

Syllabus: MAT 187– PRECALCULUS



Course Information

Course Title: PRE-CALCULUS
Course Prefix/Number: Math 187
Prerequisite: Math 151
Semester: Summer 2022
Class Days/Times: Online with Zoom

Credit Hours: 5

Instructor Information:
Engr. ZORAYDA AGUS
MaEd Mathematics
MS Industrial Engineering,
PhD Educational Management
(units)

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 6 hours per week. This is a self-paced curriculum.

Course Learning Materials and Textbook Information

<p>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.</p>

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:

Evaluation and Grading & Assignments:	
Class attendance/ Virtual Meetings	10%
Midterm/Final Exams	20%
Weekly Time/Progress Goal (>7 topics)-	<u>70%</u>
Total	100%

Apache Cultural Component

San Carlos Apache College 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

You are expected to login to class on Zoom Meeting time and be prepared to participate. Four unexcused absences may result in withdrawal and a “W” or “Y” will be recorded. You may request to be excused from class for religious observances and practices, for illness, for school or work-related travel or for personal or family emergency. If you will be absent, please notify the instructor as soon as possible.

Students are expected to attend virtual sessions via Zoom meeting as scheduled. Log on/work on Aleks assignments on 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 at different topics.

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.

Classroom Behavior (Virtual)

1. Follow all acceptable behavior as stated in the Student handbook and Student Code of Conduct
2. Mute yourself except when you have the permission to speak or during class discussions
3. Raise your hand for permission to speak or leave the class
4. Keep your video on for attendance purposes and so others can see you when you speak
5. Avoid distracting backgrounds or actions ○ Engage positively in all activities
6. Background pictures need to be college appropriate ○ Actual first and last names must be displayed at all times on your screen ○
7. Email, phone, or text teacher right away if you are having issues logging into class. Contact teacher during his/her office hours for extra help or clarification on lessons you do not understand.
8. Complete all work assigned to you on or before the due dates.
9. Cellphones should be turned off during class, unless the instructor is allowing students to use their tools (calculator, internet access).

COMMUNICATION PLAN

Please attend based on your schedule. Our Zoom live class is our venue to discuss important matters on our course content, as well as to model and discuss problem-solving techniques, explore math tools and apply effective strategies. However, in Aleks.com, our Learning Management System for Mathematics, online learning assignments should be done before or after our Zoom live class. We also use Aleks during our Zoom live class for special practice exercises and featured math assignments. I am most of the time online every school day except Saturdays and Sundays.

LOGIN TO CANVAS/ALEKS.COM:

Plan to check in at least three times per week, especially Monday to Wednesday. It works best if you set up a consistent weekly schedule for working on this class.

ZOOM LIVE CLASS:

If you have a scheduled Zoom meeting, then kindly treat this schedule with respect, as if you were setting aside the time to attend an in-person class in the building. Don't get left behind...chances are you will never be able to catch up. Print out your syllabus and calendar and look at them frequently. Every time you enter the Canvas site, check the Announcements and your mailbox.

Every time you attend the Zoom live class, check the Aleks website too, and work on at least five assignments/topics/hours. You are required to login for about six hours per week or roughly an hour per day. In order to get at least a passing grade, students are required to have worked on their Aleks Math assignment for at least fifty hours (logged/worked on) for the entire semester.

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. 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: MAT187_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 (Muddle 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, MS Industrial Engineering

Contact information:

Email: zagus@tocc.edu ; **Personal Email:** Zorayda.agus05@gmail.com

Work Phone: 928-475-3522 (Monday-Friday available 7:45 am- 9 am; 2:30 pm- 3:30 pm only)