Instructor Information

Instructor: ___________ Phone: ___________
Office: ___________ Email: ___________
Office hours: ___________

Course Information

COURSE TITLE: CALCULUS I
COURSE NUMBER: MATH 2413
CREDIT HOURS: Four credit hours

COURSE PREREQUISITE: MATH 2412 or MATH 1348 or equivalent.

COURSE DESCRIPTION: 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. (4 Lec.)

REQUIRED TEXTBOOK AND SOFTWARE:

TBA

A student of this institution is not under any obligation to purchase a textbook from a university affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
OTHER REQUIRED MATERIALS:
- Valid and monitored e-mail address, access to eCampus, access to computers.
- Binder or spiral notebook, paper, graph paper, ruler, pencils
- Instructor’s choice: ___________________________

DCCCD/State of Texas LEARNING OUTCOMES related to the book above:

<table>
<thead>
<tr>
<th>Learning Outcome (a listed in ACGM)</th>
<th>Chapter(s) from textbook –</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.</td>
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<tr>
<td>2.) Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point.</td>
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<tr>
<td>3.) Determine whether a function is continuous and/or differentiable at a point using limits.</td>
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<tr>
<td>4.) Use differentiation rules to differentiate algebraic and transcendental functions.</td>
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<tr>
<td>5.) Identify appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.</td>
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<tr>
<td>6.) Evaluate definite integrals using the Fundamental Theorem of Calculus.</td>
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<td>7.) Articulate the relationship between derivatives &amp; integrals using the Fundamental Theorem of Calculus</td>
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Course Activities and Evaluation Procedures:

I. **Unit Exams**: There will be _____ Unit Exams worth ______ points each. Exams may have to be taken outside of classroom time in the Assessment Center located in the basement.
   *Instructor’s procedure: ___________________________

II. **Online homework**: Short quizzes and/or homework will be assigned regularly using __________ software. You may use the temporary access code provided by the software but you must purchase the permanent code by the third week of class.
   *Instructor’s procedure: ___________________________

III. **Final Exam**: A comprehensive departmental exam will be worth _____ points. The final exam will be administered during Finals Week in the classroom. You will need a Scantron Form 882-E, pencil and scratch paper
   *Instructor’s procedure: ___________________________
IV. Instructor’s Choice: ________________________

V. Core Signature Assignment – CT3 “Critically Thinking Things Through”

El Centro College’s Quality Enhancement Plan is “CT3: Critically Thinking Things Through”. The Mathematics Department has designed a project to introduce students in your math class to critical thinking strategies, as well as help students document their thinking when tackling difficult, complex scenarios. You will work on an assignment to fulfill the QEP-CT3 requirements of this course. The “Signature” QEP-CT3 assignment will be available on your eCampus site and will count for 20 points on one of your exams (your instructor will provide you with more details). You must complete and upload a pdf for the Signature assignment no later than the date and time indicated by your instructor.

Grading Policy:

<table>
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<tr>
<th>Grade Calculation (in points)</th>
<th>Final grades will be recorded using the following scale:</th>
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</thead>
<tbody>
<tr>
<td>Test 1………………………___</td>
<td><strong>Course average</strong> = <em>Sum of all points, divided by the</em></td>
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<tr>
<td>Test 2………………………___</td>
<td>*<em>Total Number of Points. Points will be rounded to the</em></td>
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<tr>
<td>Test 3………………………___</td>
<td><strong>nearest whole number.</strong></td>
</tr>
<tr>
<td>Final Exam…………………___</td>
<td>A: 90-100 average</td>
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<tr>
<td>Online Grade…………………___</td>
<td>B: 80-89 average</td>
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<tr>
<td>Instructor’s Choice ..........___</td>
<td>C: 70-79 average</td>
</tr>
<tr>
<td>Total Points:………………. ___</td>
<td>D: 60-69 average</td>
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<td></td>
<td>F: below 60 averages</td>
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</tbody>
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Attendance Policy: Attendance on time and for the whole class period is required.  
Instructor’s Choice

Cell Phone Use in the classroom: Cell phone use in the classroom is not permitted. Please place your phone away and out of sight/  
Instructor’s Choice

Withdrawing from this class:

STOP BEFORE YOU DROP: For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop.

* Drop date for Spring 2020 is 4/16/2020 (R).

You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: [https://www.dcccd.edu/apply-reg/reg/pages/dropwithdraw.aspx](https://www.dcccd.edu/apply-reg/reg/pages/dropwithdraw.aspx)
Institutional Links

Click for Learning Center Tutoring and Resources
URL: https://www.elcentrocollege.edu/services/academic-support/tutoring/pages/default.aspx
West Campus Learning Center: 972-391-1408

Click for DownTown Testing Center
URL: https://www.elcentrocollege.edu/services/academic-support/testing-centers/pages/default.aspx
West Campus Testing Center: 972-391-1424

Click for Course Related Institutional Policies
URL: http://alt.elcentrocollege.edu/admissions/schedule/syllabus/Course-Related-Policies.pdf

Click for El Centro College Institutional Policies
URL: http://alt.elcentrocollege.edu/admissions/schedule/syllabus/Institutional-Policies.pdf

Click for the Title IX and Sexual Misconduct Policy
URL: http://alt.elcentrocollege.edu/students/title-ix-and-sexual-misconduct

Click for the El Centro College Student Handbook
URL: https://www.elcentrocollege.edu/slifeecc/pages/student-handbook.aspx

Click for a list of services available to all El Centro College students
URL: https://www.elcentrocollege.edu/slifeecc/servicesdirectory/pages/default.aspx

Disclaimer:

The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.