Linear Algebra (MATH 2753) Spring 2005

Professor: Paul Bailey

Office: WIL 228

Office Hours: MTWRF 10 am to 11 am; MWF 1 pm to 2 pm

Web Site: http://www.saumag.edu/pbailey

Email: plbailey@saumag.edu

Book: Vector Spaces, Preprint by Paul Bailey available for download at web site

Book: Introductory Linear Algebra, an Applied First Course, 8th edition, by Kolman and Hill

Grading

 $\begin{array}{ccc} \textbf{Homework:} & 20\% \\ \textbf{Quizzes:} & 30\% \\ \textbf{Midterm:} & 20\% \\ \textbf{Final:} & 30\% \end{array}$

Homework exercises from the textbook will be assigned daily to be completed before the next class. Write your name, the assignment, and the statement of every problem on your homework. Stable together pages from the same homework assignment. Turn in your homework at the beginning of the next class.

There will be a quiz almost every Friday. No makeup quizzes will be given. Instead, optional extra credit worksheets will be posted on the web site. These worksheets will replace lower or vacant quiz grades.

The midterm examination will be given on Friday, March 11, 2005. The final examination has been scheduled by the university for Wednesday, May 11, 2005.

The usage of calculators, cell phones, laptop computers, and all electronic devices is strictly prohibited during quizzes and examinations, and is discouraged while studying.

Course Outline

Week	Beginning	Topic
Week 1	Jan 24	Sets and Functions
Week 2	Jan 31	Vectors in Cartesian Space
Week 3	Feb 7	Lines and Planes in Cartesian Space
Week 4	Feb 14	Transformations of Cartesian Space
Week 5	Feb 21	Matrices
Week 6	Feb 28	Linear Equations
Week 7	Mar 7	Fundamental Subspaces
Week 8	Mar 14	Orthogonal Decomposition
	Mar 21	SPRING BREAK
Week 9	Mar 28	Vector Spaces
Week 10	Apr 4	Vector Spaces
Week 11	Apr 11	Linear Transformations
Week 12	Apr 18	Composition of Transformations
Week 13	Apr 25	Determinants
Week 14	May 2	Eigenvectors
Week 15	May 9	Inner Products