

# Minnesota State University Moorhead

## CSIS 152: Introduction to Computers and Programming I-a

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:

This course requires any of these nine prerequisites

MATH 127 - College Algebra

MATH 142 - Pre-Calculus

MATH 143 - Trigonometry

MATH 229 - Topics in Calculus

MATH 261 - Calculus I

A score of 24 on test ACT Math

A score of 50 on test Accuplacer College Level Math

A score of 560 on test OLD-SAT Math

A score of 560 on test SAT Math Composite

Corequisites: None

MnTC Goals: None

Introduction to problem solving, algorithm development, elementary data structures, data abstraction, and structured programming in a high-level language.

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

### C. OUTLINE OF MAJOR CONTENT AREAS

1. The Linux Operating System.
2. Problem Solving and Algorithm Development.
3. Computer program development and execution.
4. Object-Oriented Programming Paradigm.

### D. LEARNING OUTCOMES (General)

1. Demonstrate the ability to use the Linux Operating System as a programming platform.
2. Develop solutions to problems.
3. Develop algorithms suitable for translation to a high level programming language.
4. Demonstrate the ability to write computer programs in a high level programming language.
5. Describe the general principles of Object-Oriented Programming, including composition and inheritance (derivation).
6. Describe basic Abstract Data Types and their uses.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted