



Syllabus: MAT 187– PRECALCULUS

Course Information

Course Title: PRE-CALCULUS
Course Prefix/Number: Math 187
Prerequisite: Math 151
Semester: Summer 2023
Class Days/Times: Online

Credit Hours: 5

Instructor Information:
Engr. ZORAYDA AGUS
MaEd Mathematics

Phone/Voice Mail:
E-mail: zagus@tocc.edu
Office location: SCAC / Virtual
Office hours: By appointment

Course Description

College-level algebra and trigonometry. Includes equations, algebraic functions, inequalities, systems, conic sections, sequences and series, trigonometric functions, polar form, and partial fractions. Also includes intensive preparation for analytic geometry and calculus.

Course Objectives: During this course students will: ○

- Employ critical thinking skills to solve mathematical problems
- Analyze mathematical models of real-world setting, regression analysis, rates of change and the use of current technology,
- Apply higher order thinking to solve and understand problems involving real-world applications
- Identify real numbers and algebraic expressions
- Solve complex numbers; geometry applications and trigonometric functions; major topics include such as sequences, series and limits, conic sections, matrices, vectors, polar coordinates, probability, and an introduction to calculus and limits.
- Factor polynomials using advanced techniques and solve related equations.

Student Learning Outcomes

After completion of the course students will be able to:

- Write and solve functions that model a real-world applications
- Solve linear, absolute value, quadratic, rational, and radical equations, linear and absolute value inequalities, and linear systems in two and three variables.
- Graph linear, quadratic, and polynomial functions
- Employ critical thinking skills to solve mathematical problems
- Analyze mathematical models of real-world setting, regression analysis, rates of change and the use of current technology,
- Apply higher order thinking to solve and understand problems involving real-world applications

Course Structure

This course will be delivered through the computer using ALEKS.

Students are expected to log in/ work on Aleks.com Math assignments for a minimum of 8 hours per week. This is a self-paced curriculum.

Course Learning Materials and Textbook Information

Texts and Materials: The text used will be on the Aleks program. Students must purchase an electronic text. All material needed will be in the ALEKS Program.

Evaluations and Grading & Assignments:

90 and above is an A

80 - 89 is a B

70 - 79 is a C

60 - 69 is a D

Under 60 is Failing

Your grade will be determined by the following:

<i>Evaluation and Grading & Assignments:</i>	
Attendance/Discussion/Classwork	25 %
Midterm/Final Exams	25%
Aleks Time/Weekly Goals	25%
Aleks Pie Progress Chart	<u>25 %</u>
Total	100%

Apache Cultural Component

San Carlos Apache College/TOCC is in the process of developing culturally relevant curriculum and coursework in Apache history, culture, and language. Student and community feedback will guide this process. All SCAC instructors will find ways to incorporate culturally relevant topics and materials into their courses as appropriate.

Policies and Expectations

Attendance Policy / Virtual Class

Log on/work on Aleks assignments for a minimum of 8 hours per week. The best way to learn math is to do math every day. The more you log on/ and do virtual practice the faster your skills will grow. The Aleks program will periodically test your skill to assess progress. You may find you are repeating items you have previously covered because you did not pass the assessment item. Be patient you will succeed. Some topics are easy some are hard. The program is presented to each in an individual way, depending on your skills and abilities. Students are expected to be on different topics. This is a self-paced curriculum.

Academic Integrity:

Violations of scholastic ethics are considered serious offenses by San Carlos Apache College. Students may consult the SCAC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure.

All work done for this class must be your own, or the original work of your group. While you may discuss assignments with other class members, the final written project must clearly be original. You may use work from books and other materials if it is properly cited.

Course Feedback:

All assignments will be graded and returned to the students promptly, typically within a week after the assignment is closed for handing in. Email and phone messages will be returned within two days. A student or the instructor may request a student conference at any time during the semester. Quarterly grade reports will be provided to each student, either in person, by email or via the electronic system of Canvas.

Incomplete Policy

Incomplete (I) grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an Incomplete only if all three of the following conditions are met:

1. The student must be in compliance with the attendance policy.
2. The student must have unavoidable circumstance that would prohibit the student from completing the course.
3. The student must have completed over 75% of the course requirements with at least a "C" grade.

Incompletes are not a substitute for incomplete work due to frequent absences or poor academic performance. Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an F if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the I grade is awarded, is not completed.

Instructor Withdrawals

Students who have missed four consecutive classes (or the equivalent) not submitted any assignments nor taken any quizzes by the 45th day census report, due on [date of 45th day found in Academic Calendar on SCAC website] are assumed NOT to be participating in the class and may be withdrawn at the faculty member's discretion. [faculty members should be clear in their withdraw policy, if you do not withdraw students please note in appropriate sections].

Student Withdrawals

Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by [withdrawal deadline date found in Academic Calendar on SCAC website] if you do not expect to complete the class, otherwise you may receive an "F" grade.

Special Withdrawals (Y) Grade

The "Y" grade is an administrative withdrawal given at the instructor's option when no other grade is deemed appropriate. Your instructor must file a form stating the specific rationale for awarding this grade. "Y" grades are discouraged since they often affect students negatively. Your instructor will not award a "Y" grade without a strong reason.

Equal Access Statement/Disability Accommodations

San Carlos Apache College seeks to provide reasonable accommodations for qualified individuals with disabilities. The College will comply with all applicable regulations, and guidelines with respect to providing reasonable accommodations as required to ensure an equal educational opportunity. This process includes self-identifying as a student with a disability, providing supporting documentation of their disability, and being approved for services through the Disability Resources Office (DRO). It is the student's responsibility to make known to their instructor(s) the student's specific needs within the context of each class in order to receive appropriate accommodations. We will work together in order to develop an accommodation plan specifically designed to meet the individual student's requirements.

For more information or to request academic accommodations, please contact: Anthony Osborn, TOCC Disabilities Resource Coordinator, aosborn@tocc.edu, or 520-383-0033 for additional information and assistance.

Title IX

San Carlos Apache College encourages each student to have the knowledge and skills to be an active bystander who intervenes when anyone is observed or being harassed or endangered by sexual violence. Sexual discrimination and sexual violence can undermine students' academic success and quality of life on campus and beyond. We encourage students who have experienced or witnessed any form of sexual misconduct to talk about their experience and seek the support they need.

Conduct: Bias, Bullying, Discrimination and Harassment

San Carlos Apache College faculty and staff are dedicated to creating a safe and supportive campus environment as a core value. Harassment based on age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status will not be tolerated.

Make-up policy:

Late assignments that can be made up will be accepted but will be penalized 25%. Laboratories cannot be made up except in the case of college closure. At the instructor's discretion, extra credit opportunities and optional activities may be provided.

General Education Goals

Apache Wisdom

Learning from the teachings carried on from Apache elders and other community leaders, students will appreciate their unique history, language, and culture as a source of strength for their personal, family, academic, and career aspirations.

Critical Thinking

Approach critical issues, problems, or questions using creativity and deductive reasoning, evaluating evidence, acknowledging diverse perspectives and contexts, and synthesizing one's own viewpoint into ongoing conversations and debates.

Communication

Effectively express ideas orally and in writing. Good communication includes understanding one's audience, organizing one's thoughts, acknowledging and integrating outside sources, using the most recent technology, and following the accepted writing and citation conventions of the particular discipline.

Environmental Literacy

Students will understand their connection to social, cultural, physical, and global environments. Students will consider and evaluate strategies for cultural, community, and global sustainability.

COMMUNICATION PLAN

The best way for you to communicate with me is through our Canvas class page. You may also email me at zagus@tocc.edu

LOGIN TO CANVAS/ ALEKS.COM:

Plan to log in and work online between Monday to Friday. Due date is Friday at the end of the business hours, every week for weekly Math goals, discussion, and/or reflections. It works best if you set up a consistent weekly schedule for working on this class. Posting of grades will be done weekly.

Kindly treat this schedule with respect, as if you were setting aside the time to attend an in-person class in the building. Whenever you enter the Canvas site, check the Announcements and your mailbox. Print out your syllabus and calendar and look at them frequently.

Check the Aleks website regularly, and work on at least five assignments/topics for eight hours weekly. You are required to login for about eight hours per week or roughly an hour per day. To get at least a passing grade, students must have worked on their Aleks Math assignment for at least fifty hours (logged/worked on) for the semester. Please be reminded that you are working on a self-paced curriculum.

EMAIL MESSAGES:

Your inquiries, concerns and comments via email, voicemail and sent messages will be responded within 24 hours on weekdays, and within 48 hours on weekends. If this is not the case and you have not received any response from me, due to some technology issues or internet concerns, then you need to *resend* your email, with the new subject heading. If your concern is related to registration (withdrawal or dropping), then please reach out to the college office.

In your email and other correspondence, kindly include the course name and section number, your full name, and the detailed inquiries or concerns. On your subject in the email/messages, please put the following: MATH ___, Section ___, Name, Concerns.

For example: MAT082_MW_Jane_Doe_Quiz grade

It is pertinent that you indicate your course and section for easy reference in your email or correspondence, and also for immediate response to your query.

PARKING LOT (Forum):

The “Parking Lot” or Muddle Forum is our venue for inquiries, comments and questions on any topic which may or may not be Mathematics- related. I will address the query based on our grading schedule or within 24 hours depending upon the urgency or risks. No putdowns, no vulgar language or profanity in your questions, comments or statements. Similarly, positive language and constructive statements are highly encouraged. If you have anything that is personal and confidential, then, kindly use my phone or direct message/ email me. Please observe the proper netiquette rules.

We all want a highly engaging Mathematics class. Your attendance, engagement and active participation are greatly encouraged for a successful semester!

All the best,

Professor Zorayda P. Agus

Mathematics Lecturer

MaEd Mathematics, MSIE

Contact information:

Email: zagus@tocc.edu