



**MATH 1325.304CL**  
**Calculus for Business & Social Sciences**  
**Spring 2022**  
**MTWRF 9:38-10:30 am**

**Instructor Information:** Angela Molen, amolen@fisdk12.net, 281-482-3413 ext. 3660

**Office hours and location:** 8:00 – 9:00 am Monday and Friday with Wednesday for virtual students

**Required Textbook:** Calculus with Applications, 11<sup>th</sup> edition, by Lial, Greenwell, and Ritchey

**Textbook Purchasing Statement:** A student attending 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.

**Course Description:** This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with 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. They are due one week after the date assigned. Any late homework can be completed by the quiz or test date for a 20% reduction.

**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 one algebra review exam, four chapter exams and a comprehensive final. There are no retakes on any of the exams.

**Determination of Course Grade/Detailed Grading Formula:**

The course grade will be determined by the following formula:

$$\text{Final Average} = 64\% \text{ Chapter Exam Average} + 16\% \text{ Final Exam} + 10\% \text{ Homework Average} + 10\% \text{ Quiz Average}$$

**Grading Scale:**

Grade A: Final Average in [89.5, 100]

Grade B: Final Average in [79.5, 89.5)

Grade C: Final Average in [69.5, 79.5)

Grade D: Final Average in [59.5, 69.5)

Grade F: Final Average in [0, 59.5)

**3<sup>rd</sup> Nine Weeks Calendar BCalc 2022**

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
January 3  <i>Teacher Inservice</i>	January 4  3.1 - Limits by graphing and table (left and right sided)	January 5  3.1 - Limits using Limit Laws	January 6  3.1 - Limits by factoring	January 7  Lab day
January 10  3.1 - Limits at Infinity	January 11  Lab day	January 12  3.2 - Continuity	January 13  3.2 - Continuity	January 14 <b>Quiz 1</b> (3.1, 3.2)
January 17  <i>MLK day</i>	January 18  3.3 - Rates of Change	January 19  Lab day	January 20  3.4 - Def. of Derivative	January 21  3.4 - Def. of Derivative
January 24  Review	January 25  Review	January 26 <b>Exam 1</b> (Ch. 3)	January 27 <b>Exam 1</b> (Ch. 3)	January 28  4.1 - Finding Derivatives
January 31  4.1 - Finding Derivatives	February 1  Lab day	February 2  4.2 - Derivatives of Products & Quotients	February 3  4.2 - Derivatives of Products & Quotients	February 4  Lab day
February 7  Lab day	February 8  4.3 - Chain Rule	February 9  4.3 - Chain Rule	February 10  Lab day	February 11 <b>Quiz 2</b> (4.1, 4.2, 4.3)
February 14  4.4 - Derivatives of Exponential Functions	February 15  4.4 - Derivatives of Exponential Functions	February 16  Lab day	February 17  Lab day	February 18  Review
February 21  <i>Teacher Inservice</i>	February 22  Review	February 23 <b>Exam 2</b> (Ch.4)	February 24 <b>Exam 2</b> (Ch.4)	February 25  5.1 - Increasing, Decreasing Functions

February 28 5.2 - Relative Extrema	March 1 Lab day	March 2 5.3 - Concavity, SDT, and Graphing	March 3 5.4 - Curve Sketching	March 4 Lab day
March 7 6.1 - Absolute Extrema	March 8 Lab day	March 9 6.2 - Applications of Extrema	March 10 6.2 - Applications of Extrema	March 11 Lab day

### 4<sup>th</sup> Nine Weeks Calendar BCalc 2022

Monday	Tuesday	Wednesday	Thursday	Friday
March 14 <i>Spring Break</i>	March 15 <i>Spring Break</i>	March 16 <i>Spring Break</i>	March 17 <i>Spring Break</i>	March 18 <i>Spring Break</i>
March 21 6.4 - Implicit Differentiation	March 22 6.4 - Implicit Differentiation	March 23 Lab day	March 24 6.5 - Related Rates	March 25 6.5 - Related Rates
March 28 Lab day	March 29 Lab day	March 30 <b>Quiz 3</b> (6.2, 6.4, 6.5)	March 31 Review	April 1 Review
April 4 <b>Exam 3</b> (Ch. 5 & 6)	April 5 <b>Exam 3</b> (Ch. 5 & 6)	April 6 7.1 - Antiderivatives	April 7 Lab day	April 8 7.2 - Substitution
April 11 7.2 - Substitution	April 12 Lab day	April 13 7.3 - Area and Definite Integral	April 14 7.3 - Area and Definite Integral	April 15 <i>Good Friday</i>
April 18 <i>Teacher Inservice</i>	April 19 Lab day	April 20 7.4 - Fundamental Theorem	April 21 7.4 - Area	April 22 Lab day
April 25 (W-day) 8.1 - Integration by Parts	April 26 8.1 - Integration by Parts	April 27 Lab day	April 28 Lab day	April 29 <b>Quiz 4</b> (7.2, 8.1)
May 2 Review	May 3 Review	May 4 Review	May 5 <b>Exam 4</b> (Ch. 7 & 8)	May 6 <b>Exam 4</b> (Ch. 7 & 8)
May 9 Review	May 10 Review	May 11 Review	May 12 <b>Final Exam</b>	May 13 <b>Final Exam</b>
May 16	May 17	May 18	May 19	May 20

Study Hall	Study Hall	Study Hall	Study Hall	Study Hall
May 23	May 24	May 25	May 26	May 27
Study Hall	Study Hall	Study Hall	Study Hall - Half day	<i>Teacher Inservice</i>

**Make-Up Policy:** 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 prior to 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 is considered excessive.

**Tardiness Policy:** Excessive tardiness may result in a student being withdrawn from the course.

**Withdrawal Policy:** It is the responsibility of the student to withdraw from the class in the admissions office if the student decides that he or she wants to withdraw.

**Success Tips for Students:**

- Schedule your study time and be diligent in sticking with it. It is recommended that you allocate two hours outside of class for each hour in class.
- Find a study partner.  
Studying with another person can help keep you motivated and on task.
- Be an active learner.
  - Attend all your classes and be on time.
  - Listen carefully, take good notes and participate in class.
  - Review your class notes regularly and read the textbook.
  - Do all the assignments.
  - Study for all the exams using the reviews provided. Rework homework problems.
  - Seek help when something is unclear, don't put it off.
- Have a positive attitude. You can learn math!
- Use resources that are available.
  - Use the instructor's office hours.
  - Use the free tutoring that is available in the Math Lab, TVB 1532.

**Counseling Statement:** Any student that is needing counseling services is requested to please contact Holly Bankston in the Student Success Center at 409-933-8520 or [hbankston@com.edu](mailto:hbankston@com.edu). Counseling services are available in the student center for free. Appointments are strongly encouraged. However, some concerns may be addressed on a walk-in basis.

<http://www.com.edu/student-services/counseling>.

**ADA Statement:** Any student with a documented disability needing academic accommodations is requested to contact Holly Bankston at 409-933-8520 or [hbankston@com.edu](mailto:hbankston@com.edu). The Office of Services for Students with Disabilities is in the Student Success Center in the student center.

**Early Alert Program:** The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention is 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.

**Classroom Conduct Policy:** College of the Mainland requires that students enrolled at COM be familiar with the Standards of Student Conduct, which can be found in the on-line Student Handbook. <http://www.com.edu/student-services/student-handbook>. Students are expected to be familiar with and abide by the Student Code of Conduct. Any violations of the Code of Conduct will result in a referral to the Dean of Students and may result in dismissal from this class.

**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 of 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.

**Plagiarism:**

To plagiarize means to take someone else’s ideas and present them as if they are yours. Turning in another student’s work with or without their knowledge is an example of plagiarism. It is academically dishonest to engage in plagiarism. If you plagiarize then you will receive a zero for the assignment.

**Link(s) to resource(s) about ways to avoid plagiarism:**

<http://en.writecheck.com/ways-to-avoid-plagiarism/>

**Concerns/Questions Statement:** If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Leslie Richardson at [lrichardson@com.edu](mailto:lrichardson@com.edu).

Student Learner Outcomes	Maps to Core Objective	Assessed via this assignment
1. Solve mathematics of finance problems, including the computation of interest,	Empirical and Quantitative Skills (EQS)	Exam

	annuities, and amortization of loans.		
2.	Apply basic matrix operations, including linear programming methods, to solve application problems.	Critical Thinking Skills (CT)	Exam
3.	Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.	Visual Communication Skills (CS)	Exam
4.	Apply matrix skills and probability analyses to model applications to solve real-world problems.	Critical Thinking Skills (CT)	Quiz