Summer (2) 2014
MAT 331/M001: FIRST COURSE IN LINEAR ALGEBRA

Course Instructor: Prof. Vincent Fatica
219A Carnegie; 443-1587; vefatica@syr.edu
Office hours: MTWTh 12:00 – 1:45 P.M.

Content: Systems of inear equations, linear transformations, matrix algebra, determinants, n-dimensional Euclidean spaces, associated geometry, eigenvalues and eigenvectors, the Gram-Schmidt process.

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/Quizzes: Homework will be assigned in class (see pages 2,3). A policy for quizzes and homework collected 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: Homework/quizzes will comprise 20% of the course grade, two in-class exams 25% each, 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 during the last scheduled class meeting, 7 August 2014, and at no other time.

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: Syracuse University's religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm, recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holy days 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 a 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.

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 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. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations. Making arrangements with ODS takes time. Do not wait until just before the first test.

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