Syllabus: Math 22 (Section 27Z), Spring 2021
4:00 – 6:15 PM

Instructor: Dr. Bill Wilson
Office Hours: 3:00-3:45 Monday, Wednesday via Zoom
Email: wilsonwilliam@fhda.edu   Phone: 408-309-3956

Text:
Epp, Susanna. **Discrete Mathematics: Introduction to Mathematical Reasoning**
We will use WebAssign. The WebAssign questions are associated with the 5th edition, which is available as an ebook from Cengage. However, the sections we cover are essentially the same in all editions. As long as you have gotten access to WebAssign, you should be able to use whichever edition is most convenient for you to obtain. However, De Anza has negotiated a bundled deal for the ebook and WebAssign. Here is a link to more information about how to sign up for WebAssign: https://www.cengage.com/coursepages/DeAnza_DeAnzaGateway

Prerequisite: Mathematics 41 (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

Course Description: Elements of discrete mathematics with applications to computer science. Topics include methods of proof, mathematical induction, logic, sets, relations, graphs, combinatorics, and Boolean algebra.

This course is different from most of the mathematics classes you have had. Instead of focusing on calculations involving real numbers, this class will focus on the abstract side of mathematics involving symbols, logic and proofs. I hope you find the material interesting and you gain a new appreciation for concepts you had some knowledge of before as well as learn some exciting new ideas.

Class Meetings: We will meet via Zoom at the scheduled class times. Try to participate in the class session. If you cannot make a class, let me know. I will record the classes and make them available for viewing.

Homework: Homework will be assigned most weeks and will be due before the beginning of our Monday class.

Exams: Three exams will be given plus the final exam. Exam dates will be announced at least a week ahead of time. There will be no makeups. If an exam is missed because of a valid excuse, an equivalent of the final exam score will be used as the score for the missed exam.

Quizzes: Regular quizzes will be given. Quizzes will be announced at least one class ahead of time. I will drop the two lowest quiz grades.

Project: The project will explore a mathematics topic related to the material in the course. The project can be done individually or as part of a group of 2-5 students. More details will be provided during the course

Final Exam: A comprehensive final exam will be given on 12/9/20 from 4:00 PM to 6:00 PM.

Accommodations: Students requiring accommodations are welcome in this class. Please notify me and DSS of any special requirements. Go to https://www.deanza.edu/dss/ for more information.

Grading: 3 midterms @ 10% = 30%
homework and class work: 15%
quizzes: 15%
projects: 20%
final exam: 20%

Scale: A: 93+   A-: 90+
B+: 87+   B: 83+   B-: 80+
C+: 77+   C: 70+
D: 60+
F: < 60

ESL: If English is a second language, a print English translation dictionary is allowed for exams/quizzes

Expectations of Students:
1. **Academic dishonesty will not be tolerated.** If a student is found cheating on an exam or quiz, he or she will receive a 0 for the item. Repeated instances of cheating may lead to failing the course and further action.
2. **Showing your work.** You need to show your work on homework and exams to receive full credit.
3. **Respect you fellow students.** Silence cell phones and tablets in class.

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.