

Math 210: Topics in Finite Mathematics
Lecture 1, MWF 9:55–10:45 a.m., B239 Van Vleck
Syllabus for Semester I, 2012/2013

Prof. Paul Terwilliger

Email: terwilli@math.wisc.edu

Office hours: M 3:30 in 903VV, or by apt.

WWW: <http://www.math.wisc.edu/~terwilli>

Teaching assistant: Robin Prakash, rprakash@math.wisc.edu

Text: Finite Mathematics, 5th Edition, by D. Maki and M. Thompson.

Office: 101A Van Vleck

Office phone: 263-2226

Course Content: We will cover roughly chapters 1–9 in the text. The main topics include combinatorial counting, probability, linear programming, Markov chains, and financial mathematics. In addition, the students are expected to sharpen their algebraic and computational skills.

Exams and Grades: The course grade is mainly based on four in-class exams and the final exam. Each of the in-class exams is worth 100 points, and the final exam is worth 150 points. The final exam is required; of the four in-class exams, the one with the lowest score will be dropped. For each in-class exam there will be **NO make-up**; if you miss the exam, then that exam is the one that will be dropped.

The final exam is FRIDAY, DEC 21, at 10:05 a.m.–12:05 p.m.

There will be a make-up exam for the final, but it will take place **after** Dec 21. Under no circumstances will a student be allowed to take the final early. So fair warning, and make your travel plans for winter break **NOW**. In addition to the above exam grades, good performance in your discussion section is worth 50 points. Your TA will explain how this score is computed.

Homework: To learn the material well, you need to work out lots of homework problems. In a typical lecture I will cover one section of the text. At the end of that section you will find several dozen problems. For homework you should solve as many of these problems as possible. Also at the end of each chapter you will find several dozen review problems. For homework you should solve as many of these problems as possible. You may do the homework alone, or form a study group with your classmates as you see fit. I will not collect the homework, but the solutions will be gone over in the discussion sections. For the odd-numbered problems the answers are given in the back of the book. You will probably agree that in principle, it is important to do the homework if you want to learn the material. But given the many distractions in your life, you might find it hard to do this without extra motivation. So here it is:

For each exam including the final, the test questions will be taken at random and verbatim from the homework, with only the numbers changed.

Discussion Sections: As a student in this course you have been assigned a discussion section. This will meet once a week and is run by your teaching assistant. In the discussion section you have the opportunity to ask questions about examples from the lecture and the

homework problems. The TA will also have office hours each week for routine help with the exercises etc. I have office hours for non-routine help.

Exam Policy: When you seat yourself for an exam, it is your responsibility to make sure that you are separated from each neighbor by at least one empty seat. The lecture hall is quite large so there will be plenty of room for this. During the exam no books, notes, calculators, cell phones, pagers, or any electronic devices will be allowed. You are required to bring a Photo ID to each exam, and you might be asked to show it.

Extra Help: In addition to the discussion sections and office hours, the following help is available:

Business Learning Center: free tutoring, review sessions, practice exams.

<http://www.bus.wisc.edu/blc> Contact Judy Cary jcary@wisc.edu

GUTS (Greater University Tutoring Service): free peer tutoring.

<http://guts.studentorg.wisc.edu/index.html>

Private Tutors: The receptionist on the 2nd floor of Van Vleck has a list of private tutors.

See also <http://www.math.wisc.edu/~paulson/tutor.html>

Remarks: (1) The final exam is cumulative.

(2) I will create the exams. The exams are graded jointly by myself and the TA's. The graded exams will be returned to the student in their discussion section.

(3) Any questions about the grading of an in-class exam must be brought to the instructor's attention within two weeks of the day that exam is handed back in class.

(4) On the exams, cross out or erase material that you don't want counted. Incorrect reasoning will be counted against you.

(5) The Kleene Math Library has a collection of old Math 210 exams that you might find useful as a study aid. These exams are on the WWW at <http://math.library.wisc.edu/reserve>

Tentative Schedule of Lectures:

Week	M	W	F
Sept 3	Labor day	1.1	1.2
Sept 10	1.3	1.4	1.R
Sept 17	2.1	2.2	2.3
Sept 24	2.4	2.R	Exam I
Oct 1	3.1	3.2	3.3
Oct 8	3.4	3.5	3.R
Oct 15	4.1	4.2	4.R
Oct 22	Exam II	5.1	5.2
Oct 29	5.3	5.R	6.1
Nov 5	6.2	6.R	Exam III
Nov 12	7.1	7.2	7.3
Nov 19	7.R	Rev	Thanksgiving
Nov 26	8.1	8.2	8.3
Dec 3	8.R	Exam IV	9.1
Dec 10	9.2	9.3	Rev