Midland College
Syllabus
2008-09
MATH 1342
Statistics
3 Semester Credit Hours
(3 lecture/0 lab)

Course Description: MATH 1342 is designed to enable students to learn the introductory techniques of collection, presentation, analysis, and interpretation of numerical data. Correlation methods, analysis of variance, dispersion, sampling, quality control, reliability, mathematical models, and programming are also studied. Course Fee.


A graphing calculator and the use of Microsoft Excel (on a computer) are needed for some activities. Excel is available in the Learning Resource Center for Midland College students.

Course Goals/Objectives: After successful completion of this course, students will be able to use statistics correctly. The student will be able to consult with a statistician using appropriate vocabulary. The student will be able to design a simple survey, complete the survey, analyze the survey, and present the results in a clear manner without misrepresenting the information collected.

Student Contributions and Class Policies: Students are expected to regularly attend class; they may be dropped if they have more than six absences in a three-day a week class, more than four absences in a two-day a week class, or six total class hours. Students will act in an appropriate manner that will not interfere with the learning situation of other students as determined by the instructor.

Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the MC Student Handbook on this subject.

Evaluation of Students:
Projects, homework, quizzes 0-30%
Tests 60-80%
Final 10-30%

The grade scale is in accordance with Midland College Faculty handbook.

90 - 100 for an A
80 - 89 for a B
70 - 79 for a C
60 - 69 for a D
0 - 59 for a F
Course Schedule:

Chapter 1: The Nature of Probability and Statistics
Chapter 2: Frequency Distributions and Graphs
Chapter 3: Data Description
Chapter 4: Probability and Counting Rules
Chapter 5: Discrete Probability Distributions
Chapter 6: The Normal Distribution
Chapter 7: Confidence Intervals and Sample Size
Chapter 8: Hypothesis Testing

Intellectual Competencies:

1. Reading - Understanding the material incorporated in the text used in this course will require the student to analyze and interpret various mathematical concepts.
2. Listening - The primary teaching methods used in this course are discussion and lecture. Understanding the oral presentation of material will require the student to analyze and interpret various mathematical concepts.
3. Critical Thinking - Critical thinking, as exemplified by problem solving, is inherent in the study of any scientific discipline. Mathematical problems will be considered, discussed, and analyzed in this course.

ADA Statement:

Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the instructor as soon as possible. These conditions may include documented physical or educational disabilities. Please be aware that services or accommodations are not automatic. Each student must request them and secure the proper authorizations.

Exemplary Objectives:

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Competencies:
1. To apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations.

2. To represent and evaluate basic mathematical information verbally, numerically, graphically and symbolically.

3. To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.

4. To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results.

5. To interpret mathematical models such as formulas, graphs, tables and schematics and draw inferences from them.

6. To recognize the limitations of mathematical and statistical models.

7. To develop the view that mathematics is an evolving discipline, interrelated with human culture, and understanding its connections to the other disciplines.

Instructor Information:

Name:
Office:
Phone:
E-mail:
Hours:

Division Dean: Dr. Margaret Wade, 125 AHSF, 685-4615

Division Secretary: Norma Duran, 124 AHSF, 685-4612
Brenda Smith, 124 AHSF, 685-6413