

**Fall 2017**

**MAT 331: FIRST COURSE IN LINEAR ALGEBRA**

**Course Instructor:** Lixin Shen

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**Office Hours:** **Monday, Wednesday 11:00AM-noon, or by appointment**

**Course Information:** Course Description: Linear equations, Linear transformations, Matrices,  $n$ -dimensional Euclidean spaces, Associated geometry.

**Course 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, 5<sup>th</sup> edition, by David C. Lay, Steven R. Lay, and Judi J. McDonald; Publisher, Addison-Wesley

**Calculator Policy:** No calculators are allowed on the exams and quizzes.

**Homework:** There will be both online and written HW in this class.

➤ **Online Homework** will be done online using *WebWork*, an open-source homework system for math and sciences courses. Access information:

1. Go to <http://webwork.syr.edu/>
2. Click the class name. [MAT 331 Fall 2017 Shen](#)
3. Your Username is your NetID, for example jqpublic

4. Your Password is initially set to be your 9-digit SUID. You should change it after logging in

- The number of attempts is unlimited (There may be some restrictions in some problems). Problems can be done in any order. You do not have to do them all at once. You can also get a PDF file of the entire assignment and print it out to work offline.
- Every Wednesday night 1-2 sets of WebWork problems will be assigned. Homework will be due at 11:59pm on the Tuesday of the next week. It is strongly recommended to do your HW on the same day.
- Lowest 2 online-homework scores will be dropped.
- Note that all due times are 11:59p.m. EDT (EDT - Eastern Daylight Time. This is the time zone of NY State.) If you are in another state or country, then check your time zone and submit your homework according to NY time.
- **No extension will be given in any circumstances. If you have a valid excuse, you may be exempted from that HW. Your excuse must cover entire HW period- not Tuesday or part of Tuesday only. In particular, do not wait until Tuesday to do your HW. "Internet problems," "Broken laptops", "WebWork down on Tuesday night," etc. are not valid excuses. However, if there is a persistent WebWork Server problem which is longer than a day -24 hours-, then HW due time may be changed.**

➤ **Written HW:** Every Wednesday night a set of problems from your textbook will be assigned and will be due next Wednesday in class. Namely, you will have at least 7 days to finish your HW. Lowest 1 homework score will be dropped. Late HW is not accepted.

**Quiz Policy:** Every Wednesday a short quiz will be given. Lowest 1 quiz scores will be dropped.

**Quiz Make-Up Policy:** No make-up for quizzes is given. If you miss a quiz with a legitimate reason, you will be exempted from that quiz.

**Grading Policy:** Homework/quizzes will comprise 30% of the course grade with two in-class exams each 20%, one on October 4 and one on November 8, and the final exam 30%. Letter grades will correspond to numeric grade intervals as follows.

[93,100)→A [90,93)→A- [87,90)→B+ [83,87)→B [80,83)→B-  
[77,80)→C+ [73,77)→C [70,73)→C- [60,70)→D [0,60)→F

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**Exam schedule: *The exam days are firm.***

**Exam 1:** 4 October 2017

**Exam 2:** 8 November 2017

**Final Exam Date:** The final exam covers the entire course. Namely, cumulative. It will be given during a two-hour block on

**WEDNESDAY DECEMBER 13, 2017 - 8:00AM - 2:30 PM**

**The exact time and location will be announced later in the semester. Do not make arrangements to leave campus before 2:30 PM on Wednesday, December 13, 2017. The final exam will not be given at any other time.**

**Deadlines and important dates for Fall 2017**

First Day of Classes	Monday, August 28
Last Day to Add a Class	Tuesday, September 5
Financial Drop	Monday, September 18
Academic Drop	Monday, October 23
Withdrawal Deadline	Friday, November 17
Thanksgiving Break	November 19 – 26
Last Day of Classes	Friday, December 8

**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.

**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 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.

### **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 university-wide 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.

Syracuse University sets high standards for academic integrity. Those standards are supported and enforced by students, including those who serve as academic integrity hearing panel members and hearing officers. **The presumptive sanction for a first offense is course failure, accompanied by the transcript notation "Violation of the Academic Integrity Policy."** The standard sanction for a first offense by graduate students is suspension or expulsion. Students should review the Office of Academic Integrity online resource "Twenty Questions and Answers About the Syracuse University Academic Integrity Policy" and confer with instructors about course-specific citation methods, permitted collaboration (if any), and rules for examinations. The Policy also governs the veracity of signatures on attendance sheets and other verification of participation in class activities.

For this course, in particular, the use of any notes or the use of any devices capable of wireless communication, talking to another student during exams and quizzes (until you are out of the classroom) is considered to be a violation of the academic integrity policy. **Cellphones and Smart Watches are prohibited during the exams and quizzes. Wearing a smartwatch and/or holding a cellphone in the class while the exam is in progress will be considered as a violation of exam rules.**

## **Related links:**

The Academic Integrity Policy:

[http://class.syr.edu/wp-content/uploads/2017/05/Academic-Integrity-Policy\\_final.pdf](http://class.syr.edu/wp-content/uploads/2017/05/Academic-Integrity-Policy_final.pdf)

What Students Need to Know About Academic Integrity

[http://class.syr.edu/wp-content/uploads/2017/01/What-Students-Need-to-Know\\_7A.pdf](http://class.syr.edu/wp-content/uploads/2017/01/What-Students-Need-to-Know_7A.pdf)

Additional guidance for students can be found in the Office of Academic Integrity resource: “What does academic integrity mean?”

<http://academicintegrity.syr.edu/what-does-academic-integrity-mean/>

<b>Section</b>	<b>Suggested Problems</b>
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, 32
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

