Midland College Syllabus
2018 - 2019
MATH 1325 - WEB
Calculus for Business & Social Sciences
3 Semester Credit Hours
(3 Lecture/0 Lab)

Instructor Information:
Instructor: Click here to enter text. Office: Click here to enter text.
Phone: Click here to enter text. Email: Click here to enter text.
Office Hours: Click here to enter text.

Notice: Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity will be reported as never attending and dropped from the course.

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. Prerequisite: MATH 1314 College Algebra or MATH 1324 Mathematics for Business and Social Sciences.

Text, References and Supplies:
- Scientific Calculator
- Internet access is required for this online course.
- MyMathLab Access Code is required.

The student is responsible for any additional proctoring fees that may be required.

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.
Student Contributions, Responsibilities and Class Policies:
Students will be expected to comply with the policies outlined in the Midland College Catalog. Instructor policies concerning attendance and academic behavior are consistent with the policies in the catalog. Regular attendance is required to do well in this class. Students will be evaluated based on the results of module assignments, online quizzes, a proctored Midterm Exam, and a proctored Final Exam given during the semester. Students are expected to complete each assignment.

Attendance Policy:
This course is conducted primarily online with the exception of at least one proctored exam that may be taken at a college or university testing center, or other approved location by the instructor. Students are expected to fully participate in the course by logging into Canvas at least twice per week. This is NOT a self-paced course. Refer to the Midland College Catalog for more information.

Withdrawal Policy:
Students who have enrolled in a Texas public institution of higher education as a first-time freshman in fall 2007 or later are permitted to drop no more than six courses during the entire undergraduate career. This limit includes all transfer work taken at a Texas institution of higher education and to second baccalaureate degrees. This statute was enacted by the State of Texas in spring 2007 (Texas Education Code 51.907). Any course that a student drops after Census Day is counted toward the six-course limit if “(1) the student was able to drop the course without receiving a grade or incurring an academic penalty; (2) the student’s transcript indicates or will indicate that the student was enrolled in the course; and (3) the student is not dropping the course in order to withdraw from the institution.” Please visit the Midland College Catalog.

Scholastic Dishonesty:
Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the Student Rights & Responsibilities section in the Midland College Catalog for more information.

Evaluation of Students:
Students will be evaluated based on grades which may including the following but are not limited to:

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<thead>
<tr>
<th>Assessments</th>
<th>Percentage of Grade</th>
<th>Grade Range</th>
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</thead>
<tbody>
<tr>
<td>Proctored Exams</td>
<td>70-100%</td>
<td>90-100 A</td>
</tr>
<tr>
<td>Module Assignments</td>
<td>0-30%</td>
<td>89-80 B</td>
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<td>79-70 C</td>
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<td>69-60 D</td>
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Course Schedule:
This class meets for an equivalent of 3 contact hours per week. Students are not required to attend campus except to take at least one proctored exam at a college or university testing center, or other approved location by the instructor. For a
tentative schedule of the class material to be covered, please refer to the schedule provided in Canvas.

**Course Outline:**

**Chapter 11 – Differential Calculus**
11.1 Limits
11.2 One-Sided Limits and Limits Involving Infinity
11.3 Rates of Change
11.4 Tangent Lines and Derivatives
11.5 Techniques for Finding Derivatives
11.6 Derivatives of Products and Quotients
11.7 The Chain Rule
11.8 Derivatives of Exponential and Logarithmic Functions
11.9 Continuity and Differentiability

**Chapter 12 – Applications of the Derivative**
12.1 Local Extrema
12.2 The Second Derivative
12.3 Optimizations Applications
12.4 Implicit Differentiation
12.5 Related Rates
12.6 Curve Sketching

**Chapter 13 – Integral Calculus**
13.1 Antiderivatives
13.2 Integration by Substitution
13.3 Integration by Parts
13.4 Area and the Definite Integral
13.5 The Fundamental Theorem of Calculus
13.6 Applications and Integrals

**Chapter 14 – Multivariate Calculus**
14.1 Functions of Several Variables
14.2 Partial Derivatives
14.3 Extrema of Functions of Several Variables
14.4 Lagrange Multipliers

**ADA Statement:**
Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must place documentation on file with the Counselor/Disability Specialist. Students with disabilities should notify Midland College prior to the beginning of each semester.

Student Services will provide each student with a letter outlining any reasonable accommodations. The student must present the letter to the instructor at the beginning of the semester. More information can be found at Student Services – Disability Services Midland College Disability Specialist at 685-4505.

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534,
nmorgan@midland.edu. For further information on notice of non-discrimination, visit http://wdcrobcollp01.ed.gov/CFAPPS/OCR/contactus.cfm or call 1 (800) 421-3481.

Spanish

Midland College no discrimina por motivos de raza, color, nacionalidad, sexo, discapacidad, o edad en sus programas o actividades. Las siguientes personas han sido designadas para responder a cualquier pregunta o duda sobre estas políticas no discriminatorias: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. Para más información sobre estas políticas no discriminatorias, visite http://wdcrobcollp01.ed.gov/CFAPPS/OCR/contactus.cfm o llame al 1 (800) 421-3481.
Math/Science Division Information:
Division Dean: Dr. Margaret Wade 125 AHSF (432) 685-4615
Department Chair: Dr. Sonia Ford 110 AHSF (432) 685-4525
Division Secretary: Mrs. Carol Pritchard 124 AHSF (432) 685-6404
Division Clerk: Ms. Sarah Anderson 124 AHSF (432) 685-6896

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