Course Review

Goal: for you to become a competent computer scientist.

Requires an understanding of fundamental concepts:

- number-, set-, relation- and graph theory
- logic and proofs
- recursion and induction
- order of growth of functions
- combinatorics and probability

In CS/CE these are used to:

- formalise problem specifications and requirements
- develop abstract solutions (algorithms)
- analyse and prove properties of your programs

Assessment Summary

Exams:

- mid-session test worth up to 30 marks
- final exam (2 hours) worth up to 100 marks

Your final mark for this course will be

\[
\text{maximum} \ (f ; 0.7 \cdot f + m)
\]

- m – mid-session test mark
- f – final exam mark

⇒ If you do better in the final exam, your mid-session test result will be ignored

Final Exam

Goal: to check whether you are a competent computer scientist.

Requires you to demonstrate:

- understanding of mathematical concepts
- ability to apply these concepts and explain how they work

Lectures and study of problem sets have built you up to this point.
Final Exam

Wednesday, 21 June, 8:45am
Scientia Building (G19), Leighton Hall

- 10 multiple-choice questions plus 5 open questions
- Covers all of the contents of this course
- Each multiple-choice question is worth 4 marks ($10 \times 4 = 40$)
  Each open question is worth 12 marks ($5 \times 12 = 60$)
- Total exam marks = 100
- Do not write your answers in the Examination Answer Book, it will not be marked.
- Time allowed – 120 minutes + 10 minutes reading time
- Closed book. One handwritten or typed A4-sized sheet (double-sided is ok) of your own notes

Revision Strategy

- Re-read lecture slides
- Read the corresponding chapters in the book (R & W)
- Review/solve problem sets
- Solve more problems from the book
- Attempt prac exam on course webpage

(Applying mathematical concepts to solve problems is a skill that improves with practice)

Supplementary Exam

You can apply formally for special consideration

- a supplementary examination may or may not be granted
- a supplementary examination is typically more difficult than the original examination

If you attend an exam

- you are making a statement that you are “fit and healthy enough”
- it is your only chance to pass (i.e. no second chances)

If your overall result $\max(f ; 0.7 \cdot f + m)$ is $\geq 47$ you can sit the supplementary exam, in which you must score 50 or higher to pass

Assessment

Assessment is about determining how well you understand the syllabus of this course.

If you can’t demonstrate your understanding, you don’t pass.

In particular, I can’t pass people just because ...

- please, please, ... my family/friends will be ashamed of me
- please, please, ... I tried really hard in this course
- please, please, ... I’ll be excluded if I fail COMP9020
- please, please, ... this is my final course to graduate
- etc. etc. etc.

(Failure is a fact of life. For example, my scientific papers or project proposals get rejected sometimes too)
Assessment (cont’d)

Of course, assessment isn’t a “one-way street” ...
- I get to assess you in the final exam
- you get to assess me in UNSW’s MyExperience Evaluation
  - go to https://myexperience.unsw.edu.au/
  - login using zID@ad.unsw.edu.au and your zPass

Response rate (as of last Wednesday): 15.3% 😞

Please fill it out …
- give me some feedback on how you might like the course to run in the future
- even if that is “Exactly the same. It was perfect this time.”

So What Was The Real Point?
The aim was for you to become a better computer scientist
- more confident in your own ability to use formal methods
- with a set of mathematical tools to draw on
- able to choose the right tool and analyse/justify your choices
- ultimately, enjoying solving problems in computer science

Finally

That’s All Folks

Good Luck with the exam and with your future computing studies