Introduction to Numerical Analysis - **MAD4401**

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Course Meetings: MWF 11:45-12:35 (Period 5) Lit 205

Office Hours: Monday 12:50-1:40, Wednesday 12:50-1:40, Friday 12:50-1:40 (Period 6)
or by appointment

Exam Schedule: **Midterm Exam 1:** **October 8, 2008 (in class)**
Midterm Exam 2: **November 14, 2008 (in class)**
Final Exam (comprehensive): Part I - Wednesday, December 3, 2008, Lit 205 (in class),
Part II - Friday, December 5, 2008, Lit 205 (in class).

Homework: Homework will be assigned every week and is due by 5:00 pm on the due date (generally Wednesday). Late homework is not accepted.

Note: You can read more details about the class from the syllabus. There will be a weakly homework assignment. The homework will be anounced on this web page below. You can find also the notes I use to teach in class below. You can also find some past exams.

Answers to practice final: 1. p(x) = (x+1)^2(x-1)^2
2. (a) -1<alpha<1, (b) -2, 3/2, (c) -2<alpha<3/2
3. (a) (0,pi/2), (b) many answers possible
4. (a) will not converge, (b) will converge, (c) will converge
5. (a) l21 = 2, l31 = -1 l32 =0, u11 = 2. u12 = 3, u13 = -1, u22 = -2 , u23 = 1, u33 = 3

   (b) To solve Ly=b we need 5 MD and 3 AS, to solve Ux=y we need 5 MD, 3 AS
6. p(x) = a+bx+cx^2 +dx^3, with a=0. b= 12, c= -18, d= 7
7. (a) A = -pi^3/6, B = pi^2/2, (b) approx -pi^3/6
8. (a) 2, (b) 4, (c) 3
9. (a) n>=4
10. (a) L=2, (b) w0=0, w{i+1} = wi +0.25[tie^{3ti}-2wi+0.125(e^{3ti}+tie^{3ti}+4wi)]

11. a=2/5, b=4/5
12. (a) proof, (b) O(0.25^n), (c) n> ln pi10^2/ln 4

- syllabus
- classnotes
- homework
- past exam 1
- past exam 2
- past final exam