![Scottsdale Community College - A Maricopa Community College logo]

Scottsdale Community College (SCC) credits the diverse Indigenous people still connected to the land on which we gather. Our college resides on the ancient lands of the Huhugam, ancestors to the O'odham and tribal territory of the Salt River Pima-Maricopa Indian Community (SRP-MIC). SRP-MIC is a federally recognized tribe - one of 22 Arizona Indigenous tribes and one of 574 across the United States. Attached to this physical space is a painful history of forced removal and the resulting intentional genocide of its Indigenous people. We remain appreciative of our ability to teach, learn and serve in a space of such importance and reverence.

SCC acknowledges the land on which we are situated today as the traditional land and home of two distinct tribal nations: the Onk Akimel O'odham (Pima) and the Xalychidom Piipaash (Maricopa). We take this opportunity to thank the original caretakers of this land, the Huhugam. We offer our respect to all O'odham and Piipaash of the past, present and future.

Course Information

Semester & Year:	Spring 2025
Course Title:	Precalculus
Course Prefix & Number:	MAT 187
Section Number:	30069
Credit Hours:	5
Start Date:	January 13th, 2025
End Date:	May 9th, 2025
Class Meeting Location:	CM 465
Meeting Days:	Monday and Wednesday
Meeting Times:	12:30 PM – 2:40 PM

Course Format

This course is in-person. The start date for the course is January 13th, 2025. The end date for the course is May 9th, 2025. The class is scheduled to meet from 12:30 PM to 2:40 PM.

Instructor Information

Instructor: Gabriel Tarr

Email: gabriel.tarr@scottsdalecc.edu

Phone: 480-425-6746

Office Location: CM 419

Office Hours: Monday and Wednesday 11:30 AM - 12:30 PM

                     Tuesday and Thursday 2:30 PM – 4:00 PM

Course Description

Topics in algebra and trigonometry in preparation for calculus.

Prerequisites

A grade of C or better in MAT 151 or equivalent.

Course Competencies

1. Demonstrate conceptual understanding of asymptotes, continuity, end-behavior, rates of change of polynomial, absolute value, rational, radical, exponential, logarithmic, logistic, power, composite, and piecewise functions and complex roots of polynomial functions in preparation for Calculus. (I)
2. Determine the length of an arc, area of a sector, and linear and angular velocity. (II)
3. Use the unit circle to determine angle and reference angle measures in radians and degrees and convert between them. (III)
4. Determine triangle measurements using trigonometric ratios and law of sines and law of cosines. (IV)
5. Analyze (graphically, numerically, algebraically, and verbally) the trigonometric functions and their inverses. (V)
6. Use inverse trigonometric functions in solving equations. (V)

7. Verify trigonometric identities. (VI)
8. Use identities in solving trigonometric equations. (VI)
9. Solve applications involving vectors, their components, and visual representations. (VII)
10. Model real world situations graphically, numerically, algebraically, verbally, and interpret solutions using a variety of mathematical techniques. (VIII)Compare alternate solution strategies, including technology. (I, II, III, IV, V)

Texts and Course Materials

Required Texts: There are no required texts for this course.

Online Course Management System: This course uses MOER, an Online Course Management System developed by David Lippman and the State of Washington. All of the Online Homework will be accessed through this system. Grades will also be posted through this system. The software is free to use and can be accessed here at moer.maricopa.edu. Failure to enroll in MOER and complete the required syllabus quiz by the due date will result in being withdrawn from the course.

Course ID: **20610**   **Enrollment Key**: **30069**

Calculator Requirement: A graphing calculator or graphing calculator app is required for this course. The instructor strongly recommends a TI-83/84. Calculators with QERTY keyboards or those that perform symbolic algebra (such as the TI-92/TI89) are not allowed. You are expected to bring your calculator to each class session. Your cell phone may NOT be used as a calculator on your exams. The SCC Media Center will rent calculators this semester on a first-come basis. Go to the Media Center located in the Information Technology (IT) Building to rent a graphing calculator. Rentals are first-come, first-served and there are limited quantities.

Computer Access, Webcam, Microphone, and Email: You will need regular access to a computer with online capabilities in order to complete online assignments. You will need access to a webcam and a microphone attending the optional virtual office hours through Zoom.

Course Technologies

View the Accessibility Statements & Privacy Policies of technologies used in this course.

Maricopa Systems

This course uses key Maricopa systems for course management and communication.

- Canvas Learning Management System
- Student Maricopa Gmail Account
- Maricopa Open Educational Resource Learning System (MOER)

Synchronous Communication Tools

This course implements the use of web conferencing and/or other synchronous course tools.

- Zoom for optional virtual office hours

Streaming Media/Audio/Video Tools

This course uses webcasting, lecture capture systems, YouTube, and/or other streaming media services.

- YouTube

Student Assignment Tools

This course requires students to participate in or submit assignments using desktop or cloud-based applications.

- Google Products
- Microsoft Office 365
- Screencast-O-Matic
- Adobe Creative Cloud

Course Policies

The following are policies specific to this course. Students are also responsible for the college policies included on the [Student Regulations](#) page of the Maricopa Community College District website.

Withdrawing from the Course: If it becomes necessary to withdraw from the course, you should speak with admissions office and fill out the proper forms there. There is a last day to withdraw without an instructor's signature. It is not guaranteed that you will be able to withdraw from the course after this date.

Math/Science Tutor Center: Free online tutoring is available online at the following link. http://www.scottsdalecc.edu/students/tutoring/math. You will need to know your Maricopa gmail account ID and password, and self-enroll in a Canvas course. Details can be found at the link above.

Email and Contacting the Instructor: It is HIGHLY inappropriate for your family members, guardians, private tutors, former teachers, or any other third-party actors to contact your instructor to discuss anything related to your academic standing in this class. The instructor is more than happy to discuss your academic standing with YOU (the student), but emails, messages, and phone calls from third-party actors on your behalf will not receive a response (except in extreme circumstances as determined by the instructor). In certain cases, these third-party actors may be blocked from contacting the instructor.

Be respectful of your classmates and the instructor. Don't be a jerk!

Grading Standards & Practices

Grade Scale

Letter Grade	Percent Interval
A	90 – 100%
B	80 – 89.9999%
C	70-79.9999%
D	50 – 69.9999%
F	Below 50%

Grade Distribution

Exams (60% of the course): Your exams are meant to test your PERSONAL mathematical aptitude of topics covered prior to each exam in this class, but occasionally you will be required to draw from your PERSONAL aptitude in topics covered in pre-requisite courses, your real-life experiences, and common sense. There will be two exams in this course. The dates can be found at the end of this syllabus.

Make up exams will only be granted under extreme circumstances. You should meet with your instructor AT LEAST TWO WEEKS BEFORE THE SCHEDULED EXAM to discuss arrangements. This discussion must take place BEFORE the scheduled date of

the exam. Failure to adhere to this policy may result in a 0 for the exam and withdrawal from the course.

Homework (20% of course grade): You will be expected to complete regular homework assignments using MOER. Assignments and due dates will be posted in MOER. It is to your benefit to keep up, however, if you miss a due date, you have 255 late passes that you are able to use with no penalty to your homework grade. Each late pass only extends the due date for 24 hours, so that 255 goes quickly if you fall too far behind.

Quizzes (15% of course grade): Every few weeks at the end of class, you will be given a quiz covering recent course material. For most quizzes, you will have access to your own notes and your prior graded quizzes, but each quiz is timed and you only have 15-20 minutes to complete it. There are no make-up quizzes.

Participation (5% of course grade): Participation is useful in determining how well students are comprehending the material. The more people participate in class and demonstrate how well they are working with the material, the easier students may find the exams to be.

Participation means working problems at the board, explaining your solutions (not just giving answers) to the class, asking questions of others' solutions, answering questions in class, collaborating with other students during class.

In addition, any student may engage in <u>respectful</u> discussion about how current scientific, social, political, or economic events relate to the content we have covered recently in class, or engage in respectful discussion about how something personal in their life relates to the content we have covered recently in class.

Response Time

Students can expect a response time of up to 24 hours (though likely sooner) for the instructor to respond to messages sent via MOER or email. This 24-hour window does not include weekends, holidays, or official district breaks. Students can expect assignments to be graded within 3 class meetings of the assignment's due date.

Attendance Policy

Any student who misses more than three (3) classes may be withdrawn from the course. Any student who misses an exam may be withdrawn from the course. You are responsible for learning any material covered during an absence or tardiness.

Instructional Contact Hours (Seat Time)

This is a five (5) credit-hour course taught in 16 weeks. The typical student should plan to spend at least 15 hours per week on in-class direct instruction and out-of-class coursework (homework, studying, etc.). **Some students may require more or less time per week depending on ability, aptitude, and content.**

Learning Tools and Your Privacy and Security

SCC utilizes a variety of software applications and web-based tools operated by third party vendors to support student learning. To allow student access to the application, site or tool, certain identifiable information may be required to establish a user name or password, and submit work and/or download information from these tools. Inherent with all internet-based tools, there is a risk that individuals assume when electing to use these tools, as they may place information at risk of disclosure.

To use learning tools responsibly, please observe all laws and the Maricopa Community College District Student Conduct Code, such as copyright infringement, plagiarism, harassment or interference with the underlying technical code of the software. As a student using a learning tool, you have certain rights. Any original work that you produce belongs to you as a matter of copyright law. You also have a right to the privacy of your educational records. Your contributions to learning tools constitute an educational record. By using the tool, and not taking other options available to you in this course equivalent to this assignment that would not be posted publicly on the internet, you consent to the collaborative use of this material as well as to the disclosure of it in this course and potentially for the use of future courses.

Tentative Course Schedule

Date	Topic or Section
Monday, January 13, 2025	Introduction and Geometry Review
Wednesday, January 15, 2025	Triangles and Trig Functions
Monday, January 20, 2025	**Academic Holiday**
Wednesday, January 22, 2025	Triangles and Trig Functions (**Quiz**)
Monday, January 27, 2025	Angles of Rotation and the Unit Circle
Wednesday, January 29, 2025	Angles of Rotation and the Unit Circle
Monday, February 3, 2025	Graphs of Trig Functions
Wednesday, February 5, 2025	Graphs of Trig Functions (**Quiz**)
Monday, February 10, 2025	Inverse Trig Functions
Wednesday, February 12, 2025	Inverse Trig Functions
Monday, February 17, 2025	**Academic Holiday**
Wednesday, February 19, 2025	Trig Identities and Proofs
Monday, February 24, 2025	Trig Identities and Proofs (**Quiz**)
Wednesday, February 26, 2025	Law of Sines and Law of Cosines
Monday, March 3, 2025	Law of Sines and Law of Cosines
Wednesday, March 5, 2025	**Midterm Exam**
Monday, March 10, 2025	**Spring Break**
Wednesday, March 12, 2025	**Spring Break**
Monday, March 17, 2025	Vectors
Wednesday, March 19, 2025	Vectors
Monday, March 24, 2025	Overview of Functions
Wednesday, March 26, 2025	Overview of Functions (**Quiz**)
Monday, March 31, 2025	Equations and Factoring
Wednesday, April 2, 2025	Equations and Factoring
Monday, April 7, 2025	The Fundamental Theorem of Algebra
Wednesday, April 9, 2025	The Fundamental Theorem of Algebra (**Quiz**)
Monday, April 14, 2025	Limits, Continuity, and End Behavior
Wednesday, April 16, 2025	Limits, Continuity, and End Behavior
Monday, April 21, 2025	Rates of Change and Behavior of Graphs
Wednesday, April 23, 2025	Rates of Change and Behavior of Graphs (**Quiz**)

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Date	Topic or Section
Monday, April 28, 2025	Pre-Calculus Day
Wednesday, April 30, 2025	Review for Final Exam
Monday, May 5, 2025	**Final Exam**
Wednesday, May 7, 2025	**No Class Meeting**

Students are responsible for the information contained in this syllabus, the Syllabus page in your Canvas course and the **College Policies & Student Services** page found in the First Steps module of your Canvas course. Students will be notified by the instructor of any changes in course requirements or policies.