

# CSE 374: Programming Concepts and Tools

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Spring 2026  
Instructor: Megan Hazen

# Megan Hazen

PhD Electrical Engineering, UW  
Machine learning expert  
Data Science professor

Call me Megan, Dr. Hazen, Professor  
Hazen, she/they/nerd

Catch me biking to work or reading a  
book...

Come to my office to talk debugging, eat  
cookies, or just enjoy the view



# Today's Goals

## My Job

- About this course
- Instructional set-up
- Assignments
- Resources
  - Course staff
  - Web page
  - EdStem
  - Schedule
- Course Standards

## Your Job

- Find your resources
  - Read the syllabus
  - Find the course calendar
- Get started with technology
- Post on Ed, or attend office hours

# What is this course?

## CSE 374 is a practical course about

- Command line tools and scripts to automate tasks
  - Linux and a computer model
- C programming with explicit memory management
  - Data storage and manipulation
- Programming tool stack & Object Oriented Programming
  - Software engineering impacts

## CSE 374 is also

- A chance to learn how to learn
- A path to being a power user

# Major topics of 374

1. Command line and scripting tools - Linux, Bash, automation
2. C programming and memory management – How does a program interface with memory?
3. Tools for programming - Compilers, debuggers, version control, Makefiles
4. C++ Programming – Object oriented design and larger software projects
5. Software development and testing - Software specs, tests, and teamwork
6. Concurrency & Profiling – Understanding more about memory usage



# Who we are

Professor Megan Hazen

TAs

- Naama Amiel
- Perry Chien
- Michael Ibrahim
- William Tsai
- Selina Wang

Contact Us

- [Course Webpage](#)
- Ed Discussion
- Email: [cse374-staff@cs.Washington.edu](mailto:cse374-staff@cs.Washington.edu)
- Come to office hours

# Who you are

## Declared Majors

When taking the course

**1.67%** ELECTRICAL AND COMP ENGR

**2.11%** INFORMATICS

**3.7%** ACMS (DISCRETE MATH AL)

**4.3%** PRE SCIENCE

**5.2%** APPLIED MATH: DATA SCI

**6.2%** APPLIED MATHEMATICS

**7.2%** ACMS (SCI COM & NUM AL)

## Concurrent Courses

When taking the course

**1.15%** [E E-469](#)

**2.13%** [E E-474](#)

**3.11%** [E E-398](#)

**4.9%** [E E-477](#)

**5.8%** [BIOL-130](#)

**6.8%** [M E-398](#)

**7.7%** [CSE-415](#)

**8.7%** [CSE-416](#)

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# Logistics

Lecture **Monday, Wednesday, Friday 9:30-10:20am in CSE2 G01**

- Prepare for active learning, feel free to bring a laptop

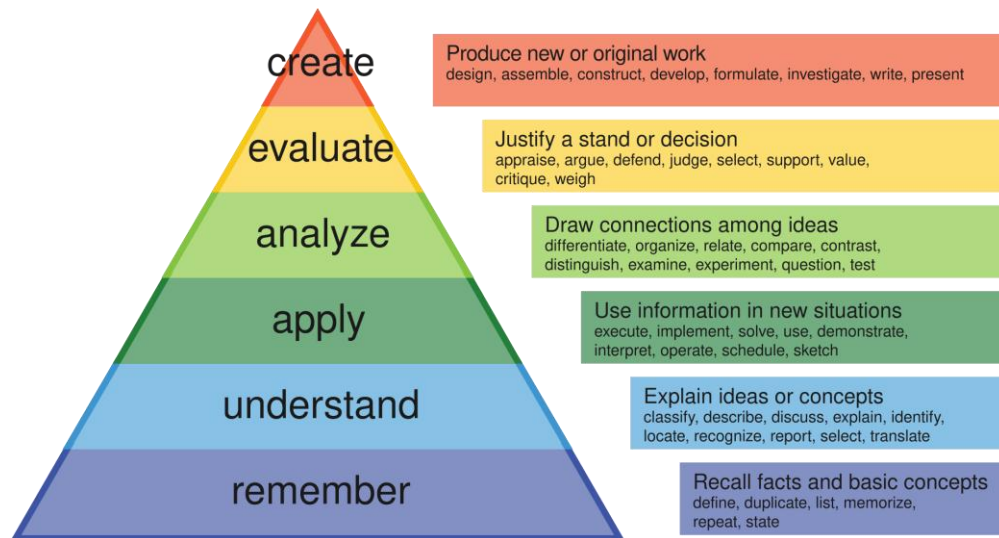
No section, but office hours (mostly) daily

Monday	Tuesday	Wednesday	Thursday	Friday			
09:30-10:20 Lecture CSE2 G01 <i>Introduction</i> 10:30-12:00 OH (Megan) CSE1 462	31	09:30-10:20 Lecture CSE2 G01 <i>Linux basics</i>	01	12:00-13:00 OH (Naama) CSE1 4th Floor Breakout	02	09:30-10:20 Lecture CSE2 G01 <i>Shell access / Bash</i>	03

## April

Monday	Tuesday	Wednesday	Thursday	Friday					
09:30-10:20 Lecture CSE2 G01 <i>Bash scripting</i> 15:00-16:00 OH (Selina) TBD 23:59 HW0 due <a href="#">Shell Access Spec</a>	06	11:00-12:00 OH (Michael) TBD	07	09:30-10:20 Lecture CSE2 G01 <i>Bash scripting I/O</i> 13:30-14:30 OH (William) TBD	08	12:00-13:00 OH (Naama) CSE1 4th Floor Breakout	09	09:30-10:20 Lecture CSE2 G01 <i>Regular expressions, Grep/Sed</i> 14:30-15:30 OH (Perry) CSE1 4th Floor Breakout 23:59 HW1 due	10
09:30-10:20 Lecture CSE2 G01 <i>Version Control (gitlab)</i> 15:00-16:00 OH (Selina) TBD	13	11:00-12:00 OH (Michael) TBD	14	09:30-10:20 Lecture CSE2 G01 <i>Intro to C</i> 13:30-14:30 OH (William) TBD	15	12:00-13:00 OH (Naama) CSE1 4th Floor Breakout	16	09:30-10:20 Lecture CSE2 G01 <i>Written assessment / Intro to C</i> 9:30-10:20 Linux tools written assessment 14:30-15:30 OH (Perry) CSE1 4th Floor Breakout 23:59 HW2 due	17

# Course work & grading



- Practice Problems: Very short credit/no-credit exercises designed for remembering and understanding material.
- Homework Projects: Longer form work in which students apply, analyze, and create with course material.
- Assessments: Formal evaluations (tests/oral demonstrations) provide information about individual mastery

# Course work & grading

Work-type	Number Frequency	Grading	Late Policy
Practice Problems: Very short credit/no-credit exercises designed for remembering and understanding material.	25 ~ every lecture	Credit / no-credit # complete/25 25% of final grade	No late submissions
Homework Projects: Longer form work in which students apply, analyze, and create with course material.	~ 8 Weekly	Variable points Points_earned/points possible 50% of final grade	Up to 3 late days per assignment, 10 late days per quarter
Assessments: Formal evaluations (tests/oral demonstrations) provide information about individual mastery	4	25 points each Sum of points_earned 25% of final grade	Missed assessments get 0 points

# Staying on top of work

- Work is turned in via Gradescope
  - If the interface is new to you, please ask for help
  - Assignments will show up there as they are published
  - We will also (later) submit work to Gradescope via Github – instructions will be provided
- Grades are tracked via Canvas
  - As much as possible, Canvas assignment list will also be kept up to date
- All materials are tracked on the webpage calendar
  - Including assessment dates
  - And links to helpful references

gradescope by turnin

CSE 374 Spring 2026  
Course ID: 1278827

Description  
Edit your course description on the [Course Settings](#) page.

Active Assignments	Released
HW0: Linux set up	MAR 30, 2026 9:30 AM Late E
Lecture 2	APR 1, 2026 10:00 AM Late

Instructors

CSE 374 A Sp 26: Intermediate Programming Concepts And Tools

Jump to Today

View Course Stream  
View Course Calendar  
View Course Notifications

To Do

- Lecture 2  
CSE 374 A Sp 26: Intermediate Programming Concepts And Tools  
1 points | Apr 6 at 9:30am
- HW0 - Linux environment  
CSE 374 A Sp 26: Intermediate Programming Concepts And Tools  
15 points | Apr 6 at 11:59pm

Course Description  
(Course Catalogue) Covers key software development concepts and tools not in introductory courses. Concepts of lower-level programming (C/C++) and explicit memory management; techniques and tools for individual and group software development; design, implementation, and testing strategies. Intended for non-majors. Cannot be taken for credit if credit received for CSE 333. Prerequisite: CSE 123.

This is a very practical, skills-oriented course. The goal is to gain exposure to a wide variety of useful concepts and tools. Lecture will introduce concepts, and homework will provide an opportunity to practice. There will be a strong emphasis on independent learning, as it will not be possible to cover each topic comprehensively in class.

gnak

# Expectations

You are in charge of your own learning  
You will get out of the course what you put into it

You are responsible for material on the webpage  
Keep track of the calendar, follow the links

Learning how to learn is part of the plan  
Look at documentation  
Search for answers

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# Resources

- Instructor and TAs
  - Ask questions in lecture
  - Office hours are frequent
  - We are here to help
- Edstem Discussion Group
- Email (cse374-staff@cs)
- Canvas Page
- Course Web page
- Resources list on web page
  - Use web searches / AI as a starting place only
  - Go to formal references for more info and authoritative answers
  - Don't cut-and-paste, do your own work.

# Books

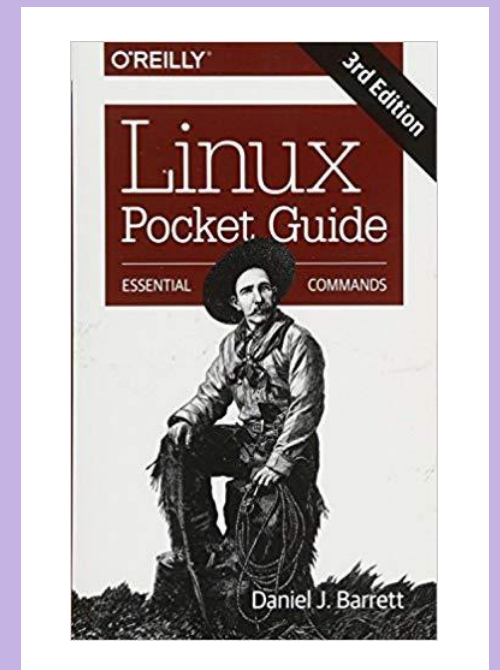
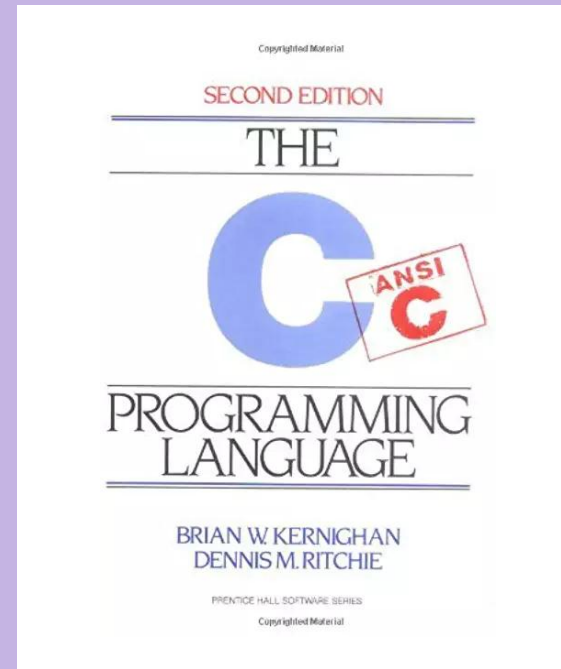
Resources tab on webpage offers a lot of source material

Two books may be helpful – great references with detailed information (check the library!)

[Linux Pocket Guide](#), Barrett, O'Reilly, 3rd ed., 2016 (different editions are ok too)

The C Programming Language, Kernighan & Ritchie, Prentice-Hall, 2nd ed, 1988

May also use web resources and (sparingly) AI



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# Course Standards



Every student in this course is capable and deserves to thrive with this material



Different life experiences may dictate different needs for learning; we'll figure it out



Course staff are authorities who are respected by course participants

# Integrity

Your integrity  
is everything

- Policy on course webpage & Allen school webpage
- Do your own work; be ready to explain it
- Unless otherwise specified, all work is independent effort
  - Do **not** share code; discuss an approach
  - Do **not** copy an answer; ask about an idea
  - Do **not** use AI's solution; ask only small questions of AI

# Integrity

Your integrity  
is everything

1. You must never copy actual code or written answers from another student or AI
2. Modifying code or other artifacts does not make them your own
3. You must not look at previous solutions, nor should you share your own
4. You must cite any help you received, including on-line references or AI responses.  
#comment in code
5. You should be prepared to explain any of your submitted work

# How to succeed

- Show up and be an active learner
- Stay on top of assignments
- Being an expert requires practice
- Don't be afraid to try something out; play with ideas
- Ask for help early and often



## Office hours today

- 10:30-12:00  
CSE1 462

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