College of Business Administration
Department of Economics and International Business

BANA 2372 – Business Analysis (Session 09)
Fall 2017

Meeting Time: Tuesday and Thursday 11:00 AM–12:20 PM
Class Room: SHB 133 Prerequisite: MATH 1324 or 1420 or 1314
Instructor: Dr. Zijun Luo (*aka* Professor Z) Office: SHB 237C
Office Phone: (936) 294-3984 Email: luozijun@shsu.edu
Office Hours: Monday and Wednesday 9:30–11:00 AM
Tuesday and Thursday 9:30–10:45 AM or by appointment

1 Course Description

This course is an introduction to the use of quantitative techniques in business. Topics covered in this course are divided into two broad categories: mathematics/calculus and statistics. The *mathematics* component includes college algebra (such as linear and quadratic functions) and basic calculus (such as taking derivatives and optimization). The *statistics* component includes organizing and presenting data, descriptive statistics, probability, and probability distributions.

2 Required Materials

- **Business Analysis Custom Mindtap Access Code**
  - You can find it in the SHSU bookstore with ISBN: 9781337702263. After you have purchased the access code, go to the course page on SHSU Online (Blackboard) and click "Link to Cengage" under the tab "Syllabus". Put in your access code when prompted;
  - You can also use the above to buy the access code directly from Cengage;
  - This access code is good for 2 semesters, meaning both BANA2372 and BANA3363.
- Every student is expected to have a *non-graphing, non-programmable scientific 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 other electronic devices are unacceptable and is recommended.

3 IDEA Learning Objectives

1. Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)
2. Learning to apply course material (to improve thinking, problem solving, and decisions)

3. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
4. Learning appropriate methods for collecting, analyzing, and interpreting numerical information

4 Course Learning Objectives

After successfully completing this course, students should be comfortable working with mathematical and statistical techniques useful to business professionals. These include, but do not limit to, the following:

1. Apply the rules and concepts of derivative calculus to various functional forms.
2. Determine measures of central tendency: mean, median, and mode.
3. Determine and interpret various measures of variability.
4. Apply the basic rules of probability.
5. Understand and apply the binomial probability model.
6. Understand and apply the normal probability distributions.

5 Student Conduct and Discipline

Each student is expected to be fully acquainted and comply with all published policies, rules, and regulations of Sam Houston State University, 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

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives 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 which is to be submitted, plagiarism, collusion and the abuse of resource materials. For a complete listing of the university policy, see: http://www.shsu.edu/students/guide/.

5.2 Cell Phone Policy

You will be asked to leave the classroom, unless prior approval is obtained, if you use your cellphone during class. The use of any cell phones, text messaging devices, or other electronic devices that are not explicitly approved during an exam is strictly prohibited and is considered cheating. SHSU Academic Policy Statement 100728 states:

"Even the visible presence of such a device during the test period will result in a zero for that test. Use of these devices during a test is considered de facto evidence of cheating and could result in a charge of academic dishonesty"

For more details on the University's policy on the use of telephones and text messagers, see: https://www.shsu.edu/dotAsset/6d35c9c9-e3e9-4695-a1a1-11951b88bc63.pdf.

5.3 Attendance and Movements Into and Out of Class

The instructor reserves the right to record attendance 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 for more details.

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 this class. Students should not come and go from the classroom during the lecture, unless in extreme situations. Moving into and out of class 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 Student Absences on Religious Holy Days Policy

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20...." A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed. For a complete listing of the university policy, see: http://www.shsu.edu/dept/academic-affairs/documents/aps/students/861001.pdf.

5.5 Students with Disabilities Policy

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see: http://www.shsu.edu/dotAsset/7ff819c3-39f3-491d-b688-db5a330ced92.pdf

5.6 Visitors in the Classroom

Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office.

5.7 Other University Policies

For a complete list of university policies, see: http://www.shsu.edu/syllabus/.

6 Course Evaluation Process

- Homework scores — 160 points
  20 homework assignments, each is potentially worth 10 points
- Mid-term exam scores — 300 points
  3 mid-term exams, each is potentially worth 100 points
- Final Exam — 100 points

Homework assignments are **due in the BEGINNING of class on the scheduled due days** (listed in the tentative class schedule attached to the end of this syllabus). Homework is graded for both completion and correctness. Among the 10 total potential points, 5 are given based on completion (turning in the homework on time) and 5 are awarded based on correctness. The 4 lowest homework scores will be dropped. Keep in mind that exam questions will strongly resemble the homework problems. Hence it is in each student's best interest to completely understand the homework problems.

There will be three mid-term exams plus the final. **All exams are mandatory and comprehensive**. The exams will be closed book, however, students will be allowed the use of a *non-graphing, non-programmable scientific calculator*. Students will be given the entire class period (80 minutes) to complete a mid-term exam. A missed exam will be scored as a zero. 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 *at least 24 hours ahead of the scheduled exam period*. An arrangement may or may not be made for you to take the exam early. However, under no circumstances will you be allowed to take an exam after the scheduled time.

Exam scores will be posted on SHSU Online once graded. Your lowest midterm exam score will be replaced by your final exam score as long as the latter is higher than the former. In case the lowest midterm exam score appeared more than once, only one will be replaced.

All students must take the final exam. There are no make-up final exams, unless otherwise permitted and approved according to SHSU policy. Students must take the final exam at the officially scheduled time. The final exam is 120 minutes.

Exam Dates

- Exam 1 ..... Thursday, September 21, 2017
- Exam 2 ..... Thursday, October 19, 2017
- Exam 3 ..... Thursday, November 16, 2017
- Final Exam ..... Thursday, December 7, 2017 at Noon

Letter grades will be assigned as follows:

Points Earned	% of Total Available Points	Grade Assigned
[504, 560]	[90%, 100%]	A
[448, 504)	[80%, 90%)	B
[392, 448)	[70%, 80%)	C
[336, 392)	[60%, 70%)	D
[0, 336)	[0, 60%)	F

7 Important Dates

Friday, September 8	Fall 2017 Degree Application Deadline
Friday, September 8	Last Day to Drop Without a "Q" Grade and Receive 100% Refund
Friday, November 10	Last Day to Drop with a "Q" Grade

8 Tutoring

Tutoring hours and location are pending.

9 Disclaimer

This syllabus is tentative and may be subject to change based on the needs of the class.

10 Tentative Class Schedule

The customized eBook is divided into three parts. First are chapters 1-21 from "Modern Business Statistics" by Anderson et al., which is denoted by **S**; Second are chapters 1-4 from "Calculus: An Applied Approach" by Larson, which is denoted by **C**; Last are chapters 3 and 4 from "College Algebra" by Larson and Hodgkins, which is denoted by **R**.

		Topics	**Chapters**	**HW Due**
8/24/2017	Thu.	Linear Functions	C1.1, C1.4, C1.2, C1.3	
8/29/2017	Tue.	Quadratic Functions	R3.1, R3.2	HW1
8/31/2017	Thu.	Exponential and Logarithmic Functions	C4.1, C4.2, C4.4, R4.3, R4.4	HW2
9/5/2017	Tue.			HW3
9/7/2017	Thu.	Exponential and Logarithmic Functions	C4.1, C4.2, C4.4, R4.3, R4.4	
9/12/2017	Tue.	Σ and Π Notations	Handouts	HW4
9/14/2017	Thu.	Measures of Location	S3.1	HW5
9/19/2017	Tue.	Measures of Variability	S3.2	HW6
9/21/2017	Thu.	Exam 1		
9/26/2017	Tue.	Measures of Association Between Two Variables	S3.5	
9/28/2017	Thu.	Least Squares Method	S14.1-S14.3	HW7
10/3/2017	Tue.	Tabular and Graphical Displays	S1, S2, S3.4, S3.3	HW8
10/5/2017	Thu.	Introduction to Probability	S4	HW9
10/10/2017	Tue.	Expected Value and Variance	S5.1-S5.3	HW10
10/12/2017	Thu.	Bivariate Distributions	S5.4	HW11
10/17/2017	Tue.	Binomial Probability Distribution	S5.5	HW12
10/19/2017	Thu.	Exam 2		
10/24/2017	Tue.	Poisson Probability Distribution	S5.6	
10/26/2017	Thu.	Uniform Probability Distribution	S6.1	HW13
10/31/2017	Tue.	Normal Probability Distribution	S6.2	HW14
11/2/2017	Thu.	Normal Probability Distribution	S6.2	HW15
11/7/2017	Tue.	Sampling Distribution	S7.1-S7.5	HW16
11/9/2017	Thu.	Limits, Derivatives and the Slope of a Graph	C1.5, C2.1	HW17
11/14/2017	Tue.	Rules of Differentiation	C2.2, C2.4, C2.5, C4.3, C4.5	HW18
11/16/2017	Thu.	Exam 3		
11/21/2017	Tue.	Rules of Differentiation	C2.2, C2.4, C2.5, C4.3, C4.5	
11/23/2017	Thu.	Thanksgiving (no class)		
11/28/2017	Tue.	Applications of Derivatives	C2.3, C3.8, C3.1-C3.5, C4.6	HW19
11/30/2017	Thu.	Applications of Derivatives	C2.3, C3.8, C3.1-C3.5, C4.6	HW20
12/7/2017	Tue.	Final Exam Noon-2PM		