

Fall 2013

MAT 331-006: FIRST COURSE IN LINEAR ALGEBRA

Course Instructor: Dr. Vincent Fatica, Assistant Professor of Mathematics;
219A Carnegie; ext 3-1587; vefatica@syr.edu
Office hours: MW 1:00 - 2:00, 3:15 – 4:00, TTh 1:00 – 3:00

Course Supervisor: Dr. Lixin Shen, Professor of Mathematics; 206D Carnegie, 3-2889

Course Information: Course Description: Linear equations, Linear transformations, Matrices, n -dimensional Euclidean spaces, Associated geometry.

Course Restrictions: Credit will not be given for both MAT 331 and MAT 485.

Prerequisites: MAT 286 or MAT 296

Textbook: Linear Algebra and its Applications, 4th edition.
Author: David C. Lay
Publisher: Addison-Wesley

Calculator Policy: You are allowed to use a graphing calculator (such as TI-84, TI-85) on homework, quizzes, and exams for this class. Students may need to show work to receive full credit. The use of a symbolic calculator (such as the TI-89 or the TI-Nspire with CAS) is not allowed on quizzes or exams. There may be quizzes and specific exam questions that are designated *no calculator*.

Homework/Quiz Policy: Homework will be assigned in class (see pages 2,3). A policy for quizzes and homework collection for grading will be announced by during the first class meeting. A policy for make-ups for exams, quizzes, and late homework will also be announced.

Grading Policy: Homework/quizzes will comprise 20% of the course grade with two-hour exams each 25% and the final exam 30%. Dates for the hour exams will be given during the semester.

Final Exam Date: The final exam will be given on Wednesday, December 11, 2013, during a 2-hour period in the interval 8:00 – 2:30. Do not plan to leave the campus before 3 PM on this day.

Important Announcements: *Cheating in any form will not be tolerated in this course. A student, who may miss an exam or a quiz due to religious commitments, should contact the instructor well in advance of the exam or quiz.*

Disabilities

If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

Syracuse University and I are committed to your success and to supporting Section 504 of the Rehabilitation Act of 1973. This means that in general no individual who is otherwise qualified shall be excluded from participation in, be denied benefits of, or be subjected to, discrimination under any program or activity, solely by reason of having a disability.

Please inform me of any problems that you have with the course. Problems not satisfactorily resolved by me should then be brought to the attention of the Course Supervisor Professor L. Shen without delay.

Section Suggested Problems

- . 1.1 11, 13, 15, 17, 19, 23, 24, 25
- . 1.2 2, 5, 6, 11, 15, 19 (find all such values of h and k), 21, 25, 26
- . 1.3 9, 11, 13, 15, 17, 21, 23(b-e), 25(b, c)
- . 1.4 1, 3, 7, 9, 11, 15, 17, 19, 21, 23(b-e), 31, 33
- . 1.5 1, 7, 11, 23, 28, 29, 30, 31
- . 1.7 1, 5, 7, 9, 11, 15, 17, 19, 21, 31
- . 1.8 1, 3, 5, 7, 8, 9, 13, 15, 17, 19, 21, 26
- . 1.9 1, 3, 5, 7, 8, 17, 19, 23
- . 2.1 1, 3, 5, 7, 11, 12, 15, 18, 19, 27, 28
- . 2.2 1, 5, 9, 13, 17, 31, 32, 33, 35, 21, 22, 24
- . 2.3 4, 8, 11, 13, 14, 15, 16, 17, 33, 35
- . 2.7 2, 3, 5, 7
- . 2.8 1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 25
- . 2.9 1, 3, 5, 9, 11, 13, 15, 16, 17, 19, 20, 21, 22
- . 3.1 9, 11, 13, 15, 17
- . 3.2 15, 17, 19, 29, 31, 34
- . 3.3 19, 21, 23, 27, 28
- . 5.1 3, 5, 9, 13, 15, 17, 18, 19, 21, 25, 29
- . 5.2 1, 3, 5, 7, 13, 15, 16
- . 5.3 7, 9, 11, 13, 17, 21, 23, 25
- . 6.1 5, 7, 9, 11, 15, 17
- . 6.2 1, 5, 9, 11, 13, 15
- . 6.3 3, 5, 7, 9, 11, 13
- . 6.4 3, 5, 7, 9, 11