MAT 105 (Section 3)
Introduction to Mathematical Thought
Fall, 2011

Classes: Mon & Wed, 10.25–11.40 am (Fanning 306)

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Office: Fanning 407 **Telephone**: 439-2020
Office Hours: Mon 3.00–4.00 pm, Wed 9.00–10.00 am & 3.00–4.00 pm, and by appointment.

Textbook (Required): *For All Practical Purposes: Mathematical Literacy in Today's World (8th Edition)*, by COMAP (W.H. Freeman, 2008). E-Book is also acceptable.

Course Webpage: Accessible via ConnCourse/Moodle at `http://banyan.conncoll.edu/moodle/login/`

Textbook Website: The textbook's website has useful educational resources, and is also where online quizzes are located: `http://www.whfreeman.com/fapp8e/` . Please register at this site.

Problem Sets: Problem Sets will be assigned at the end of each chapter, and typically will consist of four components: (i) Skills check, (ii) Exercises, (iii) Applets, and (iv) Online quiz. The first two of these are traditional problems from your textbook (and are a good guide to what to expect in exams), while the last two are web-based. The first three components will not be collected or graded, but bear in mind that an essential part of understanding the mathematical aspects is by getting your hands dirty, struggling with concepts and applying them. It is a good idea to work with your classmates on these three components of your problem sets, and you are strongly encouraged to come and see me if you are having trouble. Solutions to these three components will be made available.

Online Quizzes: Once you are confident of your understanding of the material based on the first three components of the problem sets, you will need to complete the fourth component of your problem sets: the online quiz. The grades from these quizzes will be a part of your final grade.

Writing Projects (Papers): There will be two writing projects over the semester, due (tentatively) on **Nov 2 (Wed)** and **Dec 14 (Wed)**. More details will be made available later.

Exams: There will be 2 mid-term exams, to be held during class time on **Wed, Oct 12** and **Wed, Nov 30**. These exams *must* be taken at the scheduled date and time (emergencies and medically documented situations are the only extenuating circumstances that will be considered). The final exam will be held during the final exam period, and is self-scheduled.

Late Assignment Policy: Late assignments/papers will *not* be accepted. Sorry – this is not negotiable.

Calculators: If you wish to, you may use calculators in examinations. However, exams will be designed so that you should be able to tackle them without a calculator.

Honor Code: The Connecticut College Honor Code will apply. Its impact on individual assessment tasks will be made specific when those tasks are handed out. Any violations will result in referrals to the Honor Council. A guilty verdict will result in an F for this course, plus any additional penalties imposed by the council.

Special Accommodations: If you have a physical or mental disability, either hidden or visible, which may require classroom, test-taking, or other reasonable modifications, please see me as soon as possible. You must also register without delay with the Office of Student Disability Services (Crozier Williams Room 221, Campus Extensions 5428 or 5240, `barbara.mcllarky@conncoll.edu` or `lillian.liebenthal@conncoll.edu`) to be eligible for special accommodations.

Assistance with Writing: The Roth Writing Center (`http://write.conncoll.edu/`) provides one-to-one peer tutoring (free of charge) to help student writers of all abilities during all stages of the writing process. To make an appointment, call x2173 or stop by the Writing Center at Blaustein 214.

Grade Weighting:	Final Exam	(cumulative, self-scheduled)	25 %
	Mid-term Exams	(2, at 20 % each)	40 %
	Writing Projects / Papers	(2, at 10 % each)	20 %
	Online quizzes		10 %
	Participation	(includes attendance and being on time for class)	5 %

MAT 105-03

Introduction to Mathematical Thought

Course Objectives

- To appreciate the importance of mathematics in everyday life,
- To be able to express, solve, analyze and communicate social problems in terms of abstract mathematics,
- To have some fun with mathematics! (for a change?)

Content

The following is the ordering of the chapters for the semester. This is subject to change depending on time constraints.

Chapter 1: Urban Services

Chapter 2: Business Efficiency

Chapter 5: Exploring Data: Distributions

Chapter 6: Exploring Data: Relationships

Chapter 7: Data for Decisions

Chapter 9: Social Choice: The Impossible Dream

Chapter 10: The Manipulability of Voting Systems

Chapter 11: Weighted Voting Systems

Chapter 13: Fair Division

Chapter 15: Game Theory: The Mathematics of Competition
