

Syllabus

MTH 402 Elementary Linear Algebra

Winter 2006

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Office Hours: Half-hour before and after classes or by appointment. Feel free to drop in and visit me whenever you see me in my office.

Teacher's Courses:

MTH 276	2:00 - 3:15	TR	E230
MTH 402	5:15 - 6:30	MW	E230

Text: *Elementary Linear Algebra* by B. Kolman and D. Hill, 8th edition, Pearson Education, 2004, ISBN 0-13-045787-6

Outline of Course. Chapters 1-7 and maybe 8, if we have time.

Exams:

- There will be frequent quizzes on definitions, theorems, etc. They are not surprise quizzes. The grades on these quizzes will add up to form one test grade.
- There will be two or three other regular tests.
- The lowest grade from the 3 or 4 grades in a and b above will be dropped.
- There will be a final exam (which is not cumulative). Its grade and the 2 or 3 grades from a and c above will be averaged to form a Final Average.

Special Project. We will go to the Computer Lab and learn how to perform Linear Algebra on the computer using Maple. Students will then be given 2 or 3 computer assignments.

Grading System. 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F
Class attendance and participation in class are very important. Students should be prepared to recite in class and to do homework exercises on the board. These items as well as the grades on the Computer Exercises will be used to help determine a student's Final Grade. They could make a difference between A- and B+, B and B-, etc.

Objectives of the Course

A Basic study of:

1. Linear Equations and Matrices
2. Solving Linear Systems of Equations
3. Vector Spaces
4. Inner Product Spaces (especially length and direct of vectors in such spaces)
5. Linear Transformations
6. Determinants
7. Eigenvalues and eigenvectors

