

SAM HOUSTON STATE UNIVERSITY  
College of Business Administration  
Department of Economics and International Business

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**BAN 232.05 BUSINESS ANALYSIS**

Fall 2007

MW: 12:30 p.m. – 1:50 p.m.  
139 Smith-Hutson Building

SYLLABUS

**INSTRUCTOR:** Viera Chmelarova, Ph.D.

**OFFICE:** 241F Smith-Hutson Building

**PHONE:** (936) 294-4791

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**OFFICE HOURS:** MW 8:30 – 9a.m., 12 – 12:30p.m.  
MWF 10 – 11a.m. or by appointment

**COURSE WEBPAGE:** Class information will be posted to Blackboard:  
<https://blackboard.shsu.edu/webapps/login/>. Please check it regularly. Make also sure that your SHSU email account is not over the quota.

**REQUIRED MATERIALS**

(C) *Calculus for Business, Economics, Life Sciences and Social Sciences* (ISBN-10: 0132328186, ISBN-13: 9780132328180) by Barnett, Ziegler and Byleen (11th edition);

(S) *Statistics: The Art and Science of Learning From Data* (ISBN-10: 0130083690, ISBN-13: 9780130083692) by Agresti and Franklin (1st edition).

Since we will cover only first five chapters from the calculus book, the publisher created a SHSU package (ISBN-10: 0536265062, ISBN-13: 9780536265067) that contains only the required materials and can be purchased at a reduced price.

Both textbooks can be also viewed online through CourseCompass at <http://www.coursecompass.com/>. The course ID for this section is *chmelarova36828*.

The online resource contains all of the textbook materials, tutorials, practice exercises and sample tests. When you purchase the textbooks as new, access to the website is included but you can also buy it alone.

Every student is required to have a scientific calculator (able to handle exponents and natural logarithms). Calculators built into cell phones and PDA's are unacceptable. Calculators should be brought to every class meeting. Calculators cannot be shared during examinations.

**COURSE DESCRIPTION**

The purpose of this course is to expose the student to the use of descriptive and inferential statistics, as well as basic derivative calculus and applied mathematics. Topics

include: organizing and presenting data, descriptive measures, probability, discrete and continuous distributions, sampling, estimation and hypothesis testing. Linear, quadratic, polynomials, exponential and logarithmic functions will be used for modeling various problems encountered in business. The concepts of derivatives will also be introduced as a tool to determine rates of change and solve for optimal values.

**LEARNING OBJECTIVES**

The student will have learned:

1. to apply math and statistics to improve thinking, problem solving, and decisions.
2. to analyze and critically evaluate ideas, arguments, and points of view.
3. the fundamental principles, generalizations, and theories of statistics.
4. the terminology and methods of quantitative analysis.

**COURSE EVALUATION**

There will be 4 mid-term exams, 4 quizzes and the final.

Points will be awarded in the following way:

Best three mid-term exam scores <i>(there will be 4 mid-term exams, each exam is worth 100 points)</i>	300pts
Best three quiz scores <i>(there will be 4 quizzes, each quiz is worth 25 points)</i>	75pts
Bonus points (for activity and attendance)	25pts
Final Exam (comprehensive)	100pts
Total available points	500 pts

All students must take the final exam which will be comprehensive. Since your lowest mid-term exam and your lowest quiz score will not be used in computing your course grade, there will be NO MAKEUP EXAMS and NO MAKEUP QUIZZES – a missed exam or a missed quiz will be scored as a zero. NO EXTRA CREDIT is possible under any circumstances.

The exams will be closed book. For each examination, you will need: a calculator, a scantron and a no. 2 pencil. Exam scores will be posted on Blackboard.

Letter grades will be assigned as follows:

% of Total Available Points	Letter Grade Assigned
90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
Below 60	F

**TENTATIVE COURSE OUTLINE**

Topic	Book Section
Linear Functions	C 1-1, 1-2, 1-3
Exponential Functions	C 2-2
Logarithmic Functions	C 2-3
Derivative	C 3-1, 3-3
Derivative of Constants, Power Forms, and Sums.	C 3-4
Derivatives of Products and Quotients	C 3-5
Chain Rule: Power Form.	C 3-6
Marginal Analysis in Business and Economics	C 3-7
<b>Exam # 1</b>	
First Derivative and Graphs	C 4-1
Second Derivative and Graphs	C 4-2
Optimization; Absolute Maxima and Minima	C 4-4
Derivatives of Logarithmic and Exponential Functions	C 5-1, 5-2, 5-3
Chain Rule: General Form	C 5-4
<b>Exam # 2</b>	
Introduction to Statistics	S 1-1, 1-2
Exploring Data with Graphs	S 2-1, 2-2
Measures of the Center of Quantitative Data	S 2-3
Measures of the Spread of Quantitative Data	S 2-4
Measures of Position of Quantitative Data	S 2-5
Measures of Association	S 3-2, 3-4
Gathering Data	S 4-1, 4-2, 4-3
Probability	S 5-1, 5-2, 5-3
<b>Exam # 3</b>	
Probability Distributions	S 6-1
Normal Probability Distribution	S 6-2
Binomial Probability Distribution	S 6-3
Sampling Distribution	S 6-4
Central Limit Theorem	S 6-5
Inferences about a Population	S 6-6
<b>Exam # 4</b>	

Tentative Exam Dates:      Exam # 1 - Sept. 19  
    Exam # 2 - Oct. 10  
    Exam # 3 - Nov. 5  
    Exam # 4 - Dec. 3  
    Final Exam - Dec. 10

*There will be also 4 quizzes.*

You are expected to work on the textbooks and online problems for each section that is covered. Homework will be assigned, but not always collected.

*Tutoring:* Tutoring (free of charge) will be available in Room 134 SHB every Monday through Thursday, between 2:00 – 4:00 p.m.

## ***CONDUCT***

You are expected to be fully acquainted and comply with all published policies, rules, and regulations of SHSU.

*Academic Dishonesty:* Students are expected to conduct their academic work with integrity and honesty. Acts of dishonesty will not be tolerated and can result in the failure of a course and dismissal from the University. Academic dishonesty includes, but is not limited to, cheating on a test, plagiarism, collusion – the unauthorized collaboration with another person in preparing work offered for credit, the abuse of resource materials, and misrepresentation of credentials or accomplishments. The University policy on academic honesty and appeal procedures can be found in the manual entitled Student Guidelines, distributed by the Division of Student Services (Reference Section 5.3 of the SHSU Student Guidelines).

On examination days, no student will be allowed to begin an exam after the first student to finish that exam has left. No hats may be worn on exam days. While active participation is strongly encouraged, you are expected not to talk during lecturing. Cell phones must be turned off before entering the classroom. Eating and drinking in the classroom are not allowed.

## ***ATTENDANCE***

You are expected to attend each class, to arrive on time and to leave only after the class is dismissed. Attendance will be recorded. Only students who have registered for the class are allowed in the classroom.

Students who are members of the university athletic teams should submit their respective game schedules properly signed by the officials in the athletics department at the beginning of the semester.

*Religious Holy Day Policy:* Section 51.911 (b) of the Texas Education Code requires that an institution of higher education excuses a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. 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 scheduled for that day within 1 week of returning to class. The student desiring to absent himself/herself in order to observe a religious holy day must notify the instructor of his/her intent no later than *September 5*. Request forms are available in the Dept. of Economics and International Business office in SHB 232.

## ***DISABLED STUDENT POLICY***

It is the policy of SHSU that no otherwise qualified disabled individual shall, solely by reason of his/her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic, Student Life program, or activity. Disabled students may request academic assistance/accommodation when needed from a Committee for Continuing Academic Assistance for Disabled Students by visiting the Director of the Counseling Center in the Lee Drain Building Annex, or by calling ext. 1720. Note that no accommodation can be made until a student registers with the Counseling Center.

## ***IMPORTANT DATES***

August 20 MONDAY	Classes begin
September 3 MONDAY	University Holiday - Labor Day
September 5 WEDNESDAY	Twelfth Class Day. Last day to drop without a "Q" and receive 100% refund.
September 19 WEDNESDAY	Exam #1
October 10 WEDNESDAY	Exam #2 Last day for dropping Fall Semester courses without grade of F. Last day to resign without receiving WP or WF. Degree applications to be filed in Registrar's Office by students graduating in May, 2008.
November 5 MONDAY	Exam #3
November 16 FRIDAY	Last day for resignations
November 21 - 23 WEDNESDAY, THURSDAY, FRIDAY	Thanksgiving Holidays
December 3 MONDAY	Exam #4
December 5 WEDNESDAY	Last class day
December 10, 2:00 - 4:00 p.m. MONDAY	Final exam