## Texas A&M University, Department of Mathematics, Spring 2020

## MATH 323 (200) — Honors Linear Algebra \*

TR 9:35am-10:50am, Zoom meeting: https://tamu.zoom.us/j/535293532

Instructor: Simon Foucart, 502D Blocker Building, foucart@tamu.edu

Office hours: by appointment

Course web page: accessed via eCampus at http://ecampus.tamu.edu/ Textbook: Elementary Linear Algebra (5th edition), by Andrilli and Hecker

**Course Objectives:** This thorough introduction to linear algebra focuses on concepts, proofs, and problem-solving skills to achieve a mathematical mastery of the subject. The topics covered include linear equations, matrices, real vector spaces, linear transformations, change of bases, determinants, eigenvalues and eigenvectors, diagonalization, and inner products.

**Exams:** There is one in-class test (midterm) scheduled for **Feb 20** (Thursday). The final cumulative examination is tentatively scheduled for **Apr 30** (Thursday).

**Homework:** Homework is an integral part of the course. There will be problems assigned weekly, some of which will be graded. These problems will be collected at the beginning of class on the due date. Late homework will not be accepted. Homework questions are chosen to illustrate the concepts and techniques expected to be mastered — as such, notions introduced in homework can appear in exams. You are encouraged to come and see me during my office hours to obtain some help on particular questions, provided you made a genuine attempt to solve them.

**Extra Help:** In addition to office hours, you can receive free assistance via the department of mathematics, see http://www.math.tamu.edu/courses/helpsessions.html.

**Grading:** Grades are based on the work shown, not on what was intended or implied. Excessively sloppy, poorly justified and disorganized work cannot be given full credit, even if the correct answer appears. The final grade is assigned according to the following scheme:

• Homework 100 points

• Midterm 100 points

• Final 100 points

The point scale used to determine the final letter grade is

F: 0-149, D: 150-179, C: 180-209, B: 210-239, A: 240-300.

Make-ups will only be given in case of university excused absences or in exceptional circumstances (illness, injury, etc.) which should be documented. My prior approval is necessary.

<sup>\*</sup>this syllabus is a revision prompted by the coronavirus pandemic.

## Tentative schedule:

Week 1 (Jan 14 and 16)	Sect. 1.1, 1.2, 1.3	Friday Jan 17: last day for add/drop
Week 2 (Jan 21 and 23)	Sect. 1.4, 1.5, 2.1	
Week 3 (Jan 28 and 30)	Sect. 2.2, 2.3, 2.4	
Week 4 (Feb 04 and 06)	Sect. 3.1, 3.2	
Week 5 (Feb 11 and 13)	Sect. 3.3, 3.4	
Week 6 (Feb 18 and 20)	Review, Midterm 1	
Week 7 (Feb 25 and 27)	Sect. 4.1, 4.2	
Week 8 (Mar 03 and 05)	Sect. 4.3, 4.4, 4.5	
Mar 09-13	Spring Break	
Week 9 (Mar 17 and 19)	canceled	
Week 10 (Mar 24 and 26)	Sect. 4.6, 4.7	
Week 11 (Mar 31 and Apr 02)	Sect. 5.1, 5.2, 5.3	
Week 12 (Apr 7 and 9)	Sect. 5.4, 5.5	
Week 13 (Apr 14 and 16)	Sect. Review, 5.6	
Week 14 (Apr 21 and 23)	Sect. 6.1, 6.2, 6.3	Friday Apr 24: last day for Q-drop
Week 15 (Apr 28 and 30)	Review, Final	Thursday 30, 12:30pm-2:30pm: Final

**Attendance Policy:** Attendance is not compulsory, but regular attendance is expected — it is in fact essential if you want to do well in the course. Classes to be missed due to religious holidays must be communicated to me during the first week. You are required to arrive on time and stay the length of the class. If you do not attend a class, you are responsible for any announcement made, any material covered, and any additional topic introduced during this class. Office hours cannot be used for this purpose.

**Academic Honesty:** "An Aggie does not lie, cheat, or steal or tolerate those who do." See http://aggiehonor.tamu.edu for more information.

Americans with Disabilities: The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.