## 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 patters. 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)**

- 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 reacted 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

Version 3.1.4 Page 1 of 2 07/28/2017 09:43 AM

## **G. SPECIAL INFORMATION**

None noted

07/28/2017 09:43 AM Version 3.1.4 Page 2 of 2