

# 22.03Z, Winter 2021

## About the Instructor

The instructor, Salvador Guerrero, may be reached by e-mail at [guerrerosalvador@fhda.edu](mailto:guerrerosalvador@fhda.edu) and is available for office hours, via Zoom, Monday – Friday from 9:30am – 10:20am.

My intention is for our space to be a supportive, engaging, and accepting environment in which you may comfortably explore and expand your mathematical abilities. Please do not hesitate to reach out if ever you have any questions, we will work together to help resolve them.

## About the Course

The course is Math 22 Discrete Mathematics, section 03Z with CRN 31968 and meets via Zoom on Monday – Thursday from 8:30am – 9:20am.

## Materials

For this course you will need to be able to access the course content and meetings online, respectively on Canvas and Zoom. The textbook we will be using, Applied Discrete Structures by Al Doerr and Ken Levasseur, is available for free online and linked in Canvas. It is preferable and advised that you have a separate notebook for this course.

## Requisites

This course has a prerequisite of MATH 32, 43 or 43H with a grade of C or better or equivalent, and CIS 22A or CIS 35A with a grade of C or better or equivalent.

## Time Commitment

As with most college courses you should expect to dedicate about 3 hours per unit per week for this course; this is a 5-unit course. This includes reading, homework, discussion, live meetings, etc. It may be that you don't need all this time but it is best to plan for it just in case.

## Description

The course will cover elements of discrete mathematics with applications to computer science and topics include methods of proof, mathematical induction, logic, sets, relations, graphs, combinatorics, and Boolean algebra.

## Assignments

Our mathematical exploration will involve reading, discussion, and practice. It is important that you set an appropriate study schedule as we will need to all work at the same pace since a large portion of our meetings will consist of Q&A and groupwork sessions. In order to help you keep pace we will have weekly exams, to be completed during the weekend at your convenience. You are expected to read the text before our live sessions so that we may have a conversation about your learning; in particular, the Q&A sessions will be guided by your questions and the groupwork sessions will depend on your having some prior exposure to the topic. After you read, I will ask that you complete some exercises from the textbook and discuss in small groups. It is important to communicate and collaborate in this day and age, so I expect that you will work with a group of classmates to complete a project. Please make sure to be available to meet via Zoom, with video and audio on, for a two-hour final exam on Mach. 24, 2020 at 7:00am. The details of each assignment are available on Canvas.

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## Grading

Please see Canvas for full details but I do hope that you find the following grading criteria helpful in creating a stress-free learning experience. Letter grades A; B; C correspond, respectively, to criteria listed as a; b; c

- 90; 85; 75 % of questions with score of 4; 3; 2 on exams, after correcting as many times as necessary (details on first day and in Canvas).
- Final Exam Score of at least the lower of average +0.5; -0.5; -1.5 standard deviations or 85; 75; 60 %.

Note: + and - grades will be assigned as appropriate. If at any time you are concerned about the letter grade please do not hesitate to reach out. It is best if you make sure to bring it up early but I will always help guide you to your best resolution.

## Policies and Resources

### Tutoring/Additional Help

Please know that our college provides several resources to help in your learning objectives including tutoring at the SSC (please see <http://deanza.edu/studentssuccess/>), tutoring via NetTutor (see Canvas), and of course a library (<http://www.deanza.edu/library/>).

Also keep in mind that it is 2020, well into the future now, and the internet is a powerful tool literally at our fingertips. In Canvas you will find various links to freely available video series, sample problems, and even calculators.

### Attendance

I encourage and welcome you to join every schedule live Zoom session as their purpose is strictly to benefit your learning. I hope that you will be able to arrive on time and stay until the end but if for any reason you are not able to, please make sure to check Canvas for any important information and to otherwise keep up with the course work.

If you are not able to join the first meeting but would like to remain enrolled, please make sure to contact me as soon as possible as students that miss the first meeting may be dropped. I will do my best to remind you of the important registration dates but it is your responsibility to be familiar with them. If at any point you want to drop or withdraw, I will appreciate if you first talk to me.

### Accommodation of Disability

If you have any disability, permanent or temporary, that might affect your ability to fully participate and perform your best please contact the Disability Support Services office (<http://www.deanza.edu/dsps/>) so that you may receive the support and accommodations you might find helpful.

### Academic Integrity

Please be honest, both to yourself and to me, about your learning and understanding at all times. If you are caught cheating you will receive a score of 0 on that exam and it will not be dropped.

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## Student Learning Outcome(s):

\*Critique a mathematical statement for its truth value, defend choice by formulating a mathematical proof or constructing a counterexample.

\*Analyze and apply patterns of discrete mathematical structures to demonstrate mathematical thinking.