

# Bemidji State University

## BUAD 3281: Decision Support Systems

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Design and development of decision support systems with emphasis on management science techniques using a linear programming tool implemented in Excel. Design, documentation, and auditing standards are defined and applied to models and spreadsheet database applications. Prerequisites: ACCT 1102, BUAD 2280 and MATH 1170 (or equivalent or higher).

**B. COURSE EFFECTIVE DATES:** 08/13/2008 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Binary Integer Programming to Deal with Yes-or-No Decisions
2. Forecasting (Supplement)
3. Linear Programming: Basic Concepts
4. Linear Programming: Formulation & Applications
5. Minimum Spanning
6. Network Optimization Problems
7. Nonlinear Programming
8. Queueing Models
9. The Art of Modeling with Spreadsheets
10. What-If Analysis for Linear Programming

### D. LEARNING OUTCOMES (General)

1. apply the integration of advanced spreadsheet development across the entire business and management enterprise.
2. construct spreadsheet techniques to solve real word business case problems.
3. analyze differing software added packages used with spreadsheets.
4. identify the decision-making issues involved in business management.

### E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted