Math 409/509
Applied Numerical Methods II
Spring 2005

Instructor: Dr. Glenn Williams
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The website contains general announcements, syllabus, information for assignments, and the website for our textbook. Students are encouraged to check it frequently.

Course Description: An upper-level undergraduate/introductory-level graduate course in applied numerical methods. Algorithms will be designed and analyzed for efficiency and accuracy. General principles of numerical analysis will also be covered. Specifically, topics will include direct methods for solving linear systems, iterative techniques in matrix algebra, numerical solutions of nonlinear systems, boundary-value problems, and numerical solutions to partial differential equations.

Prerequisites: MATH 312 (Calculus III) and 316U (Introductory Linear Algebra) or equivalent.

Text: Numerical Analysis (7th Ed.), by R.L. Burden and J.D. Faires

Grading Policy: Take-Home Assignments: 75%
Final Assignment: 25%


Scale: +/- grades will be used for the final grade at the discretion of the instructor

Last day to withdraw: Tuesday, March 15.

Disability Services Policy: Reasonable accommodations will be made for students with disabilities provided those students have registered with the Office of Disability Services (683-4655).

Honor Code: By enrolling in this course you agree to adhere to the honor code on all written work: "I pledge to support the Honor System of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism." I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the honor code.

Computing Policy: Assignments will require the writing of computer programs for use on personal computers. Students are free to use the programming language of their choice. MATLAB may be used for demonstration purposes, but familiarity with MATLAB programming is not required to complete the assignments.

Attendance Policy: A student who must miss class is expected to get the notes from other students. Although excessive absences can have a considerable negative effect on a student's learning and performance, absences from class are not counted.

Make-Up Exam Policy: There will be no make-up assignments. Under exceptional circumstances, beyond the student's control, the final assignment grade may be recorded for ONE (and only ONE) missed assignment. The student must provide written documentation of the reason for missing the assignment, no later than one week after the assignment is due. If the instructor approves this explanation, the assignment grade will be adjusted accordingly. Otherwise, a score of zero will be entered for the missed assignment.