

Math 485: Graph Theory - Fall 2007

Mo, We, Fri 11:15am-12:05pm, 216 Boucke

General Information

Instructor: Dr. Kirsten Eisenträger

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Office hours: Mo 10:15-11, We 10:15-11, Th 1:45-2:30, and by appointment

Textbook: *Introduction to Graph Theory* by Douglas B. West, Prentice Hall, 2001

Course webpage: <http://www.math.psu.edu/eisentra/courses/math485>

Course Topics: This is an introductory graph theory course. Graph theory is an area of mathematics that has a rich theory, as well as many applications to other areas of mathematics, computer science, and electrical engineering.

The goal is to cover parts of chapters 1-6 and 8 from the text. Some of the topics we will cover in this course include

- Trees, Spanning trees.
- Shortest paths.
- Matchings and coverings.
- Connectivity and network flow.
- Colorings of graphs.
- Planarity.

Grading:

Homework (25%), First Midterm (20%), Second Midterm (25%), Final Exam (30%).

Homework:

There will be a number of homework assignments which will be collected and graded. Homework is due at the beginning of class on the given due date. **No late homework will be accepted without approval from the instructor in advance.** You are encouraged to discuss the homework assignments with other students in the class; however, if you do, you should write on your homework submission the students with whom you discussed the assignment. You may not copy the written work of another student or allow another student to copy your written work. What you submit should be your own work.

Examinations:

Two in-class midterm exams will be given. The first midterm will be on **Friday, October 5**. The second midterm will be on **Wednesday, November 7**.

The **final exam** in this course will be comprehensive. It will be given during final examination week, December 17-21, 2007. **Do not make plans to leave the university before the end of this week.** Travel plans will **not** be considered an excuse to take an examination on a different date.

Academic Integrity: Students are expected to abide by the University and Eberly College of Science policy about academic integrity; please refer to the following webpage:
<http://www.science.psu.edu/academic/Integrity/index.html>