Syllabus: Math 232, Spring 2020

There are two sections of this class - please check the syllabus to be sure you know which one you are in.

CRN 33510: MTWF 10:00-10:50, Prof. Benjamin Young, bjy@uoregon.edu

Office Hours: Thursdays 10:00-12:00

CRN 33512: MTWF 14:00-14:50 Dr. Eric Ramos, eramos@uoregon.edu

Office Hours: Thursdays 14:00-16:00

Text: Discrete and Combinatorial Mathematics, 5th edition, by Grimaldi. We will cover chapters 5, 11, 12 and 13. Specifically we will cover:

Week 1:	5.1–5.3	Week 6:	11.6, 13.4
Week 2:	5.3–5.6	Week 7:	5.7–5.8
Week 3:	11.1–11.3	Week 8:	12.1–12.2
Week 4:	11.4–11.5	Week 9:	13.1–13.2
Week 5:	11.5–11.6	Week 10:	13.3

Course Goals: Students will learn the essential mathematical concepts and ideas in graph theory, which are required for rigorous studies in most areas of computer science. Students will also be able to prove theorems in elementary graph theory. After completing this course satisfactorily, a student will:

- Be able apply basic combinatorial formulas to types of graphs.

- Sketch the dual of a planar graph, and describe its relation to the original.

- Model problem domains using rooted trees.

- Demonstrate facility with a variety of algorithms, by describing intermediate states.

- State and prove simple propositions from graph theory.

Homework (25% of final grade): Homework will be assigned every week, and will be due at 11:59 PM on Sundays, via Canvas. The lowest homework grade will be dropped.

Midterms (25% of final grade): A 50-minute midterm test will be given during the Friday class periods in weeks 3, 6 and 9. Midterms will be handed in by Canvas. The lowest midterm grade will be dropped.

Quizzes (25% of final grade): A 30 minute quiz will be given during each Friday's class period of weeks 1,2,4,5,7,8. Quizzes will be handed in by Canvas. The lowest quiz grade will be dropped.

Final (25% of final grade): The final will be posted at the start of finals week. Students will be asked to spend two hours doing the final on their own, not discussing the final with others, and submit their solutions by Canvas when complete.

Letter grades: Numeric grades will be converted to letter grades as follows:

A	85%-100%
B	75%-84%
C	65%-74%
D	55%-64%
F	Less than 55%

Plus and minus grades (e.g. A+, B-) will be assigned within these categories at instructors' discretion.

Lectures: Lectures will be held during Monday, Tuesday and Wednesday's classes, via Zoom meeting.

Office hours: Office hours will be via Zoom meeting, in same meeting room as the lectures.

Online submission and grading All work (quizzes, homework and the final exam) will be submitted, and graded, via Canvas. This will allow students to submit written work by taking a photograph of it. If possible, the students are highly recommended to use a scanning app, so that their work is submitted as a .pdf file.

Accessibility. The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center in 360 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

COVID-19. Please contact your instructor as soon as possible if you are having difficulty with the unusual online nature of the class, or experiencing illness or hardship due to the COVID-19 outbreak and/or the isolation measures in place; we will do all we reasonably can to accommodate students' needs.