**Midland College Syllabus**
2018 - 2019
MATH 1325
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:**
- MyMathLab Access Code only
- Scientific Calculator
- MyMathLab Access Code may be required by some instructors.

**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 assessments outlined in the
syllabus and Instructor Handout.

Attendance Policy:
It is the responsibility of the students to know the policies and procedures
associated with absences. These policies are set by instructors. Excused absences
may include, but are not limited to, illness, severe weather, and death in the
family. Instructors will determine whether or not an absence is excused. Please
visit the Midland College Catalog

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:

<table>
<thead>
<tr>
<th>Assessments</th>
<th>Percentage of Grade</th>
<th>Grade Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>65-80%</td>
<td>90-100 A</td>
</tr>
<tr>
<td>Quizzes/Assignments</td>
<td>0-10%</td>
<td>89-80 B</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20-25%</td>
<td>79-70 C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69-60 D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>59-0 F</td>
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</tbody>
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Students will be evaluated based on the results of examinations given throughout
the semester. Your lecture instructor will inform you on the first day of class as to
the tentative dates and content for each exam. Students are expected to complete
each exam. Your instructor will inform you on the first day of class as to make-up
procedures for missed exams and any exemption procedures, if they apply (See
Instructor Handout).
Course Schedule:
This class meets for 3 contact hours per week. For a tentative schedule of the class meetings and material to be covered during those meetings, please refer to the schedule distributed to each student on the first class meeting (See Instructor Handout).

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. More information can be found at the Student Services – Disability Services or by contacting the Midland College Disability Specialist at 685-4505.

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.
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://wdcrobcolp01.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://wdcrobcolp01.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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