#### Course Syllabus Spring 2008

Course Number:	BAN 568.01, M,W 2:00 – 3:20 p.m., Rm SHB 139		
Course Title:	Techniques of Statistical Analysis		
Prerequisites:	BAN 232 or equivalent		
Instructor:	Dr. Berg	Office:	237G - SHB
Office Hours:	9:00 - 11:00 a.m. M,W	Phone:	(936)294 - 1243 (Office)
	and by appointment	E-Mail:	eco_mdb@shsu.edu

# 1 Required Materials

We will be using the textbooks entitled *Business Statistics in Practice* by Bruce L. Bowerman and Richard T. O'Connell, ISBN: 978-0-07-297747-9.

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.

# 2 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.

# 3 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.

### 3.1 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.

## 3.2 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! If this is unacceptable do not come to class.

#### 3.3 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.

#### 3.4 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.

### 4 Course Description

The purpose of this course is to expose the student to the use of inferential statistics and statistical modelling (regression techniques). Topics include: statistical inference (confidence intervals & hypothesis testing), analysis of categorical data, regression, and analysis of variance (ANOVA).

# 5 Course Objective

The major objectives of this course are:

- 1. To learn how to apply math and statistics to improve thinking, problem solving, and decisions.
- 2. To develop the specific skills, competencies, and points of view needed by professionals in business.
- 3. To learn how to analyze and critically evaluate ideas, arguments, and points of view.
- 4. To learn the fundamental principles, generalizations, and theories of statistics.
- 5. To learn the terminology and methods of quantitative analysis.

## 6 Course Evaluation Process

Best three midterm exam scores	300pts
(there will be 4 mid-term exams, each exam is potentially worth 100 points)	
Project scores	100pts
Final Exam	100pts
Total available points $a$	500 pts
<sup>a</sup> All exams are mandatory. However, I will drop the lowest midterm exam score. The fina can not be dropped.	l exam grade

**Projects:** There will be two project assignments. Projects will consist of case studies which require you to apply the things we have learned in the course. Each project will be worth 50 points.

**Exams:** There will be 4 midterm exams plus the final. Exams will consist of multiple choice questions and problems similar to the assigned homework. 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. Each student may drop the single lowest midterm exam score. Since your lowest midterm exam score will not be used in computing your course grade, **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 drop the single lowest mid-term exam from the grade calculation.

Exam scores will be posted on BlackBoard, but your grade for the course will only be available on SamInfo. The final exam will be comprehensive. All students must take the final exam.

Letter grades will be assigned as follows:

% of Total		
Available Points	Grade	
Earned by Student	Assigned	
90% +	А	
80-89~%	В	
70-79~%	$\mathbf{C}$	
60-69~%	D	
0-59~%	$\mathbf{F}$	

#### 6.1 Exam Dates

Exam #1	
Exam #2	Monday, March 24
Exam #3	Monday, April 14
Exam #4	Monday, May 5
Comprehensive Final Exam	

Bring your calculator to every class and especially to each exam:(1) a no. 2 pencil (2) your calculator. You will need at least 5 scantrons for the semester.

### 7 Important Dates

January 21	MLK Day, Holiday
March $10 - 14$	Spring Break.
March 21	Good Friday holiday .
May 12	Final exam, $5:00 - 7:00$ 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 Student Absences on Religious Holy Days

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. A student who 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.

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, United States Tax Code.

# 10 Disabled Student Policy

It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request help with academically related problems stemming from individual disabilities from their instructors, school/department chair, or by contacting the Chair of the Committee for Continuing Assistance for Disabled Students and Director of the Counseling Center, Lee Drain Annex, or by calling (936) 294-1720.

If you have a disability that may adversely affect your work in this class, then I encourage you to register with the SHSU Counseling Center 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 Counseling Center.

### 11 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!

# 12 Course Outline

Date	Lesson	Topic
Wednesday, January 16	1	Review descriptive statistics
Monday, January 21		MLK Day
Wednesday, January 23	2	Probability
Monday, January 28	3	Probability
Wednesday, January 30	4	Binomial Distribution
Monday, February 04	5	Poisson & Hypergeometric Distributions
Wednesday, February 06	6	Uniform Distribution
Monday, February 11	7	Normal & Exponential Distributions
Wednesday, February 13	8	
Monday, February 18	9	Sampling Distributions, Confidence Intervals
Wednesday, February 20	5	Exam $\# 1$
Wednesday, rebruary 20		
Monday, February 25		
Wednesday, February 27	10	Hypothesis testing for means
Monday, March 03	11	Hypothesis testing for proportions
Wednesday, March 05	12	Comparing two means
Monday, March 10		Spring Break
Wednesday, March 12		Spring Break
Monday, March 17	13	Comparing two proportions - Chi Sq. test
Wednesday, March 19	14	Hypothesis testing for two variances
Monday, March 24		Exam $\# 2$
Wednesday, March 26	15	ANOVA
Monday, March 31	16	ANOVA
Wednesday, April 02	17	ANOVA
Monday, April 07	18	Linear Regression & Correlation
Wednesday, April 09	19	Linear Regression & Correlation
Monday, April 14	20	Linear Regression & Correlation
Wednesday, April 16	20	Exam $\# 3$
Monday, April 21	21	Multiple Regression
Wednesday, April 23	22	Multiple Regression
Monday, April 28	23	Time Series Forecasting
Wednesday, April 30	24	Time Series Forecasting
Monday, May 05		Exam $\# 4$
Wednesday, May 07		Review

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