Kent Pearce
Office: Math 201-B
Phone: 742-2566

Linear Algebra
Math 2360-002
MA 112 MTWRF 10:00-11:50

Office Hours:
  Fixed Hours
    MTRF 1:00 - 2:00
  Other Hours
    By Appointment

Text:
  Leon, Steven J.
  Linear Algebra with Applications
  Seventh Ed., Prentice Hall

Website:
  www.math.ttu.edu/~pearce/courses.shtml

Chapters:
  1(1-4), 2(1-3),
  3(1-6), 4(1-3),
  5(1-3,5-7, 6(1-3)

Learning Objectives

Students will develop skills in manipulating matrices and understand their relationships to linear systems. They will develop an understanding of the concept of bases and vector spaces, as well as, eigenvectors and eigenspaces.

In particular, students will learn to:
1. recognize vector spaces, and compute their bases,
2. express a linear transformation as a matrix,
3. perform basic matrix manipulations, and compute the determinant of a matrix,
4. compute eigenvalues and eigenvectors,
5. use the Gram-Schmidt process.

Assessment of Learning Outcomes

Assessment will be achieved through one or more activities, non-graded and graded, such as: attendance, class discussion, board work, electronic homework, examinations and other optional activities deemed appropriate by the instructor. It is important to note that these assessments are for your learning benefit. Class grades will be assigned according to the following rubric:

Grading

In Class Tests:	300 pts.
3 Exams @ 100 pts.	
Dates: Jul 16, Jul 23, Jul 30	
WeBWorK:	100 pts.
Electronic Homework @ 25 pts.	
Dates: Jul 11, Jul 18, Jul 25, Aug 01	
Web Address: http://webwork.math.ttu.edu/webwork2/s208kpearcem2360/	
Final Exam:	200 pts.
Comprehensive	
Date: Friday, Aug 08, 11:00 am	
Grade Total	600 pts.

Grading Scale

A...100% - 90%   B...89% - 80%   C...79% - 70%   D...69% - 60%   F...59% - 0%

Technology

Graphing calculators (TI-83, TI-84, TI-89 or equivalent) and/or computer algebra software (Maple, Mathematica, Matlab) can be invaluable aids for facilitating learning. On the other hand, the course objectives are not centered around calculator proficiency nor computer expertise. Students may use a graphing calculator or computer algebra software while doing webwork assignments to facilitate: (1) learning of concepts; (2) understanding the material; (3) checking calculation details. The emphasis on mid-term exams and the final exam will be oriented towards assessing mastery of the concepts stated in the Learning Objectives section. To that end, calculators will <u>not</u> be allowed in the mid-term exams nor in the final exam.

Attendance

A roll sheet will be circulated each class period (except on exam dates). Each student is responsible for his/her signing the roll each class period. Students who are absent more than three (3) class periods will receive 30 point deduction from their cumulative total. Students who are absent more than six (6) periods will receive a 90 point deduction from their cumulative total.

Critical Dates

Monday, Jul 28, 2008 - Last day to drop a course
Wednesday, Aug 06, 2008 - Last day of classes.
Friday, Aug 08, 2008 - Comprehensive Final Exam (11:00 - 1:30)

Notices

Academic Integrity (Extracted from OP 34.12)

It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standard of integrity. The attempt of students to present as their own any work not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offenders liable to serious consequences, possibly suspension.

Scholastic dishonesty" includes, but it not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor) or the attempt to commit such an act.

Observance of Religious Holiday (Extracted from OP 34.19)

A student who intends to observe a religious holy day should make that intention known to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

Accommodation for Students with Disabilities (Extracted from OP 34.22)

Any student who, because of a disability, may require some special arrangements in order to meet course requirements should contact the instructor at MA 201-B as soon as possible to request necessary accommodations. Students should present appropriate verification from Student Disability Services (AccessTECH). No requirement exists that accommodations be made prior to completion of this approved university process.