

Syllabus

MATH 5338 NUMERICAL ANALYSIS (I)

Class Number: 82726
Semester: Fall, 2013
Classroom: PKH 111
Meeting Time: 2:00-3:20 PM, Tuesday & Thursday
Instructor: Dr. Chaoqun Liu
Office: PKH 456
Phone: 272-5151
Email: cliu@uta.edu
Web: www.uta.edu/math
Office Hours: 3:30-4:30 PM, TTH or by appointment

1. COURSE PREREQUISITES:

Knowledge of calculus, linear algebra, and programming or consent of the instructor.

2. COURSE GOALS:

- Solution of one-variable equations
- Interpolation and polynomial approximation
- Numerical differentiation and integration
- Direct methods for solving linear systems
- Iterative techniques in matrix algebra

3. TEXTBOOK:

Numerical Analysis by R.L.Burden and J.D.Faires (8th Edition) published by Thomson/Books/Cole, ISBN: 0-534-39200-8

4. REFERENCE BOOK:

Numerical Analysis by David Kincaid and Ward Cheney (3rd Edition), Published by Brooks/Cole, 2002, ISBN: 0-534-38905-8

4. HOMEWORK POLICY:

Homework problems will be assigned from the sections covered and will be collected on Tuesday each week.

5. EXAMINATIONS: Two tests, and one final

6. GRADING: tests: 25% x 3, homework: 15%, final 35%

7. LATE HOMEWORK: Generally not accepted.

8. EXAMS MISSED:

Notify me immediately, no later than the day of exam. A make-up test may be

given if and only if the absence is excused.

9. COURSE OUTLINE:

MATH 5338
COURSE OUTLINE (subject to change)
Numerical Analysis by R.L.Burden and J.D.Faires (8th Edition)

Section	Lesson	Date
1.1	1	8/22
1.2 -1.3	2	8/27
2.1	3	8/29
2.2	4	9/3
2.3	5	9/5
2.4 - 2.5	6	9/10
2.6	7	9/12
3.1	8	9/17
3.2	9	9/19
3.3	10	9/24
Test 1 (1.1 - 2.6)		9/26
3.4	11	10/1
4.1	12	10/3
4.2	13	10/8
4.3	14	10/10
4.4	15	10/15
4.5	16	10/18
4.6	17	10/22
4.7	18	10/24
6.1	19	10/29
Test 2 (3.1 - 4.7)		10/31
6.2	20	11/5
6.3-6.4	21	11/7
6.5	22	11/12
5.6	23	11/14
7.1	24	11/19
7.2	25	11/21
7.3	26	11/26
7.4 and review	27	12/3
Final (comprehensive)		