# McLennan COLLEGE

WACO, TEXAS

# **COURSE SYLLABUS**

# AND

# **INSTRUCTOR PLAN**

# CALCULUS I

# MATH 2413.87

# Dr. DEANNA BARNES

# **NOTE:** This is a 16-week Online course.

#### COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website on any changes to these guidelines.

AN EQUAL OPPORTUNITY INSTITUTION

SUMMER 1 2021

#### 2413.87

### Course Description:

Examines the concept of limit and its relationship to differential and integral calculus. Introduces the student to topics that may include differentiation of algebraic and trigonometric functions, optimization, differentials, antiderivatives, definite integrals, numerical integration, and their applications to problem solving. Graphing calculator required

## Prerequisites and/or Corequisites:

MATH 2412 or MATH 1314 and MATH 1316, or consent of division chair. Semester Hours 4 (4 lec)

# **Course Notes and Instructor Recommendations:**

Math 2412 in an online format involves optional meetings during office hours, and online discussions. Class notes, lecture videos and discussions will be available in Brightspace. Videos are done by both publisher and instructor lecture videos. Online homework assignments as well as videos and ancillaries will be located at <u>www.pearsonmylabandmastering.com</u>. Students are required to upload all handwritten work for their exams. NO CREDIT will be given if your work does not support your answer. Work for exams must be handwritten, neat, and numbered and uploaded within 15 minutes of submitting the exam in MyMathLab.

### **Instructor Information:**

Instructor Name: Deanna R. Barnes MCC E-mail: dbarnes@mclennan.edu Office Phone Number: 254-299-8810 Cell Phone Number: 713-459-5045 (Text first, then I will call back. Be sure to tell me who you are and what class you are in.) Office Location: MATH 218 Office Hours: Office hours are available by appointment Link to Zoom Meeting Room: <u>Personal ID Number 2542998810</u>

# **Required Text & Materials**:

Title: MyMathLab Student Access Kit (Standalone) Publisher: Pearson ISBN-13: 9780134764559 Required graphing calculator – TI-83, TI-83 Plus, TI-84, or TI-84 Plus ABSOLUTELY NO TI-89, HP-48 or similar CAS calculators allowed (symbolic integration capable)

# MCC Bookstore Website: http://www.mclennan.edu/bookstore/

# Methods of Teaching and Learning:

The best way to approach the course is to watch the lecture video while taking notes (or print out the attached pdf file with lecture notes), do the homework, and take the quizzes, then the exams in the assigned order. Work through the weekly checklists in Brightspace in the order material and tasks are presented. Be sure to check off items in the checklist once they are completed.

# Course Objectives and/or Competencies:

Upon completion of the course, the student will be able to:

1. Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.

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- 2. Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point.
- 3. Determine whether a function is continuous and/or differentiable at a point using limits.
- 4. Use differentiation rules to differentiate algebraic and transcendental functions.
- 5. Identify appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.
- 6. Evaluate definite integrals using the Fundamental Theorem of Calculus.
- 7. Articulate the relationship between derivatives and integrals using the Fundamental Theorem of Calculus

#### **Course Outline or Schedule:**

In order to be successful in this course, I strongly urge you to do the following each week:

- 1. Go to Brightspace, click on the Component you are working on.
- 2. Follow the steps in the Component Checklist in the order they appear. Do not try to skip around or work out of order. The course is designed to help you move through the material as efficiently as possible.

Pay attention to the calendar below. Begin each component by opening the Checklist.

**Be sure to check off items as you complete them**. (this unlocks the next checklist) Work through the course in the order items are presented in the Checklists.

Remember Due Dates are NOT Start Dates. Each component represents what would normally be assigned for one Week during a long semester.

It is always easier to keep up than to catch up. Consequently, you may want to work ahead to build in a buffer for when "life happens", as it usually does, at the most inopportune time.

Component	Assignments Due by	Component	Assignments Due by
Due Date	11:00pm CST	Due Date	11:00pm CST
Component 1	Sec 2.1 – 2.3, Quiz 1	Component 9	Sec 4.5 – 4.6, <b>Quiz 8</b>
August 27	Discussion 1	October 22	
Component 2	Sec 2.4 – 2.6, <b>Quiz 2,</b>	Component 10	Sec 4.8, Quiz 9, Exam 3
September 3		October 29	Discussion 5
Component 3	Exam 1, Sec 3.1 – 3.3	Component 11	Sec 5.1 – 5.2, Quiz 10
September 10	Discussion 2	November 5	
Component 4	Quiz 3 Sec 3.4 - 3.5, Quiz 4	Component 12	Sec 5.3 – 5.4, Quiz 11
September 17		November 12	Discussion 6
Component 5	Sec 3.6- 3.8, Quiz 5	Component 13	Sec 5.5 – 5.6, <b>Quiz 12</b> ,
September 24	Discussion 3	November 19	
Component 6 October 1	Sec 3.9 – 3.11, <b>Quiz 6</b> ,	Component 14 November 26	Exam 4 Discussion 7
Component 7 October 8	Discussion 4 Exam 2 (Covers ALL of Chapter 3) MIDTERM EXAM (Covers Chapters 2 & 3)	Component 15 December 3	FINAL EXAM Covers Chapters 2 - 5
Component 8 October 15	Sec 4.1 – 4.4, Quiz 7,	December 7	Grades due to Registrar

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#### **Course Grading Information:**

Discussion Board	10%
Homework (MyMathLab)	15%
Quizzes	15%
Exams (4)	20%
Midterm Exam	20%
Final Exam	20%

The lowest online exam and homework grade will be dropped. The three lowest quiz grades will be dropped. The comprehensive midterm exam and final exam will NOT be dropped.

All work for ALL EXAMS must be handwritten, numbered and NEAT. It MUST be uploaded in the Assignment area in Brightspace within 15 minutes of submitting your exam in MyMathLab. Failure to do so will cause you to lose 100% of your score in MyMathLab for problems requiring work. Any work that does not support your answer will cause points to be deducted from the grade in MyMathLab. You will not receive credit for "guessing" or divine inspiration.

Your course average can be found in Brightspace under "Assessments". Homework will be a completion grade calculated at the time of each exam. In order to earn credit for completing a section of homework, you need to earn at least 70% in MML. You will have four homework grades that correspond to the four exams. Any section of homework that has a grade less than 70 will deduct ten points from your homework grade for each section with a grade less than 70.

Having someone else do your online homework assignment and cheating on a test are both violations of the academic integrity policy and either may result in failing grades and/or being dropped from the class. Infractions such as these will be reported to the administration for tracking and possible disciplinary action.

#### **Course Policies:**

Due dates for online homework, quizzes, exams and discussion boards will be clearly communicated, however, these are just there to help you pace yourself to be able to finish the course on time. All work will be available throughout the duration of the course. I will update grades in Brightspace based upon the due dates. If you fall behind, I will record a zero for the late assignment but will change the grade once the assignment is completed. You will see the changed grade the next time I update grades in Brightspace. I update grades manually, so double check your grades in Brightspace against what you see in MML to ensure there are no type-o's. All work must be completed by noon, the last day of class.

#### **Supplemental Instruction:**

This course has been selected to participate in MCC's Supplemental Instruction (SI) Program. SI is a series of weekly review sessions designed to help students succeed in their academic pursuits. SI is for ALL students who want to improve their understanding of Calculus II and improve their grades.

The sessions offer a chance to meet with classmates to compare notes, discuss important concepts, develop strategies for studying, and test yourselves before exams. At each session, you will be guided through the materials by your SI Leader who has previously taken this course and done well.

Each week, the SI Leader will conduct two one-hour sessions. You may attend any of the sessions that fit into your schedule. Session times and locations will be announced in

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Brightspace. If your course average falls below 70, you will be required to attend SI sessions until your average improves. If you attend every SI session, I will offer you 5 bonus points on your Final Exam.

### **Student Behavioral Expectations or Conduct Policy:**

"Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity."

# **Academic Integrity Statement:**

It is expected that all work submitted for a grade represents your own effort. While collaboration on daily assignments is encouraged and expected, exams are to be the work of individual students. Cheating will not be tolerated in this class. If you are caught cheating, you will be removed from this class, given an F for the course, and disciplinary action (suspension) will be recommended to the Vice President of Instruction.

# **Instructor Attendance Policy:**

Make attendance a priority. Weekly activity in the course will be counted as attendance. You must spend at least six hours per component working in MyMathLab. Attendance is very important in this class. In order to receive credit for the course, you must be in attendance at least 75% of the time scheduled for the class. You MUST LOG IN to Brightspace every week or you will be marked absent **If you fall more than two components behind, you may be dropped from the class for lack of participation**. This may happen *without warning* so plan on keeping up or working ahead. If you fall behind, you need to reach out to me with an explanation in order to avoid being dropped. **No drops will be allowed two weeks before the final for ANY REASON.** 

# \* Click Here for the MCC Academic Integrity Statement

### (www.mclennan.edu/academic-integrity)

The link above will provide you with information about academic integrity, dishonesty, and cheating.

### \* Click Here for the MCC Attendance/Absences Policy

### (https://www.mclennan.edu/highlander-guide/policies.html)

Click on the link above for the college policies on attendance and absences. Your instructor may have guidelines specific to this course.

\* You will need to access each link separately through your Web browser (for example: Internet Explorer, Mozilla, Chrome, or Safari) to print each link's information.

# McLennan C O M M U N I T Y

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# ACADEMIC RESOURCES/POLICIES

#### Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <a href="http://www.mclennan.edu/campus-resource-guide/">http://www.mclennan.edu/campus-resource-guide/</a>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing <u>SuccessCoach@mclennan.edu</u>. Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

#### MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <a href="https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html">https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html</a> to find out more about the emergency grant. The application can be found at <a href="https://www.mclennan.edu/foundation/docs/Emergency\_Grant\_Application.pdf">https://www.mclennan.edu/foundation/docs/Emergency\_Grant\_Application.pdf</a>.

#### Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

#### **Backup Plan for Technology:**

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

#### Minimum System Rquirements to Utilize MCC's D2L|Brightspace:

Go to <u>https://www.mclennan.edu/center-for-teaching-and-</u> <u>learning/Faculty%20and%20Staff%20Commons/requirements.html</u> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

#### **Email Policy:**

McLennan Community College would like to remind you of the policy (<u>http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf</u>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

#### Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

#### Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email <u>Helpdesk@mclennan.edu</u> for help.

#### Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

#### MCC Academic Integrity Statement:

Go to <u>www.mclennan.edu/academic-integrity</u> for information about academic integrity, dishonesty, and cheating.

#### Accommodations/ADA Statement:

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu 254-299-8122 Room 319, Student Services Center

#### Title IX:

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at <u>titleix@mclennan.edu</u> or by calling Dr. Drew Canham (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <u>http://www.lighthouse-services.com/mclennan/</u>.

Go to McLennan's Title IX webpage at <u>www.mclennan.edu/titleix/</u>. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

#### **Disclaimer:**

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.