

CS 3A Syllabus, Winter 2019, Foothill College

Course Description:

A 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.

Prerequisite:

Math 105 or 108, or successful completion of intermediate algebra.

Instructor:

Elaine Haight - haightelaine@foothill.edu - 650-949-7624

Office Hours:

Mondays and Wednesdays from 9 - 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 your telephone number and a good time to meet or a good time for me to call you.

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.

Use the computers on campus (STEM Center), or download and install **Python 3** on your own computer. There are also computers for your use on the second floor of the Sunnyvale Center in the computer lab.

Each week you will have a **Laboratory assignment**. Note that the Laboratory Assignment will be due at midnight on Tuesdays. Each assignment (after "Hello World") is worth 5 points. *If you go two weeks without submitting a completed program you will be dropped from the class.*

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.

You can submit a late assignment or resubmit an assignment if it will raise your score. I take one point off for each **week** that an assignment is submitted or resubmitted after the due date. This means that if your assignment is one hour late or 6 1/2 days late, it will still 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 submitted late.

Textbook:

Please choose your own textbook. I can *recommend* the following:

“Python For Everyone” by Horstmann & Necaise

~OR~

The ebook by signing up at learn.zybooks.com enter the book code:

FOOTHILLCS03AHaightWinter2019, click *Subscribe*

~OR~

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

Exams:

Both the midterm and the final exams are open book, and they will be in class. You will be able to use any books or notes or this website, but you will NOT be able to use a Python interpreter of any sort.

The **midterm exam** will be given on Wednesday, 20 Feb, at 10:00 am. The **final exam** will be given on Wednesday, 20 March at 10:30 am.

Grading:

There will be 10 laboratory 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% of your total course grade; your final exam points will be weighted as 35% of your total course grade. You must get $\geq 70\%$ on the final exam 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 be given a 0 with no chance to resubmit.

Student Learning Objectives:

You can see the Student Learning Objectives for this class

here: http://www.fgamedia.org/faculty/loceff/cs_courses/common/slos/cs_slos_1.html (Links to an external site.)Links to an external site.

Disability Accommodations:

To receive disability related accommodations, please contact the Disability Resource Center (DRC) as early as possible in the quarter. To contact the DRC, you may do one of the following:

- Visit DRC in Room 5400
- Email DRC at drc@foothill.edu
- Call DRC at 650-949-7017 to make an appointment

If you already have an accommodation notification from DRC, please contact me privately to discuss your needs.

Other Opportunities for Learning:

To find internships, join Foothill's CS club, and attend community meetings of professional organizations, visit <http://csopportunities.blogspot.com/> ([Links to an external site.](#))[Links to an external site.](#)

Important Dates:

Fri, 18 Jan: Last day to drop with a full refund

Mon, 21 Jan: Campus Closed - NO CLASS

Fri, 1 Feb: Last day to file for a Pass/No Pass

Fri, 15 Feb - Mon, 18 Feb: Campus Closed - NO CLASS

Tues, 19 Feb: Last day to submit late labs #1 - #5

Wed, 20 Feb, 10:00 am: Midterm Exam

Fri, 1 Mar: Last day to drop with a "W"

Mon, 25 Mar: Last day to submit late labs #6 - #10

Wed, 27 Mar, 10:30 am : Final Exam

☰ ▶ **Week 1 - Introduction**

☰ ▶ **Week 2 - Numbers & Strings, Input & Output**

☰ ▶ **Week 3 - Branches**

☰ ▶ **Week 4 - Loops**

☰ ▶ **Week 5 - Functions**

☰ ▶ **Week 6 - Lists**

☰ ▶ **Week 7 - Data Files**

☰ ▶ **Week 8 - Dictionaries**

☰ ▶ **Week 9 - Object Oriented Programming**

☰ ▶ **Week 10 - Recursion**
