College of Business Administration
Department of Economics and International Business

BANA 2372 – Business Analysis (Session 07) Spring 2018

Meeting Time: Tuesday and Thursday 8:00-9:20 AM

Class Room: SHB 133 Prerequisite: MATH 1324 or 1420 or 1314

Instructor: Dr. Zijun Luo Office: SHB 237C
Office Phone: (936) 294-3984 Email: luozijun@shsu.edu

Office Hours: Tuesday and Thursday 2-4 PM

Wednesday 8-11 AM & 1-3 PM 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, e.g., linear, quadratic, and power functions, and basic calculus, e.g., taking derivatives and optimization. The *statistics* component includes organizing and presenting data, descriptive statistics, probability, probability distributions, and sampling distribution.

2 Required Materials

• Business Analysis Custom Mindtap Access Code

- You can find it in the SHSU bookstore by looking for this course either in store or online. After you have purchased the access code, go to the course page on SHSU Online (Blackboard) and click "Link to Cengage" in the "Syllabus" folder. Put in your access code when prompted;
- This access code is good for 2 semesters, covering both BANA2372 and BANA3363. Note that not every BANA3363 instructor uses a textbook.
- Every student is expected to have a non-graphing, non-programmable scientific calculator which can handle
 exponents and natural logarithms. Examples include Texas Instruments TI-30Xa and TI-30XS series, or
 Casio FX-260 series. Programmable calculators, such as Texas Instruments TI-30XS series or Casio FX-300
 series, are NOT permitted. 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.

3 Tutoring

If you need additional help, tutoring is available Monday through Friday 11:00-4:30 in SHB 108.

4 IMPORTANT NOTE

Every student in this class should schedule a 10-minute meeting with me no later than Friday, February 9, 2018. I will put a sign-up sheet on my door (SHB 237C). Please come by to pick a time slot.

5 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. Learning appropriate methods for collecting, analyzing, and interpreting numerical information

6 Course Learning Objectives

After successfully completing this course, students should have gained a basic understanding of the mathematical and statistical techniques useful to business professionals. These include, but do not limit to, the following:

- 1. Use the appropriate measures to analyze and interpret numerical information
- 2. Apply the basic rules of probability to improve thinking
- 3. Apply the appropriate probability distribution concepts in problem-solving and decision-making
- 4. Apply the rules and concepts of derivatives in problem-solving and decision-making

7 Course Evaluation Process

• Homework scores

20 homework assignments, each is potentially worth 10 points

Mid-term exam scores
 300 points
 mid-term exams, each is potentially worth 100 points

• Final exam score 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. 5 random questions will be checked. You will lose all 5 completion points if you do not finish all 5 random questions. 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. No late homework will be accepted.

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 (see the first page of this syllabus for more information). Students will be given the entire class period (80 minutes) to complete a mid-term exam. A missed exam will be recorded 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. Your lowest midterm exam score will be replaced by your final exam score.

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 period is 120 minutes.

Exam scores will be posted on SHSU Online once graded.

You can find a PDF document named "Test Preparation Checklist" in the "Syllabus" folder on SHSU Online. It is written by the renowned educator Dr. Richard M. Felder. You will find the checklist to be extremely helpful even though it was not written for mathematics.

Exam Dates	
• Exam 1	Tuesday, February 13, 2018
• Exam 2	Thursday, March 22, 2018
• Exam 3	
• Final Exam	Tuesday, May 8, 2018 at 8AM

Letter grades will be assigned as follows:

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

There will be no curve or extra credit.

8 Important Dates

Thursday, February 1 Last Day to Drop Without a "Q" Grade and Receive 100% Refund Friday, April 6 Last Day to Drop with a "Q" Grade

9 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.

9.1 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/.

9.2 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.

9.3 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.

9.4 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.

9.5 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

9.6 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.

9.7 Other University Policies

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

10 Disclaimer

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

11 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
1/18/2018	Thu.	Linear Functions	C1.1, C1.4, C1.2, C1.3	
1/23/2018	Tue.	Quadratic Functions	R3.1, R3.2	HW1
1/25/2018	Thu.	Exponential and Logarithmic Functions	C4.1, C4.2, C4.4, R4.3, R4.4	HW2
1/30/2018	Tue.	Exponential and Logarithmic Functions	C4.1, C4.2, C4.4, R4.3, R4.4	HW3
2/1/2018	Thu.	Σ and Π Notations	Handouts	HW4
2/6/2018	Tue.	Measures of Location	S3.1	HW5
2/8/2018	Thu.	Measures of Variability	S3.2	HW6
2/13/2018	Tue.	Exam 1		
2/15/2018	Thu.	Measures of Association Between Two Variables	S3.5	
2/20/2018	Tue.	Least Squares Method	S14.1-S14.3	HW7
2/22/2018	Thu.	Tabular and Graphical Displays	S1, S2, S3.4, S3.3	HW8
2/27/2018	Tue.	Introduction to Probability	S4	
3/1/2018	Thu.	Expected Value and Variance	S5.1-S5.3	HW9
3/6/2018	Tue.	Bivariate Distributions	S5.4	HW10
3/8/2018	Thu.	Binomial Probability Distribution	S5.5	HW11
3/13/2018	Tue.	Spring Recess (no class)		
3/15/2018	Thu.	Spring Recess (no class)		
3/20/2018	Tue.	Review for Exam 2		HW12
3/22/2018	Thu.	Exam 2		
3/27/2018	Tue.	Poisson and Uniform Probability Distributions	S5.6, S6.1	
3/29/2018	Thu.	Normal Probability Distribution	S6.2	HW13
4/3/2018	Tue.	Normal Probability Distribution	S6.2	HW14
4/5/2018	Thu.	Sampling Distribution	S7.1-S7.5	HW15
4/10/2018	Tue.	Limits, Derivatives and the Slope of a Graph	C1.5, C2.1	HW16
4/12/2018	Thu.	Rules of Differentiation	C2.2, C2.4, C2.5, C4.3, C4.5	HW17
4/17/2018	Tue.	Rules of Differentiation	C2.2, C2.4, C2.5, C4.3, C4.5	HW18
4/19/2018	Thu.	Exam 3		
4/24/2018	Tue.	Applications of Derivatives	C2.3, C3.8, C3.1-C3.5, C4.6	
4/26/2018	Thu.	Applications of Derivatives	C2.3, C3.8, C3.1-C3.5, C4.6	HW19
5/1/2018	Tue.	Special Topic(s)		HW20
5/3/2018	Thu.	Review for Final Exam		
5/8/2018	Tue.	Final Exam 8-10AM		