Course: Math 451—Computational Mathematics using MATLAB

Time: Fall 2012, MW 12:30-1:45, 335 JB

Instructor: Tom DeLillo, 348 JB, 978-3974 (office), 264-7806 (home) Email: delillo@math.wichita.edu (the best way to contact me)

Office hours: 3:00-4:00 MW or by appointment

Texts:

- 1. Learning MATLAB by Tobin A. Driscoll, SIAM, 2009.
- 2. Getting Started with MATLAB Version 7.8 A Quick Introduction for Scientists and Engineers by Rudra Pratap, Oxford University Press, 2010.

Syllabus: We will first go through Driscoll's book with with supplementary material from Pratap. Later we will choose selected matrial from Pratap and other surces such as symbolic computing, object oriented programming, and selected material from numerical methods and scientific computing. The emphasis will be on scientific programming and an introduction to the many features and functions of built into MATLAB.

Grading (approximate)

Homework and Computer projects	200
Exam I	100
Exam II	100
Final Exam or Project	<u>100</u>
	500 points total

Attendance policy, etc.: It is crucial to attend class. Contact me as soon as possible if you have special difficulties. You will be using MATLAB actively in class. I will pass around an attendance sheet during each class.

Important dates:

Fall break: 10/15-16.

Last day to drop with a "W": 10/30.

Thanksgiving Recess 11/21–25.

Last day of class: 12/5

Study Day: 12/7 (possible review or makeup class.)

Final exam: Wednesday 12/12, 10:00-12:00, in classroom.

Some Other MATLAB References

MATLAB Guide, by Desmond J. Higham and Nicholas J. Higham, SIAM (2000) ISBN 0-89871-469-9 (available soon).

See also material on my webpage from my *Math 551 course* where some review of relevant mathematics is available.