**DE ANZA COLLEGE Winter 2021**

**CIS 9 – Introduction to Data Science**

Zoom class meetings: Mon, Wed 9:30 - 10:30am

**Instructor** Clare Nguyen

**Email** [nguyenclare@fhda.edu](mailto:nguyenclare@fhda.edu) (best way to reach me outside of class and office hour)

**Phone** 408-864-8461

**Office Hours** M-Th: 4:30 - 5:20pm, through Canvas messaging, Canvas forums, or email

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

**Student Learning Outcome**

* Collect, clean, analyze, and visualize data to meet and defend a measured objective
* Gather data and choose a model to train and tune the machine learning tool and interpret the result

**Course Topics** Upon completion of the course, students will have learned the following concepts:

1. Apply statistical methods to analyze data
2. Collect data and apply data wrangling techniques
3. Visualize and present data
4. Apply a learning framework and evaluate basic machine learning
5. Apply basic natural language processing techniques

**Attendance** This is an online course that has Zoom class meetings on Mon and Wed, 9:30-10:30am, for discussion of the class exercise. The rest of the class time is online, and you are expected to do the reading in the exercises *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 4 modules of class material.

* The reading for each module comes from online references and books.
* The practice exercises for each module provide the hands-on demos of the concepts covered in the reading. The Zoom class meetings are mostly to go over the exercises.

**Assignments** There are 4 lab assignments, one for each module, at 25 points each.

1. Lab assignments are jupyter notebooks and need to be submitted on Canvas.
2. You must submit an assignment *by 11:59pm* on its due date to be considered on time. Partial credit will be given for incomplete assignments.
3. If you cannot submit assignments on time, late assignments will be accepted. Assignments turned in after the due date/time will receive a *20% per weekday penalty*.

If the due date is Mon 11:59pm, then from Tue 12am to 11:59pm is considered one day late, Wed 12am to 11:59pm is two days late, and so on.

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

* + - 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 an exam and if you have a good reason and discuss it with me *ahead of time*, or you have proof of an emergency reason, then you can take the final exam to make up for the missed exam.
* The final exam is taken at the school assigned time (see the class calendar for the specific date and time). There is no early or late final exam or make up final exam.
* Instead of a final exam, there is a final project in which you can work with one or two other students on a data science topic of your choice. To earn the choice to work on the final project, you must have a minimum of 80% on the two midterms.

**Extra Credit** There are small extra credit opportunities throughout the quarter that are part of the lab assignments.

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

Lab assignments: 100 points (4 assignments)

Midterms: 200 points (2 midterms)

Final: 100 points (either final project or final exam)

Total: 400 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%