Douglas College

A.	Division:	Instructional	Effective Date:	September 2004	

B. Department / Commerce & Business Admin. Revision   [X]   New Course [ ]
Program Area: Business Management

If Revision, Section(s)   C,F,H,J
Revised:

Date of Previous Revision: April 2003
Date of Current Revision: September 2004

C:	BUSN 2429	**D**:	BUSINESS STATISTICS	**E**	3
	Subject & Course No.		Descriptive Title		Semester Credits

F: Calendar Description:

This course will provide students with an introduction to statistics. Students will learn to solve problems using computer spreadsheets. Topics include measures of central tendency and dispersion, probability, sampling, normal and binomial distributions, confidence intervals and hypothesis testing and regression analyd

M: Course Objectives / Learning Outcomes

At the end of the course, the successful student should be able to:

1. collect statistical data using appropriate sampling techniques;

2. organize statistical data and calculate measures of central tendency and variation;

3. calculate the probability of events when they are mutually exclusive, independent and dependent;

4. use binomial and normal distribution to make probability estimates;

5. set up confidence intervals for population means and proportions;

6. use sample information to test statements or claims about parameters;

7. use computer spreadsheets to solve statistical problems;

8. use simple regression to determine significance of relationship between two variables.

N: Course Content:

1. Descriptive Statistics: frequency distributions, graphical displays, measures of central tendency, measures of dispersion.

2. Probability: experiments, counting rules, assigning probabilities, events, complement, exclusion, intersection, union, addition law, conditional probability.

3. Discrete Probability Distributions: expected value and variance, binomial distribution.

4. Continuous Probability Distributions: uniform and normal probability distributions.

5. Sampling Distributions: random sampling, sampling distribution of sample mean and sample proportion.

6. Interval Estimation: means and proportions, small and large samples, determining sample size.

7. Hypothesis Testing: formulating and testing a research hypothesis, 1 and 2 tailed tests about sample mean and proportion, Type 1 and 2 error.

8. Statistical Inference with Two Populations (independent samples): interval estimation and hypothesis tests for difference between two means and between two proportions.

9. Computer Analysis with Excel Spreadsheets: creation of spreadsheets, histograms, frequency tables, scatter charts, interval estimates, and use of probability distribution functions.

10. Simple Linear Regression: least squares, model and assumption, R-Squared, prediction.

O: Methods of Instruction

Lectures and seminars.

P: Textbooks and Materials to be Purchased by Students

Anderson, D.R., Sweeney et al. <u>Statistics for Business and Economics</u>, Latest Ed. South-Western (Thomson).

Business Calculator: one of:
  Texas Instruments BAII+
  Texas Instruments BA35
  Hewlett Packard 10B
  Sharp EL-733a

Q:	Means of Assessment	
	Final Exam	30%
	Term Examinations (2-3)	40% - 50%
	Computer Lab Test	5% - 10%
	Assignments (6-12)	15% - 25%
	Participation	0% - 5%
		100%
R:	Prior Learning Assessment and Recognition: specify whether course is open for PLAR	
	No.	

Course Designer(s): George Stroppa

Education Council / Curriculum Committee Representative

Dean / Director: Jim Sator

Registrar: Trish Angus