BAKER COLLEGE
STUDENT LEARNING OUTCOMES

SCM4010 Decision Modeling in Supply Chains
3 Semester Hours

Student Learning Outcomes & Enabling Objectives

1. Explore decision modeling tools for operational supply chain problems.
    a. Compare inventory management and inventory control tools.
    b. Examine sourcing decision processes and evaluation methods.
    c. Discuss the use of modeling for manufacturing planning and optimization.
    d. Apply network modeling techniques for transportation routing decisions and facility layout planning.
2. Analyze and identify appropriate forecasting and demand planning models for strategic and tactical decision making.
    a. Assess historic data and trends and apply the appropriate forecast technique.
    b. Apply a decision model to the demand planning process.
3. Describe the role of data in decision modeling.
    a. Define data-driven decision making.
    b. Explain the use of data analytics for better decision-making.
4. Demonstrate the use of decision support systems in a global supply chain.
    a. Explain the role of ERP (Enterprise Resource Planning) and MPS (Master Production Schedule) in supply chain decision-making.
    b. Demonstrate the use of a SWOT analysis and spreadsheet modeling
    c. Describe the use of predictive analysis in supply chain management.
    d. Explore different optimization models and their benefits.

Big Ideas and Essential Questions

Big Ideas
- Modeling Tools
- Forecasting and Demand Planning
- Data Analysis

Essential Questions
1. How can inventory control and optimization models improve inventory management decision making?
2. What is the most effective forecasting model to use when planning for future demand?
3. What role does information and decision support systems have in supply chain management?
4. How does analytics and optimization improve strategic decision making in a global supply chain?

These SLOs are not approved for experiential credit.

Effective: Spring 2021