

Course Goals

At the end of COMP2041|COMP9044, we hope that you ...

- understand a wider range of programming languages, tools and techniques
- have a deep understanding of version control GIT
- understand more about how/when to apply these languages, tools and techniques

Major topics ...

- components of modern computer systems
- how C programs execute (at the machine level)
- how to write (MIPS) assembly language
- Unix/Linux system-level programming

Syllabus/Topics

- unix filters
- regular expressions
- shell
- git
- perl
- make
- linux tools and admin
- performance/language choice

Assessment

- 15% Labs
- 10% Weekly Programming Tests
- 15% Assignment 1 — due week 7
- 15% Assignment 2 — due week 10
- 45% Final Exam

Above marks may be scaled to ensure an appropriate distribution

To pass you must:

- score 50/100 overall
- score 18/45 on final exam

For example:

55/100 overall, 17/45 on final exam \Rightarrow **55 UF** not 55 PS

- 9 labs - weeks 1-5,7-10
 - max lab mark 2 marks with challenge exercises
 - max lab mark 1.6 marks without challenge exercises
 - 8 lab marks summed and capped at 15
 - you could get 99% for lab mark without challenge exercises
 - most people will get 12+/15
- 8 tests - weeks 3...10:
 - max test mark 1.7
 - best 6 of 8 test marks summed and capped at to give mark out of 10.
 - most people will get 7+/10

Exam

- Run under same conditions as Weekly Tests
- Except 3 hours and some question may not be coding
- Saturday 22 August 13:00 — 16:00
- Exam will be released on class web site at 12:50
- Announcements before & during exam will be sent to your UNSW email
- Questions during exam can be sent to `cs2041.exam@cse.unsw.edu.au`
- We may also announce a 2nd place you can ask questions during exam.

Exam Conditions

- You are not permitted to communicate (email, phone, message, talk, ...) to anyone but COMP2041|COMP9044 staff during exam
- You are not permitted to get help from anyone but COMP2041|COMP9044 staff during the exam.
- This is a closed book exam: you are not permitted to access papers, books, files on your computer or the internet
- You are permitted to access the exam web pages on the class web site
- You are permitted to access the online language cheatsheets & documentation on the class web site
- Deliberate violation of exam conditions will be treated as serious misconduct

Exam Format

- 12-15 questions
- Each questions answered in a separate file.
- Some questions will ask you to write shell.
 - or perhaps a shell pipeline
- Some questions will ask you to write Perl.
- Other languages not permitted (e.g., Python, C++, Java, Rust, ...)
- Answers will be submitted with give.
- Questions not equal difficulty
- Questions may not be worth equal marks

Non-coding Questions

- Answers must be an specified file, e.g. `q1.txt`
- Question may specify format of file
 - e.g. 5 integers one per line
 - follow this format **EXACTLY**
- Question must give you an initial file to complete
- File will be submitted with `give`.

Coding Questions

For question that require you to write C or MIPS ...

- Questions will usually include examples.
- You may or may not be given starting code.
- You may or may not be given test data or other files
- 1 or more autotests may be available on submission.
- Passing autotests does not guarantee any marks.
Do your own testing.
- There may be no submission tests for some questions.
- It is not sufficient to match any supplied examples.

Marking of Coding Questions

- Answers will be run through automatic marking software.
 - Please follow the input/output format shown exactly.
 - Please make your program behave exactly as specified.
- All answers are hand marked, guided by automarking.
 - No marks awarded for style or comments . . .
 - But use decent formatting so the marker can read the program!
 - Comments only necessary to tell the marker something.
- Minor errors will result in only a small penalty.
 - e.g. an answer correct except for a missing semi-colon would receive almost full marks.
- No marks will given unless an answer contains a substantial part of a solution ($> 33\%$).
- No marks just for starting a question and writing some code

Special Exam Conditions

- extra time specified in ELS exam conditions is provided in this exam
- other ELS exam conditions will also be allowed
- email cs2041@cse.unsw.edu.au if you have concerns regarding ELS conditions

Problems During Exam

- if a problem occurs during the exam, e.g. internet failure
- please document the problem as possible, e.g. take screenshot
- email `cs2041.exam@cse.unsw.edu.au`
- if the problem is of short duration we may be able to give you extra time
- otherwise you'll need to apply for special consideration

Special Consideration — 'Fit to Sit'

- By starting the exam, you are saying "I am well enough to sit it".
- If unwell before exam, see a doctor, apply for Special Consideration.
- If you become unwell during the exam
 - email `cs2041.exam@cse.unsw.edu.au`
 - if you can't continue the exam you will need to see a doctor and apply for Special Consideration.

What to study

- Important Areas to Focus Your Study On
 - anything covered in a standard lab exercise
 - anything covered in a weekly test
 - anything covered by the assignments
- Less Important Areas
 - challenge lab exercise
 - topics not covered in labs, tests or assignments
 - may still be questions on these topics but not many

Provisional Results

- Exam marks will be made available via class database when marking is complete.
- I'll send email announcing this.
- Marking will probably take 10 days.
- You will receive marks for individual exam questions.
- You will be opportunity to have marking reviewed.
- Final results will appear on myUNSW.

Supplementary Assessment

- UNSW supplementary exams are run centrally.
- Supplementary exams are for students who miss original exam due to illness/misadventure.
- If this is you — apply for special consideration.
- Lecturers & schools can not offer supps.
- Students with borderline results are not offered supps.
...except potential graduands
- Supp exams centrally timetabled for week of 7-11 September
- Similar format to final exam

- Last weeks not integrated into labs
- Need labs where you manipulate a linux system
- A lot to learn: regex, shell, Perl
- Not enough time to cover (so) many things
- Labs a lot of work - but you learnt a lot
- Assignments a **lot** of work - but you learnt a lot
- Pandemic - meaning we didn't get to meeteach other

- Labs & tutes (do you agree??)
- Weekly Tests (do you agree??)
- Tutors
- Discourse
- Students

And that's all ...

- Good Luck
- I hope what you've learnt in this course will be useful.
- I hope you get the mark you deserve.