

Course Information

Semester & Year: Fall 2024

Course Title: Brief Calculus

Course Prefix & Number: MAT 212

Section Number: 12757

Credit Hours: 3

Start Date: October 21, 2024

End Date: December 13, 2024

Course Format

This course is On Your Time Online from October 19 to December 13 (8 weeks). On Your Time Online classes do not meet at specific class times. Coursework must be completed according to deadlines.

Instructor Information

Instructor: Carla Stroud

Email: Carla.Stroud@scottsdalecc.edu

Phone: (480) 423-6112

Office Location: CM 424

Office Hours:

In-Person Tues 10:00 am - 12:00 pm

Wed 9:00 - 10:00 am

Other times may be available by appointment

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

Course Description

Introduction to the theory, techniques, and applications of the differential and integral calculus of functions with problems related to business, life, and the social sciences. Note: Students may receive credit for only one of the following: MAT212 or MAT213.

Prerequisites

Grade of "C" or better in MAT 15x, or MAT187, or an appropriate district placement.

Course Competencies

- 1. Find derivatives of functions using both the definition and theorems.
- 2. Use the derivative to solve and analyze application problems related to business, life and the social sciences.
- 3. Use technology to model, solve, and analyze problems related to real world applications.
- 4. Find the integral of functions using theorems.
- 5. Use the integral to solve and analyze application problems related to business, life and the social sciences.

Texts and Course Materials

Textbook: Business Calculus by Callaway, Hoffman, and Lippman, copyright 2013. The textbook is not required as students can view the book as a pdf file for free from the MOER website.

Workbook: *Brief Calculus Student Workbook*, Carla Stroud, copyright 2024. The workbook is **strongly recommended**. Students can download and print the workbook for free from the MOER website. Another option is to pick up a free printed copy of at the SCC math center (please contact me if you would like to use this option).

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 a 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	5%	A 90% - 100%
Homework	10%	B 80% - 89%
Quizzes	15%	C 70% - 79%
Chapter 2 Exam	35%	D 60% - 69%
Chapter 3 Exam	35%	F 59% or less

Online Lesson: The Online Lesson is your direct instruction on the content. Online Lessons are set up like an interactive textbook - read through the text and examples, watch the videos, and complete the problems. You will have unlimited attempts at each question. It is recommended that students use the Brief Calculus Workbook to take notes while completing the online lessons.

Homework: The Homework is your opportunity to practice the material you learned while completing the Online Lesson. Write down your work and make note of any questions you may have. Questions can be posted to the FAQ forum for the instructor or other students to answer. You will get three attempts at each question and will have to try a new similar question to try to get full credit.

LatePasses: LatePasses can be used on the Online Lessons and Online Homework assignments. One LatePass will extend the due date for 24 hours (so to complete an assignment 4 days late, you will need to use 4 LatePasses). There is no penalty for using a LatePasse, however students will only receive 100 LatePasses. Students that use up their LatePasses will need to message the instructor to have assignments extended with a 20% penalty. Additionally, lessons and homework can only be extended until the corresponding exam.

Quizzes: The Online Quiz gives you the opportunity to demonstrate your understanding of the material. You will have two chances per question, with a 30% penalty on the second attempt. You will have the opportunity to retake two quizzes in an attempt to improve your score. Students can message the instructor requesting to use a quiz redo. The practice quizzes are optional but highly recommended and can be taken multiple times. **Note, you can NOT use a LatePass for the Online Quizzes.**

Exams: There are two exams for this course and both exams must be taken to receive a grade in the class. The exams will be proctored at the SCC campus (detailed information can be found in MOER). If you are unable to take the exam during the scheduled time, then you may use the SCC testing center, another testing center, or ProctorU. Note that other facilities and ProctorU charge a fee for their testing services which will be the responsibility of the student. Also, ProctorU has specific equipment and technology requirements, which will be the responsibility of the student. Contact the instructor **at least one week before the exam** if you are unable to make the proctored exam time so alternative arrangements can be made.

Exams must be completed by the deadlines listed in MOER. Students that miss an exam deadline (which includes equipment and/or technology issues) may take the exam up to 3 days late, but they can only earn a maximum score of 70%.

Course Policies

The following are policies specific to this course. Students are 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 or to redo a similar problem. 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.

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 and written homework assignments will be graded within 4 days of the due date.

Attendance Policy

Attendance in an online course involves consistent and regular progress on course assignments. This is not a self-paced class. Refer to the Calendar in MOER for the assignment submission schedule. Students that fall **one week behind** the Calendar schedule may be withdrawn from the class without notice. Additionally, Students who miss an exam may be withdrawn without notice.

Instructional Contact Hours (Seat Time)

On average, each 1-credit hour of a class requires 45 total hours of time commitment. The time commitment includes any scheduled meeting times as well as assignment work and study time.

This is a three (3) credit-hour course completed in 8-weeks. Plan to spend an average of 17 hours each week on course content and homework.

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45 hours x 3 credit hours = 135 hours
135 hours ÷ 8 weeks = 16.875 hours per week
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Math/Science Tutor Center

The Math Center offers free in person 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

Dedicated Tutoring (Remote Tutoring)

We are fortunate to have a tutor dedicated exclusively to this course! The dedicated tutor will assist students with mathematics questions and host live remote tutoring sessions. More information will be provided in MOER.

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.