This course includes a study of measures of central tendency and dispersion; probability; the binomial, the normal, the Poisson, Student's t, and chi-square distributions; hypothesis testing; non-parametric tests; regression and correlation. TI-83 graphing calculator required Required skill level: College-level math.

### **Course Success.**

Make time to do **all** your homework between classes, no exceptions. And if you have any difficulties, get help right away. Attend class regularly.

• I will usually be in on AHS campus right before class, but will be available for questions mostly during the following hours on BC campus: Please feel free to drop in, call or email.

М	Т	W	R
4 - 5:30pm	10-11am	4 - 5:30pm	10-11am

- The Student Success Center (located on the second floor of the main building E.200) offers **free** tutoring service. Math tutoring is staffed at most times 9a-8p Monday through Thursday, and Friday 9a-noon.
- The internet is also a useful source of information.
- Resources including solution manuals and lecture videos can be found on the college's website using the pictured button or typing <a href="https://online.brazosport.edu">https://online.brazosport.edu</a> into your browser.

**Username**: the first initial of your first name, full last name, and the last four digits of your student ID (ex: jsmith2468) **Password**: bc + your pin number

# Required

**Text:** *Elementary Statistics Using TI 83/84 Graphing Calculator 4th ed.* byTriola ISBN 978-0-321-95293-6

Calculators: TI-83/84 graphing calculator or equivalent is required

Required course materials are available at the Brazosport College bookstore, on campus or online at <u>http://www.brazosport.edu/bookstore</u>. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

# 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 Brazosport College Student Guide for more information. This is available online at <a href="http://www.brazosport.edu">http://www.brazosport.edu</a>.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and may, at a minimum, result in a zero for that assignment. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

# Grading Policies:

Grades in this course will be assigned based on your performance on tests, quizzes and a cumulative final

<u>Daily Homework</u>. Homework is an **essential** part of the course. Daily assignments will be given each class period from the textbook. The assignments are meant to make sure that you have mastered all the concepts from a particular section. Some answers can be found in the back of the book. Instructors solution manual can be found online in D2L at <u>https://online.brazosport.edu</u>.

<u>Quizzes</u> Quizzes will be given in class and as take-home assignments. There are **no make up** quizzes. Take home quizzes must be turned in by the end of the due day. If you miss class that day, you may either

scan the assignment and email it to me or give to another student to turn in for you. If you miss a quiz, you will receive a zero. I will drop your lowest quiz grade at the end of the semester before averaging. Quiz questions will be similar to homework assignments.

Grading:	
Quizzes	15%
Tests (25% each)	75%
Project	10%
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<u>Tests</u> We will have 3 tests, each 25% of your total grade. Tests will generally cover two or three chapters. Note card may be used on

some tests. If a notecard is allowed, the card must be hand written. You may not share notecards or calculators on a test. Instructions will be given for each individual test. If you are absent on a test day, you will receive a zero on that test. **Generally, there are no makeup tests.** It may be possible to take your test in the Testing Center, but <u>you must contact me first</u> to see if it will be possible. If you have not taken your test before I hand back the tests to the class, you will have missed that test. Your final exam can take the place of your lowest test grade, which will be a zero for a missed test.

<u>Test Corrections</u> You will want to correct every test to be sure that you understand the material completely. However, you will have <u>one</u> opportunity to turn in test corrections for extra points. Corrections will be due one week after the test is returned, so you must decide before you have taken other tests whether you want to correct an individual test. The corrections must be **complete**, in **order**, on a **separate** piece of paper; then stapled to your test. Every step must be shown to receive maximum credit. If there are no steps to show, an explanation must be included.

<u>Final Project</u>: You will be required to complete a team project involving data collection, display of results, analysis of results, and a class presentation.

#### Final

The final exam will be a cumulative test, it is also optional. The final exam may also be used to take the place of your lowest test grade (or a zero for a missed test).

#### **Attendance Policy:**

If you must miss a class, it is your **responsibility** to find out what you've missed and have it ready for the next class meeting. Daily information can be found at <u>https://online.brazosport.edu</u>.

#### Last Day to withdraw:

If you need to withdraw from this or other classes, you need to fill out the appropriate paperwork with the registrar by Friday, October 30.

# Students with disabilities

BC 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, 230-3236 for further information.

# **Learning Outcomes:**

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

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

#### **Other student services information**

- Technical support for computers, distance learning, student logins can be found at **IT** <u>http://www.brazosport.edu/sites/General/InformationTechnology</u> or 979-230-3266
- Library and Learning Services provide proctored testing, computer labs, conference rooms, reference materials <u>http://www.brazosport.edu/sites/CurrentStudents</u>
- Mathematics Department 230.3225
- Counseling, 230-3040
- Financial Aid office, 230-3377
- Student Life, 230-3412
- Security 236-3959

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Monday	ļ	Wednesday		
		Data Collection & Organization		
Chapters 1,2		Chapters 1,2		
	26-Aug			
Measures of Center		Measures of Variation		
Section 3.2		Section 3.3		
	2-Sep			
Holiday	•	Measures of Standing		
•	9-Sep	Section 3.4		
Correlation/Regression		Review/Catchup		
Sections 10.2-10.3		1		
	16-Sep			
Test 1 (chapters 1-3, 10)		Probability Concepts		
1050 I (cimptoris I 0, 10)		Sections 4.2-4.3		
	23-Sen			
Probability - Mulitplication Rules	20.000	Probability -Conditional		
		Sections 4.4-4.5		
50010115 7.7-7.5	30-Son	50010115 7.7-7.5		
Paviaw/Catchup Probability	30-3ep	Probability Distributions		
		Section 5.2		
Chapter 4	7.001	Section 5.2		
Einish ver Dinemiel Distributions	7-061	Binomial Distributions		
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Chapter 5		Sections 5.3-5.4		
	14-Oct			
Test 2 (ch 4,5)		Continuous/Normal Distributions		
		Section 6.2		
	21-Oct			
		Central Limit Theorem		
Section 6.3		Section 6.5		
	28-Oct			
-		Estimating Population Mean & Standard		
proportions Section 7.2		Deviation 7.3-7.4		
	4-Nov			
		HypothesisTesting for Mean		
Section 8.2-8.3		Section 8.4		
	11-Nov			
Two Proportions	T T	Two Means Review/Catchup		
Ch 9		Ch 9		
	18-Nov			
Test 3 (ch 6-9)		Holiday		
· · ·	25-Nov	-		
<b>Project Presentations</b>		<b>Project Presentations</b>		
U Contraction of the second se	2-Dec	<b>v</b>		
Final 8-10am				
F IIIai 0= Ivaiii				
	Monday Intro to Statistics Chapters 1,2 Measures of Center Section 3.2 Holiday Correlation/Regression Sections 10.2-10.3 Test 1 (chapters 1-3, 10) Probability -Mulitplication Rules Sections 4.4-4.5 Review/Catchup Probability Chapter 4 Finish up Binomial Distributions Chapter 5 Test 2 (ch 4,5) Normal Applications Section 6.3 Confidence Intervals – Estimating proportions Section 7.2 Hypothesis Testing Proportions Section 8.2-8.3 Two Proportions Ch 9 Test 3 (ch 6-9) Project Presentations	Intro to Statistics Chapters 1,226-AugMeasures of Center Section 3.22-SepHoliday9-SepCorrelation/Regression Sections 10.2-10.316-SepTest 1 (chapters 1-3, 10)23-SepProbability -Multiplication Rules Sections 4.4-4.530-SepReview/Catchup Probability Chapter 47-OctFinish up Binomial Distributions Chapter 514-OctTest 2 (ch 4,5)21-OctNormal Applications Section 6.328-OctConfidence Intervals – Estimating proportions Section 7.224-NovHypothesis Testing Proportions Section 8.2-8.311-NovTwo Proportions Ch 918-NovTest 3 (ch 6-9) Ch 925-Nov		

Tentative Schedule