Math 1342 – Statistics
Brazosport College – Spring 2012

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             TTh: 4-5:00 or By Appointment
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Required Course Material
    Textbook: Triola, M. Elementary Statistics,4th Edition. Addison Wesley.
    Calculator: Scientific Calculator
    Software: Microsoft Excel

Course Description

Statistics is a branch of mathematics that attempts to gain information about a large population by looking only at a small sample of that population. In this course, you will learn to organize data using graphs and histograms, and to analyze data on the basis of measures of central tendency and measures of dispersion. You will also learn to calculate probabilities and use the binomial and normal probability distributions. Finally, you will learn to make statistical inferences using hypothesis testing and estimation.

Course Outcomes

  Upon completion of the course, the student will be able to:

1. Identify non-randomness in a sampling technique.
2. Describe the center of a data set using the measures of mean, median, and mode.
3. Measure the dispersion of a data set using the measures of range, variance, and standard deviation.
4. Find the probability of an event using permutations and combinations.
5. Apply the addition rule for finding probability.
6. Apply conditional probability to compound events.
7. Find the probability of an event using the binomial distribution.
8. Calculate the mean of a discrete random variable.
9. Compute the expected value in an application problem.
10. Compute probability using the standard normal distribution.
11. Estimate a population mean using confidence intervals.
12. Estimate a population standard deviation using confidence intervals.
13. Construct and test a hypothesis.

Grading

The following grades are possible for this course:

A: 90 -100%   C: 70 – 79%
B: 80 – 89%   D: 60 – 69%
F: Below 60%

Your grade will be determined by the following guidelines:

Quizzes: 20%
Exams: 3 @ 20% each
Final Exam: 20%

Homework, Quizzes, and Attendance

The key to success is regular practice. Homework is assigned after each class meeting. It is your responsibility to complete the assignment, check your work, and ask questions. Quizzes will be a preview of our next exam, and questions will come from the assigned homework. All quiz dates will be announced ahead of time. I do not give make up quizzes, but I will drop your lowest quiz score.

Attendance is taken each class day but is not part of your grade. You need to attend every class meeting to succeed in mathematics. Note that if you stop attending the class, you will NOT be dropped automatically from the course. Should you need to drop this class, it is YOUR responsibility to do so. The last day you can officially drop this course is Friday, March 30th.

Exams

There will be three exams given in this course, each covering approximately four weeks of course material. I do NOT believe in trick questions. My job is to help you learn and succeed in mathematics, not to trick you. All exam questions will be a fair review of the class material, quiz questions, and assigned homework problems. We will review in class before each exam so there will be no surprises. Your final exam is comprehensive and will be given on Monday, May 7th. At the end of the semester, I will replace your lowest exam grade with your final exam grade if this works to your advantage.

Students with Disabilities

Brazosport College is committed to providing equal education opportunities to every student. BC offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact Phil Robertson, Special Populations Counselor, 979-230-3236 for further information.

Academic Honesty

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the BC Student Guide for more information, this is available online at http://www.brazosport.edu, click on the link found on the left side of the homepage.

In this course, any instance of academic dishonesty will result in a grade of zero on the assignment/quiz/test where the instance occurred. A second instance will result in an automatic F in the course. Remember that your integrity is far more valuable and lasting than a grade. It's not a good trade!

Help

At no time should you think you are in this alone. Seek help before you get into trouble or fall behind. Catching up in math is really a pain! So, always feel free to get help from me, either during my office hours, or by appointment. Also, you can sign up for free tutoring in the LAC. Finally, work together. The best way to understand something is to try to explain it to someone else.

This list is provided to assist you in locating available services.

- Information about the BC Library is available at http://www.brazosport.edu/~lib/Information.htm. or by calling 230-3310.
- Tutoring for Math, Reading, Writing, Biology, Chemistry, and other subjects is available in the Student Success Center, 230-3253.
- The Student Services area provides the following services Counseling and Advising, 230-3040; Financial Aid, 230-3294; and Student Activities, 230-3355.