Midland College
Syllabus
2016 - 2017
MATH 1342
Statistics
3 Semester Credit Hours
(3 Lecture/0 Lab)
Core Curriculum Course

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.

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 may be reported as never attended and dropped from the course.

Course Description:
This course is designed to enable students to learn the introductory techniques of collection,
analysis, presentation, and interpretation of data and probability.  Analysis includes descriptive
statistics, correlation and regression, confidence intervals and hypothesis testing.  Prerequisite:
TSI complete Math.

A final project applying the techniques and analysis described in the above course
description is required.

Core Objectives: Critical Thinking, Communication Skills, Empirical & Quantitative.

Text, References and Supplies:
ISBN: 978-0-133-89269-7 (Midland College custom print)
MyStatLab code may be required by some instructors.
Graphing calculator is required (TI-83 or TI-84 are recommended)

Access to a computer with Microsoft Excel (Computers with this program are available in the
Fasken Learning Resource Center as well as other on-campus computer labs).

Student Learning Outcomes
Upon successful completion of this course, students will:
1. Explain the use of data collection and statistics as tools to reach reasonable
   conclusions.
2. Recognize, examine and interpret the basic principles of describing and presenting
data.
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
4. Explain the role of probability in statistics.

**Student Learning Outcomes (cont’d)**
5. Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.
6. Describe and compute confidence intervals.
7. Solve linear regression and correlation problems.
8. Perform hypothesis testing using statistical methods.

**Student Contributions, Responsibilities and Class Policies:**
Students will be expected to comply with the policies outlined in the Midland College student handbook. Instructor policies concerning attendance and academic behavior are consistent with the policies in the student handbook. Regular attendance is required to do well in this class. Students will be evaluated based on the results of examinations given throughout the semester.

**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. [http://catalog.midland.edu/content.php?catoid=6&navoid=673](http://catalog.midland.edu/content.php?catoid=6&navoid=673)

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).

**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.” [http://catalog.midland.edu/content.php?catoid=6&navoid=673](http://catalog.midland.edu/content.php?catoid=6&navoid=673)

**Scholastic Dishonesty:**
Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the MC Student Handbook on this subject. [http://catalog.midland.edu/content.php?catoid=6&navoid=673](http://catalog.midland.edu/content.php?catoid=6&navoid=673)
Evaluation of Students:
Students will be evaluated based on grades which may include the following but are not limited to:

<table>
<thead>
<tr>
<th>Evaluation Type</th>
<th>Percentage</th>
<th>Grade Range</th>
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</thead>
<tbody>
<tr>
<td>Exams</td>
<td>65-80%</td>
<td>90-100</td>
</tr>
<tr>
<td>Quizzes/Assignments</td>
<td>0-10%</td>
<td>89-80</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20-25%</td>
<td>79-80</td>
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</tbody>
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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 1: Introduction to Statistics
Chapter 2: Summarizing and Graphing Data
Chapter 3: Statistics for Describing, Exploring, and Comparing Data
Chapter 4: Probability
Chapter 5: Discrete Probability Distributions
Chapter 6: Normal Probability Distributions
Chapter 7: Estimates and Sample Sizes
Chapter 8: Hypothesis Testing
Chapter 10: Correlation and Regression (Sections 1-3)

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.

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. Jacqueline January 124 AHSF 432-685-4612