MAT 531-002 Second Course in Linear Algebra Fall 2017

Instructor:	Professor Jeffrey Meyer, 206F Carnegie 443-1479 or 443-1473 jlmeye01@syr.edu
Office Hours:	TTh 12:45 – 1:45 pm, W 9:30 – 11:00 am, and by appointment.

Class Time and Room: TTh 2:00 – 3:20 pm, Room 219 Carnegie.

Text: *Linear Algebra*, by Friedberg, Insel, and Spence, Fourth Edition, Prentice Hall 2003.

Course Description: Abstract vector spaces and inner product spaces, linear transformations and linear operators, eigenvalues and diagonalization. Primarily for mathematics majors. PREREQ: ((MAT 375 or CIS 375), and MAT 331), or GRADUATE STANDING IN MATHEMATICAL STUDIES.

About This Course: The main goal of this course is to give a rigorous proof-based treatment of linear algebra. Some of the concepts will be familiar to you from MAT 331, however, you will probably find this course completely different from MAT 331. For one, there will be a strong emphasis on developing proof-writing skills. Secondly, the material will be developed in a more abstract setting, mostly by learning definitions and proving theorems. The course covers parts of Chapters 1, 2, 5, and 6, with possible additions.

Grading: Your grade will be based on the following.

Two one-hour exams	25% each
Final exam	35%
Homework	15%

Exam Dates: Tentative schedule:

Exam 1	Thursday, October 5, 2017;
Exam 2	Thursday, November 16, 2017;
Final Exam	Friday, December 15, 2017, 8:00 - 10:00 am.
	(not tentative)

There will be no make-up exams. As per departmental policy any exam missed will be made up with the relevant portion of the final exam.

Homework: Homework problems to be collected and graded will be assigned regularly (roughly every week). Working independently on the assignments will probably help you to learn the material more effectively and to do better on exams. However, you may (and sometimes should) work with others to fully understand the material. You must write your own solutions to homework problems. You are encouraged to see me for help. You should not limit your practice to the assigned problems. Find and do other problems. You may ask about any linear algebra problems during class. In addition to problems from our text that I have not assigned, there are other sources of problems including other texts and problem books. One homework score will be dropped from the grade calculation. Homework is due at the beginning of class. Homework is not accepted late.

Phone, Laptop, Tablet in class policy: Phones, laptops, and tablets are <u>not</u> <u>allowed to be out during class</u>. Students who repeatedly violate this policy will be asked to leave the room.

Academic Integrity: Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about universitywide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice. The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level. *The use of or availability of any electronic device during a midterm exam or final exam is a violation of the Academic Integrity Policy*. For more information about the policy, see <u>http://academicintegrity.syr.edu</u>.

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 maybe 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 need accommodations for a disability, please contact the Office of Disability Services (ODS), <u>http://disabilityservices.syr.edu</u>, 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.