Please, click on the A&M-Commerce Covid 19 Information, https://new.tamuc.edu/coronavirus/ following link to access

MATH 2312.004, & PRE-CALCULUS

COURSE SYLLABUS: **Fall 2024**

INSTRUCTOR INFORMATION

Instructor: Aditi Ghosh
Class: **Tue, Thurs 3:30p-4:45p, BIN 329**
Office Location: 303 Henderson
Office Hours(face to face, zoom (only in case you cannot be present in my office)): T,Th: 10.45am - 12:30 pm, 2pm -3:30 pm and and by appointment.

Office Phone: **9038865508**
Office Fax: 903-886-5945
University Email Address: **Aditi.Ghosh@tamuc.edu**
Preferred Form of Communication**: email, zoom within 24 hrs in weekdays**
Communication Response Time: 24 hrs

COURSE INFORMATION

Textbook Required: Precalculus, 8th Edition, by Stewart, Redlin, and Watson. ISBN 978-1-305-07175-9. Parts or all of the following chapters will be covered: 1, 2, 5, 6, 7, 8, and 11. We may occasionally cover other activities or projects, not in the text. **Book is available in Webassign which will be used for homework.**

Graphing calculator TI 83/TI 84 or equivalent is 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.

The *syllabus/schedule are subject to change.*

Course Description

In-depth combined study of algebra, trigonometric functions and their graphs; radian measurement; solution of triangles; identities; logarithmic and exponential functions; trigonometric equations; applications of trigonometry; conic sections and their graphs and other topics for calculus readiness.
Prerequisite: High school geometry and two years of high school algebra or Math 1314.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Demonstrate and apply knowledge of properties of functions.
2. Recognize and apply algebraic and transcendental functions and solve related equations.
3. Apply graphing techniques to algebraic and transcendental functions.
4. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
5. Prove trigonometric identities.
6. Solve right and oblique triangles.

Core Objectives:

- *Critical Thinking:* Students will be able to analyze, evaluate, or solve problems when given a set of circumstances or data. This common core learning objective will be assessed on the final exam using key questions that will fulfill these objectives.
- *Communications:* In written, oral, and/or visual communication, Texas A&M University - Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure. This common core learning objective will be assessed using class activities or projects which involve class discussion.
- *Empirical and Quantitative Skills:* Students will be able to understand and utilize mathematical functions and empirical principles and processes. This common core learning objective will be assessed using in class discussion and projects, homework, and final exams.

COURSE REQUIREMENTS

Instructional Methods : Face to face lecture in class

Student Responsibilities or Tips for Success in the Course

Students are expected to work 6 to 8 hrs after class for this course. Cell phones unless permitted by instructor are not to be used during class so as to maintain a learning environment in the class room.

.

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

Total points corresponding to the final letter grades
A = 451- 500 Points
B = 401- 450 Points
C = 351- 400 Points
D = 301- 350 Points
F = 300 & > Points

Weights of the assessments in the calculation of the final letter grade.

Assignments	15%
Quizes	20%
Class Activity	5%
Midterm Exams	30%
Final Exam	30%
TOTAL	100%

The *syllabus/schedule are subject to change.*

Assessments

Assignment on Webassign. Use class key **given in D2L Announcement** to register for the book and homework. No late HW will be collected. One-two lowest assignment and quiz will be dropped for the Final grade.

Quiz : Weekly Quizes from materials taught in class. Any problem taught in class or done in HW is a fair question for the quiz. No late quiz will be collected or scheduled unless university excused absence.

Class Activity: Weekly class activity will be conducted every week on lessons taught in class. No late activity will be collected or scheduled unless university excused absence.

Exam-1: October-2nd week, dates to be decided in class
Exam 2: November-3rd week, dates to be decided in class

No late Exam to be scheduled unless there is a university excused absence. Grade 0 will be awarded for no show in exam without university excused absence.

Finals: **DEC 12th 1.15-3.15 pm**

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

Zoom Tamuc

ACCESS AND NAVIGATION

The *syllabus/schedule are subject to change.*

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

Interaction with Instructor Statement

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

The *syllabus/schedule are subject to change.*

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

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

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: https://www.britannica.com/topic/netiquette

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

AI use in course

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).

The *syllabus/schedule are subject to change.*

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

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
Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

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

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

The *syllabus/schedule are subject to change.*

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
Texas A&M University-Commerce
Velma K. Waters Library Rm 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.

The *syllabus/schedule are subject to change.*

Department or Accrediting Agency Required Content

COURSE OUTLINE / CALENDAR

Week 1 Functions and Graphs
Week 2 Average Rate of Change, Linear Functions and Models, Transformations
Week 3 Combining Functions, One-to-one Functions and their Inverses, Quadratic Functions
Week 4 Polynomials Functions and their Graphs, Dividing Polynomials, Zeros of Polynomials
Week 5 Complex Numbers, Complex Zeros of Polynomials
Week 6 Rational Functions, Polynomial and Rational Inequalities
Week 7 Exponential and Logarithmic Functions
Week 8 Logarithmic Functions, Exponential and Logarithmic Equations and Models
Week 9 Angle Measure, Right Triangle Trigonometry , Unit Circle

Week 10 Trigonometric Functions of Real Numbers of Angles, Trigonometric Graphs
Week 11 Trigonometric Graphs, Inverse Trigonometric Functions, Harmonic Motion
Week 12 Law of Sines, Law of Cosines
Week 13 Trigonometric Identities, Trigonometric Formulas
Week 14 Trigonometric Formulas, Trigonometric Equations
Week 15 Polar Coordinates, DeMoivre's Theorem
Week 16 Final Exam

The *syllabus/schedule are subject to change.*