MATH 214
INTRODUCTORY STATISTICS
Nicholls State University, Spring 2007

Instructor: Dr. Brian Heck
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My office hours are 9-12, 1:30-3 T, Th and 1:30-3 M, W. Please contact me (phone, email, or in person) during these times if you have any questions. If you need assistance at a different time, let me know and we'll work something out.

Prerequisite: Math 101 (with a **C** or better).
Text: Elementary Statistics: A Step by Step Approach (6th ed.) by Allan Bluman (McGraw-Hill)
Calculator: You will need to have at least a scientific calculator.

Course Description (catalog): Organizing data, averages and variations, stem-and-leaf and box plots and other graphical representations of data, conducting experiments, elementary probability theory, distributions, estimations, hypothesis testing, regression and correlation.

Course Objectives: We will learn how to apply basic statistics in a variety of fields. Specifically, a student who completes this course will be able to:

- differentiate between the two different branches of statistics
- identify types of data and explain how statistics can be used and misused
- organize data using frequency distributions
- represent data graphically using histograms, frequency polygons and ogives
- summarize data using measures of central tendency and describe data using measures of variation
- create box plots and five-number summaries of data
- determine sample spaces and find the probability of an event
- use probability rules to find the probability of a compound event
- find the conditional probability of an event
- use the permutation rule to count the number of ways objects can be selected
- construct a probability distribution
- identify distributions as skewed or symmetric
- find various areas under the standard normal distribution
- use the Central Limit Theorem to solve problems
- find confidence intervals
- state null and alternative hypotheses

- test means for large and small samples
- test hypotheses using confidence intervals
- compute the correlation coefficient for a set of ordered pairs
- determine the regression line

Grading Policy: We will have three exams and a comprehensive final. The exams will each be worth 100 points, and the final will be worth 200 points. At the conclusion of the semester, you will be assigned a letter grade based on the usual 10% scale (A: 90-100%, B: 80-89%, etc).

Attendance: I will not include attendance as part of your course grade. I am not your mother or your parole officer, and this is not high school. I do, however, expect you to attend class everyday. You are responsible for all material covered in class.

Instructor Expectations: Come to class prepared to learn. In order to understand what we are doing in class, it will be necessary for you to do problems outside of class, and it would be beneficial to you to read the text prior to our covering the material in class. I also expect you to take responsibility for your achievement (or lack thereof) in this class. I am more than happy to help you succeed, but it will take effort on your part as well. I firmly believe that if you (1) come to class and pay attention, (2) do your homework, and (3) ask questions when you get confused, you will do very well in this course. It is assumed that you are attending this university because you have a desire for higher learning. It is therefore expected that you will pay attention, be respectful of your instructor and fellow students, and follow the Code of Student Conduct. Instances of academic dishonesty will be dealt with severely. If you are caught cheating, you will fail this course. Similarly, if you are a disruptive presence in the classroom, you will be dropped from the class.

Important Dates

Test #1 – Thursday, February 8, 2007
Test #2 – Thursday, March 8, 2007
Test #3 – Thursday, April 26, 2007
'**W**' Day - Friday, March 30, 2007
Final Exam - tba

Disability: If you have a documented disability that requires assistance, you will need to register with the Office of Disability Services for coordination of your academic accommodations. The Office of Disability Services is located in Peltier Hall, Room 100-A. The phone number is (985) 448-4430 (TDD 449-7002).