

Math 078-9179 & Math 178-9180, Fall 2024

FOUNDATIONS - CALCULUS for BUSINESS Calculus Bus, Soc & **Behav Sci**

MW, 9 -11:30 am

Bldg. H, Room 138

8/19/2024 - 12/16/2024



Our class supports and encourages a collaborative learning environment in which students and the instructor work as a team to create a rewarding experience and in order for students to succeed.



I am here to help you! So please always feel free to reach out and talk to me. If you have questions concerning any assignment, please contact me by Canvas Inbox. I will do my best to respond within 48 hours.

Course Information

MW, 9 - 11:30 am

8/19/2024 - 12/16/2024

Bldg. H, Room 138

Instructor: Fadia Naoum

- contacting me via Canvas Inbox (Preferred method of contact)
- E-mail: fadia.naoum@gcccd.edu

Student Hours:

Mondays and Wednesdays 8:30-9:00 am

Location: H -138

Friday 2:30 - 3:30pm via Zoom

Zoom link: Techconnect Zoom (instructure.com)

Canvas Course

Math 078 - 9179 and Math 178 -9180 Canvas Course

Course Description

Presents a study of the techniques of calculus with emphasis placed on the application of these concepts to business and management-related problems. The applications of derivatives and integrals of functions

including polynomials, rational, exponential, and logarithmic functions are studied. Not open to students with credit in MATH 180. (C-ID MATH 140) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

Course Objectives



Students will be able to:

1) Find the derivatives of polynomial, rational, exponential, and logarithmic functions;

2) Find the derivatives of functions involving constants, sums, differences, products, quotients, and the chain rule.

3) Sketch the graph of functions using horizontal and vertical asymptotes, intercepts, and first and

second derivatives to determine intervals where the function is increasing and decreasing,

maximum and minimum values, intervals of concavity and points of inflection;

4) Analyze the marginal cost, profit and revenue when given the appropriate function;5) Determine maxima and minima in optimization problems using the derivative;

6) Use derivatives to find rates of change and tangent lines;

7) Use calculus to analyze revenue, cost, and profit;

8) Find definite and indefinite integrals by using the general integral formulas, integration by

substitution, and other integration techniques; and

9) Use integration in business and economics applications

Cuyamaca Cares Emergency Fund

Cuyamaca Student Affairs

Required Material

Textbook: All the materials are posted in Canvas.

Desmos Online Graphing Calculator

Desmos 3D Calculator

Desmos Online Scientific Calculator

TI-84 or TI-83 Graphing Calculator

Free Office 365



Homework Assignments

All the Homework Assignments and the Due Dates are posted in Canvas

I will drop your **three** lowest scores from this category.

Quizzes

All the Quizzes and the Due Dates are posted in Canvas

I will drop your **two** lowest scores from this category.

In Class Activity

In Class Activities are conducted during the lecture.

I will drop your **five** lowest scores from this category.

Exams

All the Exams and the due dates are posted in Canvas.

A Final Exam will be given at the end of the course. The Final Exam is **mandatory** and may not be dropped.

Cuyamaca Tutoring Online!



Student Learning Outcomes



Upon successful completion of this course, students will be able to:

1) Use graphical, numerical, and analytical methods to solve multi disciplinary problems at the Calculus for business, social, and behavioral sciences level (especially from business or the natural/social sciences).

2) Use integration in business and economics applications

DSPS Accommodations



Please identify yourself to me (after class) and/or to Disabled Students Programs & Services staff so that the appropriate accommodations can be ensured. If you suspect you have a learning disability or need services for any other type of disability, contact the Disabled Students Programs & Services (DSP&S) Office, A-113, at the Student Services One-Stop Center or call (619) 660-4239 or TTY: 619-660-4386. I encourage you to contact DSPS as soon as possible to ensure that accommodations are implemented in a timely fashion.

cuyamaca.dsps@gcccd.edu

Grading Category

To earn a C or better in the class a student must earn an overall grade of C or better AND a D or better on the final assessment(s) OR

The following is the breakdown for your Math 078-178 grade.

- Homework Assignments: 30%
- In Class Activities: 10%
- Quizzes: 30%

• Exams: 30%

The grading scale is:



- **A** = 90 –100 %
- **B** = 80 89 %
- **C** = 70 − 79 %
- **D** = 60 69 %
- **F** = below 60%



I would like our class to be a supportive learning environment that values and builds on the richly diverse identities, perspectives, and experiences of our group. Please help me develop this environment by honoring the diverse identities of your classmates and letting your instructor know (via anonymous surveys or email, for example) if an assignment, comment, etc. makes you feel uncomfortable.

Both in the readings and in discussions, you will likely encounter cultures, ideas, and values that differ from your own. These are valuable opportunities to learn more about different perspectives and where they intersect with yours. We all see the world from a point of view informed by our experiences and backgrounds, and what we read and discuss can open new windows through which to understand both our texts and world around us. You are encouraged to contribute your ideas about our discussion prompts freely, but please remember to demonstrate respect for the works as well as your classmates and instructor. We all have unconscious biases that stem from our experiences, recognizing and discussing them can lead to unexpected insights.

Tentative Course Calendar

Week & Description: Math 160

- Week 1 Chapter 1: 1.1, 1.2
- Week 2 Chapter 1: 1.3, 1.4
- Week 3 Chapter 1: 1.5, 1.6
- Week 4 Chapter 1: 1.7, 1.8
- Week 5 Chapter 2: 2.1, 2.2
- Week 6 Chapter 2: 2.3, 2.4
- Week 7 Chapter 2: 2.5, 2.6
- Week 8 Chapter 2: 2.7, 2.8
- Week 9 Chapter 2: 2.9, 2.10
- Week 10 Chapter 2: 2.11
- Week 11 Chapter 3: 3.1, 3.2
- Week 12 Chapter 3: 3.3
- Week 13 Chapter 3: 3.4
- Week 14 Chapter 4: 4.1, 4.2
- Week 15 Thanksgiving Break
- Week 16 Chapter 4: 4.3
- Week 17 Final Exam

