

# Minnesota State University Moorhead

## CSIS 433: Design, Implementation and Support of Information Systems

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites:

This course requires the following prerequisite  
CSIS 336 - C#.Net Programming

Corequisites: None

MnTC Goals: None

The course is dedicated to object-oriented design and implementation using contemporary design principles and patterns. The object-oriented approach of this course is based on Unified Modeling Language (UML). The course provides up-to-date coverage of adaptive and agile techniques and processes, and emphasizes layered architectures and Web development.

**B. COURSE EFFECTIVE DATES:** 08/27/2007 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Approaches to Systems Development.
2. Systems Design Tasks.
3. Implementation and Support .
4. Course Project.

### D. LEARNING OUTCOMES (General)

1. Discuss the issues related to managing and coordinating the activities of the SDLC.
2. Explain the major components and levels of design.
3. Describe common deployment environments and matching application architectures.
4. Explain the purpose, objectives and fundamental principles of object-oriented design.
5. Develop package diagrams, component diagrams, class diagrams, sequence diagrams for use case realization, communication diagrams for detailed design.
6. Explain design patterns and recognize various specific patterns.
7. Design a relational database schema based on an entity-relationship diagram.
8. List the key principles used in Web design.
9. Discuss issues related to security that affect the design and operation of information systems.
10. Describe implementation and support activities.
11. Describe implementation and support activities.
12. Explain the foundations for the adaptive development methodologies.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted