

# Minnesota State University Moorhead

## CSIS 153: Introduction to Computers and Programming I-b

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 45

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites:

This course requires the following prerequisite

CSIS 152 - Introduction to Computers and Programming I-a

Corequisites: None

MnTC Goals: None

Continuation of the introduction to problem solving and programming techniques with a focus on application of object oriented techniques for defining and implementing data structures.

**B. COURSE EFFECTIVE DATES:** 01/14/2013 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. Design and implement user defined data structures.
2. Use a programming language to investigate the application of structures, including lists, stacks, queues, dictionaries, and binary search trees to problem solutions.
3. Use a programming language to investigate the behavior and implementation of classical search techniques.
4. Use programming language documentation to locate software utilities and modules appropriate for implementing a problem solution.
5. Use programming language utilities and modules from the standard library to implement a problem solutions.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted