Calculus I
MATH. 2413. 63400
Spring 2016
1/20/16-5/12/16

Professor: Mohammad S. Zouyousefain, Ph.D.
Email: mzouyousefain@dcccd.edu (Please allow at least 24 working hours for response)
Office Phone Number: 214-860-8832, Emails are preferred
Office Number: W194A
Office Hours: Online

Meeting Days & Time: Online
Room Number: Online
Credit Hours: 4 Semester Hours

The following is the Dean’s office information. Please contact your instructor first
Science, Technology, Engineering, & Mathematics (STEM)
Office Hours: M – F 8:00 am – 5:00 pm
Office Phone: 214-860-8760
Office Number: W147

Course Description: This course is a study of 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 an application to calculation of areas.
Course Pre-requisites: MATH 1348, MATH 2412, or equivalent.

Course Materials/Supplies Needed
MYMATHLAB IS REQUIRED BUT HARD COPY OF THE BOOK IS OPTIONAL
OPTIONAL: STUDENT SOLUTION MANUAL, (ISBN# 9780321884107)
TI – 83 OR TI-83 PLUS CALCULATOR REQUIRED
TI-86 CALCULATOR or any other graphing utility IS ACCEPTABLE

Core Objectives:
The objective of the mathematics component of the core curriculum is to develop a quantitatively literate college graduate. Every college graduate should be able to apply basic mathematical tools in the solution of real-world problems.
1. To apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations.

2. To represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.

3. To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.

4. To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results.

5. To interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.

6. To recognize the limitations of mathematical and statistical models.

7. To develop the view that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.

8. **Student Learning Outcomes**

   After successful completion of this course the student should be able to:
   
   1. Solve problems involving limits
   2. Solve problems involving derivatives
   3. Solve problems involving basic integrals
   4. Solve problems involving applications of derivatives

**Course Outline:**

- Chapter 1 Functions
- Chapter 2 Limits and Continuity
- Chapter 3 Differentiation
- Chapter 4 Applications of Derivatives
- Chapter 5 Integration
- Chapter 6 Applications of Integration
- Chapter 7 Transcendental Functions

**Evaluation Procedures:**

- Three Tests 45%
- Class Participation/Quizzes 20% (no class participation is required for online classes)
- Homework 20%
- Final 15%

100%

**Instructor Attendance Policy: (May not apply to online classes)**

Students are expected to attend all classes. Students have the responsibility to attend class and to consult with the instructor when an absence occurs. If for some reason you must leave class early, you should inform the instructor prior to the start of class of your reason for leaving early.

Students must begin attendance in all classes of enrollment. No exceptions. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this lecture course, your physical participation in class, on or before the certification date will allow you to receive credit for FA purposes. For certification dates, check with the division or FAO for further information. Students, who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses.
Grading Scale:
90 – 100 A
80 – 89 B
70 – 79 C
50 – 69 D
0 - 49 F

Late Work Policy:
Late work will not be accepted.

Makeup Exam Policy: No makeup test or quiz will be given. However, under extenuating circumstances, with proper documentation (Note from hospital, doctor, etc.) a maximum of one makeup test or quiz may be arranged.

Certification Procedures: (For Online Courses)
I need to certify your class before the certification day. You need to show attendance by signing up to MyMathLab/MyLab&Mastering when the class starts. If you are in my online or hybrid class, MyMathLab/MyLab&Mastering is the basis for your attendance. (For Lecture classes, you need to sign the attendance sheet when we meet in class).

Please go to www.dcccd.edu, click on the link eCampus, sign up if you are new to eCampus then log in, click on courses, then to this course. On your left click on "what you need to do first" to get the course ID for MyMathLab, and get started. If for some reasons, you have not been able to buy MyMathLab and have not sign in yet, please let me know what your plans are, so that I can certify you as attended.

The withdraw date for this class is April 14, 2016 (R). Please refer to 2015-2016 DCCCD Academic Calendar, Last Day to Withdraw, for updates.

Academic Dishonesty:
Students that caught plagiarizing an assignment will be subject to an “F” in the course and possible expulsion from the college.

Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog. More information is available at https://www1.dcccd.edu/catalog/ss/code.cfm.

Institution Policies: Please visit http://www.mountainviewcollege.edu/Academics/Documents/Institutional%20Policies.pdf for a complete list of institutional policies (Stop Before You Drop; Withdrawal Policy; Repeating a Course; Financial Aid; Academic Dishonesty; Americans with Disabilities Act Statement; Religious Holidays; and Campus Emergency Operation Plan and Contingency Plan.).

Course Calendar/ due dates are posted on MyMathLab.