

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