Welcome to CSE 121!

Elba Garza & Matt Wang

Winter 2024



TAs:	Abby	Aishah	Anju	Annie	Archit	Ayesha	Christian
	Hannah	Heather	Hibbah	Jacob	James	Janvi	Jasmine
	Jonus	Julia	Lucas	Luke	Maria	Nicole	Shananda
	Shayna	Trey	Vidhi	Vivian			

Today's song: Daft Punk's Da Funk

sli.do #cse121-0

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Agenda (1/7)

- About us
- About this course
 - Learning objectives
 - Other similar courses
 - Course components
- Our learning model

- Tools and resources
 - Course Website
 - Ed
- Assessment and grading
- Collaboration



Agenda (2/7)

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Hi, I'm Elba! (she/her)

- Assistant Teaching Professor in the Allen School
- Originally from Guadalajara, Mexico and raised in San Antonio, Texas
- Education:
 - o BS Columbia University

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- MSc Princeton University
- o PhD Texas A&M University
- Area of Specialization: Computer Architecture
- Out of school: Metal detecting, F1, coin collecting, movies



and I'm Matt! (he/him)

- (new) Assistant Teaching Professor in the Allen School
- grew up mostly in Toronto and sometimes Tokyo!
- went to UCLA!
 - BS & MS in Computer Science
 - BS in Math-Economics
- computer science interests: CS education, "open-source", programming languages, accessibility
- non-CS interests: reading, music (Laufey was my #1 this

wrapped), video games, skiing & ice skating!



Meet your 25 TAs!

1000 - 200



























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Lesson 0 - Winter 2024

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Learning Objectives

or, "What will I learn in this class?"

- Computational Thinking
- Code Comprehension
- Code Writing
- Communication
- Testing
- Debugging
- Ethics & Societal Impact

Other Similar Courses

Course	Good choice if
CSE 121	 You've never programmed before AND You are, or want to be, in a major such as CS, CE, ECE, Info, etc. that requires Java programming
CSE 122	 You've done some programming (roughly one course worth) in any programming language AND You are, or want to be, in a major such as CS, CE, ECE, Info, etc. that requires Java programming
CSE 123	 You've taken CSE 122 AND You are, or want to be, in a major such as CS, CE, ECE, Info, etc. that requires Java programming
CSE 160	 You've never programmed before AND You're interested in data science and analysis OR You'd rather learn Python than Java* OR You are, or want to be, in a major such as Physics, Bio, Stat, etc. where analyzing data through programming is useful

Other courses of interest: CSE 154, CSE 163

See <u>Guided Self-Placement</u> and <u>Introductory Courses</u> for more info

Course Components

Meetings





- Structured assignments
- Programming in Java
- Applying & implementing course concepts

CREATIVE PROJECTS

- More open-ended assignments
- Explore new ideas and • applications





Tue March 12th, ٠ 12:30-2:20 PM

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How Learning Works

Learning requires active participation in the process.

It's not as simple as sitting and listening to someone talk at you!

- Requires deliberate practice in learning by doing
- Benefits from **collaborative learning**
- Does not work well if you cram everything!





Lesson 0 - Winter 2024

Pre-Class Materials (1/3)

Core element of course: pre-class material

- prepare for each lecture with readings & practice problems
- should take ~30 minutes per lecture (why we don't have Monday lectures!)
- class will start with a brief recap, then pick off where we left off



Pre-Class Materials (2/3)

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Which means...

- we can spend lecture diving deeper, answering questions, and think-pair-share
- you can ask about pre-lecture material in class or quiz section!



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Pre-class materials are ungraded, which means...

- it's okay if you find them challenging that means you're learning!
- but, you should do them, and we will assume you've done them

Consistent and Active Participation (1/2)

Attendance is not graded. But, it's strongly encouraged!

- lectures & sections are <u>not</u> going to be just us talking at you!
- ex: live in-class coding, debugging, think-pair-share, and problem-solving
- spreading out ~ 1-2 hours each day over Tuesday Friday is

<u>much more effective</u> than cramming before the assignment is due!



Consistent and Active Participation (2/2)

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Catching up:

- all lectures (A & B sections) are recorded on Panopto; slides are on our website.
- section materials are on Ed, but section will not be recorded.

Metacognition

- Metacognition: asking questions about your solution process.
- Examples:
 - While debugging: explain to yourself why you're trying this change.
 - **Before running your program**: make an explicit prediction of what you expect.
 - When working: be aware when you're not making progress, so you can take a break or try a different strategy.
 - When designing:
 - Explain the tradeoffs with using a different data structure or algorithm.
 - If one or more requirements change, how would the solution change as a result?
 - Reflect on how you ruled out alternative ideas along the way to a solution.
 - When studying: what is the relationship of this topic to other ideas in the course?

Learning in CSE 121 (or anywhere)





Course Culture and Support

- Currently 444 students enrolled!
 - Almost none are CSE majors!
 - Wide range of backgrounds, interests, and goals
 - Everyone is new to programming
- Support and help each other!
 - Form study groups
 - If you have a question, others almost certainly do too



Course Culture and Support: Getting Help

- Discussion Board
 - Feel free to make a public or private post on Ed
 - We encourage you to answer other peoples' questions! A great way to learn
- Introductory Programming Lab (Office Hours)
 - TAs can help you face to face in office hours, and look at your code
 - You can go to the IPL with **any** course questions, not just assignments
- Section
 - Work through related problems, get to know your TA who is here to support you



Course Culture and Support: Email

- Email
 - We prefer that all content and logistic questions go on the Ed discussion board (even if you make them private). 444 of you >>> 27 of us!
 - For serious personal circumstances, you can email Elba & Matt directly at cse121instructors@cs.washington.edu. It never hurts to email us, but if it's a common logistic question, we may politely ask you to post on the discussion board.



Course Culture and Support: Reaching Out

- Policies designed with flexibility in mind
 - Resubmissions, lecture recordings, asynchronous discussion board
- **But**, life and the world still happen around us...
- Please reach out ASAP if you're struggling or have circumstances that require extra support



The World Around CSE 121

- Our goal is to give you a great CSE 121 experience
 - But CSE 121 does not exist in a vacuum there's a lot going on in the world right now that can impact your education
- We've designed course policies for maximum flexibility: ability to resubmit assignments and "drop" some quiz/final problems
 - But we cannot cover every individual situation
- Please reach out if you need accommodations of any kind to deal with these unfamiliar situations

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Course Website

cs.uw.edu/121

- Primary source of course information (<u>not</u> Canvas)
- Calendar will contain links to (almost) all resources

CSE 121	Introduction to Computer Programming Winter 2024				
Syllabus					
Programming Assignments	Welcome to CSE 121: Introduction to Computer Programming 🎉				
Creative Projects	► What is this class? What will I learn?				
Resubmissions					
Exam	Prior Experience and Expectations				
Staff					
Office Hours	Syllabus If you want to learn more about the course and its policies, please check out our course syllabus.				
Grading Rubrics	Feedback Feedback is always welcome! You can contact the the course staff or submit anonymous feedback.				
COVID-19 Safety					
Resources	Registration Please do not email the course staff or instructors regarding registration for the course. The course staff do not have access to add codes. Please email ugrad-adviser@cs.washington.edu for assistance.				
Course Tools 🗗					
EdStem	Announcements				
Anonymous Feedback	Announcements				
	This Week (at a glance)				
	Wednesday (01/03)				
Acknowledgements	Lesson 0: Welcome!; Course Policies A lecture @ 12:30 in ARC 147; B lecture at 2:30 in GUG 220				



Syllabus (website)

Please review the syllabus ASAP.

E 121 / Calendar JS	Syllabus Course Information	1) Course Information
mming Assignments	Teaching Staff	2) Course Goa
ve Projects	Instructor: Elba Garza and Matt Wang	2.1) Learning Objectives
missions	Instructor Email: cse121-instructors@cs.washington.edu	3) Course Clim
	Registration Questions: CSE Advisers (ugrad-adviser@cs.washington.edu)	3.1) Inclusion
Hours	Course Staff and Support Hours: Course Staff and Office Hours	3.2) Extenuatin Circumstances Suffer in Silenc
g Rubrics	▼ Who to contact?	3.3) Disabilities
-19 Safety	To ensure the security of your personal information, all communication	3.4) Religious Accommodatio
rces	related to this course should be conducted through either the EdStem platform or via your UW-issued email address. Personal email addresses should not be used for course-related correspondence.	4) Software an Textbooks
e Tools 🖻	Here are some common types of questions and the best place to ask them to	5) Class Session and Quiz Section
m	get the fastest and most accurate response.	5.1) Class Sess
mous Feedback	 Registration questions? Email the CSE advisers as the course staff do not have access to add codes. 	5.2) Quiz Section
	Questions about course concepts? Visit office hours in the Introductory Programming Lab (IPL), instructor office hours, or post on the Ed Discussion board (more info below) Questions about assignments? Visit office hours in the Introductory	6) Required Co Work, Resubmission Late Work
	Programming Lab (IPL), instructor office hours, or post on the Ed Discussion board (more info below)	7) Getting Hel Staff & Peers

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CSE 121 Home / Calendar	Introduction to Computer Programming Winter 2024				
Syllabus Programming Assignments Creative Projects	Welcome to CSE 121: Introduction to Computer Programming *				
Resubmissions Exam Staff	 Prior Experience and Expectations 				
Office Hours Grading Rubrics	Syllabus If you want to learn more about the course and its policies, please check out our course syllabus. Feedback Feedback is always welcome! You can contact the the course staff or submit anonymous feedback.				
COVID-19 Safety Resources Course Tools 12	Registration Please do not email the course staff or instructors regarding registration for the course. The course staff do not have access to add codes. Please email ugrad-adviser@cs.washington.edu for assistance.				
EdStem Anonymous Feedback	Announcements				
	This Week (at a glance) Wednesday (01/03)				
Acknowledgements	Lesson 0: Welcome!; Course Policies A lecture @ 12:30 in ARC 147; B lecture at 2:30 in GUG 220				

Ed

- Our online learning platform
- Lessons, sections, quizzes all here
- Intro and walkthrough in Section 0



I hope you all managed to stay safe and healthy and had an enjoyable—and all too brief—winter break. You're receiving this email on our Ed Discussion board, which will be one of the main places for you to connect with your classmates and the course staff. Please see my post #1 for more information on how to use Ed Discussion.

Resources

In CSE 121 we will use the course website for all information about the course. You can find the You can find the course website at https://courses.cs.washington.edu/courses/cse121/24wi/ (short URL; will work soon: http://cs.uw.edu/121).

The course website will be the main place for you to see updates and find information about our course. This includes the syllabus, the lecture calendar, and information about our COVID-19 safety policies.

There is a lot there, so we will spend most of the first day of class talking about the class and its structure. The course website will be your main place to find new links to lessons, assignments, and other course resources. Canvas? Hardly know 'em.



Other Course Tools

My Digital Hand

My Digital Hand

• Queueing in office hours



Canvas

• Lecture recordings



Visual Studio Code

- Not strictly necessary!
- Develop offline
- Debugger Tool



Sli.do

- In-class activities (ungraded)
- No account needed



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Assessment and Grading

- Our goal in the course is for you to gain proficiency of the concepts and skills we teach
- We assess your proficiency by asking you to apply the concepts and skills on tasks or problems
- By necessity, we are assessing your <u>work</u> as a proxy for your proficiency



Resubmission

Learning takes time, and doesn't always happen on the first try!

- Each week, one previous Programming Assignment or Creative Project can be resubmitted
 - Must be accompanied by write up explaining changes.
 - Grade on resubmission replaces original grade.
 - An assignment is only eligible for resubmission within the 3 resubmission cycles following its grades being released.
- Your lowest 2 quiz problem grades will be dropped from your gradebook (not considered when calculating course grades)

See syllabus for more details

Grading

Grades should reflect your proficiency in the course objectives

- All assignments will be graded
 - E (Excellent),
 - S (Satisfactory),
 - or N (Not yet)
 - Under certain circumstances, a grade of U (Unassessable) may be assigned
- Final grades will be assigned based on the **amount of work at each level**
- See the syllabus for more details



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Collaboration Policy

Learning is hard, but it's easier when you learn from each other

- You are encouraged to form study groups, work together on practice and review, and discuss your ideas and approaches at a high level
 - In general, share ideas and work together, but don't copy work. Never send someone else your code or solution write up.
- If you discuss your ideas with others, you must cite them
- All work you submit for grading must be predominantly and substantially your own
 - There is a dedicated <u>page</u> explaining the policy around use of generative AI tools
- Withdrawal policy
- See the <u>syllabus</u> for more details

Help Us Improve!

- CSE 121 is *super new!*
- We worked hard to build a course we think will be effective and supportive and help you succeed
- We probably didn't get it all right!
- We appreciate your patience and understanding if we need to make adjustments during the quarter
- Please give us lots of feedback!
 - Post on Ed and/or use the <u>Anonymous Feedback Tool</u>

"Homework" for Next Time

- First assignment will be released Friday, but there are some things to do in the meantime.
- TODOs this week:
 - Fill out the introductory survey
 - Go meet your TA and classmates in Thursday's quiz section
 - Complete the pre-class material for Friday (see calendar)
 - <u>Check over syllabus details</u>