

21-228 Discrete Mathematics
Spring 2008 MWF 3:30-4:20 Baker Hall 235A
Professor Bohman

This course introduces three of the fundamental areas of discrete mathematics: enumeration, graph theory and discrete probability. The introduction to enumeration includes recurrence relations, generating functions, and the principle of inclusion and exclusion. The introduction to graph theory includes topics such as Eulerian and Hamilton cycles, planar graphs, Euler's Theorem, matchings, and trees.

- **Text:** *Discrete Mathematics*, Lovász, Pelikán and Vesztergombi.
- **Prerequisites:** Concepts of Mathematics (21-127).
- **Office hours:** Thursday 2:00-4:00 or by arrangement. My office is Wean 6301. I can be reached by telephone at 8-6881 or by e-mail at tbohman@math.cmu.edu.
- **Homeworks:** Eight homework assignments will be given during the semester. These will be due on Fridays. Since genuine mathematical understanding is best achieved through the personal exploration of the material that comes with working problems, homeworks are regarded as important. Discussion of the homeworks with other students is permitted, but collaboration on the writing of the assignments is not (i.e. you are NOT permitted to see the actual pages another student is handing in).
- **Tests:** There will be quizzes on 2/15, 3/19 and 4/11 and a comprehensive final exam. If circumstances such as illness prevent you from taking a quiz or exam at the scheduled time, please discuss the problem with me *before* the quiz or exam if possible.
- **Grades:** The final exam will account for 2/5 of the course grade. Homework and other relevant information (e.g. class participation) will give 1/10 of the grade. The remaining half of the course grade will be given by the average of your best two quiz scores. The lowest quiz grade will be dropped.
- **Web Page:** <http://www.math.cmu.edu/~tbohman/21-228/discrete.html>
Homeworks and review sheets will be posted on the web page.