

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: Summer 2025

Course Title: Calculus with Analytic Geometry II

Course Prefix & Number: MAT 231

Section Number: 10853

Credit Hours: 4

Start Date: May 27th, 2025

End Date: July 17th, 2025

Note: All times and dates in this syllabus use Mountain Standard Time. Please plan accordingly, especially if traveling outside of Arizona.

Course Format

The course format for this course is On Your Time Online. This is an 8-week course that runs from 5/27/2025 until 7/17/2025. Exams in this course must be taken in a proctored environment by the dates and times listed in this syllabus.

Instructor Information

Instructor: Gabriel Tarr

Email: gabriel.tarr@scottsdalecc.edu

Phone: 480-425-6746

Office Location: CM 419

Office Hours: By Appointment (Virtually through Zoom)

Course Description

Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry, and the analysis of sequences and series.

Prerequisites

A grade of C or better in MAT220 or MAT221 or equivalent.

Course Competencies

- 1. Evaluate indefinite, definite, and improper integrals using various algebraic, trigonometric, and numerical techniques. (I, II)
- 2. Solve applied problems taken from the sciences using integration. (I, II)
- 3. Analyze curves in the plane described using parametric and polar equations. (III)
- 4. Define, classify, and analyze conic sections. (III)
- 5. Determine the convergence or divergence of sequences, series of constants, and power series. (IV, V)
- 6. Compute polynomial approximation and power series representation of elementary functions using derivatives and integrals. (V)
- 7. Compare alternate solution strategies, including technology. (I, II, III, IV, V)
- 8. Communicate process and results in written and verbal formats. (I, II, III, IV, V)
- 9. Justify and interpret solutions to application problems. (I, II, III, IV, V)

Texts and Course Materials

Texts: Active Calculus (2018) by Boelkins, Austin, and Schlicker with ISBN: 978-1724366856. A digital copy of this textbook can be found on MOER for free. You may also purchase the hardcopy from Amazon if you wish, but a hardcopy text is not required.

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: 21086 Enrollment Key: 10853

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 for the optional virtual office hours through Zoom.

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)

Synchronous Communication Tools

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

Zoom (for optional 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 <u>Student Regulations</u> 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

Your grade is NOT a commodity; it has not been purchased with your tuition. You have the right to be graded fairly, but you do NOT have the right to any specific grade. Your grade is not a reflection of you as a person. Your grade is not a measurement of effort, it is an evaluation of PERFORMANCE. This means your grade is dependent upon how well you demonstrate your comprehension of the subject through application and completion of the items listed above in the course competencies. Furthermore, it is immoral to reach out to your instructor about the consequences of not receiving a certain grade in the course. Please do not ask for extra credit or "a few extra points" in order to make a certain grade for scholarships, admittance to a certain program, or athletic eligibility. Emails and messages of this nature will be ignored.

Grade Scale

Letter Grade	Points Range
Α	90 – 100%
В	80 - 89.9999%
С	70 – 79.9999%
D	50 - 69.9999%
F	0 – 49.9999%

Grade Distribution

Exams: 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.

Midterm Exam (30% of course grade): There will be a midterm exam covering the material for module 1 through module 3. The midterm must be completed by 6/20/2025 at 11:59 PM.

Final Exam (30% of course grade): There will be a final exam covering the material for module 4 and module 5. The final must be completed by 7/17/2025 at 6:00 PM.

Exams in the course must be taken in proctored environments. You have two options for taking exams.

Option 1: You may take exams in-person at SCC in a location to be determined. The in-person proctored midterm exam will take place on June 18th, 2025 from 4:00 PM to 6:00 PM. The in-person proctored final exam will take place on July 17th, 2025 from 4:00 PM to 6:00 PM.

Option 2: You may take exams via ProctorU. Please see the Exam Proctoring Tool at the end of this syllabus.

For the midterm exam, you may sign up for any available two-hour timeslot that starts between 8:00 AM on 6/16/2025 and 9:45 PM on 6/20/2025. Look for **Summer 2025 - MAT 231 - Midterm Exam - Tarr** in ProctorU.

For the final exam, you may sign up for any available two-hour timeslot that starts between 8:00 AM on 7/14/2025 and 3:45 PM on 7/17/2025. Look for **Summer 2025 - MAT 231 - Final Exam - Tarr** in ProctorU.

Make-up exams will only be granted under extreme circumstances and is up to the discretion of your instructor. 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.

Homework (20% of course grade): You will be expected to complete regular homework assignments using MOER. Homework will only open after students earn a minimum of 50% on the associated lesson. It will benefit you to write out the homework problems and show your work as if the instructor were grading each assignment by hand. Assignments and due dates will be posted in MOER. It is to your benefit to keep up, however, if you miss a due date on homework, 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 (20% of course grade): Quizzes will cover recent content in the course and occasionally refresher content from Calculus I. Due dates will be posted in MOER. You are welcome to complete quizzes early if you get through the content early. Late

quizzes may be completed, but there is a 20% penalty for any quiz completed after its original due date.

Student/Instructor Interaction

In this course, you can expect regular and substantive interaction (RSI) that aligns with Scootsdale 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:

- Promptly responding to student questions about the course sent via email,
 MOER messaging, or the Canvas inbox.
- Monitoring your academic progress and communicating concerns, as needed.

Response Time

Students can expect a response time of up to 24 hours (not including weekends, holidays, or breaks) for the instructor to respond to messages sent via MOER or email. Students can expect written assignments to be graded within 8 calendar days of the assignment's due date.

Attendance Policy

Any student who falls more than 14 days behind in the course may be withdrawn. Any student who fails to log in to the course and complete work (lesson, homework, quiz) at least once in a 14-day timespan may be withdrawn.

Instructional Contact Hours (Seat Time)

This is a four (4) credit-hour 8-week course. Since this is an accelerated course, the typical student should plan to spend at least 8 hours per week on learning the course content (online lessons) and at least 16 hours per week completing course assignments (homework, quizzes, preparing for exams). The time spent on the course per week may vary depending on personal aptitude and the course content for that week.

Online Tutoring

SCC's tutors are available online to help with your courses. You may work with an SCC tutor remotely using Google Meet, your phone, or email. Visit the <u>Tutoring & Learning Centers</u> page for detailed information on the five learning center's hours and procedures.

As much as possible, 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 now have access to a 24/7 online tutoring service called Brainfuse. Brainfuse provides online tutoring in a variety of academic subjects. Each student may utilize up to 6 hours of online tutoring through Brainfuse 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.

Exam Proctoring Tool – ProctorU

ProctorU allows test-takers to take a supervised exam on demand or by appointment. SCC has adopted ProctorU to provide proctoring services for our online courses. All the exams in this course are proctored, meaning you are supervised live through a webcam and the proctor will have access to your computer using screen sharing technology when you take your exam. Please note that ProctorU requires a room scan prior to all testing sessions.

Students must <u>create an account</u> with ProctorU and <u>download the Guardian Browser</u> onto a personal computer. You should <u>test your equipment</u> before taking the exam to ensure no difficulties will arise on exam day. For your reference, read the <u>System</u>

<u>Requirements for ProctorU</u> and <u>ProctorU Terms of Service</u>. ProctorU is a fee-based service. The college does not pay any of the fees associated with ProctorU.

The College will only pay ProctorU fees for exam appointments made AT LEAST 72 hours (3 full days) prior to the scheduled exam. ProctorU will allow you to schedule exams within 72 hours of your exam, but you will be charged an additional fee.

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.