# Welcome to CSE 121!

Use this QR code as one way to ask questions!

Matt Wang Spring 2024



sli.do #cse121-0

TAs:	Andy	Anju	Archit	Arkita	Autumn	Christian
	Hannah H	Hannah S	Heather	Hibbah	Janvi	Jessie
	Jonus	Julia	Luke	Maria	Mia	Ritesh
	Shayna	Simon	Trey	Vidhi	Vivian	Gumball?

Today's playlist: CSE 121 lecture beats 24sp

# 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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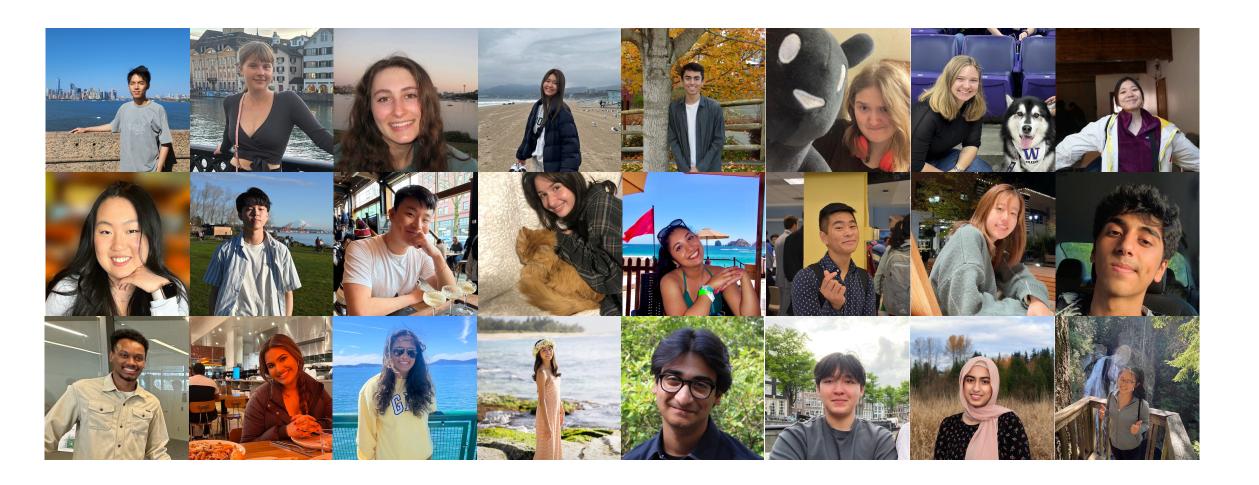
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## Hi, I'm Matt! (he/him)

- (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!



# Meet your 23 TAs!



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

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

**LECTURES** 

(x20)

- We're here!
- Introduce concepts, practice ideas, discuss applications.
- Pre-class materials to prepare for class each day. Due before class.

**SECTIONS** 

(x16)

- Held in person
- More practice, review, applications
- TA advice, how to be an effective student
- Preparation for guizzes / exams

#### **Assessments**

**PROGRAMMING ASSIGNMENTS** 

(x4)

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

**CREATIVE PROJECTS** 

(x4)

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

**OUIZZES** 

(x3)

- Taken in quiz section
- 45 minutes on computer

Culminating exam

**EXAM** 

Wed, June 5<sup>th</sup> 2:30 - 4:20 PM (x1)

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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 much more effective than cramming before the assignment is due!

16

### Consistent and Active Participation (2/2)

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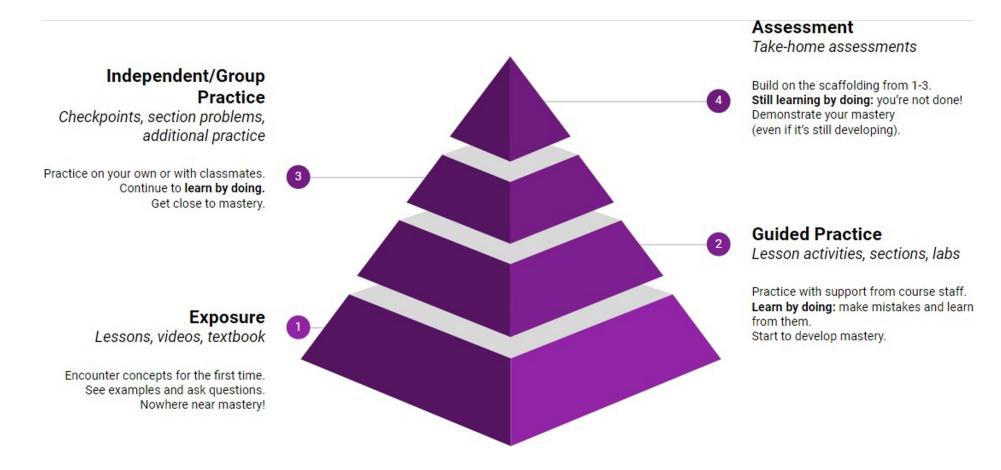
#### Catching up:

- 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?

## Learning in CSE 121 (or anywhere)



### Course Culture and Support

- Currently 231 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: 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)

- I 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 231 of you >> 24 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 (at <a href="mxw@cs.washington.edu">mxw@cs.washington.edu</a>)
- 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!

# Agenda (5/7)

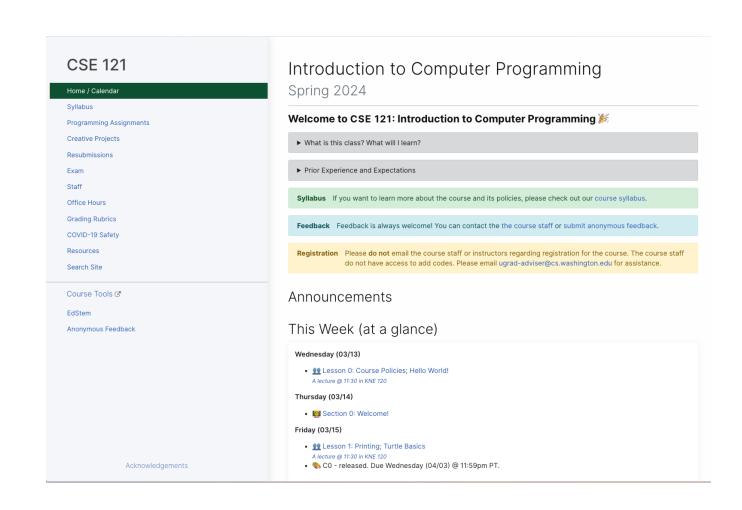
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#### Course Website

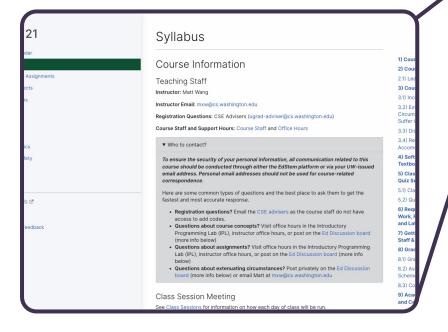
#### cs.uw.edu/121

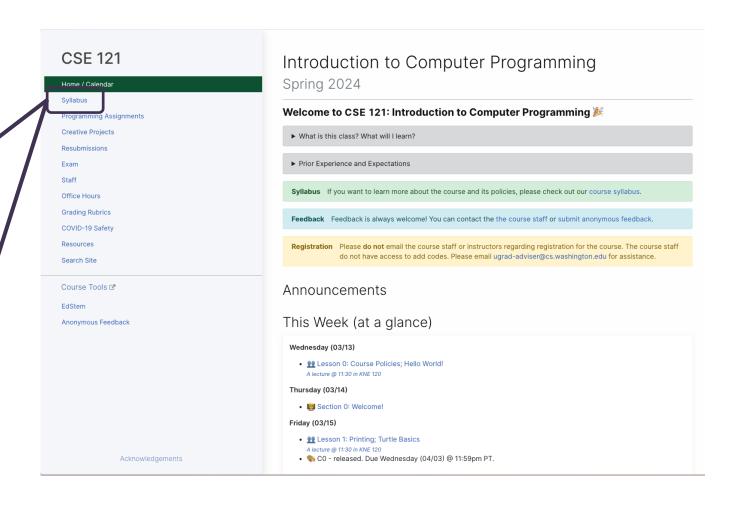
- Primary source of course information (<u>not</u> Canvas)
- Calendar will contain links to (almost) all resources



Syllabus (website)

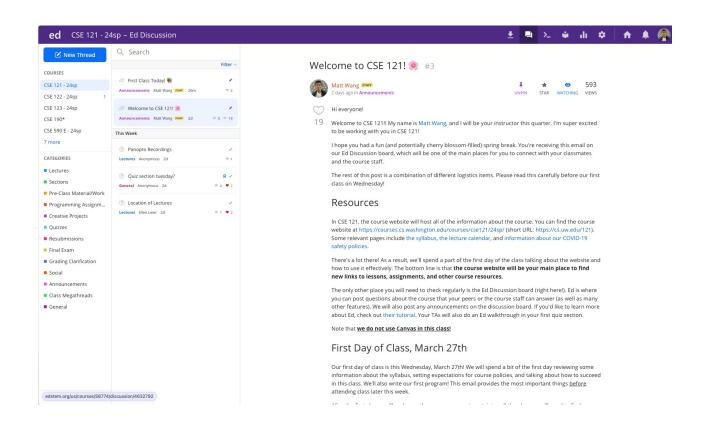
Please review the syllabus ASAP.





#### Ed

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



### 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

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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 work as a proxy for your proficiency

### Grading

Grades should reflect proficiency in course objectives.

All assignments will be graded with "E/S/N" grading:

- E (Excellent)
- S (Satisfactory)
- N (Not Yet)

Final grades are assigned based on amount of work at each level.

We'll discuss this more when our first assignment is released. See <a href="syllabus">syllabus</a> for more details.

#### Resubmissions

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

Each week, one previous assignment or project can be resubmitted.

- Must be accompanied by write-up explaining change (reflection!)
- Grade on your resubmission <u>replaces</u> original grade
- Assignments are only eligible for resubmission within 3 "cycles" following its grade being released

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### **Collaboration Policy**

You are <u>encouraged</u> to form study groups, work together on practice and review, and discuss your ideas & approaches at a high level.

- Sharing ideas and working together is good but, please <u>cite them</u>
- Don't copy work. In particular, never send someone else your code.

All work you submit must be **predominantly** and **substantially** your own.

Includes Generative AI tools! (see <u>dedicated website page</u>)

See syllabus for more details, including on the withdrawal policy.

### Help us improve!

CSE 121 is **super 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:

- 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)
- Check over syllabus details