

## **SYLLABUS: MNGT 6303 – ANALYTICAL MODELS FOR DECISION MAKING**

**Catalog Description:** Determinate linear programming, networks and dynamic programming. Emphasizes formation and utilization of programming computer packages.

**Prerequisite(s):** Graduate Standing

**Course Objectives:** Master the statistical analysis of continuous and discrete data distributions.

Various decision theory methods.

Data modeling through computer simulation and analysis.

**Current Textbook:** Textbook and/or selected readings and other materials are the responsibility of the instructor of record and will be specified on a semester-by-semester basis in the course syllabus.

**Evaluation Process:** Evaluation is the responsibility of the instructor of record and will be specified on a semester-by-semester basis in the course syllabus.

**Required Course Content:** Introduction to probability  
Probability distributions  
Decision analysis  
Utility and decision making  
Forecasting  
Introduction to linear programming  
Sensitivity analysis & interpretation of solution  
Linear programming applications  
Transportation, assignment, and transshipment prob  
Integer linear programming  
Project scheduling: PERT/CPM

**Optional Course Content:** Inventory management  
Independent demand  
Waiting line models

**Course Curriculum Coordinator:** Dr. Lloyd J. Taylor, III, P.E.