MATH 2318.01W, Linear Algebra
COURSE SYLLABUS: Summer I 2024

INSTRUCTOR INFORMATION

Instructor: Padmapani Seneviratne
Office Location: BIN 316

Office Hours: Virtual on zoom: MTWR 2:00 – 3:00 pm.
                          The Zoom link for office hours will be available on D2L

Office Phone: 903- 886-5952
Office Fax: 903-886-5945
University Email Address: Padmapani.seneviratne@tamuc.edu

Preferred Form of Communication**: email**
Communication Response Time: within 24 hours during weekdays

This class if fully online: All lectures, assignments and projects will be available through D2L (MyLeo-online).

COURSE INFORMATION

This is a fully online course.

Textbook(s): **MyLabMath (MyMathLab) access code required**. Text book will be available as an ebook.
Linear Algebra and its applications, David C. Lay, sixth edition.
Chapters 1- 6 will be covered.

Optional Texts and/or Materials: Students may use TI-83/84 or an equivalent calculator.

The *syllabus/schedule are subject to change.*

Course Description

This course studies vector spaces; linear transformations; matrices; determinants; systems of linear equations; equivalence relations on matrices; characteristic vectors; operators. Prerequisite: MATH 2305, Discrete Mathematics, Minimum of C grade.

Student Learning Outcomes: Upon successful completion of this course a student will:

1. Find solutions of systems of linear equations by using Gauss-Jordan elimination method.
2. Identify and compute algebraic properties of matrices and determinants.
3. Demonstrate a thorough knowledge of vector spaces and subspaces.
4. Find basis and rank for column, row and null spaces of a given matrix.
5. Compute eigenvalues, eigenvectors and eigenspace of a square matrix and matrix diagonalization.
6. Define linear transformations and examine the properties of linear transformations.
7. Identify inner product spaces and use Gram-Schmidt orthogonalization process to orthogonalize any given basis.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Use of TI-83/84 type calculator, Access MyLeo online(D2L) regulary. Access to internet and web-camera for proctoring.

Instructional Methods

This is a fully online class. Video lectures will be uploaded each week on D2L and home work assignments will be assigned through MyLabMath. All the exams will be remotely proctored through Zoom.

Student Responsibilities or Tips for Success in the Course

Log into D2L-MATH 2318 course page regularly. Check TAMUC email. Complete all home work on time.

GRADING

Final grades in this course will be based on the following scale:

2 Midterm Exams:	50%
Home work/Quizzes:	20%
Final Exam:	30%
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Total:	100%

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A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% or Below

Exams: There will be two closed book midterm exams and a comprehensive final exam for this course.

Exam 1: Thursday June 13th from 5:00 – 6:30 pm

Exam 2: Tuesday June 25th from 5:00 – 6:30 pm

Final Exam: Wednesday, July 3rd from 5:00 – 7:00 pm

Home work/Quizzes: Homework assignments will be assigned through MyMathLab online homework system. It is essential that you have an access code.

Exam Proctoring: Exams will be remotely proctored using Zoom. More information will follow at the time of the exam.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:
https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

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ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

You are expected to attend all classes.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

Appropriate classroom behavior is required to attend this class.

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<u>All cell phones must be put on silent during class.</u>

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx).
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:
https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx) webpage and [Procedure 13.99.99.R0.01](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf).
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf)

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

[Graduate Student Academic Dishonesty 13.99.99.R0.10](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf)

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

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 have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

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Texas A&M University-Commerce
Gee Library- Room 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information

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regarding Counseling Center events and confidential services, please visit
www.tamuc.edu/counsel

AI use policy

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

COURSE OUTLINE / CALENDAR
Daily Schedule

Date	Topics
June 3	Section 1.1
June 4	Section 1.2
June 5	Section 1.3
June 6	Section 1.4
June 7	Section 1.5
June 10	Section 1.7
June 11	Section 1.8
June 12	Section 1.9
June 13	Exam 1
June 14	Section 2.1
June 17	Section 2.2
June 18	Section 3.1
June 19	Section 3.2
June 20	Section 4.1
June 21	Section 4.2

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June 24	Section 4.3
June 25	Exam 2
June 26	Section 4.4
June 27	Section 4.5
June 28	Section 5.2-5.3
July 1	Section 6.1
July 2	Section 6.2-6.3
July 3	Final Exam

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