

CPE 101: Fundamentals of Computer Science I

Instructional Information

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Course Webpage: <http://www.csc.calpoly.edu/~akeen/courses/csc101x>

Lecture Time and Location

• Lecture: TR 12:10pm – 1:30pm, 14-250

Lab: TR 1:40pm – 3:00pm, 14-302

Course Objectives

- Create an interactive 2D virtual world.
- Enjoy solving puzzles == enjoy Computer Science.
- Understand the basic principles of algorithmic problem solving.
- Apply top-down design, stepwise refinement, and procedural abstraction.
- Use basic control constructs and data types to solve problems.
- Lastly, exposure to the Python programming language.

Text: The course textbook is *How to Think Like a Computer Scientist: Learning with Python 3*.

Activities

Reading – The schedule outlines the order in which topics will be covered in lecture and the associated chapters/ sections in the textbook that you should read. The lectures may not cover all of the material in the assigned reading, but such material may appear in labs, programming assignments, and exams.

Class Participation – The lectures and labs are for your benefit; attendance is mandatory. Participation includes responding to questions in class, lab, or office hours and making observations or discussion material in class, lab, office hours, or on the forums. You should ask questions when you have them. We are more than happy to answer any questions that you may have relating to the course material.

Office Hours – Office hours are for your benefit. We are more than happy to answer any course related questions or to help with an programming issues you may have.

Labs – There are currently ten planned lab assignments. Each lab assignment must be demonstrated in lab by the end of the week (unless an earlier date is specified). You are allowed and encouraged to work together on lab assignments.

Once you have completed the lab assignment, you are encouraged to use the remaining lab time to work on your programming assignments.

Programming Assignments – There will be five programming assignments. These assignments are intended to be of greater length and complexity than the lab assignments.

Programming assignments may be completed with a designated partner. You will have an opportunity to designate your partner early in the quarter.

Code Reviews – Each project pair will participate in two code reviews. During the code review you will present parts of an assignment solution to the class and answer questions about your solution including the style and decomposition.

Lab Exams – There will be two lab exams. These will focus on programming skills and knowledge acquired primarily, though not exclusively, from doing the labs and assignments.

The exams will be **closed** book and **closed** notes. The exams will be individual efforts.

Written Exams – There will be two midterm exams and one final exam. The exams will cover concepts presented in lecture and material based on the labs and programming assignments.

The exams will be **closed** book and **closed** notes. The exams will be individual efforts.

Grading

The percentage breakdown for the course grade is as follows.

Activity	% per	% total
Labs	1	10
Participation		3
Assignments		32
Assignment 1	2	
Assignments 2 – 5	6 – 8	
Code Reviews	2.5	5
Lab Exams	5	10
Midterm	10	20
Final	20	20
Total		100

Due Dates and Lateness

Programming assignments will be submitted electronically using **handin**. Except in the most extreme situations, **late assignments will not be accepted**. Even if you cannot complete an assignment, submit what you have for partial credit.

Missed Exams

Make-up or early exams will not be given except in the most extreme situations. If you must miss an exam due to extreme illness, etc., contact the instructor immediately.

Collaboration and Honor Code

For each assignment that you submit, the following statements must be true where “you” is defined as the official pair of students working on the assignment.

- You wrote each line of code in your submission (excluding any code that the instructor has explicitly allowed you to use).
- Your submission is not a duplication (in any part) of another student’s submission.
- Your submission is not a copy (in any part) of a single solution developed as part of a collaborative effort.
- You did not copy code from another source (student or otherwise).
- You did not provide your code to another student.
- You are able to answer detailed questions about each part of your submission.

If you do not agree to these rules, then you need to drop the course. Continued enrollment in the course is implicit agreement to adhere to these rules. Submissions will be compared using software that can reliably detect similarities among programs.

What is allowed?

- Help with proper syntax and compilation errors.
- Discussion of general programming techniques.
- Discussion of algorithms and data structures required by the assignment description.

The Last Page

This page is so I can gather a little information about you at the beginning of the class. Please fill it out, tear it off and leave it with me on the way out.

Who are you?

Name: _____
Section: _____
Major: _____
Email: _____
Enrollment: Enrolled
 Enrolled, thinking about dropping
 Thinking about enrolling
 Trying to enroll

How much programming
experience do you have?: _____

Class Expectations?

Please take a minute to write out what your goals and expectations are for CPE 101. What do you want to learn? What do you expect to learn? Are these the same thing?