MATH 1325 Syllabus
Eastfield College

Instructor Information
Name: Professor Sharon Johnson
DCCCD Email: Sharon.Johnson@dcccd.edu (recommended for fastest response)
(I will respond to emails that are appropriately addressed (course and section number in the subject line
and your full name as a signature – NO ID NUMBER PLEASE!) within 24 hours of receipt
Office Phone: 972-860-7127
Office Location: C-330
Office Hours: MW: 11:30 am – 12:30 pm, TR: 11:30 am – 12:30 pm
Friday: Virtual office Hour 11:00 am – 12:00pm

*Appointments require a formal email request at least 24 hours in advance.
I am always willing to try to schedule an appointment. However, I only get “stood up” once; from then on,
you will need to catch me in my office if I am available.

Division Office and Phone: STEM Division, C-Building, Room 202 | 972-860-7297

Course Information
Course Title: Calculus for Business and Social Sciences
Course Number: MATH 1325
Section Number: 40400
Semester/Year: Spring-2020 (Mar 24- May 14)
Credit Hours: 3
Class Meeting Time/Location: Online
Certification Date: March 30, 2020
Last Day to Withdraw: May 1, 2020

Course Prerequisites
MATH 1324, MATH 1314 or MATH 1414.
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. This course is not a substitute for MATH 2413, Calculus I. This course is cross-listed as MATH 1425. The student may register for either MATH 1325 or MATH 1425 but may receive credit for only one of the two.

Student Learning Outcomes
Upon successful completion of this course, students will:
1. Apply calculus to solve business, economics, and social sciences problems.
2. Apply appropriate differentiation techniques to obtain derivatives of various functions, including logarithmic and exponential functions.
3. Solve application problems involving implicit differentiation and related rates.
4. Solve optimization problems with emphasis on business and social sciences applications.
5. Determine appropriate technique(s) of integration.
6. Integrate functions using the method of integration by parts or substitution, as appropriate.
7. Solve business, economics, and social sciences applications problems using integration techniques.

Texas Core Objectives
The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. Communication Skills - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. Personal Responsibility - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. Social Responsibility - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
Required Course Materials

1. **Textbook**: *College Mathematics for Business, Economics, Life Sciences, and Social Sciences*, (14e) by Barnett, Ziegler, Byleen and Stocker  **OPTIONAL**
2. MyMathLab access code is required. ISBN 9780134880464
   An ebook is included with your MML access.
3. A graphing calculator may be needed for some assignments. Students may check out a TI-84 calculator from the Reserve Desk in the Eastfield library for the day. TI-84 calculators are also available during testing at the Eastfield testing center.

Note: 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.

Graded Work

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated.

Summary of Graded Work

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Weight</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>MML Homework</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Core Artifact</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Tests</td>
<td>4 @ 7.5% each</td>
<td>30%</td>
</tr>
<tr>
<td>MidTerm Exam</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>

**TOTAL: 100%**

Final Grade

<table>
<thead>
<tr>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>89.50-100%</td>
<td>A</td>
</tr>
<tr>
<td>79.50-89.49%</td>
<td>B</td>
</tr>
<tr>
<td>69.50-79.49%</td>
<td>C</td>
</tr>
<tr>
<td>59.50-69.49%</td>
<td>D</td>
</tr>
<tr>
<td>0-59.49%</td>
<td>F</td>
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</tbody>
</table>
Description of Graded Work
Homework will be submitted through MyMathLab. Go to MyMathLab.com. Register by entering the Course ID: See The Syllabus and MyMathLab information located in Ecampus.

Homework due dates and grades are posted on the student’s account. The Orientation and Discussion Board Assignment has a Due Date of 3/30/2020 by 1:00 pm CST-to be certified in this class. There is no exception this due date. All other assignments must be completed by or on 5/13/20, 11:59 pm CST for this 2020 Eight Week Class. See calendar at the end of this syllabus for “suggested dates”.

Core Artifact Assignment
This assignment will be sent as a word document attachment to you. You will send it back to me as a word document attachment. It is a required, departmental assessment of the core objectives described above. Hard due date Saturday, May 2, 2020. This assignment is 5% of your overall grade.

The course is divided into 4 modules. Each module consists of homework, test review and module test. The module test review DOES count as a homework grade. Module tests are taken AT HOME with a 1.5 hour time limit. You will have two attempts for each module test.

A Midterm Review follows the completion of Module 2. The Midterm Review is NOT averaged in as a homework grade. HOWEVER, if you score at least 90% on the Midterm Review before taking the Midterm Exam, 5 points will be added to your Midterm Exam grade. Formulas MUST BE MEMORIZED for the Midterm Exam. Likewise, a Final Exam Review follows the completion of Module 4 and scoring at least 90% on the Final Exam Review before taking the Final Exam adds 5 points to your Final Exam grade. THIS IS EQUIVALENT TO 1.25 POINTS ON YOUR FINAL COURSE GRADE FOR EACH REVIEW!! The Final Exam is NOT comprehensive. Only the material in Modules 3 and 4 is included on the Final Exam.

The Midterm and Final Exam are administered on campus at the EFC Testing Center (or other testing facility arranged in advance). Contact the instructor the first week of class to designate your testing facility. There is NO fee for testing at ANY of the DCCCD campuses. Facilities outside of DCCCD usually require a fee for proctoring “correspondence tests”. Contact information (email address and phone number) is required for facilities outside of DCCCD. DCCCD Testing Center locations and hours in addition to information on nominating an individual to serve as proctor can be found at http://online.dcccd.edu/test-proctoring/. You may also choose to test at home using proctoring services provided by ProctorU. http://proctoru.com/portal/eastfieldcollege/ The cost is $20.75 per exam (If scheduled 72 hours in advance) and requires a webcam and high-speed internet connection.

The Midterm and Final Exam are taken through ecampus. The instructor will post Midterm and Final Exam grades, along with the 5 points for the corresponding test review, on MyMathLab following the completion of each exam.

ALL TESTS can be taken any time before the end of the semester WITHOUT PENALTY but it is highly recommended they be taken NO LATER THAN the indicated dates.
Attendance and Your Final Grade
Any student that has not registered on MyMathLab and completed the orientation and discussion board assignment by **Monday, March 30, 1:00 pm CST (Firm due date)** will NOT be certified as having attended and consequently may be dropped from the class. Also, if a student is on Financial Aid, and is not certified, the student will not receive Financial Aid.

If a student is unable to complete a course (or courses) in which he/she is registered, it is the responsibility of the student to withdraw from the course by the appropriate date. (The date is published in the academic calendar each year and in each semester’s class schedule). If a student does not withdraw, he/she will receive a performance grade, usually a grade of “F”.

Late Work Policy
Tests may be taken up until the last class day with NO penalty. Recommended dates are indicated on the course-pacing calendar included on the last page of the syllabus and on the MML website.

Additional Resources
*Tutoring Services* ([https://www.eastfieldcollege.edu/services/academic-support/tutoring/pages/default.aspx](https://www.eastfieldcollege.edu/services/academic-support/tutoring/pages/default.aspx)) are provided for Mathematics and Developmental Mathematics in the Eastfield library, Building L, Room 200. Students are encouraged to take advantage of this service for additional help in their course work. Visit the link above or call 972-860-7174 for more information on tutors, hours of operation and policies.

Institutional Policies
Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

*[Eastfield Institutional Policies*](http://www.eastfieldcollege.edu/syllabipolicies)

Course Content

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Section</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>Chapter 9</td>
<td>9.1 – 9.5 and 9.7</td>
<td>Limits, Continuity, Derivatives, Differentiation rules, Marginal Analysis.</td>
</tr>
<tr>
<td>Chapter 10</td>
<td>10.1 – 10.7 (All Sections)</td>
<td>Compound interest, Exponential and Logarithmic Derivatives, product rule, quotient rule, chain rule, implicit</td>
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<tr>
<td>Chapter</td>
<td>Section</td>
<td>Topic</td>
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<td></td>
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<td>differentiation, related rates and elasticity of demand</td>
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<tr>
<td>Chapter 11</td>
<td>11.1 – 11.6 (All Sections)</td>
<td>First and second derivative test, L’Hopital’s rule, curve sketching and optimization problems.</td>
</tr>
<tr>
<td>Chapter 12</td>
<td>12.1, 12.2, 12.4, 12.5</td>
<td>Antiderivative, integration by substitution, the definite integral and the Fundamental Theorem of Calculus</td>
</tr>
<tr>
<td>Chapter 13</td>
<td>13.1 – 13.2.</td>
<td>Area between curves and Applications in Business and Economics.</td>
</tr>
</tbody>
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**Syllabus Revision**

The guideline in this syllabus may be changed, deleted, or amended any time by the instructor. The attached course outline is intended as an aid in helping you know your responsibilities for the semester. It is possible that some changes in the course outline or class policies will be made during the semester. Any changes that are made to the class policies or course outline will be sent via email to the class.

Revised 1/7/2020