**DE ANZA COLLEGE** Spring 2021

## CIS 41B – Advanced Python Programming

Zoom class meetings: Mon, Wed 11:30am - 1:20pm

Instructor Clare Nguyen

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Phone 408-864-8461

**Office Hours** MW: 10:30 - 11:20am, TTh: 9:30 - 10:20am, through Zoom meetings on Canvas

**Reference Book** Introducing Python by Lubanovic, ISBN: 978-1449359362

Website Canvas: https://deanza.instructure.com

## **Student Learning** Outcome

Design, code, document, analyze, debug, and test advanced level Python programs that include Python modules for database, networking, graphics, and extensions

## **Course Topics**

Upon completion of the course, students will have learned the following concepts in Python:

- Data structures, comprehension, and associated functions
- Features of first order functions and higher order functions
- Data analysis and visualization
- **GUI** programming
- Web access and APIs
- Database access
- Threads and processes
- Network and socket programming

# **Attendance**

This is an online course that has Zoom class meetings on Mon and Wed, 11:30am-1:20pm, for discussion of the class exercise. The rest of the class time is online, and you are expected to read the class notes before attending the Zoom discussion, in order to prepare for the class exercise.

Regular and punctual attendance at the Zoom class meetings is highly recommended. But if you cannot make it to a class meeting, each class meeting will be recorded and the video will be available on Canvas for 2 weeks.

For the first day of class: it is important that you log in to Canvas and take the Check Quiz by the end of the first day of class. Completing the Check Quiz is equivalent to answering roll call, so those who have not completed the Check Quiz will be dropped from the class.

Once you've enrolled in class, if you wish to drop the class, it is your responsibility to drop the class before the last day to drop. Otherwise, an appropriate grade will be assigned at the end of the quarter.

Scholarly conduct Discussion and exchange of ideas on lab assignments are strongly encouraged. However:

- Each person is expected to complete his/her own original work. Original work means it must not be copied in whole or in part from another person's work, or from an online source or a printed source.
- Please do not post your assignments online anywhere. If someone saw your work online and copied it to turn it in, then even if you don't know about it, you are automatically counted as part of the cheating group.

Identical or very similar solutions will be given a zero grade, unless it is part of team work.

Copying or cheating during an exam will result in a zero grade being assigned to the exam.

#### **Course material**

There are 5 modules of class material.

- The class notes for each module are in power point format.
- In addition, there are practice exercises for each module. The practice exercises demonstrate the concepts covered in the lecture notes. You don't need to turn in the practice exercises, but you can do them for extra credit, and participating in the class discussion on the exercises will prepare you for the assignment.
- Each week there are 2 class meetings on Zoom that you should attend to participate in the class discussion. The Zoom meetings will be recorded and the recording will be available on Canvas for 2 weeks from the recording date.

### **Assignment**

There will be 5 mini-projects for the assignments, at 25 points each.

- Assignments are submitted on Canvas.
- You must submit an assignment <u>by 11:59pm</u> on its due date to be considered on time. Partial credit will be given for incomplete assignments.
- If you cannot submit assignments 1 and 3 on time, late assignments will be accepted. Assignments turned in after the due date/time will receive a 20% per weekday penalty. If you cannot submit assignments 2, 4, and 5 on time, then you have until 9:30am on the next day or class meeting time to turn it in, with 2 late point deduction, because we will go over the solution in the class meeting. You cannot submit the assignment after the solution has been discussed.

#### **Exams**

There are 2 midterm exams, 100 pts each, and a final exam or final project, 100 pts.

- Exams will be on Canvas and administered through Proctorio.
- You need to have a picture ID and a computer with a webcam to take the exam.
- The exam will take place during the online class meeting time. See the class calendar for the specific date and time.
- There is no make up for the midterm exams. If you must miss a midterm and you have a good
  reason and discuss it with me *ahead of time*, or you have proof of emergency reason, then your
  score on the next exam will be used for the missed exam.
- Instead of a final exam, you can choose to work with one or two other students on a final project of your choice. To earn the choice to work on the final project, you must have a minimum of 80% on the two midterms and on all assignments.

## **Extra Credit**

There are small extra credit opportunities throughout the quarter when you work on the practice exercise.

# Grading

Grading is based on the percentage of the total points obtained:

Lab assignments: 125 points (5 assignments)
Midterms: 200 points (2 midterms)

Final: 100 points Total: 425 points

A+: 97-100% B+: 87-89% C+: 77-79% D+: 67-69%

A:93-96% B:83-86% C:70-76% D:63-66% F:0-59%

A-: 90-92% B-: 80-82% D-: 60-62%