Welcome to CS111!

Wellesley in Tech campaign:
https://wellesleyintech.squarespace.com

Introduction to CS111

Part 1: Logistics

CS111 Computer Programming

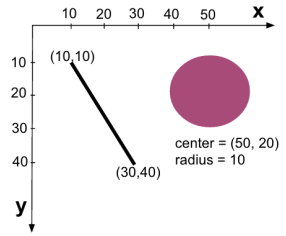
Department of Computer Science
Wellesley College

Am I in the right class?

- CS111: Computer Programming and Problem Solving introduces the fundamentals of programming and problem solving techniques using Python. It is for students who have not taken a full introductory programming course before. It is also the first required course in a CS major or minor.
  - CS111X (a lableless section) is for students with some prior programming experience.
  - CS111M is a version of CS111 that's also a Maurer Public Speaking course.
- CS112: Introduction to Computing for the Sciences similar content to 111 but applied to concepts in the natural sciences.
- CS121: Intro to Game Design teaches some programming in C# along with game design and criticism.
- More advanced concepts are taught in CS230: Data Structures (2nd required course in CS major/minor) and CS204: Introduction to Front End Web Development (elective). If you've already taken an introductory programming course, talk to a 230 and/or CS204 instructor to see if these courses are right for you.

Prerequisites

- **No previous exposure** to programming or computer science expected
- No advanced mathematics expected (esp. no calculus)
- Need comfort with some basic math concepts (a subset of the **QR** component of the QR&DL):



From geometry:

- The two-dimensional coordinate system (x,y coordinates) and angles in degrees.
- Drawing geometric shapes on a plane based on coordinates, e.g, lines, circles, polygons.

From algebra:

- Mathematical operations (addition, subtraction, multiplication, division, exponent) with variables. Examples: `10*x + 25;` `sqrt(a²+ b²);` `age = currentYear - birthYear`
- Translating English sentences into expressions with operators and values. Example: Approximate minutes you spent eating in a week: (15 + 30 + 40) * 7

Lectures and labs

- Two 75-minute lectures per week introduce and discuss material.
- A weekly 110-minute lab* provides hands-on experience with ideas presented in lecture.
- This semester, there are two lecture sections and six lab sections, taught by four instructors total (Professors Gadiraju, Lee, Melnick, and Turbak) *[see the next slide]*
- Please note that each instructor has individual course policies, which you can see on our course website: https://cs111.wellesley.edu/info/section-info

*This does not satisfy the Wellesley laboratory requirement.

Instructors

Professor Vinitha Gadiraju

Professor Sohie Lee

Professor Sara Melnick

Professor Lyn Turbak

Everything you need: CS111 website

https://cs111.wellesley.edu

Materials for the course

- All course materials may be found online at:

  http://cs111.wellesley.edu

- Textbook - you don't have to buy one. We will rely on our slides and Python notebooks from class plus resources available on our website, particularly Allen Downey's Think Python online book. (https://allendowney.github.io/ThinkPython/)

Expectations on slides and lecture notebooks

- Lecture slides are posted on the website in advance. **We expect you to read the slides before coming to class**. Bring questions from your reading to ask in class.
- Most lectures have Python notebooks containing interactive examples and exercises, some of which may be covered in lecture. The examples in these **lecture notebooks** are **ungraded**, which contrasts with the **graded exercise notebooks** that are part of your coursework *[see the next slide]*.
- During class time, we will discuss concepts that are challenging, do some examples on the whiteboard, and do pair programming in the lecture notebooks.
- We typically do not cover all slides and notebook material in class, and **it is your responsibility to review uncovered material after class**.
- Together, slides and lecture notebooks are our notes for the course.
- At the end of each slide deck, there are usually questions which help you test your knowledge.
- We post solutions to lecture notebook problems on the website.

CS111 coursework

- **Part 1: Exercises.** Every week there will be "drill" exercises on dedicated exercise notebooks that can be submitted automatically to show your understanding of the material. These are typically due on **Mondays at 11pm**.
- **Part 2: Projects.** A project is a collection of tasks that are more complex than drill exercises. You may work individually or with another student (pair programming). In most weeks, you are required to do multiple tasks. You will sometimes have a choice between tasks that satisfy the same learning goals. We encourage you to do more than the minimal number of tasks in order to learn more, especially if you plan to take more CS courses after CS111. Projects are usually due on **Tuesdays at 11pm.** You can submit project revisions up to 3 days beyond the original deadline, but the score earned on revisions will be capped at 85/100.

CS 111 coursework (continued)

- **Part 3: Quizzes.** These are graded paper-and-pencil assessments at the beginning of Wed/Thu labs. You have 15 minutes to take the quiz, and can use paper notes but cannot use a computer or any other electronic devices (e.g., to search for answers or execute code). Quizzes are intended to give you opportunities for self-assessment and self-regulation, both very important skills for becoming a life-long learner.

  Students can retake a different version of any quiz for a better grade one week after the first version during **evening quiz sessions** (Wed and Thu evenings 7-9pm in H105). During these sessions, students can also take the first version of a quiz they missed for any reason.

- **Part 4: Exams.** There are two 75-minute in-class midterms (see Calendar). There is also **an in-person, scheduled final exam** to take place during end-of-semester exam period. **The final exam date & time will be announced later in the semester; do not make travel plans home until these details are posted**. These exams are open notes, but without access to a computer or other electronic devices.

Coursework at a glance: A typical week

Spring 2026 Schedule

Key: **Today** *Info* Lecture Lab Project Out Project Due Quiz Evening Quiz Session Exercises Exercises Due Exam

If a deadline conflicts with a religious holiday you observe (that's not listed), please contact your instructor to discuss accommodations.

Jump to: **today** | **Lectures** | **Labs** | **Projects**

MON	TUE	WED	THU	FRI
2	3	4	5	6
Exercises 2 due 11pm (Functions)	Lec 5: Functions III	Lab 3: Functions 2	Lab 3: Functions 2	Lec 6: Intro to Booleans
Exercises 3 out (More Functions, Booleans)	project02 due 11pm (Functions)	Quiz 2 (Functions)	Quiz 2 (Functions)	project02 revision window closes 11pm
	project03 out (More Functions)	Quiz 1 retake (Python basics)	Quiz 1 retake (Python basics)	
		7-9pm Quiz Session H105	*7-9pm Quiz Session H105*	

Extension and attendance policies

- Each instructor/lecture section has individual extension, attendance, and participation policies.
- Your instructor will discuss their policy on the first day of class. You can also view their policy on the course website: https://cs111.wellesley.edu/info/section-info

Quiz policies

- For every quiz, there are **three** versions:
  - (week 1) A **study guide** is effectively an *ungraded* pre-take version of a quiz. It includes problems on material that has been introduced in lecture/lab, but typically before students have completed a project on this material.
  - (week 2) The **regular** quiz is the first *graded* version of the quiz, typically given after students have completed a project on the material tested by the quiz.
  - (week 3) The **retake** quiz is the second *graded* version of the quiz. It allows students to improve their score (up to 100%) on any learning goal.

Quiz study guides are linked in Quiz entries in the course schedule as well as at the bottom of the corresponding lecture pages.

Grading policy

This course is **mandatory credit/non-credit**.

Your course grade will be based on the following components:

- Exercises
- Project Coding
- Quizzes
- Midterms and Final exam
- Attendance/Participation (policy depends on your section)

In order to earn credit for this class, the criteria below must be met:

- Your average of the three exams in this course (two midterms and the fixed final) must be ≥ 65.
- Your average in each of the other categories -- namely, quizzes, exercises, and projects -- must be ≥ 75 in each category.
- You comply with your lecture section's attendance and participation policy.

If you meet **all** of the above criteria, you will earn credit for this class. If there is some criterion that you do not meet, you will **not** earn credit for this class.

Honor Code policy for **quizzes & exams**

- All quizzes and exams **MUST** be your own work. Any form of collaboration with others is **a violation of the Honor Code**.
- On all quizzes and exams, no computers or other electronic devices (including mobile phones) are allowed. Any such use of computers or electronic devices is **a violation of the Honor Code.**
- Quizzes and exams are **open notes**, so written materials (the ones we have provided or your own notes) **are** allowed for reference.

Collaboration policy on projects & exercises

- You may collaborate with all your peers who are taking CS111 this semester on **exercises and projects**. This means working together, side by side either in person or virtually, inside or outside the class.
- You can collaborate with only 1 other person on projects. You may collaborate with more than 1 person on exercises.
- When you are partnering with another student, you can submit the same code if you were both present while writing all code. However, you cannot submit the code that the partner(s) wrote without you being present. **This is a violation of the honor code.**
- Whenever you collaborate with other students in the class (even briefly, such as asking a question), always **acknowledge this collaboration** in writing (you'll learn how in lab).
- No collaboration with students from prior semesters or other CS knowledgeable people (e.g. family members, friends, etc.) is permitted. Notes and materials from these individuals are not allowed either.
- When collaborating, keep in mind that each lecture section has a different extension policy.

AI-powered tools policy

Using AI-powered tools (see below) is considered equivalent to consulting a student who took CS 111 in prior semesters or any other CS knowledgeable person. Given that such consultations are prohibited, the use of AI-powered tools for learning and completing any type of assignment in CS111 is **explicitly prohibited**.

If we detect what we think is AI-generated code in one of your submissions, we may, at any point in the semester, have a conversation with you about your code, and/or file an Honor Code charge against you.

AI-powered tools

- **Generative AI tools** - these are tools such as ChatGPT or DALL-E2. They are capable of generating text or images on demand.
- **AI-assistants embedded in IDEs** - an IDE is an Integrated Development Environment that is used for programming, e.g. Thonny.

Read the full AI-powered tools policy on the CS111 website to learn more.

CS230 recommendation

The CS111 instructor team will give a recommendation of whether a CS111 student is prepared to take CS230 Data Structures immediately after CS111, or if the student would benefit from taking another CS class prior to enrolling in CS230.

In order to get a positive recommendation to take CS230 immediately after CS111, all of the following criteria must be met:

- Either your exam average or quiz average must be ≥ 85 **and** both your exam average and quiz average must be ≥ 75. Your exam average is the average of the three exam scores (from the two midterm exams and the final exam).
- Your average in each of the other categories (exercises and projects) must be ≥ 85 in each category.
- You comply with your section's attendance and participation policy.

If all the above criteria are not met, the CS111 student will not be recommended to take CS230 directly after CS111. Instead, you must take another 200-level CS course, such as CS204, CS220, or CS221, if you wish to make progress in CS.

Need help or support?

- Regular **drop-in hours with tutors** for questions on project tasks or concepts (see the website calendar), in person or over Zoom.
- Regular **drop-in hours or scheduled appointments with instructors** for questions on projects, concepts, logistics, or anything else (see the website calendar), in person or over Zoom. You can meet with **any** instructor, not just your own lecturer or lab instructor.
- A **Brightspace Q&A** forum (you'll be added to this).
- Create study groups with your **classmates**, abiding by the honor code (working together is fine, but do not copy the work of others, more in the next slide).
- **Individual tutoring** through the PLTC.
- **Because of the AI-powered tools policy, you should always seek help from a human (instructor or tutor) rather than AI!**

Important dates for Spring 2026

You *must* attend all of the following (plan travel and other activities accordingly):

- **Friday, March 15** (the day before Spring Break) : in-class Midterm 1 (75 minutes)
- **Friday, April 10** : AI paper presentations (more on this later)
- **Friday, April 17** (the day before Patriot's Day weekend) : in-class Midterm 2 (75 minutes)
- **To Be Announced (in range Tue May 5 – Fri May 8)** : Fixed-schedule Final Exam (150 minutes)