CS 3410: Computer System Organization and Programming

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The slides are the product of many rounds of teaching CS 3410 by Professors Weatherspoon, Bala, Bracy, and Sirer.

Who am I? (Part 1)

Anne Bracy

Career Path

- Undergrad @ Stanford
- Grad School @ UPenn (computer architecture)
- Intel Labs
- Lecturer @ Washington University in St. Louis
- Sr. Lecturer @ Cornell
  - 3410, 4410, 4411

How class is organized

- Before you take this class…
  - What to take, what to buy
- Lecture
- Lab Sections
- Office Hours
- Online Tools
- Grading
- Who’s Who

Pre-requisites and scheduling (1)

CS 2110 required (Obj-Oriented Programming & Data Structures)

- Must have satisfactorily completed CS 2110
- *Cannot take CS 2110 concurrently with CS 3410*

CS 3420 (ECE 3140) (Embedded Systems)

- Take either CS 3410 ***or*** CS 3420
  - both satisfy CS and ECE requirements
- *However, Need ENGRD 2300 to take CS 3420*

CS 3110 (Data Structures and Functional Programming)

- Not advised to take CS 3110 and 3410 together

Pre-requisites and scheduling (2)

CS 2043 (UNIX Tools and Scripting)

- 2-credit course will greatly help with CS 3410.
- Spring only – *Lucky you!*

CS 2022 (Introduction to C) and CS 2024 (C++)

- 1 to 2-credit course will greatly help with CS 3410
- *Unfortunately, 2022 rarely offered*
- Instead, we will offer a primer to C during lab sections and include some C questions in homeworks

A word about Enrollment

Room Capacity = 207

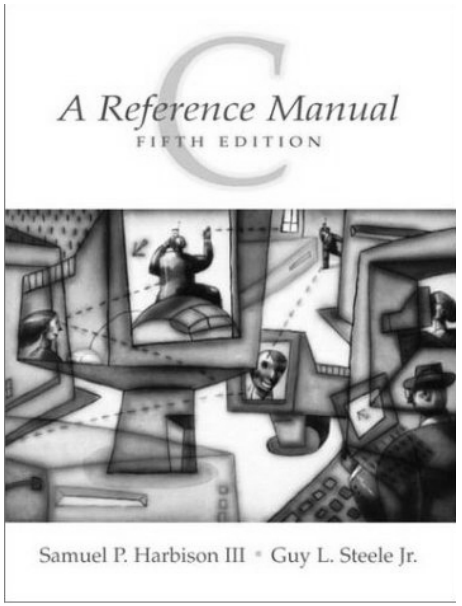
Classroom Cap = 230

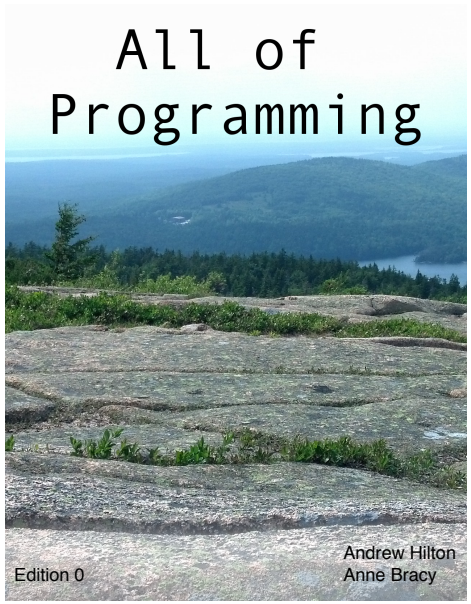
Course is now taught every semester

Required Textbooks

This:

+ 1 of these:

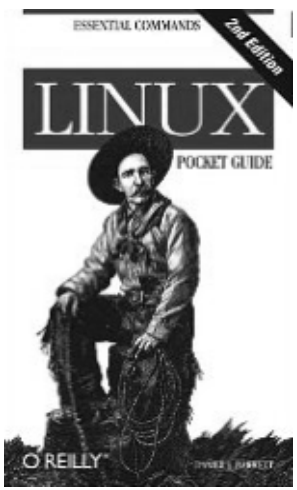




http://aop.cs.cornell.edu

download Ch. 1-4 + UNIX appendix, see if you like it

+ Suggested Textbook



Lectures

Tuesday & Thursday 10:10-11:25

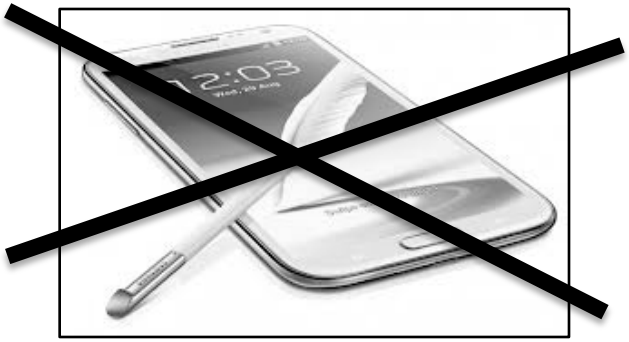
Upson B17

iClicker: Bring to every Lecture

(starting Thursday Feb 3)

missing a few times is okay

No cell phones or laptops



Active Learning

a) Clickers
b) Activity Sheets
c) You ask Questions
d) I ask Questions

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Lab Sections

	Tuesday	Wednesday	Thursday	Friday
11:40-12:55		**C**	**G**	**I**
1:25-2:40	**A**	**D**		**J**
2:55-4:10	**B**		**H**	
3:35-4:50		**E**		
7:30-8:45		**F**		

- Carpenter Hall 104 (Blue Room) or **Philips 318**
- This week: optional, Thursday and Friday only
- separate from lecture and homework
- Attendance is a part of your course grade
- Bring laptop to Labs
- ***C Lab 0:*** "hello world" lab: Intro to C, VMs
- *Next* week: **Lab 0:** Logisim, logic circuits, and building an adder

Office Hours

My Office Hours:

- Mine: M 9-10 + TBD
- Start Monday!
- “Holding Court” after immediately class

  (Upson 207, 211, or 215)

TA Office Hours:

- See Google Calendar (linked on course webpage)
- Start *Sunday*

Course Staff

Lab/Homework TA's:
22 TAs

http://www.cs.cornell.edu/Courses/cs3410/2016sp/staff.php

Find them on Piazza!
Administrative Assistant:

- Megan Gatch <mlg34@cornell.edu>

Online Tools: Course Website

http://www.cs.cornell.edu/courses/cs3410

- Office Hours / Consulting Hours
- Lecture slides, schedule, and Logisim
- CSUG lab access (esp. second half of course)
- Finalized Schedule will be up by next Tuesday

This class is relentless.

Stay on top of it!

Online Tools: Piazza

http://piazza.com/cornell/spring2016/cs3410

- **Everything happens here**

Do not send email:

- Guaranteed response “Please post to piazza”
- Redundancy is bad
- Single point of failure is bad
- **private piazza post in “prof-inbox” folder**
  - **Better for conversation tracking, “resolved”, etc.**

While there: Answer someone else’s question!

Online Tools: CMS

http://cms.csuglab.cornell.edu

- **Assignments submitted here**
- **Grades given back here**

Lab Sections, Projects, and Homeworks

Labs Assignments

- Individual
- One week to finish (usually Monday to Monday)
- In-Class (0, 2, 4) vs. Take Home (1, 3)

Projects

- two-person teams
- Find partner in same section

Homeworks

- One before each prelim
- Will be released a few weeks ahead of time
- Finish question after covered in lecture

Grading

Lab (50% approx.)

- 5-6 Individual Labs
  - 2 out-of-class labs (5-10%)
  - 3-4 in-class labs (5-7.5%)
- 4 Group Projects (30-35%)
- Attendance/Participation in lab (2.5%)

Lecture (50% approx.)

- 2 Prelims (35%)
  - Dates: March 3, May 5
- Homework (10%)
- Participation/Quizzes in lecture (5%)

Grading

Regrade policy

- In writing (for exams) or via CMS (everything else)
- Within 1 week of the assignment (or exam)'s return

Late Policy

- Each person has a total of ***five*** "slip days"
- Max of ***two*** slip days for any individual assignment
- For projects, slip days are deducted from all partners
- 25% deducted per day late after slip days are exhausted
- No assignment accepted more than 2 days late

Who am I? (Part 2)

Nice *and* a vertebrate

- **Piazza posts** about course material *very welcome*!
- Correspondence about use of slip days, your alarm clock, your all-nighters, your alcohol intake, your car battery, *etc. etc.* waste your time and mine
- I do not grant exceptions
- Deadlines are firm

Academic Integrity

All submitted work must be your own

- OK to study together, but do not share soln's
- Cite your sources

Project groups submit joint work

- Same rules apply to projects at the group level
- Cannot use someone else's solution

Closed-book exams, no calculators

One TA has a dedicated job of maintaining AI

- Stressed? Tempted? Lost?
  - Come see us before due date!

Plagiarism in any form will not be tolerated

Academic Integrity Rules of Thumb

- Code vs. Pseudo-code
- the Blackboard rule of collaboration
  - Work on BB, take no notes, erase, go home and write up separately
- Solutions are hard to un-see

Questions so far?