COMP9020 Course Information for Session 1 2014

(The present document is available online at http://www.cse.unsw.edu.au/~cs9020/14s1/admin/intro14s1.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 naturally occur in practical rigorous 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*.

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

All student feedback is sincerely appreciated and taken seriously. If you encounter any problem (lectures going too fast/too slow, too many/too few examples, etc), I want to hear about it as soon as possible - not just after the end of the course when it will be too late for you to benefit. Comments about what is going well and what you like will be appreciated too.

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.

Email to the lecturer with any issues/questions/problems is welcome, if you cannot make an appointment to meet for a consultation in person.

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	email

Lavy Libman lecturer-in-charge llibman@cse.unsw.edu.au

Consultations

Meeting for consultation in person is highly encouraged whenever you have a question or problem. I am generally available during Friday before the lecture, or make an appointment via email for other days of the week. My office is 501C in the CSE building (K17); ring using the phone next to the glass door (x55930).

Text Book

The textbook associated with this course is KA Ross and CR Wright, *Discrete Mathematics*, 5th edition, Pearson, 2003.

The textbook is not compulsory and all the theoretical material will be covered in the lectures. However, the book is highly recommended as it contains plenty of practice problems and exercises. Additional references will be provided throughout the session as needed.

Assessment Summary

The final mark will be determined as follows:

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

  The overall mark 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.
  In other words the mid-session test gives you a "free try"; if your mark in it is worse than (1/3 of the final exam mark), then your overall mark will be determined only from the final exam mark.

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*.

CSE uses its addendum to the UNSW plagiarism policy.

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