

Room	King 106, MWF 10-10:50
Instructor	Cynthia Taylor, ctaylor@oberlin.edu
Office Hours	King 229, M 2 - 3pm, F 3pm-5pm, or by appointment

Overview

CS 150 is an introductory course in Computer Science, with an emphasis on problem solving. In this course, students to gain exposure to many of the fundamental concepts of computer science, such as algorithm design, program organization, recursion, object-oriented programming, and multiprocessing. Python is the principal programming language, but this is not a course on Python. No programming experience whatsoever is expected.

Topics

Core topics: Expressions, Types, and Variables; Loops; Image Manipulation; Functions; Conditionals; Strings; Arrays; Boolean Logic and Circuits; Recursion; File I/O; Classes and Inheritance; Searching, Sorting, Asymptotic Running Time and Data Structures.

Textbook and Website

We are using Zelle's *Python Programming: An Introduction to Computer Science, 2nd Edition*, 2010. Note that the first edition uses an earlier version of Python.

The schedule, readings, labs, and announcements are posted on the course website, available at www.cs.oberlin.edu/~ctaylor/150/. Powerpoints, grades and the class forum are available on Blackboard.

For access to computers with Python, you may use the labs in King 135 and 201. Speak to Jackie Fortino in King 223 for the code. Only students currently taking a CS course may use the labs.

Course Requirements

- Twelve labs (40%) – expect roughly 8-10 hours per week outside of class on these.
- Ten prelabs (10%) – expect an hour on each prelab before you start the lab proper.
- Five in-class quizzes (25%) – September 26th, October 10th, November 3rd, November 21st and December 8th
- One Final Project (15%) – presented Friday, December 19th at 2pm
- Class and lab attendance and participation (10%).

Peer Instruction

We will be using Peer Instruction, a teaching model which places stronger emphasis on classroom discussion and student interaction. You will be expected to attend all lectures, having completed the assigned reading and ready to discuss with your classmates.

Homework and Late Policy

Late labs are strongly discouraged. You may hand up to two labs one day late without penalty. Deadlines are strict: if a lab is due at 8:00 pm, a submission with a timestamp of 8:01 pm or later will be marked as late. Be sure to submit early! Labs that are up 24 hours late will be penalized by 50%. Labs that are more than 24 hours late will not be graded. Prelabs are due at the beginning of lecture and must be typed. Late prelabs are not accepted. If for some reason (such as a severe illness) you will not be able to complete a lab or take a test, talk to me immediately, and prior to the deadline. I handle these situations on a case-by-case basis.

Tutors

Peer are tutors available, provided by Oberlin College. If interested, see Kay Knight in Peters 114.

Student Disabilities

If you have a disability that might impact your performance in this course, or requires special accommodation, please contact me as soon as possible so that appropriate arrangements can be made. Support is available through Student Academic Services, specifically Jane Boomer. You will need to contact them to get your disability documented before accommodations can be made.

Honor Code

We take the honor code very seriously, and will report any violations to the Honor Code Committee.

In general, it is OK to talk with other students about the labs, but you have to be very careful about how much you collaborate. Discussing an algorithm, approach, or the general structure of a program is acceptable. However, cooperation should never involve other students possessing a copy of all, or even a portion of, your work, regardless of format. When working with others, avoid typing or writing anything down; you should be able to recreate your discussion without anyone's help. Do not hand in work done with (or by) someone else, or found on-line, under your own name. Do not edit code for another student. If you discussed the assignment with someone, or used internet resources, you should cite these before the honor code in your submission. If you are unsure about anything, please ask.

You must write the Honor Pledge and sign at the end of each and every submission. Electronic submissions must include the honor pledge in the comments and your name. The pledge is

“I affirm that I have adhered to the Honor Code in this assignment.”