

CSE 30

Programming Abstractions: Python

Spring 2021

Description:

Introduction to software development in Python focusing on structuring software in terms of objects endowed with primitive operations. Introduces concepts and techniques via a sequence of concrete case studies. Coursework consists of programming assignments and a final examination. Note that CSE 30 assumes some Python experience, students trained in a different language should self-study Python to prepare for CSE 30.

Prerequisites:

CSE 20 or BME 160; and MATH 3 or MATH 11A or MATH 19A or AM 3 or AM 11A or ECON 11A, or a score of 400 or higher on the mathematics placement examination.

Days and Times: TTh 1:30-3:05pm (via Zoom)

Class Webpage: <https://classes.soe.ucsc.edu/cse030/Spring21/>

Instructor: Patrick Tantalo <http://users.soe.ucsc.edu/~ptantalo/>

Office Hours: Wednesdays 10:00am-12:00pm & 2:00pm-4:00pm (via Zoom)

Dates: Wednesday March 31 – Wednesday June 2

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Required Text:

[*Programming Abstractions in Python*](#) by Luca de Alfaro

Recommended Texts:

[*Problem Solving with Algorithms and Data Structures using Python*](#) by Brad Miller and David Ranum

[*Python Cookbook*](#), 3rd edition, by David Beazley and Brian K. Jones, O'Reilly 2013

[*Introducing Python*](#), 2nd edition, by Bill Lubanovic, O'Reilly 2019

[*Fluent Python*](#), 2nd Edition, by Luciano Ramalho, O'Reilly 2021

Coursework:

- 60% Programming Assignments (7): Due at roughly 7 day intervals
- 10% Lab Assignments (5): Due at roughly 14 day intervals
- 20% Quizzes (5): Tuesdays 4/6, 4/20, 5/4, 5/18, 6/1 (times to be announced)
- 10% Final Exam: Wednesday, June 9 (time to be announced)

All scores are rounded to the nearest 10th of a percent. They will not be rounded further. No scores are curved. The following letter grade boundaries will be used to determine your grade in the class.

Grading scale:

A+	98.0% - 100%
A	93.0% - 97.9%
A-	90.0% - 92.9%
B+	88.0% - 89.9%
B	83.0% - 87.9%
B-	80.0% - 82.9%
C+	78.0% - 79.9%
C	70.0% - 77.9%
C-	68.0% - 69.9%
D+	65.0% - 67.9%
D	61.0% - 64.9%
D-	59.0% - 60.9%
F	0% - 58.9%

Accommodations for Students with Disabilities

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me by email, preferably within the first two weeks of the quarter. I would be happy to meet with you in office hours to discuss how we can ensure your full participation in the course. I encourage all students who may benefit from learning more about DRC services to contact DRC by phone at 831-459-2089 or by email at drc@ucsc.edu. See also <https://drc.ucsc.edu/>.

Academic Honesty:

The Baskin School of Engineering has a zero-tolerance policy for any incident of academic misconduct. If cheating occurs, consequences may range from getting zero on a particular assignment to failing the course. In addition, every case of academic misconduct is referred to the students' college Provost, who sets in motion an official disciplinary process. Cheating in any part of the course may lead to failing the course, suspension or dismissal from the Baskin School of Engineering, or from UCSC.

What is cheating? In short, it is presenting someone else's work as your own. Examples include copying another student's, programming assignment, or exam solution; allowing your own work to be copied; or in any way facilitating misconduct by others. You may discuss programming projects with fellow students, but your collaboration must be at the level of *ideas* only. You may freely give and receive help on the UCSC computer facilities, code editors and IDEs, the UNIX operating system, and on the proper use and syntax of the Python programming language. You may also freely use any *example code* posted by me on the class webpage. However, you may not *copy, paste, email, transfer* or *share* in any way the *source code* for projects in this class. Go to https://www.ue.ucsc.edu/academic_misconduct to see the University's official policy on Academic Misconduct.

Important Dates and Information:

Waitlists expire: Wednesday, April 7

Add/Drop/Swap deadline: Friday, April 16

Withdraw from class deadline: Friday, May 7

Enrollment FAQ: <https://registrar.ucsc.edu/faqs/students/enrollment/index.html>

Waitlist FAQ: <https://registrar.ucsc.edu/faqs/students/wait-list/index.html>

Enrollment Videos: <https://orientation.ucsc.edu/next-steps/slug-videos.html#enrollment>

More How-To Videos: <https://orientation.ucsc.edu/summer/how-to-index.html>