Contemporary Mathematics

MA111 Syllabus

Section 003
Spring 2012
Course Code: schmidt47708
MWF 10am in CB208

Jack Schmidt

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Schedule: Dr. Schmidt holds office hours in the Mathskeller (CB63) on Mondays, Wednesdays, and Fridays from 2pm to 3pm. Four exams are given during our normal class meeting from 10:00am to 10:50am. The fifth and final exam is Monday Apr 30, 1:00pm-3:00pm. We will continue to have in-class activities and online homework during the last week of class, Apr 23 to Apr 27.

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 Feb 1st 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 classify some classical ideas of beauty (Chapter 11; Symmetry). We will learn to fairly divide treasure with pirates (Chapter 3; Sharing).

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 schedule

Monday topic		Wednesday topic		Friday topic	
		Jan 11	Overview	Jan 17	1.1
Jan 16	MLK day	Jan 18	1.2	Jan 20	1.3
Jan 23	1.4	Jan 25	1.5	Jan 27	Review
Jan 30	**Exam 1**	Feb 1	10.1	Feb 3	10.2
Feb 6	10.3	Feb 8	10.6	Feb 10	10.6
Feb 13	10.5	Feb 15	Review	Feb 17	**Exam 2**
Feb 20	5.1	Feb 22	5.2/5.3	Feb 24	5.4
Feb 27	5.5	Feb 29	5.5	Mar 2	5.6
Mar 5	5.7	Mar 7	Review	Mar 9	**Exam 3**
		Spring break Mar 12 - Mar 16			
Mar 19	Ch 11	Mar 21	Ch 11	Mar 23	Ch 11
Mar 26	Ch 11	Mar 28	Ch 11	Mar 30	Ch 11
Apr 2	Ch 11	Apr 4	Review	Apr 6	**Exam 4**
Apr 9	3.1	Apr 11	3.2	Apr 13	3.3
Apr 16	3.4	Apr 18	3.5	Apr 20	3.6
Apr 23	3.7	Apr 25	Ch 3	Apr 27	Review

Apr 30, Final Exam, 1:00pm - 3:00pm