

Course Information

Semester & Year: Spring 2025

Course Title: Precalculus

Course Prefix & Number: MAT 187

Section Number: 29296

Credit Hours: 4

Start Date: January 13, 2025

End Date: May 9, 2025

Room Number: CM 467

Meeting Days: Tuesday

Meeting Times: 10:30 – 12:35 am

Course Format

The format for this course is hybrid from January 12, 2025 to May 9, 2025.

Instructor Information

Instructor: Carla Stroud

Email: Carla.Stroud@scottsdalecc.edu

Phone: (480) 423-6112

Office Location: CM 424

Office Hours:

In-Person Mon/Wed 12:00 – 1:00 pm

Tues 1:00 - 2:00 pm

Other times may be available by appointment

Online Thurs 12:00 – 2:00 pm (by appointment only)

Course Description

Topics in algebra and trigonometry in preparation for calculus.

Course Notes: Students may receive credit for only one of the following: MAT182, or MAT187, or MAT188.

Prerequisites

A grade of C or better in MAT15+, or an appropriate district placement.

Course Competencies

- 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.
- 2. Determine the length of an arc, area of a sector, and linear and angular velocity.
- 3. Use the unit circle to determine angle and reference angle measures in radians and degrees and convert between them.
- 4. Determine triangle measurements using trigonometric ratios and law of sines and law of cosines.
- 5. Analyze (graphically, numerically, algebraically, and verbally) the trigonometric functions and their inverses.
- 6. Use inverse trigonometric functions in solving equations.
- 7. Verify trigonometric identities.
- 8. Use identities in solving trigonometric equations.
- 9. Solve applications involving vectors, their components, and visual representations.
- 10. Model real world situations graphically, numerically, algebraically, verbally, and interpret solutions using a variety of mathematical techniques.

Texts and Course Materials

Textbook: Students can view the textbook for free from the MOER website.

Calculator: A graphing calculator is **required** for this course. A TI-83, TI-83+, or TI-84 are recommended. Calculators with QWERTY keyboards or those that do symbolic algebra (such as the TI-92 or TI-89) are NOT allowed. Your cell phone may NOT be used as a calculator on an exam.

Computer Access: Students will need regular access to a computer with internet connection to complete online assignments. Students are responsible for completing all assignments on time regardless of any computer issues that may occur.

Course Technologies

View the <u>Accessibility Statements & Privacy Policies</u> 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)

Streaming Media/Audio/Video Tools

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

YouTube

MOER Account

We will be using MOER (https://moer.maricopa.edu) as the course learning management system. The syllabus, schedule, announcements, assignments, grades, and course materials/textbook will be available through MOER. Students who do not create MOER account by the end of the first day of class will be withdrawn from the course. Students can find information on how to log in to the course on Canvas.

Grading Standards & Practices

Grading Weights		Grading Scale
Online Lessons	10%	A 90% - 100%
Lesson Quiz	10%	B 80% - 89%
Online Homework	10%	C 70% - 79%
Online Tests	10%	D 60% - 69%
Midterm & Final	60%	F 59% or less

Online Lesson: The Online Lesson is your direct instruction on the content and includes videos along with online questions. You will get three attempts at each question and will have to try a new similar question to try to get full credit. The Online Lesson must be completed BEFORE the lesson is reviewed in class. It is strongly recommended that you take notes in a notebook as you will be able to use the notebook during the Lesson Quiz given in class.

Lesson Quiz: At the start of class, students will be given a quiz covering the concepts in the Online Lesson. You will be able to use your Online Lesson notes while taking the quiz. **No make-up quizzes will be given, but the lowest quiz score will be dropped.**

Online Homework: Online homework assignments will be due regularly in MOER. Homework questions can be posted to the FAQ forum for the instructor or other students to answer or asked in class. You will get three attempts at each question, then you will have to try a new similar question for an attempt at full credit. The exam reviews will count towards your homework score.

LatePasses: LatePasses can be used on Online Lessons and Online Homework. Any problems completed during the LatePass extension will result is a 20% penalty. **Online Lesson and Homework can only be extended until the corresponding exam.**

Online Unit Test: The Online Unit Test gives you the opportunity to demonstrate your understanding of the material. You will have two chances per question and will have a 30% penalty on the second attempt. You will have the opportunity to retake two tests in an attempt to improve your score. Note, you can NOT use a LatePass for the Online Unit Tests.

Exams: There are two exams in this class and both exams must be completed by the deadlines listed in MOER. Make-up exams will be granted in the case of an official excused absence (see your student handbook for details) or in extreme circumstances at the discretion of the instructor. You must contact the instructor via email or phone and obtain approval **BEFORE** the missed exam. Failure to adhere to this policy may result in a grade of zero for the missed exam or a reduction in total points possible.

Course Policies

The following are policies specific to this course. Students are also responsible for the college policies included on the <u>Student Regulations</u> page of the Maricopa Community College District website.

Academic Dishonesty

When academic dishonesty is suspected, students may be asked to describe their solution method, redo a similar problem, or redo the exam. Students who are found to be cheating on an exam will receive a 0 for the exam.

Course Grading Policy

Exam scores are non-negotiable and extra-credit is not offered in this course. Discussions about how the exam is graded will not be discussed via email. Instead, students are encouraged to meet with the instructor to review their exam performance. Final course grades are calculated using the scale listed in the syllabus (rounded to the nearest percent) and are non-negotiable. It is unethical for a student to request their final percentage be rounded up to earn their desired grade.

Generative Artificial Intelligence (AI) Policy

The World Economic Forum defines generative AI as "a category of artificial intelligence (AI) algorithms that generate new outputs based on the data they have been trained on. Unlike traditional AI systems that are designed to recognize patterns and make predictions, generative AI creates new content in the form of images, text, audio, and more." Some examples of generative AI tools include but are not limited to: ChatGPT, Google Bard, Microsoft Copilot, Stable Diffusion, GrammarlyGo, and Adobe Firefly.

In this class, all work submitted must be your own. The use of generative AI tools will be considered academic misconduct (see Administrative Regulation 2.3.11 1.B(b)) and will be treated as such. If you are unsure if the tool or website you are using is a generative AI tool, please contact the instructor for further clarification before using the tool or website.

Student/Instructor Interaction

In this course, you can expect regular and substantive interaction (RSI) that aligns with Scottsdale Community College's mission to provide challenging and supportive learning experiences and the US Department of Education's requirement for regular and substantive interaction (RSI) for online courses. My commitment to your success includes the following:

- Being available during regularly scheduled student support hours as stated in the syllabus.
- Providing regular updates and information about the course, campus events, resources, tutoring services, and opportunities.

- Remind students about reviews and exams.
- Monitoring student academic progress and communicating concerns, as needed.

Response Time

Students can expect the instructor to respond to messages within 24 hours Mon-Thurs and 48 hours Fri-Sun. Messages that don't adhere to the "Netiquette" Rules posted in MOER will not receive a response. Online lessons, homework, and quiz assignments will be graded immediately in MOER and other assignments (forum posts, reflections, etc.) will be graded within 48 hours after submission. Exams will be graded within 4 days of the due date.

Attendance Policy

Students are expected to arrive on time, bring required materials to class, and stay for the entire class period. You may be withdrawn if you have accumulated more than three unexcused absences. Official absences (field trips, sports, jury duty, military duty, and religious holidays) will not count against your total absences. The instructor reserves the right to require appropriate documentation for any type of excused absences. If you miss class, you are responsible for all concepts covered, notes, assignments given, and any announcements made.

Instructional Contact Hours (Seat Time)

This is a five (5) credit-hour course completed in 16-weeks. Plan to spend an average of 14 hours each week on course content and homework.

Math/Science Tutor Center

The Math Center offers **in-person** and **remote** tutoring to students who are currently enrolled in mathematics courses at Scottsdale Community College. Visit their webpage for more information: https://www.scottsdalecc.edu/students/tutoring/math

Online Tutoring

It is highly recommended that you utilize SCC tutors since they are more familiar with SCC coursework, instructor expectations, and assignments. However, if you need to work with a tutor outside regular hours, online and hybrid students have access to the 24/7 online tutoring service Brainfuse. Each student may utilize up to 6 hours of online tutoring per semester and has the option of requesting additional time if needed.

To access Brainfuse and begin working with a tutor:

- Visit the <u>SCC Online Tutoring Services Through Brainfuse</u> page (https://www.scottsdalecc.edu/students/tutoring/online-tutoring)
- 2. Click the Visit a tutor online button
- 3. Enter your MEID and password
- 4. Choose your topic and subject
- 5. Click the Connect button

Please use your time effectively and be prepared with your questions before you connect to a tutor. Tutors and students communicate in real-time so whatever you type, draw, or share on the screen, the tutor sees, and vice versa. You may also want to have screenshots ready if applicable. All Brainfuse sessions are recorded for review later.

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.

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.