Course Syllabus
Fall 2017

Course Number: BANA 2372.06,
                    M/W 11:00am–12:20pm   SHB 138
Course Title: Business Analysis
Prerequisites: MATH 1324 or 1420 or 1314
Instructor: Dr. Berg   **Office:**   SHB 237K
Office Hours: 3:30 – 4:30 p.m. M-Th   **Phone:**   (936)294 - 1243 (Office)
                    and by appointment   **E-Mail:** dberg@shsu.edu

Teaching Website: http://www.shsu.edu/~eco_mdb/teaching.html
Department's website: http://www.shsu.edu/academics/economics-and-international-business/
Economics Facebook group: https://www.facebook.com/groups/208741956458/

1   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. Credit 3.

2   Learning Outcomes

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

1. Apply 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

3 Required Materials

We will be using the textbook entitled *Modern Business Statistics with Calculus: An Applied Approach* ISBN-9781285149028, by Anderson, Sweeney, Williams, Camm, Cochran, Larson, Hodgkins, published by Cengage Learning. This textbook is primarily an eBook incorporated into the SHSU Blackboard learning management system. You can purchase access to the book and its materials through Blackboard or through the bookstore. The eBook is required because all of the homework assignments are online.

EVERY STUDENT IS EXPECTED TO HAVE A CALCULATOR WHICH CAN HANDLE EXPONENTS, NATURAL LOGARITHMS AND FACTORIALS. CALCULATORS SHOULD BE BROUGHT TO EVERY CLASS MEETING. CALCULATORS CAN NOT BE SHARED DURING EXAMS. CALCULATORS BUILT INTO CELL PHONES AND PDA'S ARE UNACCEPTABLE.

4 Supplemental Texts

A fun book which is highly recommended is *The Cartoon Guide To Statistics* by Larry Gonick & Woollcott Smith. Another good book is, *Statistics for People Who (Think They) Hate Statistics*, 2nd edition, by Neil J. Salkind.

The Department of Economics and International Business maintains a blog at
http://shsueconomicsblog.blogspot.com/
News items relating to Business Analysis will also be posted at this site.

5 Student Conduct and Discipline

Each student is expected to be fully acquainted and comply with all published policies, rules, and regulations of SHSU, copies of which shall be available to each student for review online and/or at various locations on campus. Students are also expected to comply with all federal and state laws.

5.1 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.(See `http://www.shsu.edu/syllabus/`)

5.2 Cell Phone Policy

Do not let your cell phone ring during class! Do not answer your cell phone during class! Do not use instant messaging during class! The use of any cell phone or text messaging device during an exam is strictly prohibited and will be considered cheating. If this is unacceptable do not come to class.

5.3 Movements Into and Out of Class

Students should not come and go from the classroom during the lecture. This interrupts the flow of class material, distracting both the students and the professor. Please be courteous by arriving to class on time and refrain from leaving the room until the class is dismissed.

5.4 Food and Drink in the Classroom

The Dean has explicitly requested that we enforce the prohibition of food and drink in the classrooms. Please do not bring food or drink into class.

5.5 Other University Policies

For policies concerning student disabilities, visitors to the classroom, and student absences on religious holy days, see the university web page `http://www.shsu.edu/syallbus/` .

6 Course Evaluation Process

Online Homework Assignments	100pts
Three mid-term exam scores	300pts
(there will be 3 mid-term exams, each exam is potentially worth 100 points)	
Final Exam	100pts
Total available points [a]	500 pts

[a]All exams are mandatory. However, I will replace the lowest mid-term exam score with the final exam score. The final exam counts twice, once as a replacement for your lowest mid-term and once as the final exam. **The final exam grade can not be dropped.**

The course is divided into three parts. The homework assignments are graded online. Homework for each part must be completed prior to the time of the exam covering that part of the course. Exam problems will strongly resemble the homework problems. It is in each student's best interest to completely understand the homework problems.

Your homework grade will be computed as follows:

$$\left(\frac{Sum\,of\,homework\,points\,earned}{Sum\,of\,homework\,points\,available} \right) \times 100 = Homework\,grade$$

There will be 3 mid-term exams plus the final. Exams will consist of multiple choice questions and problems similar to the assigned homework. **All exams are comprehensive.** The exams will be closed book, however students will be allowed the use of a calculator. Students will be given the entire class period to complete the exam. Since your lowest examination score will be replaced by final exam score, **there will be no makeup exams** – a missed exam will be scored as a zero.

Students should understand this policy clearly. There are no make-up exams for whatever reason. If you miss the exam for a court date, illness, doctor's appointment, car accident, death in the family, or any other reason, that exam will be scored as a zero. I will replace the single lowest mid-term exam score with the final exam score.

If you know ahead of time that you will not be able to take a mid-term exam at the scheduled time, come to me and discuss the conflict. I may or may not be able to arrange a time for you to take the exam early. However, under no circumstances will I allow you to take an exam after the scheduled time.

Exam scores will be posted on BlackBoard, but your grade for the course will only be available on your transcript.

The final exam will be comprehensive. **All students must take the final exam.** There are no make-up final exams. Students must take the final exam at the officially scheduled time.

Letter grades will be assigned as follows:

% of Total Available Points Earned by Student	Grade Assigned
90% +	A
80 – 89 %	B
70 – 79 %	C
60 – 69 %	D
0 – 59 %	F

Example Grade Calculation:
Let's assume that John Doe has earned 92% of the available homework points, therefore his homework grade is 92. John has the following mid-term exam grades: $85, 80, 50$, and a 90 on the final exam. To calculate John's grade we first replace the lowest exam score (the 50) with the final exam score (the 90) and add the points together: $92 + 85 + 80 + 90 + 90 = 437$ John earned 437 points out of a potential of 500 points. The percentage of points earned is $\frac{437}{500} \times 100 = 87.4\%$ John would receive a **B** for the course grade.

6.1   Exam Dates

Exam #1 . . . . Wednesday, September 27
Exam #2 . . . . Wednesday, October 25
Exam #3 . . . . Wednesday, November 29
Final Exam . . . . Wednesday, December 6, 12:00 – 2:00 p.m.

Bring your calculator to every class and especially to each exam:(1) a no. 2 pencil (2) your calculator. You will need at least 4 scantrons for the semester.

7   Important Dates

Sept. 4	Univ. Holiday – Labor Day
Nov. 22, 23, 24	Univ. Holiday – Thanksgiving
Dec. 6	Final exam, 12:00 – 2:00 p.m.

8   Attendance

Attendance will be recorded for each class meeting. According to university policy "Regular and punctual class attendance is expected of each student at Sam Houston State University." (See your undergraduate catalog.) Starting with the second class meeting, attendance will be taken.

IMPORTANT: While the student is in class he/she is expected to be awake and paying attention. Students should not study for another class while in my class. Students not willing or not able to pay attention and participate in the class discussion should not be in class.

9   Tips for Success

Over the years I have collected a list of study habits followed by the most successful students.

1. Read the assigned chapter before coming to class.

2. Pay attention to the lecture. Concentrate on staying tuned into the class discussion.

3. Ask questions when you don't understand.

4. Review lecture notes as soon as possible after the lecture.

5. **Work as many sample problems as possible.**

6. Review class notes and worked problems on a regular basis.

7. Create a study schedule and stick to it. Even when there is nothing new to study, stick to your schedule and review old material.

8. Read the chapter as many times as it takes for you to understand and remember it. (once lightly – once for understanding – once for review)

9. Discuss the material with other students. Try to help others who are having difficulty understanding.

10. Don't fall behind. Don't wait until the last minute. Do it now!

10 Tutoring

If you need additional help, tutoring is available at the following times, Monday through Thursday 1:00-4:30 in SHB 140. Keep in mind that the day before the exam the tutor is very busy and may not be able to give you much attention. It is best to go well in advance of the exams.

11 Class Schedule

Classday	Day	Date	Activity	Units
1	Wednesday	August 23	Percentages, Percentage Change	1
2	Monday	August 28	Review of Common Functional Forms	2
3	Wednesday	August 30	Exponents and Logarithms	3
	Monday	September 4	Labor Day Holiday	
4	Wednesday	September 6	Rates of Change and Derivatives	4
5	Monday	September 11	Rules for Taking Derivatives	5
6	Wednesday	September 13	Rules for Taking Derivatives	5
7	Monday	September 18	Rules for Taking Derivatives	5
8	Wednesday	September 20	Applications of the Derivative	6
9	Monday	September 25	Applications of the Derivative	6
10	Wednesday	September 27	Exam 1	
11	Monday	October 2	Data, Statistics, Descriptive Statistics	7
12	Wednesday	October 4	Descriptive Measures	8
13	Monday	October 9	Descriptive Measures	8
14	Wednesday	October 11	Descriptive Measures	8
15	Monday	October 16	Measures of Association	9
16	Wednesday	October 18	Probability	10
17	Monday	October 23	Probability	10
18	Wednesday	October 25	Exam 2	
19	Monday	October 30	Discrete Probability Distributions	11
20	Wednesday	November 1	Binomial Distribution	12
21	Monday	November 6	Poisson Distribution	13
22	Wednesday	November 8	Continuous Probability Distributions	14
23	Monday	November 13	Continuous Probability Distributions	14
24	Wednesday	November 15	Sampling Distributions	15
25	Monday	November 20	Sampling Distributions	15
	Wednesday	November 22	Thanksgiving Holiday	
26	Monday	November 27	Review	
27	Wednesday	November 29	Exam 3	
	Wednesday	December 6	Final Exam 12:00-2:00 p.m.	