

# Bemidji State University

## BUAD 3384: Systems Analysis and Design

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Information systems methodologies to solve enterprise-wide managerial and organizational problems. Students will use systems design methodologies to develop information system projects and evaluate cases. Approaches to information system implementation, installation, and maintenance activities are also addressed. Includes structured laboratory exercises using computer-based software engineering tools. Prerequisites: ACCT 2101, BUAD 2280, and BUAD 3381, or consent of instructor and junior standing.

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

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Application Architecture & Modeling
2. Data Modeling & Analysis
3. Database Design
4. Fact-Finding Techniques for Requirement Discovery
5. Feasibility Analysis & the System Proposal
6. Information System Building Blocks
7. Information System Development
8. Input Design & Prototyping
9. Modeling System Requirements with Use Case
10. Object-Orientated Analysis & Modeling Using the UML
11. Object-Oriented Design & Modeling Using the UML
12. Output Design & Prototyping
13. Process Modeling
14. Project Management
15. System Analysis & Design Methods
16. Systems Construction & Implementation
17. Systems Design
18. Systems Operations & Support
19. User Interface Design

#### **D. LEARNING OUTCOMES (General)**

1. use a CASE tool to develop the process and data model
2. determine appropriate alternatives and guidelines to evaluate and compare when preparing a feasibility study.
3. use business documents (mission, goals, and objectives) to evaluate the system service request.
4. create a statement of work in response to the system service request.
5. create a baseline project plan detailing the project, feasibility assessment, and management issues.
6. present findings in a professional manner to the client.
7. create appropriate techniques to determine the system requirements and analyze the business processes.
8. use Visible Analyst Academic Version or MS Project to plan and manage an information systems development project.

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

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted