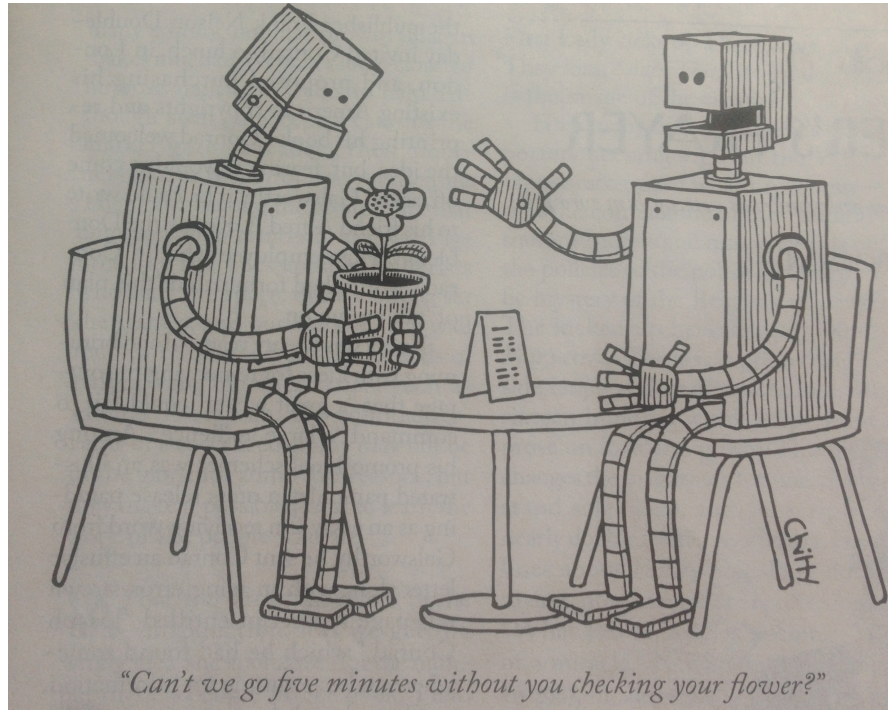


CS 3A - OBJECT ORIENTED PROGRAMMING METHODOLOGIES IN PYTHON



Systematic introduction to fundamental concepts of computer science through the study of the Python programming language. Coding topics include control structures, functions, classes, string processing, lists, tuples, dictionaries, and files. Concept topics include algorithms, recursion, data abstraction, problem solving strategies, code style, documentation, debugging techniques and testing.

Instructor: Elaine Haight
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e-mail: HaightElaine@foothill.edu

Meetings: Mondays and Wednesdays 10:00 am –11:50, Room 4308.

Laboratory: The 3 hour laboratory portion of this class is conducted online. Most people take approximately six hours to complete each lab assignment. This does not include the time it takes you to read other materials.

Office Hours: Mondays and Wednesdays at 9:00 - 9:50 am in Main Campus Room 4114. Other times I can have a face-to-face meeting or a telephone conference with you *if* you send me an Inbox Message through Canvas with your telephone number and a good time to meet or a good time for me to call you. Note that office hours and appointments are **ONLY** for students who attend class and have further questions.

Laboratory: Use the computers on campus, or download and install **Python 3** on your own computer.

Textbook: Please choose your own textbook. I can *recommend* the following:
"Python For Everyone" by Horstmann & Necaise
~OR~
The electronic book: Go to zybooks.com and sign up, enter the book code: **FOOTHILLCS03AHaightFall2018**
and click *Subscribe*
~OR~

a book of your choice. Please choose whatever book looks best to you, but make sure it covers Python **3**.

Class Website: ~ Use **FireFox** or **Chrome** and **NOT IE** ~
Go to <https://foothillcollege.instructure.com>
Scroll down, type in your ID number and password that you use to log into MyPortal.

Prerequisite: Math 105 or Math 108.

SYLLABUS

Week	Subject	Reading from "Python for Everyone"	Zyante ebook
1	Introduction	Chapter 1	Ch. 1
2	Numbers and Strings, I/O	Chapter 2	Ch. 2, 3.1
3	Branches	Chapter 3	Ch. 4
4	Loops	Chapter 4	Ch. 5
5	Functions	Chapter 5	Ch. 6
6	Lists	Chapter 6	Ch. 8.1-8.9
7	MIDTERM: Wed, 7 Nov, 10:00am Data Files	Chapter 7	Ch. 12
8	No Class Mon, 12 Nov Dictionaries	Chapter 8	Ch. 8.12-8.15
9	Object Oriented Programming	Chapter 9	Ch. 9
10	Recursion	Chapter 10	Ch. 14
11	Review		
12	FINAL EXAM: Wed, 12 Dec, 10:30 am- 12:30 pm		

Grading:

There will be 10 homework assignments, each one is a Python program. Your homework points will be weighted as 50% of your total grade; your midterm points will be weighted as 15%; final exam points will be weighted as 35% of your total course grade. You must pass the final in order to pass the class.

If you earn 97% (or more) of the points available in the class, you get an "A+"; 93% earns an "A"; 90% earns an "A-"; 87% earns a "B+"; 83% earns a "B"; 80% earns a "B-"; 77% earns a "C+"; 70% earns a "C"; 67% earns a "D+"; 63% earns a "D"; 60% earns a "D-"; and below 60% earns an "F".

Academic Honesty:

The work you turn in must be your own. You may ask others for assistance, but your solution must have your "thumbprint" on it, and not be the same as any other student's. If two students turn in identical papers, both students receive zero, with no chance to redo. If you find code on the internet and incorporate it into your solution, you must credit the author of the code by including a link to the website where you found it. If you use submit a solution under your name and you did nothing but change the variable names, you will receive a 0 with no chance to resubmit.

Laboratory Submission:

For each lab assignment, you must submit both the listing of your program and the run. I will not grade a lab assignment that does not include proof that it runs, which is in the form of a recording of what happens when you run it. Late labs get 1 point off for each *week* that they are late. This means that if your assignment is one hour late or 6 1/2 days late, it will get 1 point off. If your lab is over 7 days late, it will get 2 points off, etc. You can redo an assignment, but it will be counted off for being late.

HOW TO SUCCEED

Complete a Program Every Single Week. I believe that most of your learning will take place while you are working on laboratory assignments. Therefore, there will be an assignment due every week and each assignment is a computer program. If you don't submit an assignment two weeks in a row, you will be dropped from the class. This is because it is impossible to succeed in this class without studying *every single week* of the quarter.

Read My Feedback. Immediately after the due date for an assignment, I will review your work and give comments on every submission. I work hard to give this feedback within 36 hours after the due date, so I expect you to look at what I wrote on your one assignment submission before you start working on the next assignment. Every single assignment submission receives written comments from me. If you are not able to see my comments, or if there is anything in my comments that you don't understand, you must ask in the Public Discussion immediately.

My job is to criticize your work, so my comments can seem, well, critical. Please don't take it personally because everyone can improve. To be successful in programming you have to be able to take criticism and respond constructively to it. If you disagree about anything I write in my comments on an assignment, you **MUST** ask a question about it in class or in the Public Discussion. A lot of learning takes place in these types of discussions.

Do Not Submit Incomplete Assignments. If you are having difficulty finishing an assignment - and everyone does at some point – there are many ways to get help. You can see all the different places to get help listed on the Home page of our Canvas website. The Assignments tool is for submitting *complete* assignments and getting feedback. If you submit a program in the Assignments tool that is incomplete, I will not review it.

Post to the Public Discussion. Everyone needs to post their questions in the Discussion forum in Canvas. This Discussion forum is public only to the members of this class. For example, your posts will not appear in the results of a Google search. You will see quickly that the Public Discussion enriches everyone's learning experience!

If you send me a Canvas Inbox Message concerning anything in the class, I will respond with: "Please ask in the Public Discussion." I will then wait until you post your question in the Public Discussion before I answer your question. You will lose important time in getting your question answered if you ask it in a Private Message (or – goddess forbid – an email) to me. I answer questions that are posted in the Public Discussion all day Monday through Friday and once a day on the weekends and holidays. If you see a question that you know the answer to, by all means post the answer! Follow-up questions and reasoned disagreement is *encouraged*. Please don't reply with a "thank you" as it wastes everyone's time to look at a post that has no information.

Regarding Late Assignments: *Do not submit more than one assignment per day.* If you submit a late assignment and I have not reviewed it within 36 hours, please send me a Canvas Inbox message asking me to review it. Especially when you are submitting assignments late, *it is critically important that you get feedback on the previous assignment before you start the next one.* I will not review more than one assignment from a given student per day.