

Course Information

- Semester and Year: Fall 2026
- Course Title: Calculus and Analytical Geometry 3
- Course Prefix and Number: MAT 240
- Section Number: 18898
- Credit Hours: 5
- Start Date: September 9, 2026
- End Date: December 18, 2026
- Room Number: CM 453
- Meeting Days: MW
- Meeting Times: 5:30 – 7:50 PM
- Class Format: In-Person

Instructor Information

- Instructor: Patricia Dueck
- Email: patricia.dueck@scottsdalecc.edu
- Phone: (480)423-6594
- Office Location: CM 429
- Office Hours: Monday and Wednesday, 4 PM to 5:30 PM in CM 453
 - Live online other days.

Course Description

Multivariate calculus including vectors, vector-valued functions, partial differentiation, multiple integration, and an introduction to vector fields.

Prerequisites and/or Corequisites

Grade of C or better in MAT230 or MAT231

Course Competencies

1. Solve geometry and physics problems using vectors.
2. Analyze the motion of an object using vector-valued functions.
3. Classify and analyze the behavior of functions of several variables.
4. Interpret the geometry of rectangular, polar, cylindrical and spherical coordinate systems.
5. Solve optimization and other applied problems using partial derivatives.
6. Set up and compute double and triple integrals in any order of integration using rectangular, polar, cylindrical, and spherical coordinates.
7. Solve physical problems using line integrals and vector fields.

8. Compare alternate solution strategies, including technology.
9. Communicate process and results in written and verbal formats.

Institutional Learning Outcomes

General Education provides foundational learning experiences that contribute to academic and career success. It is reflected in [Scottsdale Community College's Institutional Learning Outcomes](#): Arts & Humanities Awareness, Career Readiness, Critical Thinking and Problem Solving, Effective Communication, Information Literacy, and Social Responsibility. In MAT 276, the focus will be on developing students' critical thinking and problem solving.

Program Learning Outcomes

Credit-bearing courses at Scottsdale Community College can count toward the completion of a degree or certificate program. Each program has Program Learning Outcomes, which are learned assets that students can claim to have acquired by completing their academic or occupational program at SCC. Program Learning Outcomes can be found on the [Degrees and Certificates page](#) of the SCC Website. For each degree, look under "What You'll Learn."

This course is a General Education course that is foundational to many degree programs and a key component of the Arizona General Education Curriculum (AGEC) certificate program. This course fulfills a mathematics requirement for the [AGEC – S](#) (for Science and Math-based Majors).

Texts and Course Materials

- **Text:** *Multivariable Calculus, 5th Ed.*, McCallum, Hughes-Hallett, Gleason et al. This will be loaned to you by SCC. Please bring your textbook with you to class daily.
- **Graphing Calculator:** A graphing calculator is required for this course. The suggested calculator is the TI-83/84. Please have the calculator for class daily. No Calculators with CAS systems or QWERTY keyboards may not be used.
 - **Calculator Rental for Students:** More information coming...
- **Internet:** The ability to use the internet is required.
- **Computer:** You will need regular access to a computer (with online connection) in order to see Canvas and assignments.
- **Web Cam:** Both video and audio capabilities are necessary in order for you to attend class using WebEx

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.

Second, there are policies that govern this specific course, MAT 240.

Policy on Incomplete: In order to receive an incomplete in the course, the student must have completed at least 90% of the course work and have a passing grade at the time the incomplete is taken.

Policy on Withdraws: This is regular SCC policy on withdraws from a class and will be strictly held to.

- Deadline for Students to Withdraw with Guaranteed Grade of W – End of the 7th week.
- Deadline for Students to Withdraw from a Course (Instructor Signature Required) - Two weeks before the last class period

Use the QR code below to see a full description of deadlines for all types and lengths of courses:



Policy on Student Grades: Final grades are calculated using the scale listed in the syllabus. **FINAL GRADES ARE NON-NEGOTIABLE.** It is unethical to reach out at the end of the semester and request "a few extra points" or discuss the consequences of not earning the grade you want in the class. Messages of this nature will not receive a response.

Policy on Exams using Disability Resource Services (DRS): Students using DRS to assist with this course are responsible for setting up any necessary accommodations prior to taking any assessments. This is only for items for which DRS is needed.

Cell Phones and Etc.: Upon starting class all cell phones and other objects of tech communication need to be turned off. If there is a true emergency call/text you are expecting, let the instructor know before class.

Note: No audio, photos or video of class, instructor or classmates are permitted unless by special request. Photos of work on the boards permitted.

Exams:

- 1) There will be three exams given during the semester (including the final). These exams will involve a mix of mechanical skills and conceptual reasoning. The best possible preparation for the exams is regular attendance and completion of assigned homework.
- 2) Each exam is part in-person, proctored and possibly part take-home, non-proctored exam to be completed under a time limit over a weekend. Information regarding the non-proctored portion will be explained carefully when the first exam of this type occurs.
- 3) There are **no make-up exams** unless you have a valid excuse accompanied with documentation or you have spoken with the instructor before the day of the exam.

- 4) You have **one week** to complete the make-up exam and you may receive a 10% reduction in points regardless of the excuse.
- 5) You may only make-up one exam per semester. The second missed exam will receive a grade of 0 (zero).
- 6) Exams are never curved.
- 7) All exams must be taken in person, in class.

Homework, Quizzes & Projects:

- 1) Homework will be assigned after each class. Students may work together on homework, use AI to check their work. No homework will be collected or graded.
- 2) There also may be group quizzes, or different kinds of individual quizzes at other times in the semester. If you are not in class for these quizzes, you may not make them up.
- 3) Projects may be assigned in class at various times and may be completed in groups.

Final Exam:

The final exam will be taken December 16, 2026 at the same time class is normally held. There will be no make-ups given for the final with the exception of the reasons below, and no finals will be rescheduled for personal reasons, including nonrefundable airplane tickets.

Final Exam Make-up Policy:

The final exam schedule listed in the Schedule of Classes will be strictly followed. Exceptions to the schedule and requests for make-up examinations can be granted only by the Department Chair and for one of the following reasons:

1. religious conflict (e.g., the student celebrates the Sabbath on Saturday)
2. the student has more than three exams scheduled on the same day as the math final
3. there is a time conflict between the math final and another final exam.

If there is a last-minute personal or medical emergency, the student may receive a grade of Incomplete and make up the final within one calendar year. The student must provide written documentation and make up the final within one calendar year. The student must provide written documentation and be passing the class at the time to receive an Incomplete. Make-up exams will NOT be given for reasons of nonrefundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule for all their classes before making end-of-semester travel plans.

Student Expectations:

Students are expected to be courteous, respectful and empathetic to peers and instructor. Be in class on time, be prepared for class, participate in class activities, follow assignment instructions, effectively complete assignments and turn them in by the appropriate due dates. You are also expected to maintain knowledge of your grade standing and contact the instructor if concerns arise. Students are also responsible for all college policies included in the college catalog and the student handbook.

Attendance Policy

- Attendance is expected.
- You are to be in class every day it is scheduled.
- You may be dropped after three absences.
- You are expected to be in class on time.
- You are expected to stay the full length of class once you come to class.
- If you have a legitimate need to leave class early, please notify your instructor before class starts.
- You may attend class 5 times virtually so if you are ill or running very late yet attend class.

Instructional Contact Hours and Minimum Course Expectations

Instructional contact hours are the weekly time students spend directly learning with their instructor or course activities. These activities include, but are not limited to, lectures, discussions, labs, group work, and viewing recordings. Instructional contact hours vary by course; refer to the [MCCCD course bank](#) for your course's details.

Minimum course expectations include the number of hours students are expected to spend outside of class (weekly) completing coursework. Students are encouraged to use the [Time Management Calculator](#) to help estimate their weekly time commitment for classes.

Course Technologies

View the [Accessibility Statements & Privacy Policies](#) of the 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, at times, implements the use of web conferencing and/or other synchronous course tools.

- WebEx via Canvas

Streaming Media/Audio/Video Tools

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

- YouTube
- Films on Demand, etc.

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 Gemini, Microsoft Copilot, Stable Diffusion, GrammarlyGo, and Adobe Firefly.

Some Generative Artificial Intelligence (AI) Allowed in Specific Circumstances

There are situations and contexts within this course where you may be permitted to use generative AI tools. In these cases, specific guidelines will be provided in the assignment details. If you are unsure if the tool or website you are using is a generative AI tool or if it is permitted on a specific assignment, please contact the instructor for further clarification before submitting your work.

Grading Standards and Practices

Grade Scale

Letter Grade	Points Range
A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	0 – 59%

Percent Allocation

Each Exam	27%
Other – Class participation, assignments	19%

Assignments — Please see the Syllabus page on our Canvas course for the list of Homework problems and the course schedule.

Assigning of Grades

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. Your grade is an evaluation of PERFORMANCE. This means it is dependent upon how well you demonstrate your comprehension of the subject through application and completion of the items listed above and below in this syllabus.

Final grades are calculated using the scale listed in the syllabus. FINAL GRADES ARE NON-NEGOTIABLE. It is unethical to reach out at the end of the semester and request "a few extra points" or discuss the consequences of not earning the grade you want in the class. Messages of this nature will not receive a response.

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.
- Sharing weekly information about the course materials, including key information, explanations, examples, and resources via in-person, recorded, and/or text-based lectures.
- Engaging in weekly discussions about course content within discussion boards in Canvas, forums in MOER, or other discussion-based tools.
- Providing group or individual feedback regularly on assignments.
- Promptly responding to student questions about the course sent via email, MOER messaging, or the Canvas inbox.
- Regularly posting announcements about the course content and activities.
- Monitor your academic progress and communicate concerns, as needed.

Response Time

Students can expect a response time of **24-48 hours** for the instructor to respond to messages sent via the Canvas Learning Management System or @maricopa.edu email. Students can expect assignments to be graded within **two weeks** of the assignment's due date.

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 [Tutoring & Learning Centers](#) page for detailed information on the five learning centers' hours and procedures.

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. To access Brainfuse and begin working with a tutor, visit the [SCC Online Tutoring Services Through Brainfuse](#) page.

Math Center Hours and Information

Fall 2025 Hours

In-person Tutoring:

Mon - Thu: 8 am - 5:30 pm

Fri: 10 am – 2 pm

Remote Tutoring:

Mon - Thu: 8 am-10 am and 3 pm – 5 pm

Fri: 10 am – 2 pm

QR Code Below, Math Center Website for details, Calendar, and Links



scottsdalecc.edu/students/tutoring/math

MCCCD Policies

MCCCD is committed to providing a safe, fair, and accessible environment for all students. This includes laws such as the ADA and Title IX, which protect against discrimination. These statements explain your rights, available support, and where to go for help or more information. Please review the following policies:

[Classroom Accommodations for Students with Disabilities](#)

[Addressing Incidents of Title IX Sexual Harassment](#)

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.