

Course discipline/number/title: BUS 2212: Business and Economic Statistics

A. CATALOG DESCRIPTION

1. Credits: 4
2. Hours/Week: 4
3. Prerequisites (Course discipline/number): MATH 0094 or MATH 0098
4. Other requirements: None
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: This course is an introduction and overview of business statistics. Topics will include descriptive statistics, probability, sampling methods, confidence intervals, one and two sample tests of hypothesis, analysis of variance, and linear regression. Statistical calculators and software will be used extensively throughout the class. Emphasis is on application of statistical techniques and procedures for solving business related problems, rather than mathematical theories.

C. DATE LAST REVISED (Month, year): February, 2024

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Statistical analysis and business applications
2. Descriptive statistics
3. Central tendency and dispersion
4. Probability
5. Discrete and continuous distributions
6. Confidence intervals
7. Hypothesis testing
8. Analysis of variance
9. Correlation of linear regression

E. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Identify and apply the concepts and procedures needed to solve business problems.
2. Design ungrouped and grouped frequency distributions.
3. Calculate and interpret measures of central tendency, dispersion, and expected values within the business context.
4. Apply discrete and continuous probability concepts within the business context.
5. Demonstrate an understanding of sampling methods and how methods are used in business decision making.
6. Build and interpret a confidence interval estimate using key properties of the appropriate sampling distribution.
7. Interpret simple linear regression analysis and use it in business decision making.
8. Identify connections between basic statistics and business applications.
9. Demonstrate ethical decision-making when applying and interpreting statistical data within the business context.
10. Utilize statistical analysis software programs to complete statistical problems.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:

1. Assignments and case problems
2. Group activities
3. Exams and quizzes

H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcomes(s): Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

I. SPECIAL INFORMATION (if any): Microsoft Excel is required