

Course Information

| Semester & Year: | Fall 2024 |
|-------------------------|----------------------|
| Course Title: | Brief Calculus |
| Course Prefix & Number: | MAT 212 |
| Section Number: | 13163 |
| Credit Hours: | 3 |
| Start Date: | August 19, 2024 |
| End Date: | December 13, 2024 |
| Room Number: | SL 114 |
| Meeting Days: | Mondays & Wednesdays |
| Meeting Times: | 10:30 – 11:45 am |

Course Format

This course is In-person from August 19 to December 13 (16 weeks).

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 instructor will provide students with the workbook on the first day of class. Please bring a binder to store the workbook.

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 reliable 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 (<u>https://moer.maricopa.edu</u>) 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 |
|--------------------------|-----|---------------|
| Homework | 12% | A 90% - 100% |
| Quizzes | 15% | B 80% - 89% |
| Exams 1 and 2 (20% each) | 40% | C 70% - 79% |
| Exam 3 | 30% | D 60% - 69% |
| Attendance/Participation | 3% | F 59% or less |

Homework: Online homework assignments will be due frequently in MOER. Homework questions can be posted to the FAQ forum for the instructor or other students to answer. You will get three attempts at each question, then you will have to try a new similar question for an attempt at full credit. Any written homework assignments will be announced in class. Late written homework will be counted for partial credit.

LatePasses: LatePasses can be used on the Online Homework assignments. Any problems completed during the LatePass extension will result is a 20% penalty.

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. 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.** Any in-person quizzes will be announced in class (with at least one class period of notice). No make-up quizzes will be given for the in-person quizzes.

Exams: There are three exams for this course. All exams must be taken to receive a grade in the class. 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 reduction of points or a grade of zero for the missed exam.

Attendance/Participation: In addition to attending class, you are expected to participate in any course activities planned for the class session. Participation is defined as contributing to mathematical discussions, completing mathematical assignments, and presenting your mathematical thinking to the class. If you miss class, you are not able to make-up any points from any missed in-class activities or assignments. If you are late or leave early, you will lose participation points for the day.

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

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 three (3) credit-hour course. Plan to spend at least three hours on course content or seat time (direct instruction) and six hours on homework weekly.

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: <u>https://www.scottsdalecc.edu/students/tutoring/math</u>

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 <u>Student Conduct Code</u>, 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.