

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: BUS 227 **Credits:** 3

Course Title: Business Analytics

Course Description:

This course includes an overview of quantitative methods in business decision-making, simple and multiple regression and correlation analysis, time series analysis and business forecasting, decision analysis, linear programming, transportation and assignment methods, and network models. Students will be required to use computer applications. Lecture 3 hours. Total 3 hours per week. 3 credits.

General Course Purpose:

This course prepares students to take a statistical approach to business, using mathematical models to develop new commercial perspectives in working with data.

Course Prerequisites/Corequisites:

Prerequisite: BUS 224 or MTH 245

Student Learning Outcomes:

This course supports the following general learning outcome topics

Critical Thinking

- Use information, ideas and arguments from relevant perspectives to make sense of complex issues and solve problems. Students will create, evaluate, interpret, and combine information to reach well-reasoned conclusions or solutions.
- Written Communication
- Develop, convey, and exchange ideas in writing, as appropriate to a given context and audience. Students will express themselves effectively in a variety of written forms
- Quantitative literacy
- Perform accurate calculations, interpret quantitative information, apply and analyze relevant numerical data, and use results to support conclusions. Students will calculate, interpret and use numerical and quantitative information in a variety of settings.

Major Topics to Be Included:

- Optimization and linear programming
- Regression/ANOVA and correlation analyses
- Time series forecasting
- Network modeling
- Queuing theory
- Decision theory

Effective Date/Updated: August 1, 2022