Revised: Fall 2016

BUS 221
Business STATISTICS I

COURSE OUTLINE

Prerequisites:

MTH 163 or MTH 166 or equivalent, or a placement recommendation of MTH 241 or equivalent.

Course Description:

Focuses on statistical methodology in the collection, organization, presentation, and analysis of data; concentrates on measures of central tendency, dispersion, probability concepts and distribution, sampling, statistical estimation, normal and T distribution and hypotheses for means and proportions.Uses the computer package, MINITAB, to solve case studies.

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Semester Credits: 3 **Lecture Hours: 3 Lab/Recitation Hours: 0**

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Course Outcomes

At the completion of this course, the student should be able to:

1. **Prepare reports using descriptive statistics both graphical and numeric presentations.**
2. **Carry out basic probability calculations.**
3. **Use the binomial and normal distributions to solve appropriate applied problems.**
4. **Make appropriate statistical inferences using one and two sample methods.**
5. **Use ANOVA for statistical inferences involving more than two populations.**
5. **Use a computer to obtain appropriate statistics for use in applied problems.**

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Required Materials:

Software, Textbook, Calculator

Textbook:

Discovering Business Statistics Textbook with Minitab. Keller. 9th edition. Hawkes Learning Systems. ISBN: 9781941552582.

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Topical Description: (Outline chapters and sections to be covered in the book – may include timeline)

Topical Description

	Topics	Chapter
I.	**Descriptive Statistics**	**2, 3 & 4**
	A. Tables and Charts	
	B. Measures of Central Tendency	
	C. Measures of Variability	
II.	**Probability**	**6, 7 & 8**
	A. Basic Concepts and Rules	
	B. Discrete Distributions	
	1.Binomial	
	2.Hypergeometric	
	3.Poisson	
	C. Normal Distribution	
III.	**Sampling Distributions**	**9**
	A. Central Limit Theorem	
	B. Random Sampling	
IV.	**Statistical Inference--Estimation and Testing**	**10-14**
	A. One Sample Methods	
	B. Two Sample Methods	
V.	**Analysis of Variance**	**15.1**

Computer usage is stressed throughout the course. Students will use Minitab for exercises throughout the course. Students will also use a calculator that expediently finds the mean and standard dev

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Notes to Instructors
(List information about optional topics, departmental exams, etc.)

1.

2.

3.

4.

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