



MATH 2318.01E (25930) – LINEAR ALGEBRA

COURSE SYLLABUS: SPRING 2022

Instructor: Dr. Mehmet Celik

Office Location: Binnion 323

Office Hours: On-Campus

Mon. 10 am-11 am (*on Zoom* 11 am-12 pm); Tues. 11 am-12 pm; Wed. 10 am-11 am (*on Zoom* 11 am-12 pm); Thur. 10 am-12 pm or by appointment

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University Email Address: Mehmet.Celik@tamuc.edu

Preferred Form of Communication: email

Communication Response Time: Student course-related questions or concerns through email are answered usually within 24 hours during weekdays (M-F).

Class Meeting Time: TR 12:30 pm - 1:45 pm

Class Location: JOUR110

COURSE INFORMATION

Materials

Textbook(s) Required: Linear Algebra and its Applications, (6th edition) by David C. Lay, Judi J. McDonald, Steven R. Lay, ISBN-13: 9780135851258. An eText is available with a MyMathLab subscription. The material covered during the semester will be Chapter 1-6. We may occasionally cover enrichment activities, not in the text.

Course Description: Introduces and provides models for the application of the concepts of vector algebra. Topics include finite-dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering. Prerequisite: Math 2414 with a minimum grade of C.

The use of a graphing calculator having at least the capabilities of the TI-83 will be helpful throughout the course. TI-89 is highly recommended. A computer algebra system will be used for some problem exploration, enhanced conceptual understanding, and to engage students as active participants in the learning process.

Student Learning Outcomes

1. Students will demonstrate proficiency in the use of mathematics to structure their understanding of and investigate questions in the world around them.
2. Students will demonstrate proficiency in treating mathematical content at an appropriate level.
3. Students will demonstrate competence in the use of numerical, graphical, and algebraic representations.
4. Students will demonstrate the ability to interpret data, analyze graphical information, and communicate solutions in written and oral form.
5. Students will demonstrate proficiency in the use of mathematics to formulate and solve problems.
6. Students will demonstrate proficiency in using technology such as handheld calculators and computers to support their use of mathematics.

Student Assessment Outcomes

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

1. *Critical Thinking*: Will be measured through one or more of the following: quizzes, projects, and/or exams
2. *Oral, Visual, and Written communication Skills*: Will be measured through one or more of the following: quizzes, projects, and/or exams
3. *Empirical and Quantitative Skills*: Will be measured through one or more of the following: quizzes, projects, and/or exams

COURSE REQUIREMENTS

Instructional Methods: Face-to-Face Lectures (by the professor), demonstration, and models, and some group work, based on time available.

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams – There will be two Mid-term exams and a Comprehensive Final Exam. Each exam will be proctored in the classroom.

Exam 1: On Week #7 (February 22th, Tuesday)

Exam 2: On Week #13 (April 12th, Tuesday)

Make-up exams are possible only if there is a documented emergency.

Final Exam - Comprehensive Final Exam.

Thursday, May 12th from 10:30 am to 12:30 pm

Quizzes – There will be no make-ups for any missed quizzes. Instead, at the end of the semester, the highest ten quizzes will be considered.

Each week, one quiz will be posted on the course home page under D2L:

On Wednesday at 6 am due to Thursday at 9 am.

The student will download the posted quiz questions, write his/her answers/solutions on a separate sheet with the academic integrity statement on the top ("*On my honor, as a student, I have neither given nor received unauthorized aid on this academic work,*" and sign under that statement), scan the sheet(s) and submit the scanned pdf file to the virtual basket under D2L (Activities→Assignments→Quiz #) as

LastName_FirstName_Quiz?_Math2318.01E_SP22.pdf

(Example: Celik_Mehmet_Quiz3_Math2318.01E_SP22.pdf).

The quiz you submit must be your work. Plagiarism is strictly prohibited.

Online Homework Assignments (from MyMathLab): There is an online supplement to your textbook called MyMathLab. There will be an online homework assignment in MyMathLab for each section covered in the course. You will have an unlimited number of attempts to complete an assignment by the due date given and your highest grade will be recorded. You will see variations of these problems on tests, so completing the online homework problems is strongly encouraged! The Class Key is going to be provided on the first day of the class under D2L.

Attendance: There is a strong correlation between attendance and final grades. Class attendance and participation are expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes if they are absent.

Suggested Problems: There will be suggested problems assigned for each section. The answers to most of these problems are in the text, so I will not collect them. However, you will see some of these problem variations on tests!

The key to success in this course is regularly working with other students in the class, doing the homework early, and asking questions when you have them!!! We will discuss homework problems during Friday's meeting, but there will often not be enough time to discuss all of them. Please join your professor's or GTA's office hours or visit the Math Skills Center (at Binnion 329) if you have additional questions about the homework or the concepts.

Workload and Assistance: You should expect to spend about one to two hours on the course material each day. This time includes studying the lecture notes, doing homework, and studying for quizzes and exams. Some weeks (those in which an exam is scheduled, for instance) may require more of your time; other weeks may require less. It will help if you spend some time discussing some of the material with other classmates. Would you please ask questions

and seek assistance as needed? It will help you if you use my Office Hours (Binnion 323) to discuss your questions. Emails are usually answered within 24 hours during weekdays (M-F).

Grading Matrix: This class will be graded on a total points system. 400 points are the maximum possible points in the class. The following grading matrix presents how your total score is going to be calculated at the end of the semester of Spring 2022 for the Math 2318.01E course. All the grading instruments are assigned between the first day of class and the last day of class of the Spring 2022 semester. The Final Exam is the last grading instrument of the course; the date of the Final Exam is: [Thursday, May 12th from 10:30 am to 12:30 pm](#). The grade is completely objective and is determined solely by student performance on each of the evaluation criteria (Mid-term exams, quizzes, in-class participation, online HW assignments, and the final exam). *Do not expect Extra Credit assignments!*

Instrument	Value (points)	Total
Quizzes	The best 10 in-class quizzes (best 10 scores)	60
Online HW Assignments	The best 20 online homework assignments will be considered.	40
Mid-term Exams	2 Mid-term exams at 100 points each	200
Final Exam	One comprehensive final exam at 100 points	100
Total:		400

Grade Determination:

A = 400 – 360 pts; i.e. 90% or better

B = 320 – 359 pts; i.e. 80 – 89 %

C = 280 – 319 pts; i.e. 70 – 79 %

D = 240 – 279 pts; i.e. 60 – 69 %

F = 239 pts or below; i.e. less than 60%

TECHNOLOGY REQUIREMENTS

A computer algebra system will be used for some problem exploration, enhanced conceptual understanding, and to engage students as active participants in the learning process.

- **TI-83/84** or other calculators with similar capability is recommended.
- **A printer** to print homework and tests is recommended.
- **Scanner/digital camera/cell phone** that you can take pictures of your work and submit them to the Virtual Basket under D2L.
- **D2L:** As a student enrolled at Texas A&M University-Commerce, you have access to D2L. You will obtain course materials through D2L, (MyLe→ APPs→ D2L). The course materials are only for this course. You cannot distribute the course materials without the permission of the instructor. You also have an email account via myLeo - all my emails sent from D2L (and

all other university emails) will go to this account, so please be sure to check your email regularly.

BROWSER SUPPORT

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

DESKTOP SUPPORT

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Apple® Safari®	Latest	N/A

TABLET AND MOBILE SUPPORT

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.

- *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site http://www.java.com/en/download/manual.jsp](http://www.java.com/en/download/manual.jsp)
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - [Adobe Reader https://get.adobe.com/reader/](https://get.adobe.com/reader/)
 - [Adobe Flash Player \(version 17 or later\) https://get.adobe.com/flashplayer/](https://get.adobe.com/flashplayer/)
 - [Adobe Shockwave Player https://get.adobe.com/shockwave/](https://get.adobe.com/shockwave/)
 - [Apple Quick Time http://www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/)

At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

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

BRIGHTSPACE SUPPORT

NEED HELP?

STUDENT 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 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.



SYSTEM MAINTENANCE

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

INTERACTION WITH INSTRUCTOR STATEMENT

Student course-related questions or concerns through email are answered usually within 24 hours during week days (M-F). Feedback on assessments will be provided within 7 days after the assignment is submitted.

My primary form of communication with the class will be through the official university Email and Announcements. Any changes to the syllabus or other important information critical to the class will be disseminated to students in this way via your D2L Email address available to me through MyLeo and in Announcements. It will be your responsibility to check your official university Email and Announcements regularly.

Discussions: This space is for students to communicate with each other. I may visit Discussions and join your discussion. Please feel free to answer one another's questions. I will check answers (as well as questions) for correctness, but do not hesitate to respond to a posting if you feel you can answer the question thoroughly and directly.

STUDENT ACADEMIC RESOURCES

Math Skills Center (MSC): Free tutoring service offered by the Mathematics department. It will be offered in an online format this summer, as courses in the D2L course management system. The MSC will be open during their normal summer hours of Monday - Thursday, 10am - 2pm, and will offer tutoring through Calculus 1, with other courses optional to the tutor, depending on the tutor's experience and willingness to assist.

The TAMUC One Stop Shop - provides as many student resources as possible in one location.

<http://www.tamuc.edu/admissions/oneStopShop/>

The TAMUC Academic Success Center provides academic resources to help you achieve academic success.

<http://www.tamuc.edu/CampusLife/CampusServices/AcademicSuccessCenter/default.aspx>

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

Policy for Reporting Problems with eCollege

If students encounter D2L-based problems while submitting assignments and assessments, the following procedures MUST be followed.

1. Students must report the problem to the help desk. You may reach the helpdesk at helpdesk@online.tamuc.org or 1-866-656-5511
2. Students MUST file their problem with the helpdesk and obtain a helpdesk ticket number
3. Once a helpdesk ticket number is in your possession, students should email me to advise me of the problem and to provide me with the helpdesk ticket number
4. At that time I will call the helpdesk to confirm your problem and follow up with you.

PLEASE NOTE: Your personal computer/access problems are not a legitimate excuse for filing a ticket with the help desk. You are strongly encouraged to check for compatibility of your browser BEFORE the course begins and to take the eCollege tutorial offered for students who may require some extra assistance in navigating the eCollege platform. ONLY D2L-based problems are legitimate.

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

Academic Honesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including (but not limited to) receiving a failing grade on the assignment, the possibility of failure in the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. In ALL instances, incidents of academic dishonesty will be reported

to the Department Head. Please be aware that academic dishonesty includes (but is not limited to) cheating, plagiarism, and collusion.

Cheating is defined as:

- Copying another's test or assignment
- Communication with another during an exam or assignment (i.e. written, oral or otherwise)
- Giving or seeking aid from another when not permitted by the instructor
- Possessing or using unauthorized materials during the test
- Buying, using, stealing, transporting, or soliciting a test, draft of a test, or answer key

Plagiarism is defined as:

- Using someone else's work in your assignment without appropriate acknowledgement
- Making slight variations in the language and then failing to give credit to the source

Collusion is defined as:

- Collaborating with another, without authorization, when preparing an assignment

If you have any questions regarding academic dishonesty, ask. Otherwise, I will assume that you have full knowledge of the academic dishonesty policy and agree to the conditions as set forth in this syllabus.

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

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

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/)

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

Student Conduct

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>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

[Netiquette http://www.albion.com/netiquette/corerules.html](http://www.albion.com/netiquette/corerules.html)

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

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

Copyright Policy

The handouts used in this course are copyrighted. By "handouts," I mean all materials generated for this course, which include but are not limited to syllabi, lecture notes, quizzes, exams, in-class materials, review sheets, projects, and problems sets. Because these materials are copyrighted, you do not have the right to copy and distribute the handouts.

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.

COURSE OUTLINE / CALENDAR

WEEKLY SCHEDULE:

(Week 1). Syllabus, 1.1	(Week 7). Exam 1 , 2.7	
(Week 2). 1.2, 1.3, & 1.4	(Week 8). 2.8, 2.9, & 3.3	(Week 14). 6.2, 6.3
(Week 3). 1.5, 1.6	(Week 9). 4.1, 4.2	(Week 15). Review
(Week 4). 1.7, 1.8, & 1.9	(Week 10). 4.3, 4.4, 4.5	(Week 16). FINALs
(Week 5). 2.1, 2.2	(Week 11). 4.6, 5.1, 5.2	WEEK
(Week 6). 2.3, Review	(Week 12). 5.3, Review	
	(Week 13). Exam 2 , 6.1	

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by email and in-class announcements.