

SYLLABUS

MAT 645, SPRING 2011

Time: Tuesdays and Thursdays, 11:00 am - 12:20 pm.

Instructor: Prof. Mark Watkins

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Office hours: Feel free to drop in anytime or send an e-mail message.

Prerequisites: (1) A knowledge of linear algebra equivalent to MAT 331 (matrix operations, linear independence, dimension, eigenvalues); (2) elementary set theory; (3) elementary group theory to the extent that group theory is covered in MAT 534.

Text: W. Imrich, S. Klavzar, and D.F. Rall, *Topics in Graph Theory: Graphs and Their Cartesian Product*, A.K. Peters Ltd. Wellesley MA, 2008. We will cover almost all of the sections of almost all of the chapters of this little book.

Required work: There will be a comprehensive final exam at our assigned hour of 5:15 - 7:15 pm on Friday, 6 May. It will count 25% of the course grade.

There will be about 6 or 7 problem sets consisting of from 5 to 8 problems each. The problem sets will not necessarily be of equal weight in computing your grade.

The problem sets are to be written up carefully, with notation that is well chosen and consistent. The style should be that of a mathematical text or research paper and appropriate to the mathematical maturity of a graduate student in Mathematics or a related field. A good criterion for clarity of style is, "Could a fellow graduate student at my level follow my arguments completely?" The write-ups must be proofread before being submitted. Scratchwork with big cross-outs is not acceptable and will be returned ungraded.

The problems will be assigned as we encounter the relevant material in lecture. The last problem of each set will be assigned at least one week before the due date for that set.

Collaboration with fellow students on assigned problems is encouraged. However, the work on the problems that you hand in must be only your own work. "Your own work" could include material that you find (on your own) in a book or journal, properly cited. If you take advantage of a "brainstorm" of a fellow student, you are expected to acknowledge that student by name. Aid from students not in this class is not permitted. {over}

Academic Integrity: While collaboration on problem sets is permitted, even encouraged, failure to follow the guidelines of the previous paragraph will result in a grade of **zero** for the problem set.

Any instance of cheating in the final exam will result in a grade of **F** in the course.

All instances of academic dishonesty will be reported to the University's academic integrity administrators. Students have the right to appeal all such sanctions.

Students with Disabilities: Students who may need academic accommodation due to a disability are encouraged to discuss their needs with the instructor at the beginning of the semester. In order to obtain authorized accommodation, students should be registered with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498 and bring an updated accommodation letter to the instructor. Accommodations and related support services such as exam administration are not provided retroactively and must be requested in advance.