1 Survey of Numerical Analysis

Math 5600 University of Utah Spring 2003

2 Instructor

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3 Course structure

- Solutions of equations in one variable.
- Interpolation and polynomial approximation.
- Numerical differentiation and integration.
- Direct methods for solving linear systems.
- Iterative techniques in matrix algebra.
- Initial and boundary value problems for ODEs.
- Numerical solutions to PDEs.

4 The textbook

The texbook is *Richard L. Burden and J. Douglas Faires,* **Numerical Analysis**, 7th edition. It comes with a CD containing the software for problem solving.

Another reference book is *Kendall Atkinson,* **An Introduction to Numerical Analysis**.

5 Grading

- Four homework assignments (20 % each)
- One written final exam (20 %)

Letter grades will be assigned as follows:

$\geq 90\%$	A,	$\geq 84\%$	$A-$,	$\geq 78\%$	$B+$,
$\geq 72\%$	B,	$\geq 66\%$	$B-$,	$\geq 60\%$	$C+$,
$\geq 54\%$	C,	$\geq 48\%$	$C-$,	$\geq 42\%$	$D+$,
$\geq 36\%$	D,	$\geq 30\%$	$D-$,	Else:	E.

Note: no late homework assignments will be accepted.

6 Office hours

TuTh 12:00 noon - 1:00 pm, and by appointment.

7 Computer lab

Computer lab is in T. Benny Rushing Mathematics Student Center (the ground floor between JWB and LCB).

8 ADA statement

The American Disabilities Act requires that reasonable accommodations be provided for students with physical, sensory, cognitive, systemic, learning and psychiatric disabilities. Please contact me at the beginning of the semester to discuss any such accommodations.