

SYLLABUS

Course: MAT 207 C Elementary Statistics
Term: Fall, 2012
Instructor: Mrs. Mary Ann Parke
Office: MCC 314
Telephone: 925-3942 (office) or 924-6451 (home)
E-mail: mparke@mc.edu
Office Hours: 10:40 - 11:40 R
Other times by appointment
Text: Essentials of Statistics 4th Edition by Triola
Calculator: TI-83/84 **required**

Catalog Description:

MAT 207 Elementary Statistics

Credit, 3 sem. hrs.

Prerequisites: MAT 101, 210 or two years of high school algebra

A study of elementary statistics for non-majors with an introduction to probability. Emphasis is placed on student understanding and interpretation of statistical data and computation using calculators and computers. Mathematics majors should take MAT 253.

Rationale for Course: Statistics is the basic mathematical tool for drawing certainty from uncertainty. Public policy, the availability of new drugs, the development of new products, comparisons of teaching effectiveness, quality control in production, and even who gets the biggest contract in baseball are based on statistical analysis. The study of statistics develops a set of cognitive and technical skills which include thinking analytically, defining and solving problems, and collecting and analyzing and interpreting data. These understanding and skills are important in preparing students for a lifetime of learning and of service to God and others. This course helps college students understand the basic vocabulary and principles of statistics needed in order to skillfully discern truth in presentations of information.

Learning Objectives: Upon successful completion of this course, the student will be able to:

- correctly define and use statistical terms
- draw and interpret graphs of various types, including scatter plots
- compute measures of central tendency, dispersion and position
- use probability as a tool in statistical evaluation
- compute probabilities from a binomial probability distribution
- develop information from a normal probability distribution
- state and use the Central Limit Theorem
- make point and interval estimates
- test hypotheses
- compute correlation and regression
- explain how statistics are used in a variety of realistic situations
- evaluate statistical citations for correctness and completeness

Academic Integrity: Honesty and integrity are basic virtues expected of all students at Mississippi College. The *Mississippi College Tomahawk* lists the policies and penalties for plagiarism and cheating. This information can also be found online by going to Policy 2.19.

Other Behavioral Expectations: In addition to exhibiting academic integrity, each student is expected to:

- arrive to class on time, prepared to participate fully in the class
- show respect for others by talking only in ways that contribute to a good classroom atmosphere
- turn off and stow out of sight all cell phones, pagers, PDAs, etc.
- refrain from bringing a "full meal deal" to class; light snacks or a drink are OK, but if you spill it, you clean it up
- refrain from reading newspapers, magazines and books from other classes during this class

Disability Accommodation: If you need accommodation due to a disability, please see the information available from MC Student Counseling Services.

Learning Environment: The method of instruction will include lecture, group problem solving, individual problem solving, demonstrations, quizzes and examinations. Each student is expected to have a copy of the text, a calculator (TI83/84 required), writing materials, and an open mind. **Group work is encouraged on homework.** On tests and quizzes the work must be the student's own and no cheating will be tolerated.

Assessment: Assessment of the student's progress will be made through periodic examinations, quizzes, and the grading of other assignments as well as through classroom feedback. There will be three periodic examinations (100 points each), daily work (quizzes, Statdisk assignments, video assignments for a total of about 90 points), and a comprehensive final examination (110 points) for a total of 500 or 510 possible points. Grades will be assigned as follows:

<u>Total Points Earned</u>	<u>Grade</u>
447-500	A
397-446	B
347-396	C
297-346	D
Below 297	F

Makeup work is the responsibility of the student and should be cleared with the instructor in advance. **Makeup tests will only be given if I am notified before the test is given, a valid excuse is given and permission is granted.** This may be done by email or voice mail in advance. There are no makeups for quizzes missed. The College stipulates that the grade for the course is automatically an F in the event of missing 8 or more of the classes. Roll is taken every class period and if a student comes in after it is taken, it is the student's responsibility to inform me that he/she is present that day. Two tardies will equal an absence.

TENTATIVE ASSIGNMENT SCHEDULE

Introduction to Statistics	2	class periods
Descriptive Statistics	4	class periods
Correlation and Regression	1	class period
Probability	3	class periods
Probability Distributions	2	class periods
Normal Probability Distributions	3	class periods
Estimates and Sample Sizes	3	class periods
Testing Hypotheses	4	class periods
Tests and leeway	6	class periods

The final examination will be Saturday, Dec. 8 8:00-11:00 a.m.

Grade Sheet

Quiz/Video/Statdisk Grades

Date	Points
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Examination/Test Grades

Date	Points
_____	_____
_____	_____
_____	_____