# Syllabus: Math 22 (Section 62), Summer 2025
## Asynchronous Online

Instructor: Dr. Bill Wilson
Email: wilsonwilliam@fhda.edu                    Phone: 408-309-3956
Office Hours: Tuesday, Thursday 1:00-2:00 PM, PDT on Zoom
Homework Sessions: Monday, Friday 1:00-2:00 PM PDT on Zoom

**Text:**
Epp, Susanna. **Discrete Mathematics With Applications 5th edition**, which is available as an ebook from Cengage.  I will put a link on the Canvas course page that you can use to access the ebook.

**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 Structures:**  I will post recorded lectures on Canvas each week that go over that week's topics.  However, a lot of the learning will be accomplished by trying the material yourself by doing the homework problems.  I will have regular sessions on zoom to go over homework questions, and I will create discussions on Canvas.

**Homework:**  Homework will be assigned most weeks and will usually be due on Monday of the following week.  Submit your solutions on Canvas by uploading a scan or photo of your work.  You should make it clear which question you are answering.  At the end of each homework assignment write a brief description of what you learned, what surprised you, or what you still need to work on for the week's topics. I will hold two homework sessions each week where we will go over any homework problems you want help with.

**Exams:**  Two exams will be given plus the final exam.  Exam dates will be announced at least a week ahead of time.  Since this is an asynchronous class, you will be given a time period in which to complete the exam.

**Quizzes:**  Regular quizzes will be given.  Quizzes will be announced at least one class ahead of time.

**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 during the week of August 3.

**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:**  2 midterms @ 10% = 20%
Homework, Group Activities and Discussion: 25%
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.
**Respect you fellow students.**  Be civil in discussions with others.

**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.

**Office Hours:**

      T,TH   1:00 PM - 2:00 PM                  Zoom