# Sam Houston State University College of Business Administration Department of Economics and International Businesses



"Do not worry about your difficulties in Mathematics. I can assure you mine are still greater." Albert Einstein.

Course Number: BAN 232, Section 3.

Course Title: Business Analysis

Instructor: Dr. Vargas-Silva

Term: Fall 2007

Office: Smith-Hutson Business Building, 237L

Phone: (936) 294 – 4304 Office (787) 529 – 2382 Mobile

Email: cxv004@shsu.edu

Class webpage: http://www.shsu.edu/~cxv004/teaching/ban.htm

### **Class Hours:**

Monday-Wednesday-Friday 10:00 – 10:50 am

### **Meeting Place:**

Smith-Hutson Business Building 139

Office Hours:

Monday-Wednesday-Friday 9:00 – 10:00 am Wednesday 5:00 – 6:00 pm

Required Texts:

Barnett, Ziegler and Byleen, *Calculus for businesses, economics, life sciences and social sciences*, Prentice Hall, 11<sup>th</sup> edition (**special version for Sam Houston**).

Agresti and Franklin, Statistics: The art of learning from data, Prentice Hall.

You are required to bring the textbook and the class notes (available at www.shsu.edu/~cxv004/teaching/ban.htm) for each class. The class notes are

provided for your benefit only and may contain some errors. This is not a substitute for class discussion and/or the textbook.

# **Learning Objectives:**

The student will have learned to use quantitative business techniques. Topics include organizing and presenting data, descriptive statistics, probability, discrete and continuous distributions, modeling, optimization procedures, and statistical inference (estimation and hypothesis testing).

#### Course Structure:

You are responsible for reviewing the material in Appendix A of the Barnett, Ziegler and Byleen (Calculus) book. This is material that you should have discussed previously in other classes.

This course consists of 41 classes. The material will be discussed in class as follows (this dates serve only as a reference, I retain the right to change the day in which material is discussed and the dates of the tests):

# **Monday August 20:**

Chapter 1. Linear Equations and Graphs.

Wednesday August 22:

Chapter 1. Linear Equations and Graphs.

Friday August 24:

Chapter 2. Functions and Graphs.

**Monday August 27:** 

Chapter 2. Functions and Graphs.

Wednesday August 29:

Chapter 2. Functions and Graphs.

Friday August 31:

Practice Test.

**Monday September 3:** NO CLASS.

Wednesday September 5:

FIRST MIDTERM

Friday September 7:

Chapter 3. Limits and Derivatives.

**Monday September 10:** 

Chapter 3. Limits and Derivatives.

Wednesday September 12:

Chapter 3. Limits and Derivatives.

Friday September 14:

Chapter 4. Additional Derivative Topics.

**Monday September 17:** 

Chapter 4. Additional Derivative Topics.

Wednesday September 19:

Chapter 5. Graphing and Optimization.

Friday September 21:

Practice Test.

**Monday September 24:** 

SECOND MIDTERM

Wednesday September 26:

Chapter 2. Exploring Data with Graphs and Numerical Summaries.

Friday September 28:

Chapter 3. Association: Contingency, Correlation, and Regression.

**Monday October 1:** 

Chapter 3. Association: Contingency, Correlation, and Regression.

Wednesday October 3:

Chapter 4. Gathering Data.

Friday October 5:

Chapter 5. Probability in Our Daily Lives.

**Monday October 8:** 

Chapter 5. Probability in Our Daily Lives.

Wednesday October 10:

Chapter 6: Probability Distributions.

Friday October 12:

Chapter 6: Probability Distributions.

**Monday October 15:** 

Chapter 6: Probability Distributions.

Wednesday October 17:

Practice Test.

Friday October 19:

THIRD MIDTERM

**Monday October 22:** 

Chapter 7. Statistical Inference: Confidence Intervals.

Wednesday October 24:

Chapter 7. Statistical Inference: Confidence Intervals.

Friday October 26:

Chapter 7. Statistical Inference: Confidence Intervals.

**Monday October 29:** 

Chapter 8. Statistical Inference: Significance Tests about Hypothesis.

Wednesday October 31:

Chapter 8. Statistical Inference: Significance Tests about Hypothesis.

If you wear a costume I will give you 5 points in the fourth midterm.

Friday November 2:

Chapter 9. Comparing Two Groups.

**Monday November 5:** 

Chapter 9. Comparing Two Groups.

Wednesday November 7:

Chapter 9. Comparing Two Groups.

Friday November 9:

Chapter 10. Analyzing the Association Between Categorical Variables.

# **Monday November 12:**

Chapter 10. Analyzing the Association Between Categorical Variables.

**Wednesday November 14:** 

Practice Test.

Friday November 16:

FOURTH MIDTERM.

**Monday November 19:** NO CLASS. **Wednesday November 21:** NO CLASS.

Friday November 23: NO CLASS.

**Monday November 26:** 

EXTRA BONUS UP to 10 points.

Chapter 11. Analyzing Association Between Quantitative Variables: Regression Analysis.

# Wednesday November 28:

Chapter 11. Analyzing Association Between Quantitative Variables: Regression Analysis.

Friday November 30:

Review for the final.

**Monday December 3:** 

Practice Test.

**Wednesday December 5:** 

I will be in my office if you have any questions.

#### **Course Evaluation Process:**

**Exams:** There will be four major exams given during the semester. Exams may consist of multiple choices, problems and/or short answer questions. The exams will be closed book. Each student will be allowed the use of a calculator (you cannot share calculators) and a formula sheet will be provided. No make-up exams will be given. If one major exam is missed, the Final exam will replace the grade of zero. If two major exams are missed, or if the Final exam is missed, the student will receive a grade of "F" for the class. Exams may include material from class discussion and/or material from the textbook.

**Final:** The Final will be comprehensive. All students must take the Final exam.

Evaluations: Your grade will be the average of your best three exam scores and the Final exam. That is, I will drop the lowest grade from your exams (the Final exam always counts as part of your grade).

# Example:

	Grade	Letter
First Exam	80	В
Second Exam	85	В
Third Exam	90	A
Fourth Exam	95	A
Final Exam	90	A
Final Grade	90	A

### The course grade will be based on the following grading scale:

90 - 100	A
80 - 89	В
70 - 79	C
60 - 69	D
0 - 59	F

## **Students with Special Needs:**

Please let me know in writing and at least one week before the test if you need special accommodations.

#### **Class Attendance**

Class attendance is mandatory. Roll will be taken during the first three minutes of class. Please do not come in late. Students missing classes may also miss important announcements, special assignments, handouts or extra credit. Students are responsible for materials covered during class periods in which they do no attend (or come in late). If you miss four classes or more you will get a grade of "F" in the course.

## **Email Policy**

During the semester I will be sending emails to the students in the class. The emails are sent to your SHSU account, it is your responsibility to make sure that you have a working SHSU email. I am always glad to receive email from my students. However, you need to follow the following rules:

- 1) Put your first and last name, class name and class meeting time.
- 2) Write in proper English and respectfully.
- 3) Address me as Dr. Vargas-Silva or Professor Vargas-Silva.
- 4) You need to use your SHSU account (no hotmail, yahoo or gmail, etc. accounts).

## **Classroom Etiquette**

The following are the classroom rules:

- 1) All laptop computers must be closed at all times during the class.
- 2) Do not use headphones during the lecture.
- 3) All cell phones must be turn off. Do not talk on the cell phone during class.
- 4) Do not write or read a text message on your cell phone during class.
- 5) Do not play games on hand-held systems or other electronic devices (including watch alarms and cell phones).
- 6) Do not listen to you iPod or music during the class.
- 7) Do not sleep during class.
- 8) If you leave the classroom before the lecture is over it will be counted as an absence.
- 9) During the lecture you should not read material other than the textbook of this class. This means that newspapers and books for other classes should be closed and hidden.
- 10) Be patient and courteous to other students when they ask a question or make a statement, even when the subject may be obvious to you.
- 11) Hats, baseball caps and sunglasses should not be worn in the classroom during examinations.
- 12) Do not interrupt others
- 13) If your behavior is disruptive I will ask you to leave the classroom. This includes making fun of classmates or the professor, talking loudly to other students while the lecture is in progress and whistling. Talking to classmates during the lecture disrupts the normal learning environment.
- 14) Do not answer questions from other student during the lecture.
- 15) Be polite in your speech and manners no profanity or lewd language.
- 16) Students are not allowed to enter the classroom five minutes after I enter the classroom.