

Math 852: Graph Theory

Spring 2010 Section 001 — University of Nebraska–Lincoln — Course Information

INSTRUCTOR: Stephen Hartke

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COURSE WEBPAGE: www.math.unl.edu/~shartke2/teaching/math852

OFFICE HOURS: Mon, Wed, Fri 10:30am–11:20am, or by appointment.

MEETING TIMES: Mon, Wed, Fri 9:30am–10:20pm in Avery Hall Room 108

FINAL EXAM: Wed May 5 10:00am–12:00pm in Avery Hall Room 108

TEXT: *Combinatorial Mathematics* by Douglas B. West (prepublication version).

COURSE OVERVIEW:

This course is the second semester of a graduate-level introduction to the questions of existence and enumeration of finite discrete mathematical objects. This semester will focus on posets, designs, and graphs. The course is designed to develop not only the students' computational ability, but also their ability to understand and manipulate abstract concepts through the use of proof.

COURSE REQUIREMENTS:

Homework will be assigned most weeks. The homework provides practice finding proofs and writing proofs; writing up the solutions is among the most effective ways of keeping up with the material in the course. Discussion with other students is a great way to better understand a problem and to get ideas, but each student must write his or her submission individually. Late homework will not be accepted. There will be two evening tests; they are tentatively scheduled for the weeks of Feb 22 and Apr 12. The final exam will be cumulative over the entire semester. Makeup tests will only be given in the case of extreme illness or other hardship. The decision to give makeups is at the discretion of the instructor. The different components contribute to the final grade as follows: homework assignments: 44%; two tests: 17% each; final exam: 22%.

As part of a continuing effort to improve instruction, students are asked to keep all assignments and tests in a portfolio to be submitted near the end of the semester. Students submitting the portfolio may drop their lowest homework grade.

All students are expected to be aware of and abide by the University's policies on student conduct and academic integrity and honesty.

RESOURCES:

Announcements will be made in class and posted on the course webpage. Some announcements may also be sent to the student email address listed on WAM. The course webpage will also have assignments, supplemental materials, and a log of the topics covered each day. Blackboard (my.unl) will be used for posting grades.

Collaborative study sessions are a great opportunity to discuss ideas with students and get individual help from the instructor. Study sessions will be held each week.

STUDENTS WITH DISABILITIES:

Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska–Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may

affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

PARTICIPATION NOTICE:

The professor of this course has been nominated to take part in the Peer Review Project, a University-wide, on-going attempt to develop new and better methods for promoting student learning. Your professor will be asked to evaluate his syllabus, exams, class activities and written assignments. He will also receive feedback from other faculty members regarding teaching plans and how they are carried out. One of the project's ultimate goals is to improve student learning, and we cannot accomplish this goal without student input.

Your professor will be asked to select several students whose work would be copied and included in his course portfolio as an archive of student performance for the course. These examples are a very important piece of the project for professors to show how much and how deeply students are learning. Once the course portfolio is completed, it will be put on a project website: www.courseportfolio.org so that it can be shared, used, and reviewed by other faculty.