Math 232 Syllabus

**Lecturer:** Eric Merchant  
**Office:** 198B Anstett  
**Email:** ericm@uoregon.edu

**Office Hours:** M,W: 10:00-11:00  
**Email:** ericm@uoregon.edu

**TA:** Matt Lukac  
**Office Hours:** M: 11:00-12:00  
Th: 1:00-3:00  
**Email:** mlukac@uoregon.edu

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

**Course Goals:** Students will learn the essential mathematic concepts and ideas in graph theory, which are required for rigorous studies in most areas of computer science. 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.

**Homework (15% of final grade):** Homework will be collected every week in discussion sections, or Thursday in 4 Deady by 2:30, except for weeks 1 and 6.

**Worksheets (5% of final grade):** A worksheet will be given during discussion sections weeks 1, 3, 5, 6, 8 and 10. Working in groups is encouraged, but everyone must do their own work. Grades will given according to effort, not correct answers.

**Quizzes (20% of final grade):** A quiz will be given in discussion weeks 2, 4, 7 and 9.

**Midterms (25% of final grade):** The midterm will be on Monday 2/12 during the regular lecture period. It will cover chapter 5 and some of 11.

**Final (35% of final grade):** 10:15 Wednesday 3/21

**Cell Phones:** If I hear your cell phone or see you touch it during class, I will deduct points from your next quiz score.

**Calculators:** Calculators are prohibited on all exams and quizzes.

**Clickers:** Clickers should be brought to every lecture (but not discussion sections). For now, clicker questions are not graded or used for attendance, but I reserve the right to change that policy if needed.
Assignments

Due Week 2:  
5.1 #2, 7, 8, 10  
5.2 #2, 6, 9, 12, 17

Due Week 3:  
5.3 #2, 4, 8, 12  
5.4 #3, 4, 6, 7, 11

Due Week 4:  
5.5 #4, 6, 8, 14, 20  
5.6 #4, 8, 12, 14, 19, 20

Due Week 5:  
11.1 #6, 8, 10, 11, 14  
11.2 #2, 6, 8, 10, 12, 14

Due Week 7:  
11.3 #2, 3, 5, 8, 10, 12, 19, 20, 30  
11.4 #5, 6, 10, 13, 17, 22, 26abc

Due Week 8:  
11.5 #2, 4, 6, 10  
12.1 #8, 10, 11, 13, 14

Due Week 9:  
12.2 #2, 3, 5, 6, 7, 8, 14, 16, 20

Due Week 10:  
12.3 #1, 2, 3  
12.4 #2, 3, 5, 6, 7, 8