

**MATH 5620 NUMERICAL ANALYSIS II
SPRING 2009 SYLLABUS**

Instructor: Fernando Guevara Vasquez.

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Office hours: MTW 9:30am-10:30am or by appointment.

Textbook: This class is mostly based on the book “Numerical Analysis” by Burden and Faires (8th edition, Thomson Brooks/Cole).

Prerequisites: Math 5610 or instructor’s permission. Basic Matlab programming.

Hours: MTWF 8:35am-9:25am

Classroom: MWF: LCB 323. T: LCB 322.

Course website:

http://www.math.utah.edu/~fguevara/math5620_s09

Description: This is the continuation of Math 5610. Topics include.

- Numerical solution of ordinary differential equations (Chap 5 and 11)
- Numerical solution to partial differential equations (Chap 12)
- Approximating Eigenvalues (Chap 9)
- Numerical solution of non-linear systems of equations. Optimization. (Chap 10)

Grading:

- Homeworks (40%): There will be between 4 and 6 homeworks.
- Project (15%): To be announced in class.
- Midterm (15%): Tentatively Monday February 23 2009, in class. Exact date will be announced at least one week before.
- Final (30%) Wednesday May 6 2009, 8am-10am (per university’s final exam schedule)

Students with Disabilities: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.