Welcome to COMP3231/COMP9201 Operating Systems!

School of Computer Science & Engineering UNSW

2005/S2

— Staffing —

Gabriele Keller (Lecturer)
Simon Winwood (Subject Admin)
and Nick Fitzroy Dale, Patrick Zardanovski (Tutors)

OVERVIEW

- → Course Outline
- → Computer Systems Overview
- → Operating System Overview

LECTURES

- → Common for all courses (COMP3231/COMP9201)
- → Monday 6pm 9pm
- → Lecture notes will be available on the course web site (prior to lecture if possible)
- → Lecture notes and textbook are not a substitute for attending the lectures

3

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TUTORIALS

- → Start in week 2
- → Everyone (including 9201 students) has to be enrolled into a tutorial to get assignments marked
- → For 3231 students: marks awarded for participation (not just attendance)
- → You will only get participation marks in your enrolled tutorial
- → Attendance is highly recommended

PREREQUISITES

COMP2011 — Data Organisation:

→ Stacks, queues, hash tables, trees, heaps, ...

COMP2021 — Digital Systems Structure:

- assembly programming
- → mapping of high-lebel procedural languages to assembly

or the postgraduate equivalent

- → You are expected to be competent programmers!!!!
- → We will be using the C programming language
- → The dominant language for OS implementation.
- → Need to understand pointers, pointer arithmetic, explicit memory allocation.

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- → Three assignments
 - Due approx. in week 6, 9, 12
 - Assignment 0 gives you the chance to familiarise yourself with OS/161, the version control system CVS, and GDB debugger
 - handed out this week
 - due in week 3
 - remaining three assignments will be more challenging

ASSIGNMENTS 5-A

ASSIGNMENTS

- → In groups of 2 students: info on how to form groups will be available soon
- → Start early with assignments
- → Bonus marks for
 - finishing within 48 hours of release
 - finishing a week early
 - see course handout for details

ASSIGNMENTS 6

→ Late penalty

- assignments accepted until 7 days after deadline
- 4% penalty of total assignment value per day
- Example:
 - assignment worth 20 marks
 - you have 18/20
 - five days late
 - mark:

$$18 - 20 * 0.04 * 5 = 14$$

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- → We do take plagiarism seriously please contact us early if you think you will not be able to complete an assignment

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EXAMS

- → The is no mid-session exam
- → The final exam is two hours
- → Supplementary exams are oral exams
- → Supplementary are available according to school policy, not as second chance

FINAL MARK

Two components:

- ① Class mark: max. of 100
 - 90% assignments (100% for COMP9201 students)
 - 10% tutorial participation mark (for COMP3231 students)
- 2 Exam mark: max. of 100

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Final Mark:

- → To pass the course, min of 40 in each component necessary
- → Final mark, COMP3231: harmonic mean of class and exam mark (50/50)

$$\frac{2*E*C}{E+C}$$

 \rightarrow If C < 40 or E < 40, then

$$min(44, \frac{2*E*C}{E+C})$$

Final mark, COMP9201:

Maximum of

→ harmonic mean of class and exam mark (50/50)

$$\frac{2*E*C}{E+C}$$

→ and weighted harmonic mean of class and exam marks (20/80):

$$\frac{5*E*C}{E+C}$$

 \rightarrow If C < 40 or E < 40, then

$$min(44, max(\frac{2*E*C}{E+C}, \frac{5*E*C}{4*E+C}))$$

BOOKS

Main Text Book:

→ Andrew S. Tanenbaum: Modern Operating Systems, 2nd Edition

Further Reference:

- → Silberschatz et. al: Operating Systems Concepts
- → William Stallings: Operating Systems, 5th Edition

C Programming:

- → Kernigham & Ritchie: The C Programming Language, 2nd Edition
- → S. Harbison and G. Steele: C: A Reference Manual

CONTACT US

- → Questions?
 - admin related: mail to cs3231@cse.unsw.edu.au
 - lecture, tutes, assignments: message board
- → Consultation:
 - Tuesday, 14pm 15pm
 - additional assignent consults if required

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What are the characteristics of a "good" operating system?