COURSE: BAN 363.9; Intermediate Business Analysis

PREREQUISITE:
BAN 232

INSTRUCTOR:
Valerie P. Muehsam, Ph.D.

OFFICE:
Smith-Hutson Business Building, Room 103E

PHONE:
(936) 294-3712 (Office) (936) 714-9452 (Mobile)
e-mail: pepper@shsu.edu

OFFICE HOURS:
Monday-Thursday 10:00 a.m. – Noon
Others by appointment

REQUIRED TEXT:

DESCRIPTION OF COURSE:
Continuation of BAN232. The course is designed to introduce students to the use of statistics as a business tool in the face of incomplete knowledge. Topics include estimation, hypothesis testing, analysis of variance, goodness-of-fit measures, correlation, simple and multiple linear regression, and sample design.

COURSE OBJECTIVES:
Once students have completed this course they should understand:

1. The use of statistics as a business tool 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. How to use estimation and hypothesis testing to make inferences about means, proportions, and variances. The concepts will be introduced using the traditional one- and two-sample techniques.

3. Analysis of Variance (ANOVA), specifically the one-factor completely randomized design, the randomized block design, and the two-factor factorial design.

4. The Chi-Squared goodness-of-fit analysis.
5. The techniques used to investigate the existence of relationships between two variables - correlation analysis and simple linear regression.

6. Multiple linear regression analysis. The strengths of the procedure along with common misinterpretations will be emphasized.

**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.

**COURSE EVALUATION PROCESS:**

**Exams**
There will be three major exams given during the course. The exams will be closed book and you will be allowed the use of a calculator (any type) and a **formula sheet WILL BE PROVIDED**. There will be no **make-up exams** given. If a student misses one of the three major exams (or if their final exam score is higher than any of the first three exams) then their final exam score will replace the missed (lower) exam score. If two of the major exams are missed, the student will earn an "F" in the course.

**Final**
The final will be comprehensive. **ALL STUDENTS MUST TAKE THE FINAL EXAM.**

**Evaluations**
There will be a total of four exams - three topical exams and a final. The score on the final exam (if higher) may be used to replace the lowest score on the three topical exams. Each of the exams will count 25% of the final grade in the course.

The course grade will be based on the following grading scale:
- A .... 90 - 100
- B .... 80 - 89
- C .... 70 - 79
- D .... 60 - 69
- F .... below 60

**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 as soon as possible after returning to class. Students are asked to let me know as soon as possible of their intent to be absent for observance of a religious holy day.
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. Disabled students may request help with academically related problems stemming from individual disabilities from their instructors, department/division chair, or by contacting the Director of the Counseling Center, Lee Drain Annex, or by calling (936) 294-1720.

CLASS ATTENDANCE

Class attendance is required. **COMING IN LATE DISTRACTS THE PROFESSOR AS WELL AS THE OTHER STUDENTS. PLEASE TRY TO BE ON TIME.** Roll will be taken during each class period. Students are responsible for materials covered during class periods that are missed. Students missing classes may miss important announcements, special assignments, participation/homework/quiz grade opportunities and handouts.

TOPICS/TENTATIVE COURSE OUTLINE

**Topic(s)**
Role of Statistics in Business
Estimation of Population Means, Proportions, and Variances (One & Two Populations)
Hypothesis Testing for Population Means, Proportions, and Variances (One & Two Populations)

**Exam I –**
Analysis of Variance
Goodness-of-Fit Analysis

**Exam II –**
Correlation and Regression Analysis
Multiple Regression and Time Series

**Exam III –**
Final Exam –