

# Bemidji State University

## BUAD 4385: Data Modeling and Design

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

The study of database design methodologies, implementation and administration for centralized and distributed database environments. Students will use database design methodologies to develop database projects. Includes study of Structured Query Language (SQL), security techniques, user interface design, testing, and implementation. Prerequisites: BUAD 3384 or consent of instructor.

**B. COURSE EFFECTIVE DATES:** 08/20/1997 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Create Project Teams, Database Management Systems
2. The Relational Model - Project 1
3. Access Workbench
4. SQL
5. Database Modeling & Entity Relationship Diagrams, Team E-R Diagram
6. Database Design
7. Improving Data Access
8. Database Administration
9. Transactions and Locking

### D. LEARNING OUTCOMES (General)

1. understand the database fundamentals including relational models, and Structured Query Language
2. apply Database Design techniques such as Entity-Relationship Modeling into hands on projects
3. understand the issues involved in database management including administration, database processing applications, and database processing for business intelligence systems

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted