Douglas College

A.	Division:	**Instruction**	Effective Date:		**January 2009**
B.	Department / Program Area:	**Commerce & Business Admin. HISP**	Revision	**X**	New Course

If Revision, Section(s) Revised: **H**

Date of Previous Revision: **September 2004**
Date of Current Revision: **August 2008**

C: **BUSN 2337**   **D**:

M: Course Objectives / Learning Outcomes

At the end of the course, the successful student should be able to:
1. Describe data using measures of central tendency and variability;
2. Utilize SPSS statistical software to extract data from a database (PRISM), conduct basic statistical computations, and analyze the results.
3. Calculate the probability of mutually exclusive, dependent or independent events; apply probability distributions to make estimates;
4. Identify appropriate sampling techniques in order to make inferences about the population mean or proportion;
5. Set up confidence intervals and conduct tests of significance for the population mean, proportion and variance using small or large samples;
6. Set up and conduct tests of hypotheses and interpret results;
7. Examine relationships between variables using correlation and linear regression.

N: Course Content:

1. Review of Descriptive Statistics
   . scales of measurement
   . frequency distributions
   . histograms, graphs and diagrams
   . averages and variation
   . using SPSS for computing frequencies, averages and variance
   . cross-tabulation

2. Introduction to SPSS
   . setting up a data file
   . defining data
   . running SPSS/PC+
   . the PRISM data base

3. Probability and Probability Distributions
   . approaches to probability
   . measures of probability or expectation
   . mutually otw144 45871 48.07 0 g( )JTBT/h1-5(f)818.98eW*niation

6. Hypothesis Testing
    . null and alternative hypotheses
    . test statistics
    . test of significance, decision rule
    . Type I and Type II error
    . z-test, t-test, chi-square test
    . using SPSS to test statistical hypotheses

7. Examining Relationships
    . correlation co-efficient (r)
    . .linear regression
    . standard error of the estimate
    . co-efficient of determination
    . using SPSS to calculate (r) and simple regression lines

O: Methods of Instruction

Lecture/discussion
Computerized application exercises. A significant component of this course requires individual usage of computer facilities.

P: Textbooks and Materials to be Purchased by Students

Daniel W. <u>Biostatistics: A Foundation for Analysis in the Health Sciences</u>, 5th Edition, Wiley, 1991.

Raymond Yu. **Research Applications I Manual for BUSN 337**, Douglas College Printers, 1991.

Q: Means of Assessment

Assignments (Minimum 4)	40%
Mid-term Exam	20%
Final Exam	30%
Participation	<u>10%</u>

Date: August 2008