, Pearson, 2003. This used to tbe 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 and bonus marks of the course:

- 100% exams:
  - a mid-session test (1 hour during the lecture in week 6) worth up to 25 marks
  - a final exam (2 hours) worth up to 75 marks

  The exam mark e is the maximum of $m+f$ and $f*100/75$, where m is the mid-session test mark and f is the final exam mark.
- 1 bonus mark for filling in an online course survey at the end of the session, if it is run.

Disclaimer

(Plagiarism, special considerations, supplementary exams)

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

Maintained by: COMP9020
Last modified: Sun Jul 27 17:49:03 EST 2014