

# Math for Modern Technology

## Spring 2010

### Basic Information

<b>Course</b>	Math for Modern Technology 2030:161-001 10164
<b>Time</b>	11-11:50 am, MTuWF 1/11/2010-4/30/2010
<b>Location</b>	Polsky 462
<b>Text</b>	<i>Finite Mathematics &amp; Its Applications, Tenth Edition</i> Larry J. Goldstein, David I. Schneider, Martha J. Siegel
<b>Instructor</b>	Dr. Scott Randby
<b>Office</b>	Polsky 133D (POL 133D) Associate Studies Department
<b>Office hours</b>	12-2:30 pm, MW and by appointment
<b>Phone</b>	(330)-972-6094
<b>E-mail</b>	srandby@uakron.edu
<b>Web Page</b>	srandby.org

### Course Objectives

After completing this course the student should have the following competencies: **(1)** the ability to graph lines, find equations of lines, and use linear regression lines in applications, **(2)** an understanding of sets and basic counting techniques and their uses, **(3)** the ability to compute simple probabilities and odds, **(4)** the ability to compute and apply modes, medians, means, expected values and standard deviations, **(5)** an understanding of the binomial and normal distributions and their applications, **(6)** an understanding of the mathematics of finance including simple interest, compound interest, annuities, present value, future value, the APR, and consumer loans, and **(7)** an understanding of basic symbolic logic, arguments, and logic circuits.

Course Content	
Chapter	Sections
1	1.1, 1.2, 1.3, 1.4, 1.5
5	5.1, 5.2, 5.3, 5.4, 5.5
6	6.1, 6.2, 6.3, 6.4
7	7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
10	10.1, 10.2, 10.3, 10.4
11	11.1, 11.2, 11.4
12	12.1, 12.2, 12.3, 12.4, 12.5, 12.7

### Grading

Course Components	
<b>Attendance</b>	0.07 bonus points/class day
<b>Homework</b>	10 points/assignment
<b>Exams</b>	100 points/exam

### Attendance

Attendance will be taken at the beginning of each class. You will be rewarded with 0.07 bonus points for each class day that you attend class **and** sign the attendance sheet. Good attendance will raise your final grade by as much as 4%.

### Homework

There will be a graded homework assignment, worth ten points, for each section covered in class. Homework counts towards 25% of your final grade. The due date for each graded assignment will be announced in class.

The homework assignments for this course are contained in a PDF file which is posted on the course website. All students must download this file. It may either be viewed on a computer screen or printed out.

Unless an acceptable excuse is provided or the instructor agrees to give an extension, points will be deducted from late homework using the following scale. Note that the number of points deducted from late homework increases exponentially with the number of class days an assignment is late. Also, homework is late if it is not turned in before or during the class in which it is due.

$x$  = the number of class meetings an assignment is late

$x$	Points Deducted
$0 < x \leq 1$	2
$1 < x \leq 2$	4
$2 < x \leq 3$	8
$x > 3$	10

The beginning of each class will be devoted to a discussion of homework problems. Remember, success in a mathematics course requires individual effort outside of the classroom, the standard recommendation being two hours of study for each hour of class.

### Exams

Each exam is worth 100 points and will be based on the material previously covered in class. Exams count towards 75% of your final grade.

Exam Schedule	
1/27	Exam 1
2/24	Exam 2
3/31	Exam 3
4/21	Exam 4
5/7	Final, 12-1:55 pm

### Final Grades

To determine your grade percentage use the following formula.

$h$  = the number of homework assignments

$e$  = the number of exams

$hw$  = the total number of homework points earned

$ex$  = the total number of exam points earned

$c$  = the total number of classes attended

$p$  = the grade percentage

$$p = hw \left[ \frac{25e + 2.5h}{10eh + h^2} \right] + ex \left[ \frac{7.5e + 0.75h}{10e^2 + eh} \right] + 0.07c$$

To determine your course grade use the course grading scale given below.

Minimum Percentage	Grade
91	A
90	A-
87	B+
81	B
80	B-
77	C+
71	C
70	C-
67	D+
63	D
60	D-
0	F

## Incompletes

A grade of **incomplete (I)** will be granted only in special circumstances. To receive an **I** a student must have **(1)** the agreement of the instructor, **(2)** successfully completed a substantial portion (generally 4/5) of the required coursework, **(3)** have a good and acceptable reason for not completing any remaining coursework, and **(4)** maintained a grade of C or better on the coursework that has been completed.

## Withdrawal

The withdrawal deadline for this course is **Friday, April 9, 2010**.

## Course Website

The address for the course web page is the following:

[srandby.org/2010.1/161.001/161.001.html](http://srandby.org/2010.1/161.001/161.001.html)

The course web page contains links to all the documents used in this course. It also contains a section entitled **Course News** in which information about each class meeting appears. Check with classmates, the syllabus, and the course web page before asking the instructor for non-mathematical information.

## Office Hours

My office hours are given above. You may come to my office anytime, not just during my office hours. If I am in my office when you arrive and I am not working on something

urgent, then I will be happy to help you. Please note that office hours are for discussing homework problems, clarifying concepts discussed in class, and discussing general mathematical issues. I do not give make-up lectures during office hours nor will I discuss material that was covered in a class you missed and for which you have not obtained the class notes.

If you come to my office for help, please be sure to bring your class notes, any work you have done, a calculator, a writing instrument, and paper. If you lack any of these items, then you may be asked to go get them and come back later.

## Student Responsibilities

### Conduct

Students are required to follow The University of Akron's *Student Code of Conduct* and they are required to behave in a manner that complies with the expectations outlined in the *A Civil Climate for Learning: A Statement of Expectations* section of the *Undergraduate Bulletin*. The *Student Code of Conduct* is available on the website of *The Office of Student Judicial Affairs* ([www.uakron.edu/sja](http://www.uakron.edu/sja)). The undergraduate bulletin is available at the following link:

[www.uakron.edu/academics\\_majors/undergraduate\\_programs/ugrad.pdf](http://www.uakron.edu/academics_majors/undergraduate_programs/ugrad.pdf)

### Attendance

Students are expected to attend every class, arrive to each class on time, and stay for the entire length of all classes. Students are responsible for all material covered in each class as the instructor does not give lectures outside of the classroom. If you miss a class, then you are required to obtain the notes for that class from a classmate.

Students are not permitted to bring children, family members, friends, or any other person to class for any reason.

### Homework

Students are expected to turn in all homework assignments on time. Unless the instructor agrees otherwise, points will be deducted from late homework using the scale given above.

### Exams

Students are required to take every exam during its scheduled date and time unless the instructor agrees to schedule a make-up exam. Make-up exams are given only under special circumstances. Early exams will not be given under any circumstances.

### Calculators

All students are **required** to have a **scientific** or graphing calculator with minimum functionality equivalent to that of the **Texas Instruments TI-30X IIS** calculator. Every student is **required** to have possession of their calculator by the end of the first week of classes. No exceptions to this policy will be made by the instructor.

Students are required to bring an acceptable calculator to each class.

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