

LEC 00

CSE 121

Welcome!



Questions during Class?

Raise hand or send here

sli.do #cse121



BEFORE WE START

*Talk to your neighbors:
Introduce yourself!*

*What is your name? Major?
What did you do over spring break?*

Music: 🌸 [CSE 121 25sp Lecture Tunes](#) 🌸

Instructor: Miya Natsuhara

TAs:	Chloë	Hibbah	Sushma
	Ailsa	Julia	Kelsey
	Johnathan	Sahej	Shayna
	Christian	Ruslana	Hannah
	Merav	Hanna	Zach
	Judy	Maitreyi	
	Janvi	Ayesha	

Lecture Outline

Today:

1. Introductions!
2. About this course
3. Our learning model
4. Tools
5. Our first program!

On Friday:

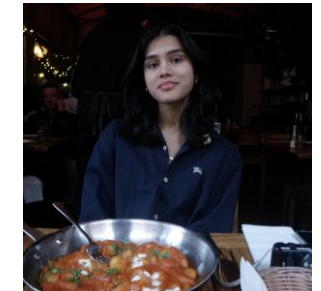
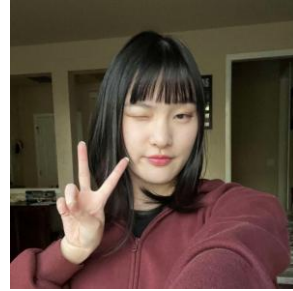
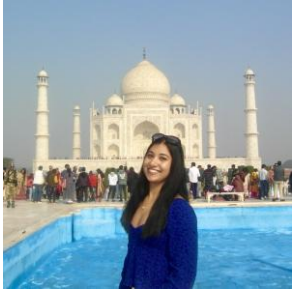
1. Assessment and grading
2. Collaboration
3. More programming :)

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

- Assistant Teaching Professor in the Allen School
- Grew up in WA, and UW alum!
 - BS & MS in Computer Science
 - BS in Math
 - Minor in ASL
- Former Software Engineer at Microsoft
- CS interests: CS Education, accessibility, theoretical CS
- non-CS interests: corgis ([Gumball](#)), knitting, baking, signing with friends, learning Japanese!



Meet your 19 awesome TAs!



Y'all! (the students)

- ~ 225 students registered for this course!
 - Wide range of backgrounds, interests, and goals
 - Almost none are CSE majors
 - **This course is for students who are new to programming!**
- strength in numbers!!
 - 225 of you >>> 20 of us
 - Have a question? **It's almost certain** that others do too – please ask!
- We're a learning community!
 - One focus of quiz section tomorrow: *building* that community

12x community standards

We watched the [12x community standards video](#) in class!



Practice: Think

sli.do

#cse121

Think-Pair-Share: Inclusive Environments

CSE 121 will have many think-pair-share activities. Let's practice! Today's think:

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

1. **Think** on your own, in silence for about ~ 30 seconds
2. **Pair** with your neighbor about it (and introduce yourself!!)
3. **Share** in sli.do & in class (I'll take a few volunteers from both)

Learning Objectives

or, “What will I learn in this class?”

Bottom line:

Intro to Programming, part 1

Not quite:

- “How do computers work?”
- “Intro to Java”
- “All you need to program”
- Math!

Learning objectives:

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 (this is us!)	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• You've done <i>some</i> 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	<ul style="list-style-type: none">• You've taken CSE 122 (or equivalent) AND• You are, or want to be in a major such as CS, CE, ECE, Info, etc. that requires Java programming
CSE 143X	<ul style="list-style-type: none">• You have programmed quite a bit 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	<ul style="list-style-type: none">• 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 your primary goal is analyzing data through programming (rather than building software)

Also see: [guided self-placement test](#) and [CSE page on introductory courses](#) 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, reviews, applications
- TA advice, how to be an effective student
- Preparation for quizzes / exams
- Post-section work done at section or on your own. Due **day of section**.

Graded 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

QUIZZES

(x3)

- Taken in quiz section
- 45 minutes on paper

EXAM

(x1)

- Culminating exam
- **Thursday, June 12th**
- 2:30 – 4:20 PM



How Learning Works

Learning requires **active participation**.

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

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



Learning in CSE 121: Consistent Practice

Consistent, incremental practice works!

Gradual scale of difficulty (and grading)

Ungraded (but frequent; >2x /week)

1. pre-class work
2. lecture activities
3. quiz section problems*

Graded (but infrequent; 1/week)

1. creative projects (4)
2. programming assignments (4)
3. quizzes (3)
4. final exam (1)

*More details on explain Friday! (or see syllabus)

Learning in CSE 121: Metacognition

Metacognition: understanding how you **think** (and got to a solution).

- “what problem-solving approaches do I use?”
- “how did I rule out alternative solutions?”
- “why am I stuck right now? what will unblock me?”
- “are my study habits working for me?”

Metacognition is a **key** CS (and life!) skill; it’s **built into our course**:

- relatively frequent, **graded** reflections
- semi-structured “nudges” (e.g. extra resub from post-section work)
- tight feedback loops

Learning in CSE 121: Live Support Systems

Programming is hard! We **want** to give you collaborative support!

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

- > 40 hours/week (and highly rated in the class!)
- face-to-face help from TAs on **any** course questions

Instructor Office Hours (in-person & Zoom) – starting today!

- I have candy and I promise I'm not *that* scary
- Great for things from lecture, personal questions, or just saying hi

Learning in CSE 121: Async Support Systems

Ed Board

- Best for content and logistics questions – 225 of you >> 20 of us!!
- Encourage public posts, except for things about **your** graded work
- Answer other students' questions – great way to learn!

Email

- Best for personal circumstances and/or private questions
- If unsure, always feel free to email Miya at mnats@cs.washington.edu
 - May politely ask you to post on Ed instead!
- For emails, **please use your UW email** (protecting student privacy!)

The World Around CSE 121 & Reaching Out

Our goal is to give you a great CSE 121 experience!

But, we recognize that CSE 121 doesn't exist in a vacuum – there's a lot going on in the world that can impact your education.

We've designed course policies for maximum flexibility: resubmissions, dropping quiz/exam problems, asynchronous help & lecture recording.

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!

Help Us Improve!

This is a relatively new course! We're *always* looking for feedback on how to improve the class for you and for future students.

- We ***really*** value your feedback!
- Let us know what's working and what isn't working for you!

Several feedback mechanisms:

- Built into the class (e.g. reflections, mid-quarter feedback sessions)
- Post on discussion board (can be public/private)
 - Note: anonymous is anonymous to other students, *not* to staff
- Use [CSE's Anonymous Feedback Tool](#) (also on website)

Course Website

cs.uw.edu/121

- Primary source of course information (**not Canvas**)
- Calendar will contain links to (almost) all resources
- Please review syllabus ASAP
- Let's go on a website tour :)

The screenshot displays the CSE 121 course website. On the left is a purple navigation sidebar with the title 'CSE 121'. It contains a 'Home / Calendar' header and a list of links: Syllabus, Assignments, Resubmissions, Exam, Getting Help, Course Staff, Grading Rubrics, and Resources. Below these are links for Search Site, Course Tools, EdStem, Grade Calculator, and Anonymous Feedback. The main content area on the right has a yellow 'Attention!' banner at the top stating the website is under development. Below this is the title 'Introduction to Computer Programming I Spring 2025'. A second yellow banner provides a note about the '25sp ver.' and a link to the course page. The main text says 'Welcome to CSE 121: Introduction to Computer Programming I' followed by a button '► What is this class? What will I learn?'. At the bottom, a section titled 'This Week (at a glance)' shows a calendar for Monday (03/31) with 'Nothing!' and Tuesday (04/01).

CSE 121

Home / Calendar

- Syllabus
- Assignments
- Resubmissions
- Exam
- Getting Help
- Course Staff
- Grading Rubrics
- Resources

Search Site

Course Tools

EdStem

Grade Calculator

Anonymous Feedback

Attention! This website is still **under development**. More information will be added soon and all content is subject to change.

Introduction to Computer Programming I Spring 2025

25sp ver. Note: this is for the Spring 2025 iteration of CSE 121. Looking for a different quarter? Please visit <https://courses.cs.washington.edu/courses/cse121/>.

Welcome to CSE 121: Introduction to Computer Programming I

► What is this class? What will I learn?

This Week (at a glance)

Monday (03/31)

- Nothing!

Tuesday (04/01)

Ed

- Our online learning platform
- Lessons, sections, quizzes
- Place to ask questions
- Also, where we'll code!
- Intro and walkthrough in Section 0

The screenshot shows the Ed Discussion board interface for CSE 121 - 25sp. The top navigation bar is purple with the 'ed' logo and course title. On the left, there's a sidebar with 'COURSES' (including 'CSE 121 - 25sp' which is highlighted) and 'CATEGORIES' (including 'Lectures', 'Sections', etc.). The main content area shows a search bar and a list of threads. The first thread, 'Welcome to CSE 121!', is highlighted in purple and shows it was posted by Miya Natsuhara (Instructor/Lead TA) 1 day ago with 24 likes. The thread content includes a welcome message from the instructor, a heart icon with the number 24, and a 'Resources' section with a link to the course website.

ed CSE 121 - 25sp – Ed Discussion

New Thread

Search

Filter

COURSES

- 12x Open Access Proj...
- CSE 12x + OMAD IC
- CSE 121 - 25sp
- CSE 122 - 25sp
- CSE 123 - 25sp
- 9 more

CATEGORIES

- Lectures
- Sections
- Pre-Class Material/...
- Programming Assig...
- Creative Projects
- Quizzes
- Resubmissions
- Final Exam

Welcome to CSE 121! #1

Miya Natsuhara INSTRUCTOR/LEAD TA

Yesterday in Announcements

UNPIN STAR WATCHING VIEWS 149

Hi all!

24

Welcome to CSE 121! 🎉! My name is [Miya Natsuhara](#), and I'll be your instructor for CSE 121 in Spring 2025. The entire course staff is really excited to be working with you in CSE 121! With the quarter officially starting today, we wanted to get some important information out so you can prepare.

We hope you all managed to stay safe and healthy and had an enjoyable spring 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. If you're new to Ed or want a refresher, check out [EdStem's Quick Start Guide](#) to help you navigate the website.

This is a long message with a lot of information. Some of it will be covered in class this week also, but please try to at least skim this whole announcement, and pay particular attention to parts in **bold**.

Resources

Our course website has all the information and resources you'll need and is now available here: <https://cs.uw.edu/121>. Please bookmark or remember this site, as you'll want to access it frequently.

Some Other Course Tools



Sli.do

- Ask questions in class
- Live activities (ungraded)
- No account needed



Canvas

- Panopto lecture recordings (also linked from website)
- Some grades*

My Digital Hand

MyDigitalHand

- Queueing in TA office hours



Gradescope

- Quizzes and final exam grading

Switching to Ed: Our First Program!*

*note: in almost all cases, slides are *not* comprehensive. reviewing the slides will not cover all the content in lecture!

“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](#) (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 website/calendar)
- Check over [syllabus details on website](#)