### Technical Education Department

# COURSE OUTLINE Revision: Marla Lockhart Date: April, 2009

DEPARTMENT:	Business (BUS)
CURRICULUM:	Business Information Technology
COURSE TITLE: Approach	Applied Business Statistics: A Decision Making
COURSE NUMBER:	BUS 175
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	1 quarter
CREDIT HOURS:	5
LECTURE HOURS:	55
LAB HOURS:	0
CLASS SIZE:	24
PREREQUISITES:	Passing score on ASSET or Instructor's permission

COURSE DESCRIPTION:

The course is designed to give an introduction to concepts and techniques used extensively in public and private business sector decision making. The statistical techniques covered in this introductory course are used in functional areas, including: accounting, finance, marketing, production and personnel management. The course will focus on real data applications, active learning, quantitative literacy, statistical thinking and the use of statistical software. Students will be introduced into the power of descriptive statistics methods, probability, and the decision making process in applied business statistics situations. Emphasis is given to the use of statistical methods used in the decision making process; measures of central location, dispersion, and shape; confidence levels and basic cases with realistic business applications.

# STUDENT LEARNING OUTCOMES ADDRESSED:

1. Computation – Use mathematical processes in decision making.

### STUDENT LEARNING OUTCOMES ADDRESSED (Cont.):

- 2. Critical Thinking and Problem Solving Use critical thinking skills to access data, solve problems and make decisions.
- Personal Responsibility Evaluate one's own practices and priorities using data.
- 4. Communication Use effective speaking and writing skills to present information.

### PROGRAM OUTCOMES ADDRESSED:

- 2. Apply mathematical skill to business and banking situations.
- 7. Demonstrate time management and organization skills.
- 8. Identify and use appropriate resources for problem solving.
- 9. Receive, interpret, and follow both written and verbal instructions.
- 12. Demonstrate flexibility, motivation when faced with change.
- 13. Use the Internet for information searches.
- 15. Adapt to workplace practices and practice appropriate professional conduct.
- 16. Interact effectively with individuals and groups.
- 17. Create and present effective presentations (with and without software).
- 18. Interpret business data.
- 19. Demonstrate knowledge of laws and regulations, which affect the US workplace and work force, and an appreciation for ethics in business.
- 20. Understand career paths and advancement criteria typical of office occupations.
- 22. Work with others on larger scale projects.

# GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

- 1. Present a broad overview of the subject and its applications.
- 2. Demonstrate how data is collected and prepared for descriptive summarization, tabular and chart presentation, analysis and interpretation.
- 3. Describe the characteristics of data and the various descriptive summary measures used to aid data analysis and interpretation.
- 4. Explain and give examples of the basic concepts of probability.
- 5. Demonstrate how the normal function can be used not only to represent certain types of phenomena, but also to approximate models under specific conditions.
- 6. Define and develop a confidence interval.

TOPICAL OUTLINE:

### APPROX. HOURS

I. Data collection for decision making	5
II. Organizing and presenting data	6
III. Measures of location, spread and shape	7
IV. Introduction to probability	8
V. Important discrete probability distributions	8
VI. Continuous probability distributions	8
VII. Introduction to statistical estimation/statistical software	8
VIII. Reports	5
	55

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