

601.220 Intermediate Programming, Spring 2021

Introduction to the course

<https://piazza.com/jhu/spring2021/601220>

Outline

- Overview of course
- Signing up for Piazza
- CS account

Instructors

- David Hovemeyer, Associate Teaching Professor, daveho@cs.jhu.edu
 - Section 01: MWF 12:00–1:15 on Zoom
- Michael (Misha) Kazhdan, Professor, misha@cs.jhu.edu
 - Section 02: MWF 1:30–2:45 on Zoom
- Sing Chun Lee, Ph.D. Candidate, singchun.lee@jhu.edu
 - Section 05: MWF 8:30–9:45 on Zoom
- Joanne Selinski, Associate Teaching Professor, joanne@cs.jhu.edu
 - Section 04: MWF 10:00–11:15am on Zoom

Course goal

- By end of course, you'll be able to create large*, complex, correct programs in C and C++
 - For some students, this comes easily; for others, not so much
 - Differences in background play a large part
 - If you're struggling, don't panic! We're here to help.
 - To become a strong programmer, you need to practice, practice, practice

Content Delivery and Course Format

- Online class
- No “synchronous” lectures
- Pre-recorded videos, slides, recap questions, and exercises will be posted
- Must watch videos and do recap questions before attending the class
- Class sessions on MWF:
 - we answer your questions, go over recap questions, review main concepts in the lectures, review previous exercise solutions, discuss homeworks & projects, and work on the new exercise, etc.
 - class session links: <https://jhu-ip.github.io/cs220-sp21/staff/>

Programming is more than coding

- In introductory courses, you learn to write code
- You also spend a good deal of time debugging it
- In fact, the larger your programs get, the larger the percentage of time you'll spend debugging it
- But debugging isn't really (always) fun - how can we avoid it?
- Short-term lazy vs. long-term lazy
 - How far in the future are you thinking when you consider the consequences of your actions?
 - In some cases, extra work up front can reduce total time spent
- Sometimes its difficult to see the benefits in a single short homework assignment, but real commercial software is developed over years by large teams of people
- We aim to help you build skills that will allow you to contribute on large-scale projects

Building skills

- This course is primarily intended to help you build skills (rather than just increase knowledge)
- Building skills takes practice, and meaningful practice takes time
- Please ask for help when you need it!

Grade calculation

- Handwritten homework assignments (done individually) - 9%
- Coding homework assignments (done individually) - 31%
- Midterm coding project (in teams) - 14%
- Midterm exam (date TBD) - 15%
- Final coding project (in teams) - 16%
- Final exam (TBD) - 15%
- Required code review(s) - 0% (satisfactory completion required to pass the course)

Advice about coding homework

- A significant chunk of your grade (31%) is individual coding assignments
- These form an essential part of the learning experience
- Take these seriously!
 - Start early, ask questions early
 - Make steady progress
 - Strive to create robust, understandable, and elegant code
 - Do *not* share code or copy code (we will report violations to the student conduct office)
- If you don't take these assignments seriously, you are unlikely to have a good experience in the course

Advice about in-class exercises

- Throughout the semester we will work in in-class exercises
- These don't count towards your grade directly
- But they are *very* important for mastering course topics!
- Recommendations:
 - Complete all of these
 - Finish them on your own outside of class
 - Past students have repeatedly reported that finishing exercises have saved time when completing the homeworks and projects!
- We generally *won't* post solutions to the exercises
 - Completing these on your own is far more valuable than just looking at our solution
 - If you need help, ask for it in class, in office hours, or on Piazza

Course resources

- Gradescope: where you'll submit homework and receive grades
 - You'll receive an invitation to Gradescope site via email later this week
- Piazza: <https://piazza.com/jhu/spring2021/601220>
 - We'll use Piazza as our primary form of course communication; you're expected to check it regularly!
 - Please ask questions using Piazza, rather than sending me email
 - Can make posts which are anonymous to other students
 - Can make posts which are targeted to Instructors (includes instructors and CAs) only, or just to the instructor of your section
 - Please read the post on posting guidelines

Sign up for Piazza right now

- Sign up at <https://piazza.com/jhu/spring2021/601220>

CS account

- You will need a CS account for this class
- Obtain a ugrad cs account
 - if you have one already, then use that
 - if you are a cs major/minor, get a “permanent one” from CS IT (https://support.cs.jhu.edu/wiki/Obtaining_CS_Computer_Accounts)
 - Otherwise, send the “instructors” a *private* post on Piazza with subject “Request for a temp cs account”
 - will get back to you as soon as possible with a user and password