MATH 362-1SE/4RE/7RE
Mathematical Modeling of Science for Middle School II

COURSE SYLLABUS: Spring 2025
TR 12:30-1:45pm BIN329

INSTRUCTOR INFORMATION

Instructor: Dr. R. Cavender Campbell
Office Location: Binnion 303B
University Email Address: robert.campbell@tamuc.edu
Office Phone: 903-468-8660

Office Hours: MW 12:30-2:00pm, TR 9:00-10:30am, or by appointment (Zoom available)

Preferred Form of Communication**: Email**

Communication Response Time: Same or Next Business Day

COURSE INFORMATION

MATH 362 – Mathematical Modeling of Science for Middle School II – Hours: 3

Mathematics will serve as the basis of the course and the following topics will be covered: Trigonometric functions and relationships, rate of change, derivative concepts, extrema and points of inflection, accumulating change, concepts of the definite integral, finite difference equations. Prerequisites: "C" or better in MATH 361.

Course Information

SOFTWARE (REQUIRED): Students must purchase a copy of MyMathLab/MyLab & Mastering student access code from either of the campus bookstores or directly from Pearson at http://www.coursecompass.com/ The specific course code needed for class registration is campbell89091 and will be posted on D2L.

TEXT (OPTIONAL): College Mathematics for Business, Economics, Life Sciences, and Social Sciences 14th Edition by Barnett, Ziegler, Byleen, ISBN # 978-0134674148. The text is OPTIONAL, but MyMathLab access is REQUIRED. Note: If a student purchased a MyMathLab access code for Math 1324 or 1325 since Fall 2023, a new code purchase may not be required. Portions of Chapters 9-14 in the textbook will be discussed. Please use the MyMathLab 14 day free trial to start working on homework if students cannot purchase it right away. The MyMathLab student access code must be purchased by the end of 2nd week of class to prevent a loss in points.

REQUIRED MATERIALS: MyMathLab access and a TI-83 or TI-84 calculator (see below)

TECHNOLOGY REQUIREMENTS: 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 NOT allowed to be used for this class. ** Students are also required to clear the memory of graphing calculators before and after each proctored exam.

The *syllabus/schedule are subject to change.*

CORE OBJECTIVES:

1) Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art. This common core objective will be assessed in the exams and final exam for all sections of Math 1325.

2) In written, oral, and/or visual communication, East Texas A&M 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 common class activities with class discussion over limits, continuity, derivatives and integrals and how these topics relate to the field of business for all sections of Math 1325.

3) Students will be able to interpret, test and demonstrate principles revealed in empirical data and/or observable facts. This common core objective will be assessed using class activities, homework problems, exams and final exam for all sections of Math 1325.

STUDENT OUTCOMES: Upon successful completion of this course a student will:

1) Demonstrate knowledge and understanding of topics including, but not limited to limits, continuity, derivatives and integration and apply these topics in various fields of business.

2) Demonstrate problem-solving skills in the solving of complex business word problems.

3) Understand functions and their graphs.

COURSE REQUIREMENTS

REQUIRED MATERIALS: MyMathLab access and a TI-83 or TI-84 calculator (see above)

Students should complete assignments by the due dates and clearly communicate any mathematical ideas necessary to demonstrate understanding of the topics. Instruction will include lectures and demonstrations along with group assignments and discovery style activities. It is critical that you sign up for MyLab to complete homework for the course. MyLab access includes an eTextbook that can be used instead of the physical textbook. Students should attend all class meetings and communicate with the instructor should difficulty with the material arise.

Daily attendance is expected and will be tracked by the instructor. The student is responsible for ensuring they are counted present for the day by arriving punctually to the start of class.

GRADING

Final grades in this course will be based on the following scale:
A = 90%-100% B = 80%-89% C = 70%-79% D = 60%-69% F = 59% or Below

GRADES:
Tests: 44% Attendance: 4% Projects: 10% Homework: 10% Quizzes: 10%
Final Exam: 22%

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PROJECTS: Projects will include teaching topic(s), a TEKS write-up, and materials related to the 4-8 Math Certification Exam. (1) You will be assigned a topic within the course to show the class an activity you could use in teaching the topic. This activity should target deepening the understanding of the class in the given topic. Grading rubrics and instructions will be distributed. (2) You will identify related skills in the grades 4-8 mathematics TEKS for the content being tested. An explanation of the connections and a write-up of notable applications will be required. (3) Questions from the practice certification exam will be studied for connections to course content from MATH 361 and 362.

HOMEWORK/QUIZZES: Homework will be completed online through MyMathLab and immediate feedback will be given. You can use various help features within MyMathLab and try problems you miss again until you get them right and fully understand the topic. It is my expectation that you should have a 100 on each homework assignment because of this. Online due dates should be observed, and in general, late submissions will not be accepted.
If a student experiences any technical difficulties with MyMathLab, be sure to use the online help and technical support from the software company. If a student continues to have trouble accessing or navigating the software, please contact instructor through email or come by his/her office during office hours for some individual help. Quizzes will occasionally be given in class over the material presented in class,

EXAMS: There are three scheduled exams and a comprehensive final. Students will take exams in class with instructors or at the Academic Testing Center on campus (with teacher approval). Partial credit may 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 and quizzes is a stand-alone calculator (such as a TI-34, TI-83, TI-84, etc.), and only with the instructor's permission. All exams must be completed in pencil. In general, no make-up exams will be given without prior notice of a university excused absence*. 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 attending on an exam day. I can replace the lowest exam grade with the student's grade on the corresponding portion of the final exam, provided the final exam score is higher. This provision will only be applied to ONE exam, so students should make every effort to be present and well-prepared for all exams.

A review and answer key will be available prior to each exam.
Be sure to take advantage of this valuable resource!!

See the class schedule on the last page for testing dates. These dates are tentative and are subject to change.

* University Authorized Excuses: 1) Participation in a required/authorized university activity; 2) Verified illness; 3) Death in a student's immediate family; 4) Obligation of a student at legal proceedings in fulfilling responsibility as a citizen; and others determined by individual faculty to be excusable (e.g., elective University activities, etc.)
Final Exam: The comprehensive final exam will be given on Thursday, May 8th from 10:30am – 12:30pm. See the university final exam schedule for more info.

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Getting Help Outside of Office Hours:

Free tutoring is available for students who need help with their math courses.
The Math Skills Center, located in Binnion 328, is open: Mon & Wed: 10am – 8pm; Tues & Thurs 10am – 6pm; & Fri 10am – 2pm.

The Academic Success Center offers tutoring in the library, as well as Supplemental Instruction. Their hours can be found on the university web site. Also, each student has available tutoring hours through the online tutoring service, tutor.com. Additional details can be found here: https://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/tutorInfo/default.aspx

Online Tutoring: Each student receives 3 free hours from www.tutor.com/tamuc. Use your MyLeo Log in and Password to access this. You can contact your instructor if you need additional free online tutoring hours.

The Mach III/TRIO Program is available for students who qualify for additional resources, such as private tutoring. In order to qualify, students must meet certain conditions, such as being a first-generation college student. For more information, contact TRIO at 903-886-5833 or in the Halladay Student Services building, Room 300.

GRADE REPORTING FOR FIRST YEAR STUDENTS: Grades for students in freshmen level classes will be reported to the Registrar's Office at the end of the fifth week of class during the fall and spring semesters. The Registrar's Office will report grades to students, Advising Services, Academic Departments (faculty advisors) and mentors. This procedure will allow students to be knowledgeable about their academic progress early in the semester. The university, through Advising Services, faculty advisors and mentors, will take steps to assist students who may be having trouble to focus on improvement and course completion. Early intervention for freshman students is designed to communicate to students the University's interest in their success and willingness to participate fully to help students accomplish their objectives.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by East Texas A&M 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

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.

Please use email or visit the instructor during office hours. The instructor will make every effort to respond by the next business day at the latest. You can also visit with the instructor before or after class, but meetings during this time may be cut short to help all students.

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 POLICIES

Missed tests will not be made up after the grades have been returned to the class, but documented absences will be accommodated through other means agreed upon with the instructor. Tests may be taken early if an approved absence is expected and a time arranged with the instructor**. Prompt arrival at test time will maximize available time and improve performance.**

A missed quiz can be made up during the professor's office hours until the next quiz or test. Should a documented need arise due to multiple absences it will be considered on a case-by-case basis.

Personal electronic devices and laptops will not be allowed during exams or quizzes. Causing a distraction or creating a barrier to learning for other students will be grounds for banning of device use, but typically devices will be allowed during 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.

The *syllabus/schedule are subject to change.*

University Specific Procedures

Public Health Policy

Students should not attend class or on campus gatherings 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. Though the instructor will plan an initial method of attendance (in-person), changes may be necessary as the semester progresses.

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

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpages.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf
As mentioned in course requirements, after 10 absences (or equivalent lost time due to tardiness), 2 points will be deducted for each absence.

Academic Integrity

Students at East Texas A&M 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 procedure 13.99.99.R0.
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Artificial Intelligence

East Texas A&M 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.

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Nondiscrimination Notice

East Texas A&M 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.

Counseling Services

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 www.tamuc.edu/counsel.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M 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 East Texas A&M 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.
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.

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
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/

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COURSE OUTLINE / CALENDAR

1/14	Syllabus, Review Factoring, Exponent Rules, Log Rules, Intro of MyMathLab & D2L, & 9.1	
1/21	9.2 & 9.3 – Limits & Continuity	**January 20 MLK Day**
1/28	9.4 & 9.5 – Derivatives	January 28 Quiz 1 (Tuesday)
2/4	9.7 & 10.2 – Marginal Analysis & Exponentials	February 4 Quiz 2 (Tuesday)
2/11	10.3 – Derivative Rules & Review for Exam 1	
2/18	Exam 1 & 10.4 – Chain Rule	**February 18 Exam 1 (Tuesday)**
2/25	10.7 & 11.1 – Elasticity & 1st Derivative Graphs	February 27 Quiz 3 (Thursday)
3/4	11.2 & 11.4 – 2nd Derivatives & Curve Sketching	March 6 Quiz 4 (Thursday)
3/11	**Spring Break**	**March 11 & 13 Spring Break**
3/18	11.5 & 11.6 – Extrema & Optimization	
3/25	Review for Exam 2 & Exam 2	**March 27 Exam 2 (Thursday)**
4/1	12.1 & 12.2 – 12.1 – Antiderivatives & Integration by Substitution	
4/8	12.4 & 12.5 – Definite Integrals & Fundamental Theorem of Calculus	April 8 Quiz 5 (Tuesday)
4/15	13.2 & 14.2 – Applications & Partial Derivatives	April 15 Quiz 6 (Tuesday)
4/22	Review for Exam 3 & Exam 3	**April 24 Exam 3 (Thursday)**
4/29	Catchup & Review for Final Exam	
5/8	**Final Exam – 10:30am – 12:30pm**	**May 8 Final Exam**

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