## Math 22: Discrete Mathematics, Winter 2021 Monday/Wednesday 4:00 – 6:15 pm online (Zoom)

Instructor: Matthew LeeEmail: leematthew@fhda.eduOffice Hours: Tuesday/Thursday 2-3 pm (Zoom) or by appointment

**Textbook:** Discrete Mathematics: An Introduction to Mathematical Reasoning by Susanna S. Epp, Brief Edition. We will be following the sections in the book closely as well as using it for homework problems. Please obtain a copy as soon as possible. Note: Epp also has a book called <u>Discrete Mathematics with Applications</u>. Our text is a shortened version of that book, so if you use it, make sure you cover the correct sections.

**Reading:** *Please read over each section of the textbook BEFORE we cover that section. We will not have time to cover 100% of the textbook, so it is your responsibility to read the material.* 

**About the Course:** This course is a unique math course, likely your first course that does not focus on real numbers (in contrast to pre-calculus and algebra) or use a calculator. Instead, we will focus on the abstract side of mathematics involving symbols, logic and proofs. By the end of this course, you will have a broader notion of what mathematics is about.

**Course website:** Canvas will be the main hub of information for the course. All course materials will be uploaded and made available as the course progresses, and grades will be uploaded regularly. You can log in at <u>https://deanza.instructure.com/</u> or through MyPortal.

Since our class is online, it is YOUR responsibility to check Canvas often and keep up with course material, announcements, quizzes, and other assignments. You must develop a good habit of checking Canvas regularly if you plan to succeed not only in this class, but your other classes at De Anza as well.

**Grades:** We will use a standard letter grading system with plus/minus (97-100 A+, 93-96 A, 90-92 A-, etc). Your grade will be made up of the following:

Weekly Homework	20%	Online Quizzes	10%
Classwork/Reflections	20%	2 Midterm Exams	20%
Final Exam	30%		

**Late Policy:** While you should do your best to submit work on time, late work is accepted for partial credit. The amount of credit will depend on the number of days missed. *This late policy applies to homework, classwork, and quizzes. It does NOT apply to exams.* 

**Weekly Homework:** There are weekly homework assignments, which will be due every *Sunday* by midnight. Most problems will come from the textbook. They will be graded for completeness and correctness. Expect to spend many hours per week on problems! *Homework is 15% of your grade. The lowest 2 scores will be dropped.* 

**Classwork/Reflections:** Every day, we will work on problems together in class during breakout rooms. Once a week, you will submit your work which you complete in class to Canvas. Furthermore, at the end of every week, you will submit a short journal-style entry on Canvas reflecting on your progress in the course. *Classwork and Reflections are 20% of your grade. The lowest 2 scores will be dropped.* 

**Online Quizzes:** We will have timed quizzes on Canvas roughly once a week. These will be posted on Canvas. Try your best do to them without outside help and without notes. They are meant to help you assess your own understanding and practice for the exams. *Quizzes are 10% of your grade.* 

**Exams:** We will have 2 midterm exams throughout the semester. Each will be administered on Zoom, during the first half of class for around 70 minutes. You may use your notes, but no other outside help is allowed. You must also turn on your video during the exam. *Each midterm is 15% of your grade. If you must miss a midterm exam, notify me ASAP.* 

**Final Exam:** The final exam will be cumulative and is scheduled for *Wednesday, March 24<sup>th</sup> from 4 pm to 6 pm.* The format will be similar to the midterms: notes allowed, video on. *The final exam is 30% of your grade. If you miss the final exam, you will fail this course.* 

**Academic Integrity**: All students are expected to exercise high levels of academic integrity throughout the quarter. You are encouraged to work together but you are also expected to write up your answers independently when required. Any instances of cheating or plagiarism will result in disciplinary action, including getting a '0' on the assignment and report to the PSME dean, which may lead to dismissal from the class or the college.

**Disability Notice:** If you have any special circumstances that you feel may influence your performance in this class (a diagnosed learning disability, physical disability, or anything at all that might interfere with your learning), please email or chat with me privately so that we can best accommodate you and we can create a learning environment that works for you.

**Communication:** Please ask questions and let me know your concerns throughout the course! Send me emails and Canvas messages so that I know how to support you throughout the quarter.

## 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.