

MATH 2360: Linear Algebra
Section 002, MWF 12:00, MATH 114.

Course Information:

Instructor: Chris Monico
Email: c.monico@ttu.edu
Office: MA-252
Office Hours: T/Th 12:30–3:00, or by appointment.
Required Text: *Linear algebra with applications*, S.J. Leon, 7th Ed.

Course outline/Important Dates: We will cover Chapters 1-6 of the textbook, except for Sections 1.5, 5.4, and 6.4-6.8.

Exam 1	Monday, 9/28.
Exam 2	Monday, 10/26.
Last day to drop a course	Monday, 11/2.
Last day of classes	Wednesday, 12/9.
Final Exam	Wednesday, 12/16, 1:30–4:00.

Calculator policy: Students will *not* be allowed to use calculators on exams. Nevertheless, I encourage students with access to advanced calculators (e.g., TI-86 or similar) to learn to use them to check their work on homework problems. But students are expected to be able to do all problems without the use of a calculator.

Attendance: Class attendance is *mandatory*. It is assumed that you will attend, so I will not waste your time by taking attendance. However, keep in mind that it will be decidedly difficult for you to pass this course if you do not attend. If you arrive late to class, enter quietly. If you miss a class, it is your responsibility to find out what you missed (assignments, notes,...); either ask a fellow student or come by my office to find out. If you are absent for an exam, you will be permitted to make it up *if and only if* you are absent for one of the following reasons:

- You are out of town performing duties on behalf of the university (i.e., athletics). Advance notification is required.
- Religious holiday (see below).
- **Severe** illness, documented by a physician.
- Death in the family.
- Other extenuating circumstances, at the instructor's discretion (I am *not* very generous with this).

Expected Learning Outcomes Students will

- Apply arithmetic, algebra, geometric, statistical and logical reasoning to solve problems.
- Represent and evaluate basic mathematical and/or logical information numerically, graphically, and symbolically.
- Interpret mathematical and/or logical models such as formulas, graphs, tables and schematics, and draw inference from them.

Students will develop skill in manipulations involving matrices and understand their relationship to linear systems. They will understand the concept of vector spaces, bases, eigenvectors, and eigenspaces. In particular, students will

- perform basic vector algebra and compute bases,
- express a linear transformation as a matrix,
- perform basic matrix manipulations and compute the determinant of matrices,
- compute eigenvalues and eigenvectors,
- use the Gram-Schmidt process.

Assessment of learning outcomes The expected learning outcomes for the course will be assessed through scheduled exams and homework assignments. Homework will be assigned regularly (nearly every class meeting) through the WebWork system. Your final grade in this course will be determined by the weighted components and grading scale below.

Grade components		Grade Scale	
Homework:	25%	90–100%	A
Exam 1:	25%	80–89%	B
Exam 2:	25%	65–79%	C
Final Exam:	25%	55–64%	D
		0–54%	F

ADA Accommodation: Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from AccessTECH. No requirement exists that accommodations be made prior to completion of this approved university procedure.

Religious Holy Day Observance (OP 34.19)

1. “Religious holy day” means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20.
2. A student who intends to observe a religious holy day should make that intention known in writing 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.
3. A student who is excused under Section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.