

Math 111 Linear Math Modeling
Spring 2013
Class Times: MW 3:00 – 4:15

Instructor: Matthew Gerhart

Email: mgerhart@gmu.edu

Office and hours:

Planetary Hall, Room 234

Mondays and Wednesdays, 4:45 – 5:45 (after class) and by appointment

Website: GMU Blackboard

Text: Finite Mathematics and Its Applications, 10th Edition, Goldstein, Schneider, Siegel.

In this course, we will learn a variety of methods for modeling data. These include an introduction to linear systems, matrix calculations and game theory, working with Markov chains, and solving difference equations. We plan to cover information from chapters 1,2,8,9,10 and 11 in the text.

Matlab:

We will also be working with the math programming software Matlab. This software is exceptional at handling and doing calculations with matrices, and graded assignments will be given using Matlab. Instructions for downloading Matlab, and a description of some basic commands can be found on the Math Department's web site here:

<http://math.gmu.edu/introtomatlab.htm>. Matlab is also available on computers in the computer labs throughout campus. Check locations and hours with IT here:

<http://itusupport.gmu.edu/STG/computerlabs.asp>.

Homework and Calculators:

Other homework will be assigned in order for you to be sure of mastering the material. It will not be collected, but you should not expect to perform well on exams without having prepared for them through regular problem-solving on your own. You may submit the homework and I will grade it but the grade will not be recorded. You are welcome to use calculators on homework problems and tests, but I do not require you to have one. Please keep in mind that using a calculator is not a substitute for understanding a problem-solving process. You will be required to show all work for full credit on tests, whether you use a calculator or not.

Grading:

Grading will consist of these approximate percentages, which I retain the right to change: 15% for each chapter test (for a total of 60%), 20% for the Matlab assignments, and 20% for the final exam. There are NO MAKE-UPS for missed exams, so please carefully note the test dates given below.

Important Dates:

1/21 – No Class

1/29 – Last day to add

2/13 – Test 1 (Tentative)

2/22 – Last day to drop

3/6 – Test 2 (Tentative)

3/11 – Spring Break Begins

3/17 – Spring Break Ends

4/4 – Test 3 (Tentative)

4/29 – Test 4 (Tentative)

5/6 – Last day of class

5/13 – Final exam: 1:30 – 4:15

Honor Code: You are expected to know and abide by the GMU Honor Code. I have absolutely no tolerance for dishonesty or cheating. Please refer to <http://oai.gmu.edu/honor-code/>