

**SYLLABUS — MATH 304—(Sections 508–509–510) — Fall 2023**  
**Linear Algebra, Texas A&M University**

**Credits 3.** 3 Lecture Hours.

**Instructor:** Grigoris Paouris

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**Office:** Blocker 525K

**Office hours MW 4:00- 4:50. (or by appointment via Zoom):** Zoom ID: 921 5661 9052 (Password 160573).

**Lectures:** 508: TR 02:20pm - 3:35pm, 509: TR 3:55pm - 5:10pm, 510: TR 5:30pm - 6:45pm, BLOC 149.

**Course Homepage:** <http://www.math.tamu.edu/~grigoris/teachingpaouris.html>

**Common Course Homepage:** <https://www.math.tamu.edu/courses/math304/>

**Textbook:** *Linear Algebra with Applications, by Steven J. Leon (custom edition)* Pearson.

**Course description:** Introductory course in linear algebra covering abstract ideas of vector space and linear transformation as well as models and applications of these concepts, such as systems of linear equations, matrices and determinants.

**Prerequisites:** MATH 148, MATH 152, or MATH 172; junior or senior classification or approval of instructor.

**Learning Outcomes:** Students will learn how to understand and manipulate the objects of Linear Algebra such as Euclidean spaces, matrices and linear systems as well as abstract vector spaces and linear maps. Applications will be presented.

**Material Covered:** The course will consist of the following material from the required text.

Chapter 1 – Matrices and Systems of Equations (week 1-3)

Chapter 2 – Determinants, (week 4)

Chapter 3 – Vector spaces, (week 5-7)

Chapter 4 – Linear Transformations, (week 8-9)

Chapter 5– Orthogonality, (week 10-12)

Chapter 6– Eigenvalues, (week 13-15).

**Grading Policy :** Students grades will be determined by performance on homework assignments, two in-class mid-term exams and a comprehensive final exam. The final grade will be determined in the standard way: A: 90–100, B: 80–89, C: 70–79, D: 60–69, F: < 60. The mid-term exams worth 20% each, the final exam worth 30% and the Homework assignments worth 30% of the final grade.

**Homework:** Homework assignments will be posted in Canvas/Instructor's webpage throughout the semester. Late homework will not be accepted except in the

case of an excused absence as defined by TAMU Student Rule 7. In this case, appropriate documentation of the absence must be provided to the instructor.

**Exam(s) Information:**

1. Students need to bring a # 2 pencil, and their TAMU student ID to each exam.
2. Calculators or electronic devices of any other type are not permitted for any exam.
3. The entire exam is closed book. Students are not allowed to use notes or formula sheets.

**Final Exam:** The comprehensive final exam will be administered on

- Section 508: 13:00-15:00, December 12th.
- Section 509: 13:00-15:00, December 11th.
- Section 509: 15:30-17:30, December 12th.

Material on the final exam will be similar to the examples presented in class and problems from the assigned homework.

**Important Dates:**

- September 26 – 1st Mid-term exam in class (the usual time).
- October 31 – 2nd Mid-term exam in class (the usual time).

**University policies – Attendance Policy** The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments. Please refer to Student Rule 7 in its entirety for information about excused absences, including definitions, and related documentation and timelines.

**Make-up policy:** Make-up exams will only be allowed in the case of an excused absence as defined by TAMU Student Rule 7. In this case, appropriate documentation of the absence must be provided to the instructor. Wherever possible, students should inform the instructor before an absence. Consistent with TAMU Student Rule 7, students are required to notify an instructor by the end of the next working day after missing an assignment or exam. Otherwise, they forfeit their rights to a make-up.

**Academic integrity:** Students in this course are allowed to discuss suggested homework problems and solutions. However, students are not permitted to copy homework solutions from another student. Students are not permitted to discuss any aspect of an exam until all students have completed the exam. The penalties for violating this policy will range from an F on an assignment or exam to failing the course. Always abide by the Aggie Code of Honor: “An Aggie does not lie, cheat or steal, or tolerate those who do.” For further information regarding academic integrity, please visit .

**Americans with Disabilities Act (ADA):** The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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, in Cain Hall, Room B118, or call 845-1637. For additional information, please visit <https://disability.tamu.edu/>.

**Electronic Devices Policy.** Electronic devices can only be used for educational purposes that relate to activities done in class.

**Copyright Policy:** It is not allowed to record the lectures without authorized by the Instructor. See <https://disability.tamu.edu/facultyguide/classroom/recording-lectures/> for more information.

**Title IX and Statement on Limits to Confidentiality.** Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking. With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see University Rule 08.01.01.M1): (\*) The incident is reasonably believed to be discrimination or harassment. (\*) The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University. Mandatory Reporters must file a report regardless of how the information comes to their attention ? including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, you will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need. Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with Counseling and Psychological Services (CAPS). Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's Title IX webpage.

**Statement on Mental Health and Wellness:** Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in proper self-care by utilizing the resources and services available from Counseling and Psychological Services (CAPS). Students who need someone to talk to can call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at [suicidepreventionlifeline.org](https://suicidepreventionlifeline.org).

**Campus Safety Measures:** To help protect Aggieland and stop the spread of COVID-19, Texas A&M University urges students to be vaccinated and to wear masks in classrooms and all other academic facilities on campus, including labs. Doing so exemplifies the Aggie Core Values of respect, leadership, integrity, and selfless service by putting community concerns above individual preferences. COVID-19 vaccines and masking – regardless of vaccination status – have been shown to be safe and effective at reducing spread to others, infection, hospitalization, and death.