SYLLABUS FOR MATH 22, DISCRETE MATH, SPRING 2015

Math-022-63, CRN: 01250

Instructor: Professor Wyatt Howard

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Class Hours: Tuesdays and Thursdays from 6: 30P.M.-8: 45P.M. in room MLC105.

Office Hours: Thursdays from 2:00P.M.-3:00P.M. in Room E37.

Textbook: Discrete Mathematics: An Introduction to Mathematical Reasoning, Brief Edition, by Susanna Epp (blue cover with stacked stones on the front). We will plan on covering Chapters 1-10 in the textbook.

Grading:

- Homework: Homework will be assigned after almost every class. I will not collect all of your homework and grade each assignment. However, on quiz and exam days you need to bring all of your homeworks with you to class. I will collect 1 assignment on quiz days and 2 on exam days. Before you take the quiz or exam I will call one of these assignments at random and you will turn them in with your quiz or exam. This will count for 1 question on your quiz and 2 questions on your exam. I will not accept late homeworks. If you turn the wrong homework assignment, then you will receive a zero for that assignment. It is your responsibility to make sure that you are organized and turn in the correct homework assignment. The homework will be graded on a scale of 1-5 where 5 is a perfect score. I will be primarily grading the homework on effort and to give you feedback.
- **Tests:** There will be a total of 4 exams in the class: 3 midterms and 1 final. I do **not** give make up exams, **unless** you provide me with documentation. For example, if you had to visit the emergency room, then I will ask for a doctor's note. If you miss an exam without a valid reason, then you will receive a zero for that exam. In the even this occurs, you will be permitted to replace the zero you received on **one** midterm exam by your next midterm (or final exam in the event you miss the third midterm) grade on a percentage equivalent basis. You can use **scientific calculator** for both the quizzes and exams. You are **not** allowed to use a graphing calculator. The final exam will be cumulative.

Date: April 5, 2015.

Tentative Dates for Midterms: Thursday April 23rd for Midterm 1, Thursday May 7th for Midterm 2, and Thursday June 11th for Midterm 3.

Final Exam: The date of the final exam is Tuesday June 23rd from 6:15P.M.-8:15P.M. The date of the final exam is set in stone and will not be changed.

 $\begin{array}{ll} \mbox{Midterm 1 } 20\% \\ \mbox{Midterm 2 } 25\% \\ \mbox{Midterm 3 } 25\% \\ \mbox{Final } 30\% \end{array}$

• Grade Breakdown:

90 - 100% = A. 80 - 89% = B. 70 - 79% = C. 60 - 69% = D.below 60% = F.

This grading scale is not set entirely in stone. I may curve the class at the very end of the course. It depends on how the entire class performs, but the above scale will be a good indication of how you are doing in the course.

Student Learning Outcomes:

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 structure to demonstrate mathematical thinking.

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

Prerequisites: Completion of Math 43 with a grade of C or better.

Warm-Up Exercises: Warm-up exercises will be given almost every class. This will consist of 1-3 exercises that I will post on the board and have you work on either by yourself or in groups when you enter class. After the first few minutes I will walk around the class to observe how everyone is tackling the exercises and to provide help. These problems are intended to help warm-up your mind for the lecture that day. Please take these seriously.

Blue/Green Books: Each student is required to purchase 4 small blue/green books and turn them in to me during the first two weeks of class. I will talk more about this on the first day of class.

Free Tutoring: The Math Tutoring Center in Room S4 offers free tutoring on Mondays-Thursdays from 9 : 00A.M.-5 : 30P.M. I strongly encourage you to utilize this resource. More information can be found here:

http://www.deanza.edu/studentsuccess/mstrc/

Supplemental Resources: I encourage you to poke around the library and web to see what other supplemental resources exist. One great resource is Prof. Roberta Bloom's webpage where she has a number of links to great videos and notes to help you with the topics from this class:

http://faculty.deanza.edu/bloomroberta/stories/storyReader\$71

Disability Support Services: If you need to contact the Disability Support Services, then please contact them as soon as possible. More information can be found here: https://www.deanza.edu/dss/

Academic Integrity: This is pretty straightforward: Do not cheat on quizzes, exams, or directly copy other student's work. It is not worth getting caught and suffering the consequences. For more information about De Anza College's policy on academic integrity: https://www.deanza.edu/studenthandbook/academic-integrity.html

Policies for This Class: These policies are part of the syllabus and will be strictly enforced. By enrolling in this course, you as the student agree to accept these policies and follow them and agree that the instructor reserves the right to drop a student from the course with a W if any of the policies are violated. Further action may also be taken against a student who violates specific policies, such as the policy on cheating.

• Cell phone use (talking on your phone, texting, etc.) during lecture is not allowed. This is considered to be rude behavior and tells me that you are not paying attention in class. If you are using your phone, then you will be warned once to stop. If it happens again, then you may be asked to leave the class and you will not be allowed back into the class until you emailed the instructor or talked to him before the next class meeting.

If you have an emergency and need to use your cell phone, then you are free to excuse yourself from class to deal with the situation.

• Tests are usually given at the end of class and must be completed by the time class time ends. You will receive a two minute warning before your time is fully up. When time is over, you must put down your writing utensil and **stop writing immediately**. If you do not stop writing immediately, your test may **not** be collected and you may receive a grade of zero. Also, during exams everything must be off of your desk and either in your backpack (or under your seat if you do not have a backpack). If the instructor sees any phones, paper, notebooks, textbooks, etc. out during an exam, then it will be considered cheating and the student will receive a zero for that exam. If the instructor observes a student placing his or her hands beneath his or her desk for an extended period of time, the instructor may ask that student to stand up or move to another desk. If a student is

observed with a cell phone in his or her hands, lap, or other easily accessible place after the student has received his or her test, that student will be considered cheating and will receive a zero on that test.

• If a student is caught cheating, the instructor reserves the right to assign a grade of F for the entire course or to drop the student with a W from the course. If a student is returned a graded test or quiz and the student changes his or her incorrect answers in order to receive more points, the student is considered cheating and such an act will carry the same consequences as those mentioned above. If you are caught cheating on the final exam, you will automatically receive a grade of F for the course.