Instructor:

Name:	Jake Wildstrom
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Office:	Natural Sciences Building 231
Office hours:	Wednesday 11:00–12:00, Tuesday 13:00–14:00
Alternative office hours:	Monday 12:00–13:00, Thursday 11:00–12:00

Course Websites:
http://blackboard.louisville.edu/bin/redirect_temp.pl?course_id=MATH%2D581%2D01%2D4092
http://aleph.math.louisville.edu/teaching/2009SP-581

Lecture: MW 15:00–16:15 in Natural Sciences Building 108

Prerequisites: MATH 206 or EAC 102; MATH 311 and MATH 325 or consent of instructor.

Description: Provides an overview of graph theory. Topics include blocks, trees, connectivity, Hamiltonian and Eulerian graphs; topological problems, matrices and groups.

Supporting texts: The primary reference for the course will be Bondy and Murty's *Graph Theory with Applications*, available for free through Adrian Bondy's home page at
http://www.ecp6.jussieu.fr/pageperso/bondy/books/books.html. You may also find Diestel's *Graph Theory* useful; an electronic version is available for free at
http://www.math.uni-hamburg.de/home/diestel/books/graph.theory/.

Objectives: In this class, we will begin with fundamental concepts of graph theory, including the definition of a graph, the definition of several significant graph substructures and parameters, and significant theorems relating to the computation and relationships among these parameters. On this foundation, there are several individual topics in applications of graph theory which the course could cover, and I depend on the students to express preferences for particular topics as the course progresses.

Responsibilities: You are responsible for attending class on a regular basis and maintaining comprehension of the scheduled class objectives for each day. You are expected to be active participants in class, answer problem sets as completely as able, and to attend examinations. The examinations are scheduled for *Friday, February 6th*, *Friday, March 6th*, and *Friday, April 10th*, as well as a comprehensive final on *Thursday, April 30 at 2:30 PM*.

Special needs: If you have a scheduled absence conflicting with an examination, or any other special needs, please bring it to my attention at the earliest convenient time. Unscheduled absences will be handled on a case-by-case basis.

Collaboration: It is expected that you will cooperate and collaborate with other students in the class; any write-ups which you submit, however, should be your own work and the result of your own comprehension of the course material. Collaboration on exams, unless explicitly stated otherwise, is of course prohibited.

Grades: Problem sets will account for 20% of your grade. The three midterm examinations will each be worth 20%, and the comprehensive final examination is worth 20%. A 90% overall guarantees a grade of A– or better, 80% guarantees a B– or better, and 70% guarantees a C– or better.

Changes: The syllabus is subject to change. Changes will be announced in class and updated online.