

Syllabus

MATH 5338 NUMERICAL ANALYSIS (I)

Class Number: 82405
Semester: Fall, 2014
Classroom: PKH 311
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	8/21
1.2 -1.3	2	8/26
2.1	3	8/28
2.2	4	9/2
2.3	5	9/4
2.4 - 2.5	6	9/9
2.6	7	9/11
3.1	8	9/16
3.2	9	9/18
3.3	10	9/23
Test 1 (1.1 - 2.6)		9/25
3.4	11	9/30
4.1	12	10/2
4.2	13	10/7
4.3	14	10/9
4.4	15	10/14
4.5	16	10/16
4.6	17	10/21
4.7	18	10/23
6.1	19	10/28
Test 2 (3.1 - 4.7)		10/30
6.2	20	11/4
6.3-6.4	21	11/6
6.5	22	11/11
6.6	23	11/13
7.1	24	11/18
7.2	25	11/20
7.3	26	11/25
7.4 and review	27	12/2
Final (comprehensive)		