CS 3410: Computer System Organization and Programming

Anne Bracy

Computer Science

Cornell University

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…
- 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 – *sorry, guys!*

CS 2024 (C++)

- 1 to 2-credit course will greatly help with CS 3410

You are required to buy a Programming in C ebook to be used during lab sections.

Required Textbooks

Digital Design

+

=

Cornell University CS 3410 Bracy Fall 2016: Digital Design and Computer Organization and Design

+ Starting in late September:

Cornell University CS 3410 Fall 2016: Programming in C with zyLabs

Lectures

Tuesday & Thursday 10:10-11:25

Hollister Hall B14

iClicker: Bring to every Lecture

(starting Tuesday August 30)

missing a few times is okay

No cell phones or laptops.

Active Learning

a) Interactive Textbooks
b) Clickers
c) Activity Sheets
d) Lab Sections
e) You ask Questions
f) I ask Questions

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Lab Sections

	Tuesday	Wednesday	Thursday	Friday
11:40-12:55	A	D	F	H
1:25-2:40	B	E		
2:55-4:10	C		G	I

- Carpenter Hall 104 (Blue Room)
- Labs Start This Week
  - **Lab 1:** Introduction to Logisim
- Next Week
  - **Lab 2:** Circuits & Circuit minimization

Office Hours

My Office Hours:

- To be determined, starting next week
- Start Monday!
- “Holding Court” after immediately class

TA Office Hours:

- Always in Surge A, Room 101
- Every day except Saturday
- See Google Calendar (soon to be linked on course webpage)
- Start *Thursday*

Course Staff

There is an army of teaching assistants!

http://www.cs.cornell.edu/Courses/cs3410/2016fa/staff.html

Find them on Piazza!

Administrative Assistant:

- Jenna Edwards <jls478@cornell.edu>, Gates 401
- Please give accommodation letters to her within the first 2 weeks

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 Friday

This class is relentless.

Stay on top of it!

Online Tools: Piazza

http://piazza.com/cornell/fall2016/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

- Weekly
- Can work in pairs, but submit separately
- Submit in class, upload to CMS by Saturday noon that week
  (Or have solution logged in zybook by same deadline)

Projects

- 2 Individual Projects: you work alone
- 4 Pair Projects: you work in pairs
- Ideally, find partner in same section

Participation Activities

- In the zybook
- Deadline before each Prelim to count toward your grade
- Will be released a few weeks ahead of time
- Finish question after covered in lecture

Grading

Still working out, but something like this:

Labs (work + attendance)	15%
Projects	40%
Participation	10%
Prelims	35%

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 ***four*** "slip days"
- Max of ***two*** slip days for any project
- For pair 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
- Cannot use on Labs. (Lowest 1-2 lab scores will likely be dropped anyway. To be decided and announced later.)

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?