

Course Information

Semester & Year: Summer 2025

Course Title: Calculus 3

Course Prefix & Number: MAT240/241

Section Number: 10831/10695

Credit Hours: 5/4

Start Date: 6/9/25

End Date: 7/31/25

Course Format

The course format for this course is On Your Time (OYT) Online in MOER. In order to get started in this course go to https://moer.maricopa.edu/ and enroll in this course.

MOER Course ID: 21090 MOER Enrollment Key: Calc3SU25.

Instructor Information

Instructor: Dr Phillip G Clark

Email: phil.clark@scottsdalecc.edu

Phone: 480-425-6753

Office Location: CM428

Office Hours: Online/Email

Course Description

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

Prerequisites

Grade of C or better in MAT230 or MAT231 or equivalent.

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.

Texts and Course Materials

Calculator

- A graphing calculator is required for this course. The suggested calculators include the TI-83 or TI-83 plus and the TI-84. NOTE: Calculators with QWERTY keyboards or those which do symbolic algebra (e.g. TI-92s, TI-89s, Casio FX2 or 9970G's) cannot be used during an exam.
- You are responsible for knowing how your calculator works! There are also links to help with the calculator on MOER.

Computer

 You will need regular access to a computer (with online connection) in order to complete the online homework and online modules that are part of this course.

Webcam

• You will need a working webcam in order to take the exams.

Email

- You will need a working email address that you check regularly.
- I do send regular class announcements and information via email which will be sent to your SCC email. Information about how to access and forward your SCC email account can be found under student resources on the SCC website.

 You can change your email in MOER but if you have another email you would like to use have your gmail forwarded to that email address.

Textbook

- We will be using an open text for this course which can be downloaded for free, printed out, or purchased from Amazon.
- Links for downloading and/or purchasing can be found in MOER
- The text is NOT required for this course

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.

- 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

Exam Proctoring Tool

MonitorEDU

Some exams in this course will have the option to be proctored using MonitorEDU, a remote proctoring service adopted by Scottsdale Community College (SCC) for online courses. This service allows you to take a supervised exam on demand. During a proctored exam, you will be monitored via your webcam, microphone, screen-sharing, and a secondary device (such as a smartphone) to ensure academic integrity.

Please be aware that:

- MonitorEDU is a fee-based service
- You must meet the general and device requirements to use the service

You will be required to scan your workspace before each testing session

Review the <u>MonitorEDU Student Instructions</u> before your exam to set up your devices and understand the process. Following these guidelines will help ensure a smooth and successful testing experience. There are other options for exam proctoring such as a scheduled on class exam and the testing center at SCC. There will be more information about these in the course in MOER.

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.

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 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.

Policy on Exam Proctoring

Exams must be proctored. Proctors provide rules for test takers. Any instance
where an exam rule or a proctor instruction is not followed may result in a loss of
points or a forfeiture of the exam completely.

Generative Artificial Intelligence (AI) Policy

Opening Statement Regarding Generative Artificial Intelligence (AI)

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.

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 & Practices

Grade Scale

Letter Grade	Points Range
Α	90 – 100%
В	80 – 89%
С	70 – 79%
D	60 – 69%
F	0 – 59%

Assignments

Assignment Name	Percent of Grade
Video Lessons	5%
Online Homework	25%
Online Quizzes	20%

Assignment Name	Percent of Grade
Midterm Exam	25%
Final Exam	25%
TOTAL:	100%

Students in MAT240

For students taking MAT240 you are required to complete a short essay at the end of each module. There will be questions for you to answer. You can find the link at the end of each module below or in the calendar. There will be 5 essays to complete, 1 for each module. These essays count as part of your homework grade. The essay questions are not required for students taking MAT241. For students enrolled in MAT241 you will see an 'x' in the grade column for the Module Recap Essays indicating that you are excused from these assignments and they will not count towards your grade.

Note: Both MAT240 and MAT241 transfer the same with regards to Calculus. MAT240 is 5 credit hours, 4 of which transfer for Calculus credit. The extra hour can transfer as a general elective. Course Components

Course Components

Video Lessons (5% of grade)

- There are video lessons that align with each section in the book we will be covering. You should go through the video lessons before class.
- Due dates are posted in MathAS and you must complete the homework by the due date and time for full credit.
- Latepasses may be used if additional time is needed. There is a 20% penalty applied to points earned during the latepass (after the due date). A Latepass must be requested through MathAS within 24 hours of the due date of the assignment. You can request more than 1 per assignment.

Online Homework (25% of grade)

- Online homework is assigned in MOER
- Problems may be attempted until correct up until the due date for the assignment
- Assignments are worth varying totals based on the number of questions and the amount of points each question is worth.

- Latepasses may be used if additional time is needed. There is a 20% penalty applied to points earned during the latepass (after the due date). A Latepass must be requested through MathAS within 24 hours of the due date of the assignment. You can request more than 1 per assignment, penalty does NOT compound.
- Lowest online homework score is dropped

Quizzes (20% of grade)

- There will be a quiz given at the conclusion of each module
- You will get multiple attempts at each question, but the points possible drops by 20% for each incorrect answer.
- Quiz dates are listed in MOER. If you cannot complete a quiz by date listed you
 must use a Latepass. There is a 20% penalty for quizzes completed late.
- Lowest quiz score is dropped.

Exams (50% of grade)

- The midterm and final will be multiple choice.
- All exams must be proctored.
 - Options for proctoring will be given in MOER and include in person during a scheduled time, in the SCC testing center, or via ProctorU (see below).
- There will be take home problems assigned from each module. These problems will appear in MOER in the Course Content folder. Take home problems are worth 20% of the overall exam grade.
- Take home problems for modules 11-13 are due by the scheduled midterm, problems for modules 14 and 15 are due by the scheduled final.
- Exams taken after the assigned date in MOER will be subject to a late penalty regardless of the reason and may not be allowed.

Exam Proctoring

There are 3 options for exam proctoring:

- 1. Exam during scheduled time on SCC campus (found in MOER)
- 2. Exam at SCC testing center
- 3. MonitorEDU

More detailed information about each option will be available in MOER.

Response Time

Students can expect a response time of 24 for the instructor to respond to messages sent via the Canvas Learning Management System or email. Students can expect assignments to be graded within 24 of the assignment's due date.

Attendance Policy

Attendance is determined via your participation in the course. This is not a self-paced course. You must complete assignments and make regular progress or you will be withdrawn. Refer to the Calendar section in MOER for the assignment submission schedule. Students that fall one week behind the Calendar schedule may be withdrawn from the class without notice.

To keep an active status you must have logged in to MOER and worked on an assignment (just logging in does not count as activity) or email your instructor to let him/her know why you have not logged in for 1 week. There is a syllabus quiz and an introductory homework assignment due the first week of class, if these are not completed you will be withdrawn.

Instructional Contact Hours (Seat Time)

This is a four/five (4/5) credit-hour course. Plan to spend at least 12-15 hours on course content weekly. Accelerated courses will require additional time per week.

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.
- 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.

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.

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.