

**Sam Houston State University**  
**Department of Economics & International Business**  
**Course Syllabus**

**Course Number:** BANA 2372, Online, 3 credit hours

**Course Title:** Business Analysis

**Prerequisites:** MATH 1324

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**Course Description**

This course is an introduction to the use of quantitative business techniques. Topics include: differential calculus, organizing and presenting data, descriptive statistics, probability, discrete and continuous distributions, modeling, optimization procedures, and statistical inference. Prerequisite: MATH 1324.

**Student Learning Outcomes**

After completing this course the student should be capable of the following:

1. Applying the rules and concepts of derivative calculus to various functional forms.
2. Understand the difference between descriptive and inferential statistics.
3. Determine measures of central tendency: mean, median, and mode.
4. Determine and interpret various measures of variability.
5. Apply descriptive techniques to a data set.
6. Understand the concept of sampling.
7. Understand the use of sample statistics to estimate population parameters.
8. Apply the basic rules of probability.
9. Understand and apply the concept of discrete probability.
10. Understand and apply the binomial probability model.
11. Understand and apply the uniform and normal probability distributions.
12. Understand and apply the concept of sampling distributions

## Required Materials

The textbook we will be using is entitled *Modern Business Statistics with Calculus: An Applied Approach* by Anderson, Sweeney, Williams, Camm, Cochran, Larson, Hodgkins, published by Cengage Learning. The course heavily relies upon electronic access to the book and MindTap for the graded assignments. You will have two weeks free access to the book and MindTap starting with the first day of the semester, after which you will be required to purchase access to continue. The easiest (and possibly the cheapest) way to get access is to go through the Blackboard link.

Every student is expected to have a calculator which can handle exponents, natural logarithms and factorials.

- The mid-term exams and the final exam will require you to use the free proctoring software furnished by SHSU Online. ProctorFree is an on-demand, automated online proctoring service that deters cheating in an online testing environment. Using biometric and machine learning technologies, ProctorFree has eliminated the need for a human proctor during testing.
- You will be required to have a microphone, keyboard, mouse, and webcam (normally, an external webcam includes a microphone). You will also need the Java plugin for your Browser, which can be Firefox 13+, Chrome 18+, Safari 6+ (Mac only), or Internet Explorer 8+ (Windows only).
- For more information refer to the ProctorFree information link on the landing page in Blackboard. There is nothing else to download or install.
- Procedures and a practice exam will be furnished in the course as well as support from SHSU Online Technology Support at 936-294-2780.

## Supplemental Texts (optional)

A fun book, which is highly recommended (but not required), is *The Cartoon Guide To Statistics* by Larry Gonick & Woollcott Smith. Another good book is, *Statistics for People Who (Think They) Hate Statistics*, by Neil J. Salkind.

## Academic Honesty

SHSU expects all students to engage in all academic pursuits in a manner that is above reproach and to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. SHSU may initiate disciplinary proceedings against a student accused of any form of academic dishonesty, including but not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials.

All of the exams are closed book/closed notes. Use of outside materials during an exam is considered cheating. Use of a cellphone during an exam is considered cheating. No formula sheets are permitted during an exam. On the fourth exam and the Final Exam

you will be permitted to use the standard normal probability tables (print them before the exam and show them to the webcam prior to taking the exam).

Only exams submitted through the ProctorFree system will be used to compute your course grade. If an exam is submitted outside of the ProctorFree system, that exam will be given a score of zero.

## Other Policies

Sam Houston State University's policies concerning student disabilities and student absences on religious holy days can be found at the following website:

<http://www.shsu.edu/syllabus/>

## The Weekly Process

Each week another unit will be available to you online. After going through the online material, read the corresponding sections in the book. Homework problems are assigned. You need to do the homework!

Exams are timed. Be prepared to work the problems just as if you were in a face-to-face class. The nice thing about an online class is that you can choose when to take the exam. That means you can prepare yourself first. You won't have enough time to look up things in your book (which you should not be doing anyway during an exam).

All exams should be considered comprehensive. This means that older material may appear on the current exam. The knowledge you learn in a previous part of the course may be required to understand newer material.

## How Your Course Grade Will Be Determined

There are a total of 500 points available to be earned in the course. Exams are worth 100 points each. There will be four exams (including the final exam). Therefore, 400 points of the course total will come from the exams. The remaining 100 points will come from graded online assignments and activities.

Your homework score will be computed as follows:

$$\left( \frac{\text{sum of homework points earned}}{\text{total homework points available}} \right) 100 = \text{homework score}$$

For example, if there are 350 homework points available and you earn 270 of them, your homework grade score be 77.1.

The course is divided into three parts corresponding to the three mid-term exams. All part one homework must be completed prior to the part one exam deadline. All part two

homework must be completed prior to the part two exam deadline. All part three homework must be completed prior to the part three exam deadline. Homework completed after the corresponding exam will not be given credit.

If your final exam score is higher than your lowest mid-term exam score, I will replace the lowest mid-term exam score with the final exam score. In this case your final exam score will be counted twice, once as the final exam and once in the place of the lowest mid-term score. The final exam is mandatory and it cannot be dropped. If you miss an exam you will receive a zero for that exam. There are no make-up exams.

To receive an A in the course you must earn 90% or more of the 500 points. If you earn from 80% to 89.45% of the points you will receive a B. If you earn from 70% to 79.45% of the points you will receive a C. If you earn between 60% and 69.45% you will receive a D. If you earn anything below 59.45% of the total points you will receive an F.

## Exam Schedule

Exam	First Date Available	Deadline for Completion	Primary Units Covered on the Exam
1	Friday Sept. 29, 5:00 a.m.	Monday, Oct. 2, 11:59 p.m.	1, 2, 3, 4, 5, 6
2	Friday Oct. 27, 5:00 a.m.	Monday, Oct. 30, 11:59 p.m.	7, 8, 9, 10, plus old material
3	Wednesday Nov. 29, 5:00 a.m.	Monday, Dec. 2, 11:59 p.m.	11, 12, 13, 14, 15 plus old material
Final	Sunday, Dec. 3, 5:00 a.m.	Tuesday, Dec. 5, 11:59 p.m.	entire course

Most of the questions on exams 1, 2, and 3 will come from the new material, but knowledge of the old material may be required to solve current problems. The final exam will be comprehensive.

## Course Schedule

<b>Week #</b>	<b>Start Date</b>	<b>End Date</b>	<b>What you should accomplish during this time period</b>
1	Wednesday, August 23, 2017	Monday, August 28, 2017	Units 1 & 2
2	Tuesday, August 29, 2017	Monday, September 4, 2017	Unit 3
3	Tuesday, September 5, 2017	Monday, September 11, 2017	Unit 4
4	Tuesday, September 12, 2017	Monday, September 18, 2017	Unit 5
5	Tuesday, September 19, 2017	Monday, September 25, 2017	Unit 6
6	Tuesday, September 26, 2017	Monday, October 2, 2017	Get caught up and take Exam 1
7	Tuesday, October 3, 2017	Monday, October 9, 2017	Unit 7
8	Tuesday, October 10, 2017	Monday, October 16, 2017	Units 8 & 9
9	Tuesday, October 17, 2017	Monday, October 23, 2017	Unit 10
10	Tuesday, October 24, 2017	Monday, October 30, 2017	Get caught up and take Exam 2
11	Tuesday, October 31, 2017	Monday, November 6, 2017	Unit 11
12	Tuesday, November 7, 2017	Monday, November 13, 2017	Units 12 & 13
13	Tuesday, November 14, 2017	Monday, November 20, 2017	Units 14 & 15
	Tuesday, November 21, 2017	Sunday, November 26, 2017	Thanksgiving Holiday
14	Monday, November 27, 2017	Saturday, December 2, 2017	Get caught up and take Exam 3
	Sunday, December 3, 2017	Wednesday, December 6, 2017	
		2017	Take Final Exam