Syllabus: Math 320 Numerical Analysis, Spring 2014

Course
Math 320 meets MWF 12:00-12:50 in RH 237
Course web page http://mathcs.slu.edu/~clair/numeric

Instructor
Dr. Bryan Clair
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Ritter Hall 110, 977-3043

Office Hours
M 1-2, Tu 11-12, W 10-11 or by appointment. Stop by my office anytime, and if I’m around I can usually help you.

Textbook

Homework
Homework will consist of some problems to be done by hand, and some computer programming projects using MATLAB or Octave. Your work should be neat and legible, with plenty of blank space on your pages so I have room to write comments. Staple your homework!
I encourage you to work together on homework, but write up results separately.
Late homework is always accepted for half credit, but I will not write comments.

Exams
I give makeup exams only for severe and documented reasons.
Exam 1 Wednesday, February 19
Exam 2 Friday, April 4
Final Exam Friday, May 9, 12:00-1:50
In addition, there will be a handful of short quizzes.

Grading
Grading is on a straight scale (uncurved), with 90%, 80%, 70%, 60% guaranteeing A, B, C, D respectively. Grading is weighted as follows:

- Homework: 25%
- Quizzes: 10%
- Exam 1: 20%
- Exam 2: 20%
- Final Exam: 25%

Honesty
Students are expected to be honest in their academic work, as per the Honesty Policy of the College of Arts & Sciences. Plagiarism, cheating and dishonesty will be reported to the dean and may result in probation, expulsion, or worse.
In particular, for this course, code you submit as solutions to programming assignments must be written by you. You are not allowed to copy code from other students or the web. Copying code from examples presented in class is allowed.

Course Topics
(Still tentative)
- MATLAB/Octave programming
- Interpolation and polynomial approximation. Ch 3-3.4.
- Numerical quadrature (integration). Ch 4.3-7.
- Solving differential equations. Euler’s method, Runge-Kutta. Ch 5-5.4.