Contemporary Mathematics

MA111 Syllabus

Section 002
Fall 2012
Course Code: schmidt96545
MWF 10am in CB204

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Schedule: Dr. Schmidt holds office hours in the Mathskeller (CB63) on Mondays from 2pm to 4pm and Fridays 4pm to 5pm. Four exams are given during our normal class meeting from 10:00am to 10:50am. The fifth and final exam is Monday Dec 10, 8:00am-10:00am. We will continue to have in-class activities and online homework during the last week of class, Dec 3 through Dec 7.

Policies: Behave professionally in class, and address your peers in the classroom courteously. If you need to make an emergency call or text, please quietly excuse yourself and handle the emergency outside of the classroom. Inform me in writing before Sep 12th of any special accommodations needed for religious reasons, and as soon as possible for disability or extra-curricular reasons.

Please inform your instructor in advance and in writing of any absences. Class absences not reported in writing within one week of the first day of absence are not excused; exam absences not reported within 12 hours of the beginning of the exam are not excused. Exam absences are only excused if they meet the university excused absence policy and are subject to strict verification. Excused absences will not lower your grade, but unexcused absences result in no credit for that day's attendance and recitation points. Homework must be turned in through the (commercial) online homework system MyMathLab, and late work will only be accepted with a large penalty. The out-of-class project must be turned in on the BlackBoard system.

In writing means paper in my POT715 mailbox, email to <jack.schmidt@uky.edu>, or text to 512-522-5137. In all cases, leave a clear message including your name and course (MA111).

Content: We will cover two main themes of mathematics: strategy and beauty. The textbook, Excursions in Modern Mathematics by Peter Tannenbaum (Third custom edition for UK; ISBN 1-256-30145-0), **bundled with MyMathLab access**, will be required, including a publisher access code typically only available from new textbooks.

We will cover democratically choosing between several alternatives (Chapter 1; Voting). We will study the mysterious ebb and flow of wealth (Chapter 10; Money). We will wander the corridors of a giant maze (Chapter 5; Getting around). We will learn to fairly divide treasure with pirates (Chapter 3; Sharing). We will classify some classical ideas of beauty (Chapter 11; Symmetry).

Grading: Your grade derives from exams, online homework, and a substantial out-of-class project.

- 75% from five exams (15% each)
- 20% online homework
- 5% a project to be described in early October and due in early November.

Your grades are numerical and on the standard scale: 90% and up is an A, 80%-89% is a B, 70%-79% is a C, 60%-69% is a D, and below 60% is an E.

Collaboration: Collaboration is encouraged. Any work turned in for grading will be individually assessed and should represent an individual's work, but it is assumed that that work was done in a collegial atmosphere. Plagiarism is a serious academic offense. Your ideas are valuable; please present your own ideas after having listened to the ideas of your colleagues. Ideas are meant to be shared, understood, and reshaped, not simply copied. Cheating on quizzes or tests will be handled in accordance with university policy, and can result in a failing grade for the entire course and even more serious consequences.

Tentative weekly schedule: The weekly schedule is subject to change, but should be similar to the following:

Monday topic		Wednesday topic		Friday topic	
		Aug 22	Outline	Aug 24	1.1
Aug 27	1.2	Aug 29	1.3	Aug 31	1.4
Labor day		Sep 5	1.5	Sep 7	Ch 1
Sep 10	Ch 1	Sep 12	Ch 1	Sep 14	Review
Sep 17	Exam	Sep 19	10.1	Sep 21	10.2
Sep 24	10.3	Sep 26	10.6 EZ	Sep 28	10.6
Oct 1	10.5	Oct 3	Ch 10	Oct 5	Review
Oct 8	Exam	Oct 10	5.1	Oct 12	5.2
Oct 15	5.3	Oct 17	5.4	Oct 19	5.5
Oct 22	5.6	Oct 24	5.7	Oct 26	Review
Oct 29	Exam	Oct 31	3.1	Nov 2	3.2
Nov 5	3.3	Nov 7	3.4	Nov 9	3.5
Nov 12	3.6	Nov 14	3.7	Nov 16	Review
Nov 19	Exam	Thanksgiving		Nov 23	HW 7.2
Nov 26	Symm	Nov 28	Rosette	Nov 30	Rigid
Dec 3	Frieze	Dec 5	Rigid	Dec 7	Review

Dec 10, Final Exam, 8:00am -10:00am