Welcome to CSE 121!

Matt Wang/Brett Wortzman

Use this QR code as one way to ask questions!

Autumn 2024



	Abby	Afifah	Ailsa	Alice	Aliyan	Arohan
TAs:	Chloë	Christopher	Dalton	Derek	Elizabeth	Ethan
	Hanna	Hannah	Heather	Hibbah	Janvi	Jasmine
	Judy	Julia	Kelsey	Lucas	Luke	Mahima
	Maitreyi	Maria	Merav	Minh	Neha	Ronald
	Ruslana	Sahej	Sam	Samrutha	Sushma	Vivian
	Yijia	Zachary				



Agenda (1/7)

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

- Tools and resources
 - Course Website
 - Ed

On Friday

- Assessment and grading
- Collaboration



Agenda (2/7)

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Hi, 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!



Hi, I'm Brett! (he/him)

- Associate Teaching Professor
- Frequent intro CS instructor
 - Lead designer/developer of new 12X curriculum
- Also interested in CS education/pedagogy
- Previously:
 - trained CS teachers (and still!)
 - developed CS curriculum
 - taught high school CS
 - worked as a software engineer
- Non-CS hobbies: board games/RPGs, officiating football, announcing robotics competitions





Meet your 38 TAs!

























































SCHOOL **OF COMPUTER SCIENCE & ENGINEERING**

Agenda (3/7)

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Learning Objectives

- or, "What will I learn in this class?"
- **1. Computational Thinking**
- 2. Code Comprehension
- 3. Code Writing
- 4. Communication
- 5. Testing
- 6. Debugging
- 7. 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 143X	 You have programmed before, but <i>not</i> in Java OR You have lots of extra time to put into learning and tend to pick things up quickly
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

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

PAUL G. ALLEN SCHOOL

OF COMPUTER SCIENCE & ENGINEERING

Lesson 0 - Autumn 2024

Course Components

PAUL G. ALLEN SCHOOL

OF COMPUTER SCIENCE & ENGINEERING

Meetings



(x1)

Agenda (4/7)

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Digression: My Pandemic Hobby

Amigurumi: Japanese art of creating crocheted or knitted stuffed toys





Digression: My Pandemic Hobby

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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!





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!



Pre-Class Materials (3/3)

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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 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?

Course Culture and Support

- Currently 687 students enrolled!
 - *Very few* 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: Live Support

Introductory Programming Lab (TA Office Hours – starting Week 2)

- #1 place to get help (and <u>highly rated</u> in the class!)
- face-to-face help from TAs on **any** course questions not just assignments

TA Section

- Work through practice problems (this is how you learn!)
- Get to know your TAs & peers!

Instructor Office Hours (in-person & Zoom – schedule on website)

- We don't byte (most of the time)
- Great for things from lecture, personal questions, or just to say hi!

Course Culture and Support: Ed & Email

Ed Board

- Best for content and logistics questions 687 of you >> 40 of us!!
- Feel free to make them public or private (and/or anonymous)
- Answer other students' questions great way to learn!

Email

- Best for personal circumstances and/or private questions
- If unsure, always feel free to email Matt & Brett (at <u>cse121-</u> <u>instructors@cs.washington.edu</u>)
- May politely ask you to post on Ed instead!

The World Around CSE 121 & Reaching Out

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: resubmissions, dropping quiz/exam problems, asynchronous help & lecture recordings.

Please reach out ASAP if you're struggling or have circumstances that require extra support. We're happy to help – we just need to know!



Community Standards





Think Pair Share: Inclusive Environments

Our class will have many "think-pair-share" activities. We'll do a light version of that today! Our question to you is:

"What was an experience you had that made you feel welcome or included in a learning environment?"

think on your own about this for ~ 30 seconds
 then, talk to your neighbor about it (and introduce yourself)
 finally, we'll share out – taking a few answers from volunteers



Think Pair Share: Exclusive Environments

Similarly:

"What was an experience you had that made you feel unwelcome or excluded in a learning environment?"

think on your own about this for ~ 30 seconds
 then, talk to your neighbor about it (and introduce yourself)
 finally, we'll share out – taking a few answers from volunteers



Agenda (5/7)

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Course Website

cs.uw.edu/121

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

CSE 121	Attention! This website is still under development. As the quarter progresses, more information will be added soon; all content is subject to change.			
Home / Calendar				
Syllabus Assignments Resubmissions	Introduction to Computer Programming I Autumn 2024			
Exam Course Staff	Welcome to CSE 121: Introduction to Computer Programming I 🎉			
Office Hours Resources	► What is this class? What will I learn?			
Course Tools	Syllabus If you want to learn more about the course and its policies, please check out our course syllabus.			
EdStem 🖸 Anonymous Feedback 🖸	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 <u>ugrad</u> -adviser@cs.washington.edu for assistance.			
Acknowledgements	This Week (at a glance)			
	Wednesday (09/25) • Lesson 0: Course Policies; Hello World! A lecture @ 11:30 in KNE 130; B lecture at 2:30 in BAG 131 Thursday (09/26) • Section 0: Welcome! Friday (09/27)			



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Syllabus (website)

Please review the syllabus ASAP.

21	Syllabus		
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	Attention! This website is still under development. As the quarter progresses, more information will be added soon; all content is subject to change.	1) Course 1.1) Course 1.2) Prior E	
ns	Course Information	Expectatio 2) Learnin 3) Course	
	Course Staff	3.1) Inclusi	
	Instructors: Brett Wortzman, Matt Wang	3.2) Exten	
	Instructor Email: cse121-instructors@cs.washington.edu	Suffer in S	
	Registration Questions: CSE Advisers (ugrad-adviser@cs.washington.edu)	3.3) Disab	
	Course Staff and Support Hours: Course Staff and Office Hours	3.4) Religi Accommo	
Feedback [2]	▼ Who to contact?	4) Softwa Textbooks	
ements	To ensure the security of your personal information, all communication 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. Here are some common types of questions and the best place to ask them to get the fastest and most accurate response. Registration questions? Email the CSE advisers as the course staff do not have 	5.2) Quiz S	
		6) Course	
		6.1) Assign	
		6.2) Resub	
	access to add codes. Questions about course concepts? Visit office hours in the Introductory Programming Lab (IPL), instructors office hours, or post on the Ed Discussion		
	board (more info below)	8) Grades	

CSE 121	content is subject		
Home / Calendar			
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Assignments			
Resubmissions	Autumn 2024		
Exam	Welcome to CSE 1		
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	Friday (09/27)		

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on to Computer Programming I

121: Introduction to Computer Programming I 🎉

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learn more about the course and its policies, please check out our course syllabus.

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it a glance)

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- NE 130; B lecture at 2:30 in BAG 131



Ed

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

ed CSE 121 - 24	au – Ed Discussic		
🕑 New Thread	Q Search		
COURSES	Welcome to CSE 1211		
CSE 121 - 24au	Announcements Matt Wang		
CSE 122 - 24au			
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CATEGORIES			
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Sections			
Pre-Class Material/Work			
Programming Assignm			
Creative Projects			
Quizzes			
Resubmissions			
Final Exam			
Grading Clarification			
Social			
Announcements			
Class Megathreads			
General			

Welcome to CSE 121! 🌞 #1

Matt Wang INSTRUCTOR 2 hours ago in Announcements



) Hi everyone!

Filter >

9 20

TRUCTOR 2h

20 Welcome to CSE 121!! My name is Matt Wang, and I will be one of your co-instructors for CSE 121 this quarter (alongside the wonderful Brett Wortzman). We are both *super* excited to have you join us this quarter!

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We hope you had a restful and relaxing summer 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.

The rest of this post is a combination of different logistics items. Please read this carefully before our first class on Wednesday (tomorrow!)!

Resources

In CSE 121, the course website will host all of the information about the course. You can find the course website at https://courses.cs.washington.edu/courses/cse121/24au/ (short URL: https://cs.uw.edu/121). Some relevant pages include the homepage/lecture calendar and the draft syllabus.

There's a lot there! As a result, we'll spend a part of the first day of the class talking about the website and how to use it effectively. The bottom line is that **the course website will be your main place to find new links to lessons, assignments, and other course resources**.

A Please be aware the website is still being updated and will be changing for a while! While most of the website is set, quite a few things are still in flux. So please bear with us as the CSE 121 team makes adjustments and updates to the site.

The only other place you will need to check regularly is the Ed Discussion board (right here!). Ed is where you can post questions about the course that your peers or the course staff can answer (as well as many other features). We will also post any announcements on the discussion board. If you'd like to learn more about Ed, check out Ed's tutorial. Your TAs will

💄 88 others online



Other Course Tools (brief overview)

My Digital Hand

My Digital Hand

• Queueing in office hours



Canvas / Panopto

• Lecture recordings



Visual Studio Code

- Not strictly necessary!
- Develop offline
- Debugger Tool



Sli.do

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



Help us improve!

CSE 121 is **still new!** We've worked hard to build a course that we think will be effective, supportive, and help you succeed.

But... 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
- Mid and end-of-quarter feedback
- Use <u>CSE 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:

- <u>Fill out the introductory survey</u> (this is Thursday's post-section work)
- Go meet your TA and classmates in Thursday's quiz section
- Complete the pre-class material for Friday (see calendar)
- Check over syllabus details