

**Course Home Page****Textbook:**

1. **Numerical Linear Algebra and Applications**, By Biswa Nath Datta (Thompson Custom publishing).
2. Mastering Matlab7, Hanselman and Littlefield.

**Grading Policy:**

Homework/Quizzes: 100 pts

Computer oriented Assignments: 100 pts

Two classroom Exam: 200 pts

Final: 200 pts

Total: 600 pts

**Lectures (Tentative)**

Week	Dates	Sections
1	August 25	1.7.1, 1.7.2, 1.7.4, 1.8
2	September 1	2.1-2.3, 2.8
3	September 8	3.1.1-3.1.4, 3.2-3.5
4	September 15	4.2, 4.3.7, 4.3.8, 5.21, 5.2.2
5	September 22	5.3, 6.2, 6.3.1
6	September 29	6.4.1 - 6.4.3, 6.4.6, 6.4.7
7	October 6	6.4.8, 6.5.3, 6.5.4
8	October 13	6.4.7, 6.4.9
9	October 20	6.6.1, 6.7.1, 6.7.2, 6.9
10	October 27	6.10.1, 6.10.2, 6.10.3
11	November 3	7.2, 7.3, 7.4, 7.5, 7.6
12	November 10	7.8.1, 5.4.1, 5.4.2
13	November 17	7.8.2, 10.2, 10.5, 10.6
14	November 24	7.8.4
15	December 1	8.4.1, 8.4.2, 8.5.3, 8.7, 8.9.1

**Tentative Examination Schedule:**

1. Exam 1 will be held on September 17, 2009
2. Exam 2 will be held on October 22, 2009
3. Final Exam will be held on Tues., Dec. 9, 10:00 - 11:50 a.m. (Room to be announced).

Suggested Homework Problems:

Chapter 1.8(a),8(b),8(c),19(b),19(c),19(d),24, 31, 38, 44, 45, 48, 49, 50, 51.

Chapter 2.1(a),3, 5, 14, 15(a)(b)(c)(e),16, 17, 19, 20

Chapter 3.1(a),1(b),10; Chapter 4.1(a),1(b), 3, 4; Chapter 5.1(a), (b), 2, 18(a), 18(d), 21(b), 22, 28, 33(a), 35(a)

Chapter 6.7(a),(b) (only partial pivoting), 8(a), (b), 10(a), (b), (c), (e), 12, 13, 14, 17, 18

Chapter 6.26, 28(a), (b), 29(a), (b), 30, 33(a), 34, 35, 36, 37

Chapter 7.1, 2, 4, 13(a)(i), (ii), (iii) (Only Householder QR factorization)

Chapter 8.1, 10, 17, 18, 21, 24, 26, 27

Chapter 10.1(a), (b), (c), 5, 6(a), (b), 7(b), (c)

Matlab Resources:

- Free Online MATLAB Tutorials are available from : [www.math.ufl.edu/help/matlab-tutorial](http://www.math.ufl.edu/help/matlab-tutorial)
- Practical Introduction to MATLAB by Mark Gockenbach, available from <http://www.math.mtu.edu/gocken>