Fall 2017
MAT 331-M001: FIRST COURSE IN LINEAR ALGEBRA

Instructor: Mark Kleiner, Carnegie 317B, 3-1497, mkleiner@syr.edu

Office Hours: Tu 3:00 – 3:50PM; Th 10:00 – 10:50AM; and by appointment.

Course Supervisor: Lixin Shen, Carnegie 206D, 3-2889, lshen03@syr.edu

Class: TuTh 11:00AM – 12:20PM, Carnegie 100

Course Description: Linear equations, Linear transformations, Matrices, *n*-dimensional Euclidean spaces, Associated geometry.
Prerequisites: MAT 286 or MAT 296.
Credit will not be given for both MAT 331 and MAT 485.

Textbook: Linear Algebra and its Applications, 5rd edition.
Authors: David C. Lay, Steven R. Lay, Judi J. McDonald
Publisher: Pearson
The course will cover Chapters 1, 2, 3, 5, and 6 with some omissions. If time permits, portions of Chapter 4 may also be included.

Calculator Policy: You are NOT allowed to use a calculator or any electronic devices on homework, quizzes, and exams for this class. Students may need to show their work to receive full credit.

Homework/Quizzes: Homework will be assigned in class. Weekly quizzes modeled on the homework problems will be given.

Grading Policy: The course grade will be based on two midterm exams (20% each), the comprehensive final exam (35%), and quizzes (25%). The semester grade will be given according to the following rule:

A (93 and above), A- (90-92), B+ (87-89), B (83-86), B- (80-82), C+ (77-79), C (73-76), C- (70-72), D (60-69), F (<60)

Final Exam: The final exam will be given in Carnegie 100 on Wednesday, December 13, during the time period from 8:00AM until 2:30PM. *Do not plan to leave the campus before 3 PM on that day.*

Attendance: Attendance is mandatory in this course.

Warning: The material in this course builds upon itself more than in most courses you have taken so far. Keeping up with it on a daily, rather than weekly, basis is ***crucial*** for success. A student with a valid excuse who plans to miss an exam or quiz should ***notify the instructor in writing one week before the absence.***

Students with 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 303 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 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. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations.

Academic Integrity: The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see http://academicintegrity.syr.edu

Religious observances policy. SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class.

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, 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, 29, 30, 31, 312
. 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, 27
. 1.9	1, 3, 5, 7, 9, 17, 19, 23
. 2.1	1, 3, 5, 7, 11, 12, 15, 19, 20, 27, 28
. 2.2	1, 5, 9, 13, 15, 21, 22, 24, 31, 32, 33, 35
. 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