

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

**DEPT. CSCI**

**COURSE NUMBER: 2240**

**NUMBER OF CREDITS: 4**

**Lecture: 4 Lab: 0 OJT 0**

<b>Course Title:</b>
Fundamentals of Programming I

<b>Catalog Description:</b>
Fundamentals of Programming I emphasizes concepts that provide a fundamental background for continued study in the area of computer science. Involves high-level language programming and the use of abstraction in program design.

<b>Prerequisites or Necessary Entry Skills/Knowledge:</b>
CSCI 1102

**FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)**

- ☐ Goal 1: Communication: By meeting the following competencies:
- ☐ Goal 2: Critical Thinking: By meeting the following competencies:
- ☐ Goal 3: Natural Sciences: By meeting the following competencies:
- ☐ Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- ☐ Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- ☐ Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- ☐ Goal 7: Human Diversity: By meeting the following competencies:
- ☐ Goal 8: Global Perspective: By meeting the following competencies:
- ☐ Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- ☐ Goal 10: People and the Environment: By meeting the following competencies:

<b>Topics to be Covered</b>
Overview of languages
C++ Basics
Strings and I/O streams
Selection control statements
Loop control statements
Functions
Pointers, Enum, Structures
Data file concepts
One-dimensional arrays

Student Learning Outcome
Discuss programming languages.
Enter, compile, and execute a C++ Basic program.
Describe strings and I/O streams and control statements.
Explain programming functions.
Create simple Enum data types and employ pointers and structures.
Compare sequential access and random access data files.
Initialize and access elements of one-dimensional arrays.

<b>Is this course part of a transfer pathway:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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\*If yes, please list the competencies below

Revised Date: 1/18/2022