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Instructor Information: Jessica Calvillo Luna 409-933-3816 jsmith56@com.edu Student Hours (Office Hours); Location: STEAM 325-10

- 1. 11:20 am 1:30 pm Monday
- 2. 11:20am-12:30pm Wednesday
- 2. 12:30 am 1:30 pm Wednesday (Tutoring Center)
- 2. 2:00pm-3:00pm (Monday Online by Appointment Only) TEAMS Meeting
- 3. 4:15pm 4:45pm Tuesday/Thursday
- 4. 10:00am-11:10am Friday

**Required Textbook:** The textbook used in this course is *Calculus, Early Transcendentals*, by Thomas, 14<sup>th</sup> edition, published by Pearson. The e-text is provided with *MyLab Math*. The student will need a computer and internet service outside of class to gain access to the online assignments on *MyLab Math*. Computers and internet access are available on campus during specified times.

**Course Description:** This course covers limits and continuity, the Fundamental Theorem of Calculus, definition of the derivative of a function and techniques of differentiation, applications of the derivative to maximizing or minimizing a function, the chain rule, Mean Value Theorem, and rate of change problems, curve sketching, definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with applications to include calculation of areas. Prerequisite; Math 2412, grade "C" or better or COM Math Placement Test.

#### **Course Requirements:**

A Texas Instruments TI-30XIIS scientific calculator is recommended for this course. While graphing calculators may be used in some sections, they will not be permitted on certain parts of the exams. Only TI-84 graphing calculators will be allowed during approved portions of the exams. Additionally, students are required to have a pencil and notebook paper for all assignments. A Casio, TI-Nspire, TI-89 or higher graphing calculator is not appropriate for this course.

**Homework Assignments on** *MyLab Math*: There is a homework assignment for each unit covered. They are listed on the course outline in the syllabus and on the list of assignments on *MyLab Math*. Each homework assignments must be completed by 11:59 pm on the due date shown on both the course outline and on the list of assignments on *MyLab Math*. The student has a limit of **three** attempts to answer each question correctly on the homework assignments.

The student may stop working on a homework assignment and return to the assignment any time before the due date and time.

#### Quizzes on MyLab Math: Go to your Brightspace course and locate MyLab Math.

Online quizzes must be completed in <u>one sitting and are timed</u>. You cannot exit the quiz and come back to it as you can with homework. When you have answered all the questions, click submit quiz and the quiz will be graded online with your grade being posted to your gradebook of *MyLab Math*. To see your gradebook, click on the Gradebook button and you can see the scores for all assignments attempted as well as your current average. You can retake each online quiz once to improve your score if the deadline is met. When an online quiz is retaken, the higher quiz grade is used in calculating your overall average. Reviewing a submitted online quiz is only available immediately after submitting.

**Chapter Exams:** There are four exams which cover the chapters in the textbook. The exams are taken in class on the due dates shown on the course outline in the syllabus. The student has 2 mins to take each exam. Exams may not be retaken. However, if the grade on the final exam is higher than the lowest chapter exam grade, the final exam grade will replace the lowest chapter exam grade.

**Comprehensive Final Exam:** The final exam is taken in class on the due date shown on the course outline in the syllabus. The student has 2 hours to take the final exam. The final exam may not be retaken.

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

Comprehensive Final Exam	20%
Average of Chapter Exams	60%
Homework Average	10%
Quiz Average	10%
Final Average	100%

**Grade I**: Given unforeseen circumstances that result in the inability to successfully complete the course objectives, an I-Contract may be requested from the instructor, assuming you meet the following criteria:

- 1. Have a passing overall average (70 or higher)
- 2. All work completed except for The Final Exam.

Your individual assignment grades and overall course average will be located within your MLM Course Gradebook.

Note: You will be able to access your D2L gradebook, however, your overall course grade will be more accurately reflected on MLM Course Gradebook.

### **Grading Scale:**

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Grade A: Final Average is [89.5, 100]
Grade B: Final Average is [79.5, 89.5)
Grade C: Final Average is [69.5, 79.5)
Grade D: Final Average is [59.5, 69.5)
Grade F: Final Average is [0, 59.5)
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### Late Work, Make-Up Exams, and Extra-Credit Policy:

**Late Work:** There is a twenty (20) point penalty for all homework and quizzes submitted after the due date. Any homework assignments or quizzes that are not finished by the due date of the associated exam will be given a grade of zero at the time the exam is given. If a homework assignment or quiz has been partially completed by this deadline, the grade on the assignment (less 20%) will be applied to the homework assignment or quiz.

## **Make-Up Exams:** There are no make-up exams unless:

- 1) the student notifies the instructor before the exam due date that they will miss the exam, and
- 2) the reason for the requested make-up exam is extraordinary, such as the death of a close family member, or the student's admission to the hospital. (Transportation problems, minor illness, or scheduled doctor appointments are not extraordinary reasons for missing an exam.) Students will not be permitted to make up more than one exam. If a student makes up an exam, the final exam will no longer replace the lowest exam grade.

**Quizzes-** You cannot make up a quiz. A specified deadline will be given, and you will not be allowed to submit late. If the quiz assignment is not submitted or is not submitted by the deadline, a grade of zero will be recorded for the quiz assignment grade.

Note: You have a at least a two-day window to complete the online quizzes — do not wait until the last minute. If you encounter technical difficulties early, I can assist you. However, if issues arise at the last minute (Pass 7pm on the day the quiz is due), I will not be able to help, and no extensions will be granted.

Attendance Policy Attendance Policy: Students at COM are expected to attend and participate in every session of all classes for which they are registered. Regular attendance is a critical component to being successful in courses. Students should consult with their instructors when it becomes necessary to miss a class. Students are required to attend all classes. College of the Mainland recognizes no

excused absences other than those prescribed by law.

To aid in a successful semester for a face-to-face math class, attendance and being engaged by actively participating to gain knowledge through class discussions and taking detailed and organized notes is essential. Students are not considered to be actively engaged when missing any part of a class and/or when their attention is directed to other sources. Because of this, students will be counted absent when:

- 1. Arriving to class 15 minutes late or later,
- 2. Taking break(s) during the class period for a significant amount of time or taking multiple breaks.
- 3. Sleeping during the class period,
- 4. Leaving early (15 minutes or longer), and/or
- 5. Using cellphone(s) and/or earbuds/headsets during the class period since students are expected to have a productive workspace and be engaged with the class discussions to aid students in having an environment that is conducive to optimal learning.

You cannot make-up classes, and it is your responsibility to be punctual and regular at attending class. If you find that you are having trouble arriving on time, adjust your schedule accordingly. Also, please be advised that it is your responsibility to get caught up when a class is missed.

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.

email or phone call will be satisfactory, but do not leave a message on my phone. If you cannot reach me by phone, email me. Be sure to include your name, the course in which you are enrolled, and state your question completely.

**Table Mapping SLO's and Core Objectives** 

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.	Critical Thinking	Quiz
2. Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point.	Communication Skills	Quiz
3. Determine whether a function is continuous and/or differentiable at a point using limits.	Critical Thinking	Exam
4. Use differentiation rules to differentiate algebraic and transcendental functions.	Critical Thinking	Exam
5. Identify appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.	Empirical and Quantitative Skills	Quiz
6. Evaluate definite integrals using the Fundamental Theorem of Calculus.	Empirical and Quantitative Skills	Exam
7. Articulate the relationship between derivatives and integrals using the Fundamental Theorem of Calculus	Critical Thinking	Exam

**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 engaged in academic dishonesty on an assignment, quiz, or exam will receive a zero for that work, with no opportunity to retake it. The zero will be included in the final grade calculation for the course. A second offense will result in a final grade of **F** for the course. Academic dishonesty – such as cheating on exams or quizzes is an extremely serious offense and will be referred to the Office of Student Conduct for the appropriate disciplinary action.

**Note:** There is a zero-tolerance policy for the use of cell phone or any other electronic devices during quizzes and exams. Possession or use of a cell phone during any assessment will be considered academic dishonesty and handled accordingly. Additionally, using any calculator on a quiz or test when it is not allowed will be considered cheating as well as using a calculator other than a TI-30XIIS calculator (or an approved scientific calculator) on a calculator approved quiz or test.

**Student Concerns:** If you have any questions or concerns about any aspect of this course, please contact me using the contact information provided. If, after discussing your concern with me, you continue to have questions, please contact Mr. Leslie Richardson, Math Department

Chair, at 409-933-8329 or lrichardson@com.edu.

### **Additional Policies**

## **Unattended Minors/Children in Class**

For their safety, unattended minors of students are not permitted on campus while students are in class. In consideration of fellow classmates and staff, please do not bring children to class.

#### Productive Workplace

Students are expected to bring all tools necessary for success to class every day. These tools include writing implements, notebook/note paper, and an approved calculator. **Food and drinks, except for bottled water, are not allowed in classrooms.** All other items (backpacks, purses, bags, laptops, etc.) must be placed between your feet. In addition, headsets/wireless earbuds and cell phones are to be placed in your backpack, etc. before class starts.

### **Classroom Conduct Policy**

Arriving on time, staying the entire class period, eliminating distractions like cell phones, using appropriate language (no cursing), respecting your classmates and the instructor, and cleaning up after yourself are all expectations for students in the classroom. Please abide by these expectations so that the class setting is enjoyable for all students. Regarding cell phones, they should be turned off or set on airplane mode and in your backpack/purse (not on your desk). It is extremely disruptive to the learning environment, so you will be asked to leave if it is a continuous problem. You are not allowed to use laptops during class. You may ONLY use a tablet for note taking purposes. Infractions may result in an automatic withdrawal from the class. Cell phones **cannot** be used during tests or quizzes and refer to testing policies for additional information. Please notify me before class if you have an emergency that requires you to answer your phone during class. Make sure to take an emergency phone call outside of the classroom.

#### **Recording of Class**

Students may not record all or part of class and/or all or part of a livestream without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Student Disability Services. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. If any instructor's recordings are provided, students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings may result in a disciplinary referral and/or disciplinary action.

#### **Testing Policy**

Prohibited devices include, but are not limited to:

- Cell phones; smart phones; smart watches
- Audio players/recorders, tablets, laptops, notebooks, or any other personal computing devices
- Separate timers
- Cameras or any other photographic equipment
- Any devices, including digital watches, that can be used to record, transmit, receive, or play back audio, photographic, text, or video content.

If your device makes a sound or is in your possession when the device goes off, you may be dismissed, and your score may be recorded as a zero.

If you leave the classroom at any time during an exam, the exam must be submitted for grading. Therefore, it is strongly advised that students take care of all personal business prior to entering the classroom to take an exam.

<u>Using any electronic device other than a TI-30XIIS calculator or TI-84 or an approved scientific calculator on a quiz or test will be considered cheating.</u>

## **Course Outline:**

### Tentative Schedule

Week	Date	Sections Covered	HW/WkA Due
1 T 8/1	T 8/19	2.1 Rates of Change and Tangent Lines to	Due: Aug 25th
		Curves	
	TH 8/21	2.1 Rates of Change and Tangent Lines to	
		Curves	
		2.2 Limit of a Function and Limit Laws	
2	T 8/26	2.3 Precise definition of a Limit	Due: Sep 1st
		2.4 One Sided Limits	
	TH 8/28	2.4 One Sided Limits	
		Quiz 1 (2.1, 2.2, 2.4)	
		2.5 Continuity	
3	T 9/2	2.5 Continuity	Due: Sep 8 <sup>th</sup>
		2.6 Limits Involving Infinity; Asymptotes of	
		Graphs	
T	TH 9/4	2.6 Limits Involving Infinity; Asymptotes of	1
		Graphs	
		Review for Exam 1	
4	T 9/9	Review for Exam 1	
	TH 9/11	Exam 1(2.1 – 2.6)	Sep 11th
5	T 9/16	3.1 Tangent Lines and the Derivative at a Point	Due: Sep 22 <sup>nd</sup>
		3.2 The Derivative as a Function	
	TH 9/18	3.2 The Derivative as a Function	
		3.3 Differentiation Rules	
	T 9/23	3.4 Derivatives as Rates of Change	Due: Sep 29th
		3.5 Derivatives of Trigonometric Functions	
	TH 9/25	3.5 Derivatives of Trigonometric Functions	
		3.6 The Chain Rule	
7	T 9/30	3.7 Implicit Differentiation	Due: Oct 6th
		Quiz 2 (3.1 – 3.7)	
,		3.8 Derivatives of Inverse Functions and	
		Logarithms	
	TH 10/2	3.9 Inverse Trigonometric Functions	
		3.10 Related Rates	
8	T 10/7 3.10 Related Rates	3.10 Related Rates	Due: Oct 13th
	TH 10/9	Review for Exam 2	
9	T 10/14	Exam 2 (3.1 – 3.10)	Oct 14th
		4.1 Extreme Values of Functions on Closed	
	TH 10/16	4.1 Extreme Values of Functions on Closed	Due: Oct 20 <sup>th</sup>
		4.2 The Mean Value Theorem	
10	T 10/21	4.3 Monotonic Functions & the First Derivative	Due: Oct 27th
		4.4 Concavity and Curve Sketching	
	TH 10/23	4.4 Concavity and Curve Sketching	1
		Quiz 3 (4.1-4.4)	
		4.5 Indeterminate Forms and L'Hopital's Rule	
11	T 10/28	4.5 Indeterminate Forms and L'Hopital's Rule	Due: Nov 3rd

		4.6 Applied Optimization	
	TH 10/30	4.8 Antiderivatives	
12	T 11/4	Review for Exam 3	
	TH 11/6	Exam 3 (4.1 – 4.8)	Nov 6 <sup>th</sup>
13	T 11/11	5.1 Area and Estimating with Finite Sums 5.2 Sigma Notation and Limits of Finite Sums	Due: Nov 17 <sup>th</sup>
	TH 11/13	5.2 Sigma Notation and Limits of Finite Sums 5.3 The Definite Integral	
14	T 11/18	5.4 The Fundamental Theorem of Calculus Quiz 4 (5.1-5.4) 5.5 Indefinite Integrals and the Substitution Method	Due: Nov 24 <sup>th</sup>
	TH 11/20	Review for Exam 4	
15	T 11/25	Exam 4 (5.1 – 5.5)	Nov. 24 <sup>th</sup>
	TH 11/27	***Thanksgiving Break***	
16	T 12/2	Review for Final Exam	
	Th 12/4	Final Exam	Dec. 4 <sup>th</sup>

PLEASE NOTE: The syllabus is subject to change at the discretion of the instructor. W-Day –Nov. 14<sup>th</sup>

#### **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 <a href="https://www.com.edu/student-services/student-handbook.html">https://www.com.edu/student-services/student-handbook.html</a>. 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, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: <u>AccessibilityServices@com.edu</u>

Location: COM Doyle Family Administration Building, Student Success Center

**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.

**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 1<sup>st</sup> 8-week session is October 1. The last date to withdraw from the 16-week session is November 14. The last date to withdraw for the 2<sup>nd</sup> 8-week session is November 25.

**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, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <a href="https://www.com.edu/community-resource-center/">https://www.com.edu/community-resource-center/</a>. 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 <a href="maintenance-deanoft-de

## **Nondiscrimination Statement:**

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.