

MATH 01.210.2 Linear Algebra

Instructor: Guangming Yao **Course Web** <http://users.rowan.edu/yao/>
Office: Robinson Hall, 229B **Office Hours:** MW 14:00–15:00, TR 10:00–11:30
Email: yao@rowan.edu **Class Schedules:** TR 08:00–9:15, RUN 105

Text: Kolman, Bernard & Hill, David, Elementary Linear Algebra with Applications, 9th Edition, Pearson/Prentice Hall

References: The following is a partial list of supplemental reading which is beneficial:

1. Howard Anton and Chris Rorres, Elementary Linear Algebra Applications Version, 9th Edition, John Wiley & Sons, Inc.
2. Dennis Kletzing, Introduction of Linear Algebra: An Applied First Course, Prentice Hall, 8th Edition

Course Description: Prerequisites: Math-01.131 Calculus II, Math-03.150 Discrete Mathematics or Math-03.160 Discrete Structures, or permission of instructor. 3 s.h.

Course Objectives: The essential topics of linear algebra are prerequisite for many of the subsequent mathematics courses. In particular, certain linear algebra concepts are decidedly useful in multivariable calculus, differential equations and statistics. The purpose of the course is to provide an introduction to linear algebra at an elementary level to improve students' ability of abstract reasoning by its attention to mathematical proof.

Technology Sources: The Mathematics department policy recommends the TI-89 for this course. The instructor will use the TI-89 in class. Mathematica or MATLAB software will also be used in this class.

Grading: At any point during the semester, you may determine your standing by computing your grade. This can be done by adding the points in each category.

Homework & Quizzes	100 points
Projects	100 points
Two Tests	100 points each for a total of two tests
Final Test	100 points

Grades are awarded according to the following tableaux:

Score	Grade
500 – 450	<i>A</i>
450 – 400	<i>B</i>
400 – 350	<i>C</i>
350 – 300	<i>D</i>
≤ 300	<i>F</i>

Scores falling on a boundary are at the discretion of the instructor based on the level of effort and commitment shown by the student during the semester.

Late Assignments: Any assignment turned in past the specified due date and time will receive a score lowered by 5 point for each day it is late.

Attendance Policy and Makeup work: Full attendance is expected at every class meeting. Absence will affect your grade. Makeup tests/quizzes/etc., without an excused absence, are unacceptable. If you must miss class, then you must also produce documentation supporting your absence.

Homework: You are expected to do the homework. All assignments are expected to be completed by the next class meeting unless a due date is specifically announced. Students are expected to visit Blackboard after every class to check for updates of assignments and due dates for assessments. The final exam is based entirely on the

homework. It is in closed book and notes, thus students who cannot master the basic homework problems will be unlikely to do well on the final exam.

Quizzes: Short quizzes will be given. Quizzes will generally cover material on homework assignments. Tutoring and study groups: I encourage you to work together on homework assignments, to look at each other's solutions, and to explain answers to each other. This is not the same thing as copying each other's homework. You take the tests alone and without help, so if you cannot explain to your tutor, classmate, or teacher how to solve the problem, then you have not learned how to solve it, and you need to study it more (perhaps by visiting me, the professor).

Projects: There will be two Mathematica projects, the due dates will be given in class.

Tests: There will be two 75-minute tests, the dates will be given at least a week before the tests. The materials covered in the two tests will be as follows:

Test 1: all sections of Chapter 1 and Chapter 2 and sections 1 through 4 of Chapter 3

Test 2: sections 5 and 6 of Chapter 3 and all sections of Chapter 4

Tests are not multiple-choice. Every test will consist of two parts: (1) a review of the homework assignments, and (2) a bonus problem that you have not seen in class or in the homework.

Final Exam: The final exam will be held during finals week (December 14 through December 20). Specific date, time and location will be announced when it becomes available. Final test will cover all sections of Chapter 6 and chapter 7.

Note: The deadline to drop a full-semester course without academic penalty is Monday, September 12th.

Academic Honesty: Dishonesty includes cheating on a test, falsifying data, misrepresenting the work of others as your own (plagiarism), and helping another student cheat or plagiarize. Academic dishonesty will result in a grade of zero on that particular assignment; serious infractions of the Academic Honesty policy will result in failure of the course. For complete information about the University's policy on Academic Honesty, consult the Student Handbook 2000-2001.

ADA Syllabus Statement: If a student has a disability that qualifies under the American with Disabilities Act (ADA) and requires accommodations, he/she should contact the

for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies.