

MATH-2134-002: SYLLABUS

1. COURSE INFORMATION

- Course Title: Calculus for Business and Social Science
- Course Number: 2132
- Credit Hours: 4; Clinical Hours: 0; Lecture Hours: 4; Lab Hours: 0
- Meet Times: Tuesday and Thursday 1100 to 1250
- Meet Location: BIC 3G04
- Course Description: Students will be introduced to basic concepts of differential and integral calculus. This course is intended for students planning to major in business, or the behavioral, social, or biological sciences.
- Repeatable for Credit: NO
- Pre-Enrollment Criteria: N/A
- Prerequisite: MATH 1431 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

2. INSTRUCTOR INFORMATION

- Name: Michael McCabe, M.S.
 - Email: mccabem85@cod.edu
 - Office: 3436B
 - Office Phone: 630 942 2152
 - Office Hours: Labeled on Blackboard (always available by appointment)
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3. GENERAL COURSE OBJECTIVES

Upon successful completion of the course the student should be able to do the following:

- 1 Solve exponential, polynomial, rational, and logarithmic equations
- 2 Analyze functions
- 3 Graph functions
- 4 Construct mathematical models
- 5 Apply limit theorems and algebraic techniques to evaluate limits
- 6 Differentiate functions and equations
- 7 Analyze properties of functions using derivatives
- 8 Solve application problems using derivatives
- 9 Determine extrema of functions of several variables
- 10 Determine antiderivatives using the rules of integration
- 11 Solve application problems using the fundamental theorem of calculus

4. TOPICAL OUTLINE

1.: Functions

- a.: Power and exponential functions
- b.: Polynomial functions

- c.: Rational functions and asymptotes
- d.: Natural logarithms
- e.: Graphing
- 2.: Differential calculus
 - a.: Limits and continuity
 - b.: Derivative process
 - c.: Derivative rules for products and quotients
 - d.: The chain rule
 - e.: Higher order derivatives
 - f.: Maxima and minima of functions of one variable
 - g.: Functions of more than one variable
 - h.: Maxima and minima for functions of more than one variable
 - i.: Maxima and minima using Lagrange multipliers
 - j.: Applications from business, biology, and other areas
- 3.: Integral calculus
 - a.: Anti-derivatives including substitution and parts
 - b.: Area and the definite integral
 - c.: Fundamental theorem of calculus
 - d.: Improper integrals
 - e.: Numerical integration (optional)
 - f.: Applications

5. REQUIRED TEXTS, MATERIALS, AND SUPPLIES

- **Required Text:** Applied Calculus for the Managerial, Life, and Social Sciences by Tan Soo T.
- **Materials:** notebook for taking notes in class, writing tools, and if possible a internet enabled device.
- **Supplies:** Internet, extra notebooks, and extra writing tools

6. SCHEDULE

6.1. Academic Calendar.

- First Day: 08/25/2025
- No Class: 9/1, 11/26, 11/27, and 11/28
- Last Day to Withdraw: 11/16
- Final Exam: Wednesday, May 17 from 1100 to 1250

6.2. Exam Dates (Tentative).

- Exam 1: 09/19/2025
- Exam 2: 10/17/2025
- Exam 3: 11/14/2025

7. METHOD OF EVALUATION

- (1) Exams [Weight 50%]
 - (a) No drops and no retakes.
- (2) Quizzes [Weight 20%]
 - (a) At least 3 drops, no retakes, and no make-ups.
- (3) MyOpenMath Homework Sets [Weight 10%]

- (a) At least three of the lowest scores will be dropped.
- (b) No extensions
- (4) Final Exam [Weight 20%]
 - (a) Test on everything covered throughout the semester (Cumulative Exam).
 - (b) Constructed to be completed during a 2 hour time limit on the scheduled Final Exam day.
 - (c) I plan to construct the Final Exam with about 20 questions.

7.1. Grade Scale.

- A:** 85% to 100%
- B:** 75% to 84%
- C:** 65% to 74%
- D:** 55% to 64%
- F:** 54% or less

I do round.

8. ULTRA COURSE VIEW PILOT

Welcome to Math 0481! This course is part of a pilot program for Blackboard Ultra Course View, a user-friendly learning management system designed to enhance your online learning experience. You may engage with various newly available tools and features within the platform to access course materials, participate in discussions, submit assignments, and receive feedback. This pilot of Blackboard Ultra does not change course credits or the instructor established grading basis and course requirements.

Throughout the term, you may be asked to provide feedback through anonymous course surveys. Please be as candid as possible as this is an opportunity for both instructors and students to explore and provide feedback on the Blackboard Ultra Course View experience.

If you, at any time, experience any difficulties using the Ultra Course View, the College has technical support available just for you. Please send us an email at studentultrahelp@cod.edu. Staff are available during traditional business hours (8am – 5pm) and we will get back to you as soon as possible. For on-demand help, please use Blackboard Learn Help for Students – {} Ultra Course View.

9. ACADEMIC HONESTY

As members of the College of DuPage community, we share a commitment to the highest standards of learning and ethical behavior. The College and its faculty strive to build meaningful and productive relationships with our students. The expectation of honesty and effort is the foundation of that relationship. Academic dishonesty damages the learning partnership built between student and faculty and is considered a serious breach of the principles of learning and growth. Violations of the Code of Academic Conduct will be dealt with appropriately and may become part of a student's educational record. Please don't risk it! For further information about the expectations, please review the Code of Academic Conduct found at the following website: Code of Academic Conduct.

10. ACCESS AND ACCOMMODATIONS

- As a course policy, I do not accept late work/make up for My Open Math assignments, attendance, and participation. I am committed to providing fair, equal, and unbiased accommodations. If you believe that your circumstances qualify you for accommodations, please contact the Center for Access and Accommodations at access@cod.edu. Staff from the Center can help you better understand if your situation qualifies you for an accommodation.
- If you are student who is registered with the Center for Access and Accommodations, please send me your Letter of Accommodation as soon as possible.
- Please do not send me personal medical records or similar personal documents.
- Here is a to start the process for accommodations: Center for Access and Accommodations Intake Form (https://cod-accommodate.symplicity.com/public_accommodation/).

The College of DuPage is committed to the equitable access of educational opportunities for students with disabilities in accordance with The Americans with Disabilities Act, As Amended and Section 504 of the Rehabilitation Act of 1973. Any student who feels they may need an accommodation on the basis of an illness, injury, medical condition, or disability should contact the Center for Access and Accommodations to determine eligibility for accommodations and to obtain an official Letter of Accommodation. The Center for Access and Accommodations can be reached via email at access@cod.edu. Students may also initiate a request for services by going to www.cod.edu/access and clicking on the green box labeled “complete form to request accommodations.” If you are already registered with the Center for Access and Accommodations, please email me your Letter of Accommodation as soon as possible. Please DO NOT send any private health documentation or Doctor’s notes to me.

11. WITHDRAW POLICY

Withdrawal from a Class. The final day for a student to withdraw from any course will be equal to 75% of the time for the respective academic session (see the Registration Calendar) through MyAccess or in person at the Registration office, Student Services Center (SSC), Room 2221.

Administrative Withdrawal. After the deadline, students will be required to appeal for late withdrawal and provide appropriate documentation to the Student Registration Services Office for all requests. Students who are granted approval to withdraw by petition will not be eligible for refunds of tuition or fees and will receive a ‘W’ grade on their transcript. Appeals must be submitted prior to the designated final exam period for 16-week classes and before the last class meeting for all other session classes.

Coronavirus Information. Stay up to date with information provided by the college about alternative withdrawal policies. Coronavirus Information