

Math 177.02W (83571): Business Math with Applications COURSE SYLLABUS: Fall 2025, 3 semester credit hours

INSTRUCTOR INFORMATION

Instructor: Dr. Brenda Reed

Office Location: Waller Classroom Building room 111 (located on the Corsicana campus)

Office Hours: M&W 8:00 – 9:15, T&TH 8:00 – 10:45

Office Phone: 903-875-7515

University Email Address: Brenda.reed@tamuc.edu or Brenda.reed@navarrocollege.edu

Preferred Form of Communication: Email

Communication Response Time: Within 48 hours, unless over a weekend, holiday, or

during school cancellation, such as bad weather days.

COURSE INFORMATION

Materials - Textbooks, Readings, Supplementary Readings:

SOFTWARE (REQUIRED): Students must purchase a copy of the **MyMathLab/MyLab & Mastering student access code** from either the campus bookstore or directly from Pearson at http://www.coursecompass.com/. After you have created an account and logged into MyLab, you will need our course code. The specific course code needed for class registration in MyMathLab is reed43553 and will also be available in D2L. If you are not able to immediately purchase the access code, please use the 14 day free trail to begin working on homework right away, and be sure to purchase your access code within the first two weeks of class. **The access code must be purchased within the first two weeks in order to prevent a loss of homework points.**

<u>TEXTBOOK (OPTIONAL)</u>: College Mathematics for Business, Economics, Life Sciences, and Social Sciences, 14th Edition, by Barnett, Ziegler, and Byleen. ISBN # 978-0134674148. The text is **OPTIONAL**, but MyMathLab access is **REQUIRED**. Note: If a student purchased an access code for Math 1324 or 1325 or 297 since Spring 2025, a new code purchase might NOT be required (depending on the length of account purchased).

Each student's average for the course will be posted in your MyLeo account. To access the course, you will go into MyLeo and the "Apps" and look for the app for "MyLeo Online (D2L Brightspace)".

<u>Calculators:</u> The graphing calculator of TI 83/TI 84 or equivalent will be highly recommended. Calculators other than Texas Instruments calculators may be used but classroom instruction on calculators will be given for TI equipment only. **Note: Calculators that solve problems for students, including but not limited to TI-Nspire, TI 89 or higher, Casio Prizm, Casio Touch or higher are <u>NOT</u> allowed to be used for this class. ** Students are also required to clear the memory of graphing calculators before and after each proctored exam.

Work must be shown in order for a student to receive credit. Any problem solved using the calculator without supporting work shown will not receive full credit on any graded assignment.

Course Description:

MATH 177 (Special Topics) - Business Mathematics with Applications – Note: this course is a pilot course focusing on Algebra and Calculus (specifically derivatives) with particular business applications students will see in their future business courses. This course is intended for Business majors. Topics include an in-depth Algebra review (solving equations and systems of equations), finding derivatives, and in-depth applications problems. Prerequisites: College Algebra (Math 1314) or Business Math 1 (Math 1324).

Student Learning Outcomes: Upon successful completion of this course, students will:

- Demonstrate their understanding of skills in the Algebraic review.
- Demonstrate their knowledge and understanding of various areas of derivatives.
- Solve problems working with real-world applications, as seen in business courses in the students' programs.
- Demonstrate their knowledge of matrices and matrix operations.

Core Objectives:

- **Critical Thinking.** Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art. This common core learning objective will be assessed on the final exam using key questions that will fulfill these objectives.
- **Communication.** In written, oral, and/or visual communication, East Texas A&M University students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure. This common core objective will be assessed using class activities with class discussion of statistical identities, graphs, and application problems.
- **Empirical and Quantitative Skills**. Students will be able to interpret, test, and demonstrate principles revealed in empirical data and/or observable facts. This common core learning objective will be assessed using in class discussion and projects, homework, and final exams.

COURSE REQUIREMENTS

Minimal Technical Skills Needed:

Students must have a minimal amount of technical skills to be successful in this course. Skills needed include, but are not limited to: using the online learning system (D2L) in MyLeo; using Microsoft Word, Excel, and PowerPoint; and the use of email.

Instructional Methods:

Instructional Methods: This is an online course and you are ultimately responsible for your own learning. You will be required to watch the online video lectures posted. When doing so, you should take notes and participate like you are in an actual classroom. Only after that should you attempt your homework. Skipping the lectures provided and going straight to homework will not end in success.

Exams will be administered in a face to face proctored setting. Students are expected to take exams in a verified testing center, either on the ETAMU campus, or near them (once approved by the instructor). More information on testing centers will be provided in our D2L course.

Student Responsibilities/ Tips for Success in the Course:

Attendance/Participation: You will have multiple assignments due each week. You will need to make sure to start on these early as you will likely need more than one day to finish your assignments each week. Your weekly attendance grade will be based on weekly completion of all assignments for the week as specified in D2L.

Amount of weekly study: The "rule of thumb" for a math class is that for every hour of class time, you should spend approximately 3 hours of study time outside of the classroom. This study time may include a variety of activities, including but not limited to: re-organizing notes; working on homework; participating in a study group or tutoring; and studying for quizzes and exams. That translates to approximately 12 hours per week on this course alone.

GRADING

Grading Policy:

<u>Type of Assessment:</u> <u>Portion of the Grade:</u>

Daily Work (Attendance – based on D2L activity for online course) 5%
Daily Work (Homework and Quizzes, MML work, etc.) 20%
Tests (a total of 3 exams) 50%
Comprehensive Final Exam 25%

Grading Scale: Grades will be assigned using the standard scale:

A = 90-100+, B = 80-89.9, C = 70-79.9, D = 60-69.9, F = 59.9 or below

Types of Grades/Assessments:

Types of Grades/Assessments:

Daily Grades: The daily grade is composed of several categories of assessments, including attendance, participation, homework, quizzes, etc...

Attendance/Participation: Your weekly attendance grade will be based on weekly completion of all assignments for the week as specified in D2L.

<u>Homework:</u> Before attempting homework, you should make sure that you have watched all lectures provided in D2L and reviewed weekly supplemental resources. Homework will be assigned weekly and will be found in your MyLab software; immediate feedback is given through the software. It is extremely important for you to work all homework in order to be prepared for the exams. In general, late work will not be accepted without appropriate documentation of a university-accepted absence.

Quizzes: Will be available in your My Lab software. However, you are required to upload your handwritten work for specified problems in D2L for each quiz. Failure to upload work requested will significantly lower your quiz grade up to and including changing the grade to a grade of zero. Quizzes will be averaged into your Daily Work grade. You must study in advance of these quizzes because they are timed. While you can use your notes on quizzes, you will not have time to look up every single problem.

Tests: There are three scheduled exams and a comprehensive final. Notes and formula sheets are not allowed on the exams. As stated before, all exams must be taken IN PERSON and either on campus or at an approved testing location. Be aware that testing centers off campus may charge a testing fee for using their services.

Partial credit <u>may</u> be given on exams IF all work is neatly shown for determination of the student's mistakes. While taking exams, **CELL PHONES AND OTHER ELECTRONIC DEVICES MUST BE TURNED OFF AND STORED OUT OF THE STUDENT'S REACH.** The only electronic device allowed during tests is a standalone calculator (such as a TI-34, TI-83, TI-84, etc.), and only with the instructor's permission.

Tentative test dates: See the schedule below for details.

Exam 1 must be taken between Sept. 15-23 Exam 2 must be taken between October 13-21 Exam 3 must be taken between November 17-25 The Final Exam will be on December 8 or December 9.

Replacing a Low Test Grade: I realize that at times throughout the semester, emergency situations may arise that affect a student's performance on an exam or even prevent a student from attempting a test. However, in general, make-up exams will NOT be given unless confirmed ahead of time and accompanied by a documented, University excused absence. Therefore, I am willing to replace the student's ONE lowest exam grade with the student's grade on the final exam, provided the grade on the final exam is higher. This provision will only be applied to ONE exam, so students should make every effort to attempt and be well-prepared for all exams.

Final Exam: Our final is a REQUIRED comprehensive exam. We will take the final exam according to the published Class Schedule/Final Exam schedule, which allows us a testing window from Monday, December 8th or Tuesday, December 9th. (More details to come with information about testing. NOTE: The testing center in Commerce is open on Monday and Tuesday this week.) **Do not expect a makeup exam for the final exam.**

TECHNOLOGY REQUIREMENTS

Instructor Specific Technology Requirements:

- **MyLab Access Code:** This is required for completing all homework.
- **Calculator:** A TI-83 or TI-84 calculator (or equivalent) is RECOMMENDED for this course.
- **Internet access is REQUIRED**. Projects, etc., may be given online. If you use the ebook, you will need to be able to access the site.
- **Email access is REQUIRED**. Please utilize your East Texas A&M (____@leomail.tamuc.edu) email address.
- Scanner: A scanner or scan app MUST be used for uploading certain assignments; NOT just the camera on your phone or tablet. Homework and other documents must be loaded as .pdf files, NOT as .jpg files. This allows for an easy upload and download and clean documents (no black outlines/edges, etc.) The department has experience with the free app Cam Scanner (a video will be available in the "content" page in D2L), but there are several apps available. Many are free, including the "basic" version of Cam Scanner, even if they ask for money... you should still be able to use the free version for this course. As long as it will load to MyLeo as a .pdf and there aren't a lot of dark edges, extra items in the background, or shadows on the pages, you should be okay.

MyLeo Online Learning Management System (LMS):

D2L in MyLeo: All course sections offered by East Texas A&M have a corresponding course shell in MyLeo. 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

ACCESS AND NAVIGATION in MyLeo/D2L:

MyLeo Support: You will need your campus-wide ID (CWID) and password to log into your course in D2L. 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, an ETAMU campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:

Students will be expected to interact with the instructor(s) in class or via electronic means in an appropriate manner. All instructor contact information is listed on this syllabus and should be used. Please use email to facilitate a quick response.

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:

Getting Help Outside of Office Hours: The Math Skills Center, located in Binnion 328, is open Monday and Wednesday, 10am – 8pm; Tuesday and Thursday, 10am – 6pm; and Friday, 10am – 2pm. For information on which tutors would be best to help, and when they are working, feel free to see me or the bulletin board outside the lab. Mach III/TRIO Services, located in the Halladay Student Services building, Room 300, is available to students who meet certain criteria, such as being a first-generation college student, etc. Contact TRIO at 903-886-5833. The Academic Success Center offers tutoring in the library, as well as Supplemental Instruction. Their hours can be found on the university web site. In addition, each student has available tutoring hours

through the online tutoring service, tutor.com. Additional details can be found here: https://inside.tamuc.edu/campuslife/campusServices/academicSuccessCenter/tutorInfo/default.aspx

Comments: I will do my best to make a quality presentation each day and, in return, I expect that you will do your best to learn the material presented in class and in the text. This course will be taught as hands-on as possible, and student participation is necessary daily. It is important that you be actively engaged in any group activities. Questions are welcome in the classroom, and I will gladly schedule outside help sessions if necessary. I know that together, these efforts can contribute significantly to your education in this class.

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 Illness:

Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.

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_(See link below). All students are expected to exercise self-discipline and respect for the rights of others at all times. Behavioral disruptions that interfere with the business of the "classroom" or with an individual's ability to learn may be referred to the Dean of Students. Courtesy to others is important. That means respecting the opinions of others, and in general, doing your part to make this a positive learning environment for all students. NOTE: This includes images and/or messages on face masks and/or facial coverings.

https://www.tamuc.edu/student-code-of-conduct/

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

Appropriate classroom behavior is required to attend this class. <u>All cell phones and other such devices must be put on silent or turned off during class.</u> Phones are a distraction for me and the other students in the class. NOTE: THIS INCLUDES BLUETOOTH AND OTHER DEVICES THAT ARE PLACED IN THE EAR. All people will be treated with respect and I will not allow talking that will disrupt my lectures. If disruptions occur during class lectures, you will be asked to leave class and will earn a zero on any applicable grades for that class period. Serial disrupters will be asked dealt with individually, including referral to the Dean of Students. If you are withdrawn from this course as a result of disruptions, you will be withdrawn from school, entirely.

ETAMU Attendance Policy:

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.

https://coursecatalog.tamuc.edu/undergrad/academic-procedures/

Academic Integrity:

Students at East Texas A&M University 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:

<u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u>

As stated in the Student Handbook, academic dishonesty in the class will not be tolerated. If any materials or equipment are found to be available to the student at any time which is considered inappropriate by the instructor, the very fact that the materials are inappropriately available to the student is grounds for an accusation of academic dishonesty. The instructor reserves the right to fail the student for the assignment or the course, as well as report the student to the Academic Dean and/or the Dean of Students. They also have the ability to terminate the student's enrollment in the University. The instructor considers this an extremely serious matter. Please make sure you are not in a situation that could be viewed negatively.

I find that a majority of students are honest in doing their school work. However, we must take measures to protect the academic integrity of the classroom. I have a NO TOLERENCE policy for cheating and if you are caught cheating, you will probably fail that portion of the course, as well as possibly the entire course. Cheating in this course is defined as (but not limited to) the following:

- Giving or receiving answers during an exam or quiz.
- Viewing the exam or quiz answers of nearby classmates.
- Having notes/practice work/etc. available during quizzes or tests.
- Possession or access to test items before the test is given.
- Deception in getting an excused absence to obtain the undeserved opportunity to make-up work.
- Use of cell phones or text messaging technology/other devices during exams or quizzes. **You may not use the calculator on your cell phones.**
- Improper citations in written works, or using another person's ideas and words as your own without giving proper credit.
- Any method, no matter how well rationalized or accepted, which gives an unfair advantage and/or
 improves a person's grade by any means other than study and skillful performances on exams and/or
 other assignments.

Students found guilty of an act of academic dishonesty in this course will be subject to receiving an "F" in this course, as well as the below-mentioned disciplinary actions, as deemed appropriate.

Specific additional disciplinary action for these offenses may include any combination of the following:

Point deduction of an assignment Failure of an assignment A grade of zero for an assignment Failure of this course

Referral to the Academic Integrity Committee or department head for further action Referral to the Dean of the College of Science and Engineering, and other Deans as appropriate Referral to the University Discipline Committee

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 East Texas A&M University Library, Room 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148

Email: <u>StudentDisabilityServices@tamuc.edu</u>
Website: <u>https://www.tamuc.edu/student-disability-services/</u>

Counseling Center:

The Counseling Center at East Texas A&M, 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: https://www.tamuc.edu/counseling-center/

Non-Discrimination Notice:

East Texas A&M University 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.

Artificial Intelligence Statement:

East Texas A&M University 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 13.99.99.R0.10 Graduate Student Academic Dishonesty

Concealed Carry Statement:

<u>Texas Senate Bill - 11</u> (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University 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 ETAMU 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 <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

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

COURSE OUTLINE/CALENDAR

Topics Covered (tentative schedule):

- Week #1 (Aug. 25-31) Syllabus, Introduction, Review Factoring and Algebra, Linear Equations
- Week #2 (Sept. 1-7) Labor Day (school closed Monday) Graphs and Lines, Functions, Quadratics, Polynomials
- Week #3 (**Sept. 8-14**) Quiz 1, Rational Functions, Exponential Functions, Logarithmic Functions
- Week #4 (**Sept. 15-21**) Quiz 2, Review for Exam 1, Exam 1 (taken between Sept 15-23)
- Week #5 (**Sept. 22-28**) Derivatives, Basic Differentiation Properties
- Week #6 (**Sept. 29-Oct. 5**) Marginal Analysis & Derivative Rules (Product & Quotient)
- Week #7 (Oct. 6-12) Quiz 3, Chain Rule, First Derivatives and Graphs
- Week #8 (**Oct. 13-19**) Quiz 4, Review for Exam 2, Exam 2 (taken between Oct. 13-21)
- Week #9 (Oct. 20-26) Second Derivative Test with Applications; Optimization
- Week #10 (Oct. 27-Nov. 2) System of Equations and Augmented Matrices
- Week #11 (**Nov. 3-9**) Quiz 5, Gauss-Jordan Elimination, Basic Matrix Operations
- Week #12 (Nov. 10-16) Inverse Matrices and Solving Matrix Equations
- Week #13 and Week #14 (**Nov. 17-25**) Quiz 6, Review for Exam 3, Exam 3 (taken between Nov. 17-25), Thanksgiving Holidas
- Week #15 (Nov. 30-Dec. 7) REVIEW WEEK FOR FINAL EXAM
- Week #16 (**Dec. 8-9**) **Final Exam** (taken on Dec. 8 or Dec. 9)

Remaining enrolled in this course constitutes acceptance of all policies contained in this syllabus.

Any changes to this syllabus and/or schedule will be communicated directly to you by the instructor. You are responsible for being aware of any such changes.

Good luck and work hard!!