Administrivia

CS 4410
Operating Systems
Spring 2018
Professor Bracy
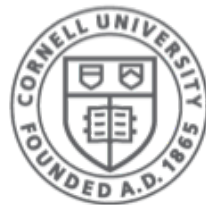
Cornell University FOUNDED A.D. 1865 | Cornell CIS
COMPUTING AND INFORMATION SCIENCE

[R. Agarwal, L. Alvisi, A. Bracy, M. George, E. Sirer, R. Van Renesse]

How this class is organized

- Who's Who
- Before you take this class…
- Lecture
- Getting Help
- Grades & Policies

Who am I?

- BS: Symbolic Systems, BA: German
- MS: Computer Science
- PhD: CIS (Computer Architecture)
- Industry: Research Scientist @ Intel Labs
- "All of Programming"
  Google Play Book & now a Coursera Course
- Senior Lecturer: Cornell: 1110, 3410, 4410, 4411
  ACSU Faculty of the Year 2016, Engineering Teaching Award 2017

Interests: microarchitecture, performance, hardware

Non-geek: novice runner, intermediate jazz connoisseur, doing cool things in Ithaca with (and without) kids

Who are you?

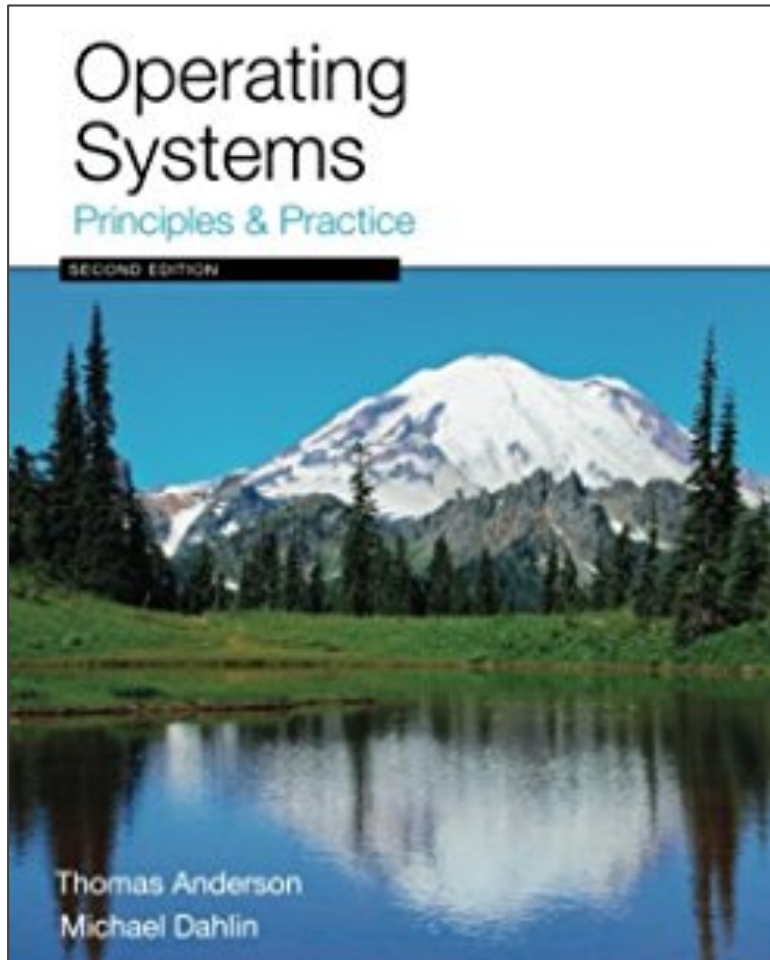- Demographics
- 4411?
- Meet your neighbors

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Prerequisites

- CS 3410, CS 3420 or equivalent required

- **Otherwise:** you must contact the instructor, explain your situation and request permission.

Required Textbook

- Operating Systems, Principles and Practice, by Anderson & Dahlin

- Available in bookstore, library, online, and ebook (in 4 volumes)

- Other resources listed on the course website

Lectures

- Tues/Thurs 1:25-2:55pm, Phillips 101

- Electronics policy
  - ***No cell phones anywhere, ever***
  - No laptops in the front section, please
  - Studies show that such classrooms without laptops are far more effective

- Please ask questions!
  - Save private discussions for later

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  - Office Hours
  - Online Tools
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Office Hours

- Professor Bracy:
  - Tue/Thu 2:40-3:30
  - Start in Phillips 101, then head to Gates 452

- Course Staff
  - Lots of great TAs this semester (website)
  - Each TA holds 2 hours (also on website)

Online Resources

Webpage: `http://www.cs.cornell.edu/courses/cs4410/`

- Schedule, exam & due dates
- Lecture notes
- Mostly static

Github for code: `https://github.coecis.cornell.edu`

CMS for assignments: `https://cmsx.cs.cornell.edu`

- Autogrades, Grades, & Regrades

Gradescope for exams

- Grades & Regrades

Online Help

Piazza

- For 99% of the communication
  - Private posts should be visible to *all* course staff
  - Do not contact staff by other means (FB, texts, *etc.)*
- For help with assignments, concepts

cs4410-staff@cornell.edu: time sensitive matters

- Goes to Professor Bracy & course staff leads

cs4410-prof@cornell.edu: *sensitive* matters

- Goes to Professor Bracy

Please no emails to personal email accounts.

Other Resources

[Engineering Advising](#)	Academic advising for engineering students.
[Arts College Student Services](#)	A listing of general support services for a variety of concerns students may have.
[Gannett](#)	Cornell University Health Service Center. For all health related concerns.
[CAPS](#)	If you experience emotional distress, please contact **C**ounseling **a**nd **P**sychological **S**ervices.
[Student Disability Services](#)	Ensures that all aspects of student life are accessible, equitable, and inclusive of those with disabilities. Send accommodation letters to Jenna Edwards (jls478, Gates 401) by Feb 15.

Email cs4410-prof@cornell.edu
Get help. Get documentation. The earlier the better. (Graduating?)
Also, please look out for each other.

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Course Content

- Three Components
  - Lectures and Readings
  - Exams
  - Assignments

You are expected to keep up with all three

Draft Syllabus

- Introduction
- Architectural Support for OSs
- Processes and Threads (A1)
- Scheduling
- Synchronization (A2)
- Deadlocks
- Memory Management

3/15: Prelim 1

- Virtual Memory
- Networking (A3)
- Disks & RAID
- Filesystems (A4)

4/26: Prelim 2

- Security

5/22: Final Exam

Grading Policies

Late Policy

- Each person has a total of **4** "Slip days"
- Max of **2** slip days for any assignment
- Cannot ever submit later than 48 hours late
- I really do not budge

Regrade policy

- Within 1 week of assignment (or exam)'s return

A word about autograders

Semester Grades

45%   Assignments
50%   Exams (best 2 of 3*)
 5%   Altruism Points

- Goal is to give everyone an A
- Help us achieve this

*Please note how LATE the Final is!
If you have to leave for an internship, this will be the exam grade that we drop.*

Altruism Points

Once this semester, contribute to the education of your fellow class members

Examples (be creative!):

- Helpful & Thoughtful post on piazza
- Elite Piazza answerer
- Make a video that explains a concept
- Good explanation of a practice exam question
- Share code that illustrates a cool concept
- Research something left unanswered
- use `alt` tag on piazza when possible

Academic Integrity & Honor Code

Closed-book exams, no calculators/phones

All submitted work must be your own

- OK to discuss concepts together
- White/black board rule (work, erase, wait, code)
- Cannot be in possession of other's solution
- Do not look at code that is not yours
  - a friend's or online
  - what is seen cannot be unseen

Violations will be prosecuted