MATH 1325-304CL
Business Calculus
Spring 2024
8:40 – 9:32 MTWRF

Instructor Information: Christopher Billot, cbillot@com.edu, 281-482-3413

Student hours and location:
Class hours: MTWRF from 8:40 am-9:32 am in room 1469
Office hours: MTWRF from 8:00 am-8:30 am in room 1469
        MTWRF from 12:30 pm – 2:00 pm in room 2402
        MTWR from 4:00 pm – 4:30 pm at FHS Library

Required Textbook/Materials: Calculus Applications, 12th edition, by Lial, Greenwell, and Ritchey and appropriate Math Lab account.

Course Description: This course is the basic study of limits and continuity, differentiation, optimization with graphing, and an integration of elementary functions with the emphasis on applications in business, economics, and social sciences.

Course requirements:

Homework Assignments
There is assigned homework for each section to be done online using MyMathLab. Students are expected to have their work completed by the due date. Late work will not be accepted.

Quizzes and Exams
There are four quizzes to be done online using MyMathLab. You need to show work on paper that will be turned in to the instructor. You can retake each quiz just once to improve your score; the highest score will be the one that counts. There will be four chapter exams and a comprehensive final. The exams will be taken in person and on paper. There are no retakes on any of the exams.

Determination of Course Grade/Detailed Grading Formula:

Grading Formula:
The course grade will be determined by the following formula:

Final Average:	64%	Chapter Exam Average	Grading Scale:	Grade A: Final Average [89.5 – 100]
	16%	Final Exam		Grade B: Final Average [79.5 – 89.5)
	10%	Homework Average		Grade C: Final Average [69.5 – 79.5)
	10%	Quiz Average		Grade D: Final Average [59.5 – 69.5)
				Grade F: Final Average [0 – 59.5)

The Final Exam score will replace the lowest Chapter Exam Score when it is larger.

Late Work, Make-Up, and Extra-Credit Policy:
Will be determined at the discretion of the instructor based on the circumstances of the student. If you are unable to make a scheduled chapter exam, you will be allowed to make up the exam outside of class **provided you notify the instructor before the exam and have a legitimate reason for the absence.**

Attendance Policy: Attendance and classroom participation is required. Excessive absenteeism may result in a student being withdrawn from the course. More than three absences are considered excessive.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. (Faculty may add additional statements requiring monitoring and communication expectations via Blackboard or other LMS.)

You must log in and be active in MyMathLab at least three times each week. In addition to time spent doing homework, taking quizzes and exams it will be necessary to study, using the course materials, at least 4 hours per week to be successful in the class.

Student Learner Outcomes	Maps to Core Objective	Assessed via this assignment
1. Apply calculus to solve business, economics, and social sciences problems.	Critical Thinking Skills (CT)	Exam 3
2. Apply appropriate differentiation techniques to obtain derivatives of various functions, including logarithmic and exponential functions.	Critical Thinking Skills (CT)	Exam 2
3. Solve application problems involving implicit differentiation and related rates.	Empirical and Quantitative Skills (EQS)	Quiz 3
4. Solve optimization problems with emphasis on business and social sciences applications.	Critical Thinking Skills (CT)	Quiz 3
5. Determine appropriate techniques of integration.	Visual Communication Skills (CS)	Exam 4
6. Integrate functions using the method of integration by parts or substitution, as appropriate.	Critical Thinking Skills (CT)	Quiz 4
7. Solve business, economics, and social sciences applications problems using integration techniques.	Critical Thinking Skills (CT)	Exam 4

Academic Dishonesty:
College of the Mainland is committed to a high standard of academic integrity. All students are responsible for honesty and independent effort. Incidents od academic and scholastic dishonesty (including cheating, plagiarism, and collusion) will be dealt with in a manner that is consistent with College Policy and the Student Handbook. Any student found to have been academically dishonest on an assignment, quiz or exam will receive a zero for that assignment, quiz or exam and he or she will be referred to the Office of Student Conduct for further disciplinary action. Please read the sections on *Standards of Student Conduct and Discipline and Penalties* in the on-line Student Handbook.

Student Concerns: If you have questions or concerns about any aspect of this course, please contact me at cbillot@com.edu. If after discussing your concern with me and you continue to have questions, please contact Mr. Leslie Richardson at (409) 933-8329 or lrichardson@com.edu.

Course outline: (included a calendar with lecture topics, due dates)

Math 1325 Business Calculus Spring 2024 Calendar

Month	Week	Date	Day	Topic	Sections
January	1	8	Monday	Student Holiday	Holiday
		9	Tuesday	Introductions to Class	Intro
		10	Wednesday	Purchase Math Lab	Intro
		11	Thursday	Limits by graphing and table	3.1
		12	Friday	Limits using Limit Laws	3.1
	2	15	Monday	Student Holiday	Holiday
		16	Tuesday	Limits by Factoring	3.1
		17	Wednesday	Limits at Infinity	3.1
		18	Thursday	Lab Day	Lab
		19	Friday	Continuity	3.2
	3	22	Monday	Continuity	3.2
		23	Tuesday	Lab Day	Lab
		24	Wednesday	Quiz 1 (3.1 & 3.2)	Quiz
		25	Thursday	Rates of Change	3.3
		26	Friday	Lab Day	Lab
	4	29	Monday	Definition of the Derivative	3.4
		30	Tuesday	Definition of the Derivative	3.4
		31	Wednesday	Lab Day	Lab
February		1	Thursday	Review for Exam 1	Review
		2	Friday	Review for Exam 1	Review
	5	5	Monday	Exam 1 (Ch. 3)	Exam
		6	Tuesday	Exam 1 (Ch. 3)	Exam
		7	Wednesday	Techniques for Finding Derivatives	4.1
			Thursday	Techniques for Finding Derivatives	4.1
		9	Friday	Lab Day	Lab
	6	12	Monday	Derivatives of Products and Quotients	4.2
		13	Tuesday	Derivatives of Products and Quotients	4.2
		14	Wednesday	Lab Day	Lab
		15	Thursday	The Chain Rule	4.3
		16	Friday	The Chain Rule	4.3
	7	19	Monday	Student Holiday	Holiday
		20	Tuesday	Lab Day	Lab
		21	Wednesday	Quiz 2 (4.1, 4.2, & 4.3)	Quiz
		22	Thursday	Derivatives of Exponential Functions	4.4
		23	Friday	Derivatives of Exponential Functions	4.4
	8	26	Monday	Lab Day	Lab
		27	Tuesday	Review for Exam 2	Review
		28	Wednesday	Review for Exam 2	Review
		29	Thursday	Exam 2 (Ch. 4)	Exam
March		1	Friday	Exam 2 (Ch. 4)	Exam
	9	4	Monday	Increasing and Decreasing Functions	5.1
		5	Tuesday	Lab Day	Lab
		6	Wednesday	Relative Extrema	5.2
		7	Thursday	Higher Derivatives, Concavity, and 2nd Derivative Test	5.3
		8	Friday	Lab Day	Lab
	10	11-15	MTWHF	SPRING BREAK – Student Holiday	Holiday

Month	Week	Date	Day	Topic	Sections
March	11		Monday	18	Curve Sketching	5.4
			Tuesday	19	Lab Day	Lab
			Wednesday	20	Absolute Extrema	6.1
			Thursday	21	Lab Day	Lab
			Friday	22	Applications of Extrema	6.2
	12		Monday	25	Lab Day	Lab
			Tuesday	26	Implicit Differentiation	6.4
			Wednesday	27	Implicit Differentiation	6.4
			Thursday	28	Lab Day	Lab
			Friday	29	Student Holiday	Holiday
April	13		Monday	1	Related Rates	6.5
			Tuesday	2	Related Rates	6.5
			Wednesday	3	Lab Day	Lab
			Thursday	4	Quiz 3 (Ch. 6)	Quiz
			Friday	5	Review for Exam 3	Review
	14		Monday	8	Review for Exam 3	Review
			Tuesday	9	Exam 3 (Ch. 5 & 6)	Exam
			Wednesday	10	Exam 3 (Ch. 5 & 6)	Exam
			Thursday	11	Antiderivatives	7.1
			Friday	12	Lab Day	Lab
	15		Monday	15	Substitution	7.2
			Tuesday	16	Substitution	7.2
			Wednesday	17	Lab Day	Lab
			Thursday	18	Area and the Definite Integral	7.3
			Friday	19	Student Holiday	Holiday
	16		Monday	22	Area and the Definite Integral	7.3
			Tuesday	23	Lab Day	Lab
			Wednesday	24	The Fundamental Theorem of Calculus	7.4
			Thursday	25	Lab Day	Lab
			Friday	26	Quiz 4 (Ch. 7)	Quiz
	17		Monday	29	Integration by Parts	8.1
			Tuesday	30	Lab Day	Lab
May			Wednesday	1	Review for Exam 4	Review
			Thursday	2	Exam 4 (Ch. 7 & 8)	Exam
			Friday	3	Exam 4 (Ch. 7 & 8)	Exam
	18		Monday	6	Review for Final Exam	Review
			Tuesday	7	Review for Final Exam	Review
			Wednesday	8	Final Exam	Exam
			Thursday	9	Final Exam	Exam
			Friday	10	Finalize Grades	

W-Day April 22, 2024

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook https://www.com.edu/student-services/docs/Student_Handbook_2023-2024_v2.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact Kimberly Lachney at 409-933-8919 or klachney@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Textbook Purchasing Statement: A student attending the College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is February 28. The last date to withdraw from the 16-week session is April 22. The last date to withdraw for the 2nd 8-week session is May 1. The last date to withdraw for the spring mini-session is May 29.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:
If you are experiencing stress or anxiety about your daily living needs including food, and housing or just feel you could benefit from free resources to help you through a difficult time, please click here https://www.com.edu/community-resource-center/. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.