Syllabus

CS 2110, FA22

A learning community

A shared goal

Neither a contest nor a race

An active, social pursuit

Please help maintain a safe, respectful, & focused environment for everyone to learn in

- Be kind, show patience
- Participate in discussions, refrain from distractions
- Be mindful of personal & public health

If you want to learn, you belong here; so if peers or staff make you feel unwelcome, let us know

Who are you?

Enrollment is full at 700 students—largest class ever!

Year	Count
Freshmen	177
Sophomores	338
Juniors	87
Seniors	37
Professional	40
Graduate	21

2 instructors,21 TAs,27+ consultantson course staff

School	Count
Engineering	296
Arts & Sciences	216
CALS	82
Business	20
AAP	12
Human Ecology	8
ILR	5
Professional	40
Graduate school	21

Participation policies

Participating in this community means coming to class and engaging in discussions

We want to reward engagement without creating perverse incentives



Lecture

- Credit for responding to iClicker questions
 - iClicker remotes are required
- Respond to at least ¾ of questions for full credit
 - No penalty for handful of absences

Discussion

- Credit for submitting work on group activity
 - Group submission required
- Submit at least ¾ of activities for full credit
 - No penalty for handful of absences

Class cadence

- Weekly Canvas quizzes (10%)
 - Best of 2 timed attempts
 - No late submissions; lowest quiz dropped
 - Covers lectures, discussions, and readings
- Lectures Tue & Thurs (2.5%)
 - Skim notes before lecture, read notes thoroughly after
 - iClicker questions
- Discussions Tue/Wed (2%)
 - Cooperative activities (bring paper as well as laptop)

- Programming assignments (35%)
 - 7 projects (~biweekly)
 - First few are solo, later ones allow partners
 - Accepted late with penalty, delayed return
- Exams (50%)
 - Prelim 1: Sep 20
 - Prelim 2: Nov 15
 - Final: TBD

Class cadence

Monday

- Make sure quiz is submitted
- Skim upcoming lecture notes

Tuesday

- Attend lecture
- Read lecture notes carefully and experiment in IDEA
- Complete discussion activity

Wednesday

Skim upcoming lecture notes

Thursday

- Attend lecture
- Read lecture notes carefully and experiment in IDEA
- Start quiz

Friday

- Make sure discussion activity is submitted
- (Regularly)
 - Work on programming assignments

Course websites

Course homepage

• Syllabus, lecture notes, OHs

CMSX

- Form groups
- Submit discussion activities
- Submit assignments
- View grades

Canvas

- Weekly quizzes
- Register iClickers

Ed Discussion

- Discussion forum
- Course announcements

QueueMeIn

- Manage consulting queue
- Gradescope
 - View graded exams

Getting help

Office hours

- Offered by TAs (Rhodes 405) and instructors (Gates) at various times
- Small group setting; best for conceptual help

Consulting hours

- Sun-Thurs, 4-9pm, Rhodes 405, QueueMeIn
- One-on-one; best for diagnosing individual issues
- Not for "walking through" assignment implementations; limited to 10-15 min

Ed Discussion

- Online forum ask *and answer* questions
- Best for clarifying concepts & assignments, general troubleshooting, curiosity
- Prefer public posts; reserve private for when you need to include assignment code

Study resources & community

- Academic Excellence Workshop: ENGRG 1011
- Learning Strategies Center: <u>lsc.cornell.edu</u>
 - Partner matching service (register early for best results)
- CIS partner-finding social (Sept 6)

- Student organizations
 - WICC: Women in Computing at Cornell
 - URMC: Underrepresented Minorities in Computing
 - ACSU: Association of Computer Science Undergraduates

CS/ENGRD 2110 or CS/ENGRD 2112?

- 2112 is an *honors* version of 2110
 - more credits (4 vs 3)
 - aimed at CS majors
- much smaller class size (<100 vs. ~600)
- satisfies same requirements: mostly same material, some extra content
- more difficult and longer assignments, with more programming and building code from scratch
- big final project spanning 3 assignments and a final tournament.
- good fit for people who have done "a lot" of Java programming?
- May switch between 2110 & 2112 within first 3 weeks

Academic integrity

Cornell has a code of integrity, and everyone here has agreed to abide by it Some examples of it applied to this course:

- All submitted work must be your own
 - You are responsible for knowing the purpose of every code statement
- All sources of assistance (including websites) must be cited
 - Excludes course staff, materials, & references
- No assistance during quizzes, exams; do not discuss until after deadline
- You are encouraged to assist one another (e.g. while waiting for consulting) at a high level, but do not compare code
 - Assist diagnostically (test cases) rather than constructively (solution code)

Accommodations

Student Disability Services (SDS) can approve accommodations to mitigate the academic impact of some conditions

- Extra exam time, alternate exam room handled automatically
- Attendance handled by default policy
- If accommodations require special action by instructors, please meet with us to clarify details

Your college advising office may be able to help with unexpected situations

Resources

- Lecture notes (read them! this is our "textbook")
 - Linear presentation of concepts
- JavaHyperText
 - Brief tutorials on individual topics
- Java SE API docs (these are your friend)
 - Documentation for standard classes and their methods
- The Java Tutorials (how Dr. Muhlberger learned Java)
- Optional textbook: Data Structures and Abstractions with Java

Demo!



McDiver in the sewers

- Character navigates a maze
 - How to represent mazes?
 - How to generate mazes?
 - How to navigate a maze efficiently?
- Program is graphical
 - How to respond to interactive events?
- Character seeks treasure, but has limited time
 - How to maximize reward within constraints?