SAM HOUSTON STATE UNIVERSITY COLLEGE OF BUSINESS ADMINISTRATION

Department of Economics and International Business Course Syllabus – Summer I 2008

COURSE NUMBER: BAN 232.03, MTuWThF 12:00 – 1:50 p.m.

COURSE TITLE: Business Analysis

PREREQUISITE: Successful completion of MTH 199 or the equivalent

INSTRUCTOR: Valerie P. Muehsam, Ph.D.

OFFICE: Smith-Hutson Business Building, 103E

PHONE: (936) 294-3712 (Office)

(936) 714-9452 (Mobile)

EMAIL: pepper@shsu.edu

OFFICE HOURS:

M – Thursday 10:00 – 11:00 a.m. 3:00 – 4:00 p.m.

And by Appointment

REQUIRED TEXTS: Calculus for Business, Economics, Life Sciences, and Social Sciences; a custom

text for Sam Houston State University, ISBN 0-536-26506-2

and Statistics, The Art and Science of Learning from Data, ISBN 0-13-008369-0

both published by Pearson/Prentice Hall.

Every student is expected to have a calculator which can handle exponents, natural logarithms and factorials. Calculators should be brought to each class meeting. Calculators cannot be shared during exams. Calculators built into cell

phones and PDAs are unacceptable.

DESCRIPTION OF

COURSE: This course is designed to introduce to students the use of quantitative business

techniques including basic derivative calculus and applied mathematics. Additional 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:

The lectures will emphasize concepts, motivation, interpretation, and present vocabulary. Statistical formulas will be given and discussed on a heuristic basis. Mathematical derivations of the formulas will not be presented. Homework problems will be assigned, but not collected. The student is strongly urged to use the exercises in the texts as practice problems.

COURSE

OBJECTIVES: The major objectives of this course are:

- 1. To introduce the students to the use of statistics and mathematics as business tools in the face of incomplete knowledge. Emphasis will be placed on how information from a sample may be used to describe a population or to make inferences about a population.
- 2. To introduce the students to the various types of data that may be collected and how to organize a data set into a concise and usable form.
- 3. To familiarize the student with the most frequently used numerical descriptive statistics. The student will be presented with the strengths and weaknesses of these descriptive statistics: how to determine which are appropriate, how to calculate and interpret each statistic presented.
- 4. To familiarize the student with functions frequently used to model business phenomena.
- 5. To introduce the students to the concept of probability as a bridge between descriptive and inferential statistics. The student will learn how to recognize distributions that are commonly used in business.
- 6. To familiarize the students on how to use estimation and hypothesis testing to make inferences about means and proportions. The concepts will be introduced using the traditional one- and two-sample techniques.
- 7. To introduce the students to optimization procedures used in business applications.

COURSE EVALUATION PROCESS:

Exams

There will be three major exams given during the summer session. Exams may consist of multiple choice, problems and/or short answer questions. The exams will be closed book. Each student will be allowed the use of a calculator and a formula sheet will be provided. NO MAKE-UP EXAMS WILL BE GIVEN. If one major exam is missed, the Final Exam score will replace the grade of zero. All students will be allowed the opportunity to have the Final Exam replace their lowest exam score. If two major exams are missed, or the Final Exam is missed, the student will receive a grade of "F" for the class.

Final

The final will be comprehensive. All students must take the Final Exam.

Evaluations

The average of all four exam scores (three major exam scores and a final exam score) OR (two highest exam scores and the final exam score double counted) will constitute the final grade for the course

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

 $\begin{array}{lll} A & \dots & 90-100 \\ B & \dots & 80-89 \\ C & \dots & 70-79 \\ D & \dots & 60-69 \\ F & \dots & below 60 \end{array}$

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY

Students who are absent from class for observance of a religious holy day will be allowed to take an examination or complete an assignment scheduled for that day within a reasonable amount of time.

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, Student Life program, or activity. Handicapped students may request academic assistance 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 (936) 294-1720.

CLASS ATTENDANCE

Class attendance is required. Roll will be taken during each class period. Please try not to come in late; the class starts promptly at 12:00 noon. **COMING IN LATE DISTRACTS THE PROFESSOR AS WELL AS THE OTHER STUDENTS. PLEASE TRY TO BE ON TIME**. Students are responsible for materials covered during class periods in which they do not attend. Students missing classes may also miss important announcements, special assignments, handouts or **EXTRA CREDIT**.

IMPORTANT DATES

June 4	Last day to add classes (must be processed by 5:00 p.m.)
June 5	Last day to resign with 80% refund (must be processed by 5:00 p.m.)
June 6	Last day to drop with a refund (must be processed by 5:00 p.m.)
June 10	Last day to resign with 50% refund (must be processed by 5:00 p.m.)
June 13	Last day to resign without "W" (must be processed by 5:00 p.m.)
June 20	Last day to drop courses <u>online</u> without a grade of "F" before taking any scheduled Final exams or before the last business day, whichever comes first (Must be processed by 5:00 p.m.)
June 30	Last Day to Drop a Course in the Registrar's Office without the grade of "F" before taking any scheduled exams or before the last business day, whichever comes first. (Must be processed by 5:00 p.m.)
June 30	Last day to resign (must be processed by 5:00 p.m.)
July 1	Final Examinations

TOPICS/TENTATIVE COURSE OUTLINE

Algebra/Math Review

Percentages/Indices

Functions

Derivatives

Application of the Derivative

EXAM I – Friday June 13, 2008

Introduction to Quantitative

Techniques in Business

Types of data

Measures of Central Tendency

Measures of Variability

Measures of Location

Frequency Distributions

EXAM II - Friday June 20, 2008

Introduction to Probability

Expected Values, variances

Binomial Distribution

Poisson Distribution

Normal Distribution

Exponential Distribution

Statistical Inference

EXAM III – Friday June 27, 2008

FINAL EXAM - Tuesday July 1, 2008