Math 111–A01 (Linear Mathematical Modeling)
Summer 2013

Instructor: David Walnut
Office: Exploratory Hall, 4402
email: dwalnut@gmu.edu
Phone: 703 993 1478 (voice)   703 993 1491 (fax)
Course web page: Linked from `http://math.gmu.edu/coursehomepages.htm`.
Office hours: TW 2:00–3:00pm and by appointment.
Text: Goldstein, Schneider, and Siegel, *Finite Mathematics & its Applications* (tenth edition), and the supplemental notes *Math 111 Finite Mathematics: Matlab, Data Fitting, and Modeling* available in the GMU Bookstore
Topics: The course will cover portions of Chapters 1, 2, 8, and 11 in the text, as well as some additional topics that appear in the supplemental notes. Exact sections covered are indicated in the Homework Exercises.

General Comments:

The prerequisite for this course is a score of 75 or better on the Pre-Algebra portion of the placement test. If you do not have the prerequisite, you cannot remain in the course.

In this course we must cover an entire semester's worth of material in about four weeks. Therefore, the pace of this course is **extremely fast**. If you fall behind at any point, you will very quickly find yourself in serious trouble. Therefore, do your best to stay caught up with the material. You should expect to work **at least 12 hours per week** outside of class in order to master the material in this course.

In this course, you will be introduced to the software package MATLAB (stands for MATrix LABoratory). Instructions for accessing Matlab remotely, and a description of some basic commands can be found on the Math Departments web site here:

<div align="center"><code>http://math.gmu.edu/introtomatlab.htm</code>.</div>

Matlab is also available on computers in the computer labs throughout campus. Information on hours and locations can be found here:

<div align="center"><code>https://itservices.gmu.edu/services/computers-software.cfm</code>.</div>

There is also a brief tutorial on Matlab in Chapter 1 of the supplemental notes.

The course web page contains announcements and useful information including solutions to exams. MATLAB assignments, any handouts, and this syllabus will be made available in downloadable form. **You are responsible for checking the web page periodically so that you will not miss important information.**

A considerable amount of help is available to you for both coursework and for MATLAB. The Mathematics Tutoring Center is highly recommended. Information on this and other sources of help can be found on the Mathematics Department web page at `math.gmu.edu`.

Grading:

Homework. Included with this syllabus is a list of homework exercises. Homework will not be collected but it is vitally important that you do the homework exercises in a timely fashion in order to perform well on the exams and quizzes. The assigned problems are representative of the test questions.

MATLAB Assignments. Three MATLAB assignments will be given during the semester, due on Monday, June 3, Monday, June 10 and Monday, June 17. Specific instructions will be given at the time the assignments are handed out. You may work in groups of no more than **three** persons. Your average grade on these assignments will count for 10% of your final grade. **No late MATLAB assignments will be accepted under any circumstances.**

Exams: Mid-term exams will be given each Thursday of the term, so on May 23, May 30, June 6, and June 13. Your best three exam scores will be counted toward your final grade. Your exam total will count for 60% of your final grade. **Makeup exams will not be given under any circumstances whatsoever.**

Final Exam: There will be a cumulative final exam given on Thursday, June 20, 10:30am - 1:15pm in the same room where we have class. The final exam will count for 30% of your final grade.

Grading Scale:

A+:	99 +;	A:	92 - 98;	A-:	90 - 91;
B+:	88 - 89;	B:	82 - 87;	B-:	80 - 81;
C+:	78 - 79;	C:	72 - 77;	C-:	70 - 71;
		D:	60 - 69;		
		F:	0 - 59.		

Homework Exercises

Section	Exercises
1.1	1-15 (odd), 19, 23, 27, 31, 35, 39-45 (odd)
1.3	1-11 (odd), 23-29 (odd)
1.4	15-21 (odd), 23-31 (odd), 39-49 (odd), 63, 67, 71
2.1	9-15(odd), 23-37(odd), 41, 43, 47, 49
2.2	1, 9, 11, 13, 17, 21, 23, 25
2.3	11-41 (odd), 49, 51
2.4	1-19 (odd)
2.6	1, 5, 7, 11, 13, 17
8.1	1-15 (odd), 19, 21, 25, 29, 31
8.2	1-9 (odd), 13, 15
8.3	1-11 (odd), 13, 15, 21, 23, 25
1.5	1, 3, 5, 7, 11
11.1	1-19(odd)
11.2	1-17(odd)
11.4	1-11(odd)