MAT 331 – FIRST COURSE IN LINEAR ALGEBRA Spring 2017, Section M004

Instructor: Professor Moira McDermott

email: momcderm@syr.edu

Office: 313E Carnegie (443-1481)

Time & Place: MWF 10:35 - 11:30, Carnegie 219

Office hours: posted on Blackboard and by appointment.

Course Supervisor: Prof. Moira McDermott.

Topics: Linear equations, Linear Transformations, Matrices, n-dimensional Euclidean Spaces, and Geometric aspects. This covers portions of (or all of) Chapters 1, 2, 3, 5, and 6 of the text.

Course Prerequisites & Restrictions: MAT 286 or MAT 296. Credit will not be given for both MAT 331 and MAT 485.

Textbook: Linear Algebra and its Applications, 5th edition., David C. Lay, Addison Wesley.

Calculators: There may be quizzes or portions of tests that are designated *no calculator*. Otherwise, you are allowed to use a graphing calculator on homework, quizzes, and exams, including the final. Students must show work to receive full credit. Commands typed into a calculator do not count as work. The use of a symbolic calculator (such as the TI-89 or the TI-Nspire with CAS) will not be allowed on quizzes or exams.

Grading: Course grades will be based on quizzes and homework (20%), three in class exams (two exams are 20% each, lowest exam is 10%), and a cumulative final exam (30%). Letter grades will correspond to numeric grade intervals as follows:

$$[93, 100] \rightarrow A$$
 $[90, 93) \rightarrow A [87, 90) \rightarrow B+$ $[83, 87) \rightarrow B$ $[80, 83) \rightarrow B [77, 80) \rightarrow C+$ $[73, 77) \rightarrow C$ $[70, 73) \rightarrow C [60, 70) \rightarrow D$ $[0, 60) \rightarrow F$

Exams: In class exams are scheduled for February 17, March 31, and April 28. There will be no makeups for the in class exams or the final exam. If you have a documented excused absence for one of the in class exams, your grade on the relevant portion of the final will be used.

The final exam is scheduled for Monday, May 8, 2017, sometime between 8:00 AM and 2:30 PM. The exact time and location will be announced in class after midterm. This information will also be available on MySlice. You should not make plans to leave campus before 2:30 PM on Monday, May 8. The final exam will *not* be given at any other time.

Quizzes: There will be weekly quizzes. There will be no make-up quizzes, but at least one quiz score will be dropped. All excused absences for medical or family emergencies must be documented. Travel plans are not a valid excuse for an absence, so plan accordingly.

Homework: The key to success in this course is to master the homework. Homework from the textbook will be assigned at each class and collected weekly. Late homework will not be accepted. A portion of the homework problems will be graded for accuracy. You are encouraged to discuss the homework problems with your classmates and to work together, but the work you submit must be your own. You will also be assigned problems to complete on WebWork.

Attendance: You are expected to attend and participate in class. Missing class is among the most common reasons for poor performance in the course (not doing the homework is another one). If you miss a class, you are responsible for obtaining notes for that class from a student who attended. It is also your responsibility to find out about any announcements concerning homework, quizzes, or exams made during the class.

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.

Any incidence of academic dishonesty, as defined by the SU Academic Integrity Policy, will result in both course sanctions and formal notification of the College of Arts & Sciences. (A first violation will result in a 0 on the homework, quiz, or exam. A second violation will result in failing the course.) Any established violation in this course may result in course failure regardless of violation level. I encourage you to work together on homework and discuss problems and their solutions, but you must write up your solutions individually. What you write must reflect your own understanding of the problems. Consulting outside sources (online solutions, Chegg, etc.) will hamper your ability to learn the material. Copying a homework solution, in part or in full, is considered a violation of academic integrity. If you have any questions about the differences between working together and copying or how to document sources, please see me.

Students with Disabilities: Students who may need academic accommodations due to a disability are encouraged to discuss their needs with me at the beginning of the semester. In order to obtain authorized accommodations, students should be registered with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498, and have an updated accommodation letter for the instructor. Accommodations and related support services such as exam administration are not provided retroactively and must be requested in advance. For more information about services and policy, see http://disabilityservices.syr.edu.

Faith Tradition Observance: SU's religious observances policy can be found at http://supolicies.syr.edu/emp_ben/religious_observance.htm. Under the policy, students are provided an opportunity to make up any examination, study, or work requirement that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes. There is an online notification process available on MySlice.

Helpful Warnings:

- 1. This course is quite different from the calculus courses you have taken previously. Linear algebra is not "the next course" in a long list of math courses. Calculus is part of the general area of mathematics known as *analysis*, while linear algebra is part of the area of *algebra*.
- 2. Don't fall behind! The material builds upon itself rapidly! Keep up on a daily basis.
- 3. Some of the beginning material is computational. The material quickly becomes more conceptual. Do not be lulled into a false sense of security by the computational material.