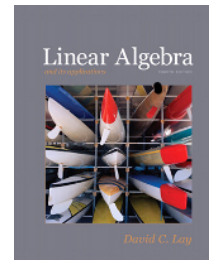


## MAT 331 — FIRST COURSE IN LINEAR ALGEBRA — SPRING 2015

Instructor: Professor Graham Leuschke  
Office: 317G Carnegie  
Phone: 443-1500  
email: [gjleusch@syr.edu](mailto:gjleusch@syr.edu)

Lecture: TR 9:30–10:50, Carnegie 311  
Office hours: MW 3:00–4:00  
also by appointment, and any time my door is open  
Text: *Linear Algebra and its Applications*, 4th ed.  
by David C. Lay

Text website: [www.pearsonhighered.com/lay](http://www.pearsonhighered.com/lay)  
Course webpage: [leuschke.org/teaching/MAT-331-spring-2015/](http://leuschke.org/teaching/MAT-331-spring-2015/)



**Course Supervisor:** Prof. Jack Ucci; 229B Physics; [jjucci@syr.edu](mailto:jjucci@syr.edu); 443-1492. Please inform your instructor of any problems you have with this course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the Course Supervisor without delay.

**Course Description:** Linear equations,  $n$ -dimensional Euclidean space, linear independence, bases, linear transformations, matrices and determinants, eigenvalues and eigenvectors. Geometric aspects. This material is in Chapters 1, 2, 3, 5, and 6 of the text.

**Prerequisite:** MAT 286 or 296. Credit will not be given for both MAT 331 and 485.

**Calculators:** You are allowed to use a calculator on homework, quizzes, and exams for this class, including the Final Exam. Solutions on quizzes and exams must show full work to receive credit.

**Attendance:** You are expected to attend class and to participate in it. If you miss a class, you are responsible for obtaining notes and any announcements from that class from another student.

**Grading:** I will use the following scheme to compute your grade:

Homework and Quizzes:	25%
Hour exams:	2@ 25% each
Final exam:	25%

**Homework:** We will be using **WeBWoRk** for homework in this class. Detailed information will be sent by email and also posted on Blackboard. Two lowest homework scores will be dropped.

**Quizzes:** There will be a quiz given in lecture most weeks. It will be given at the beginning of class. The quizzes will cover material similar to homework. Unexcused absence, or being late for a quiz, counts as zero. One lowest quiz score will be dropped.

**Hour exams:** There will be two hour-long exams during the semester, given in lecture. Any changes to the schedule below will be announced in class and on BlackBoard.

Exam 1: Thursday 12 February  
Exam 2: Thursday 2 April

There will be no makeups for missed exams. If you have an excused absence for an exam, your grade on the relevant portion of the final will be used to replace the missing score.

**Final exam:** The cumulative final exam will be given on Monday, May 4, 2015 in a two-hour block between 8:00am and 2:30pm. **Do not make any plans to leave campus before 2:30pm on May 4, 2015. The final exam will not be given at any other time.** The specific time for MAT 331 will be announced during the semester.

**Advice:**

- ▷ 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 belongs to the general area of *algebra*.
- ▷ Don’t fall behind! The material builds on itself *rapidly!* Keep up on a daily basis.
- ▷ Some of the early material is computational. The material quickly becomes more conceptual. Do not be lulled into a false sense of security by the computational material.
- ▷ Ask questions! In class, during office hours, or by email.
- ▷ Discussing problems with a classmate is very useful.
- ▷ Expect to work hard. Don’t get discouraged if you find the material difficult. Be persistent and patient.

**Students with Disabilities:** If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), [disabilityservices.syr.edu](http://disabilityservices.syr.edu), located in Room 309 of 804 University Avenue, or call 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 though 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:** Syracuse University’s religious observances policy, found at [http://supolicies.syr.edu/emp\\_ben/religious\\_observance.htm](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 MyS-lice/Student Services/Enrollment/My Religious Observances from the first day of class until the end of the second week of class.