

MAT 143 – Statistics and Society
Course Syllabus
Siena Heights University
Fall 2017

Instructor:	Eric Swank
Contact:	eric.swank@monroeisd.us
Course Meets:	M W 6:00 – 7:15
Text:	Statistics: Unlocking the Power of Data Lock, et al.
Required Technology:	TI-Nspire only

Course Description

This course covers topics in introductory statistics including descriptive statistics (measures of center, variability, and shape, and the relationship between two variables), probability and probability distributions, point and interval estimation, and statistical inference (hypothesis testing of a single population parameter and the difference between two parameters).

There will be an emphasis on the effective use on technology including simulations.

Primarily intended for students who will take only one statistics course.

Objectives

The goal of this course is to provide students with the skills to:

1. Gather, describe, organize and interpret data
2. Compute expected values of probability distributions
3. Determine estimates for population parameters
4. Perform hypothesis tests
5. Obtain relationships between variables and determine reliability of regression functions.

Course Expectations

- Come to class prepared: Review notes, skim book, do problems.
- **Use your graphing calculator** whenever possible. Technology gives you the freedom to explore realistic problems and examples, and to spend your time learning concepts, without getting bogged down by difficult and/or tedious hand calculations.
- Form study groups or seek tutoring **IMMEDIATELY** if you are struggling in class.
- Attend every class. You will miss a considerable amount of information and it will solely be on you to catch up. Missed Homework Quizzes or Exams cannot be made up.

Getting Through the Course

The Mathematics Tutoring Lab (Science 26... 264-7882) will be staffed by "Work-study math tutors", some of whom will tutor statistics. A schedule will be posted outside Science 26. Please be prepared when requesting help. The tutors will **not** do your homework for you, nor will they read the text for you. They are very happy and willing to help students who have put some effort into their work prior to coming for support. Successful completion of this course requires a substantial amount of out of class study. Students are encouraged to form study groups. Homework is assigned every class period and it is expected to be completed by the next class period unless otherwise stated.

Collected Assignments

Homework Quizzes:

You will be expected to complete assigned problems from the text for practice. At the end of a chapter, you will be given a Homework Quiz, which will be very similar to the problems found at the end of each section of the text. Generally a Homework Quiz cannot be made up if missed, but if there are extreme circumstances, you may make arrangements in advance to take your quiz sometime before the next class session.

Exams:

There are 3 planned exams this semester. Exams cannot be made up if missed.

Grading

HW Quizzes (20 points each x approx. 5): ~ 100 points
Exams (100 points x 3) 300 points

Total: ~400 points

A = 94-100%	C+ = 77-79%
A- = 90-93%	C = 74-76%
B+ = 87-89%	C- = 70-73%
B = 84-86%	D+ = 67-69%
B- = 80-83%	D = 64-66%
	D- = 60-63%

Final Exam (optional) may replace your lowest exam score.

E = 0-59%

Academic Honesty

Complete honesty is expected in written work with proper acknowledgements to sources. Any student engaged in any act of academic dishonesty may receive a failing grade and reported to the appropriate university authorities. Honesty with oneself and with others is of utmost importance in life. The work you do in this course should reflect your honesty and integrity. In practical terms, this means that you should be honest with yourself about how much time you spend on homework, how well you understand the material, and the level of reliance you have on others to complete the assignments. For example, you are encouraged to work with others on homework; merely copying someone else's work and turning it in as your own does not enhance your understanding and is dishonest. If you do work with others on the homework, write down on your assignment the names of the students you worked with. If there is clear evidence that a student has committed fraud to advance his/her academic status (for example, cheating on an exam or quiz), your instructor will be obliged to deal with the matter in accordance with the Academic Dishonesty Policy found in the SHU Undergraduate Catalog. If you are aware of such activity by another student in the course, you should bring the matter to your instructor's attention immediately.

Students with Disabilities

Section 504 of the Rehabilitation Act of 1973 (Section 504), prohibits discrimination on the basis of physical or mental disability (29 U.S.C. Section 794). Siena Heights University is committed to furnishing appropriate auxiliary aids and services where necessary to afford any student with a disability an equal opportunity to participate in, and enjoy the benefits of, a service, program, or activity conducted by a public entity.

An academically qualified (has met admission standards) student with a disability who is in need of auxiliary aids/services is obligated to provide detailed documentation of the nature of the disabling condition to the Office of Disability Resources (303 Sacred Heart Hall/ 517 264-7683). The student will discuss with the coordinator of the ODR how the disability impacts performance in the academic setting. The student should initiate this process at the beginning of the semester, so that accommodations may be arranged before the student experiences difficulty. This process is not retroactive-a student may not disclose a disability in order to retake a failed test. Once appropriate accommodations/services have been determined, the student presents a Letter of Accommodation (provided after consultation with the coordinator of the ODR) to his/her course teaching staff and discusses a plan for implementing the accommodation/service.

Cell Phone Usage

I ask that you do not use your cell phone during class time. It is a matter of courtesy and respect towards your classmates and the instructor. If you make yourself a distraction in class you will be asked to leave. Assignments you miss will be counted as a 0.

Any use of a cell phone during an exam constitutes academic dishonesty, and will be treated as such.

Tentative Timeline

The schedule below is very subject to change. Material covered and Exam dates are **NOT** set in stone.

Week of:	Monday	Wednesday
8/28 – 8/30	Syllabus; 1.1 – 1.2	1.2 – 1.3
9/4 – 9/6	NO CLASS – LABOR DAY	Quiz Chapter 1; 2.1
9/11 – 9/13	2.2 – 2.3	2.3 – 2.4
9/18 – 9/20	2.5 – 2.6	Quiz Chapter 2; Review for Exam 1
9/25 – 9/27	Exam 1 Ch. 1 – 2	3.1 – 3.2
10/2 – 10/4	3.3 – 3.4	Quiz Chapter 3; 4.1
10/9 – 10/11	4.2 – 4.3	NO CLASS
10/16 – 10/18	4.4 – 4.5	Quiz Chapter 4; Review for Exam 2
10/23 – 10/25	Exam 2 Ch. 3 – 4	5.1 – 5.2
10/30 – 11/1	6.1-6.2	6.3
11/6 – 11/8	Quiz Chapter 6 pt.1; 6.4 – 6.5	6.6
11/13 – 11/15	Quiz Chapter 6 pt.2	NO CLASS
11/20 – 11/22	Review Single Proportion vs Single Mean Begin 6.7	NO CLASS – THANKSGIVING BREAK
11/27 – 11/29	6.7 – 6.9	Quiz Chapter 6 pt.3
12/4 – 12/6	Review for Exam 3	Exam 3 Ch. 5 – 6
12/11	Final Exam (optional) 6:00-8:00 PM	-----