# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
## COURSE OUTLINE

**DEPT.** CSCI  
**COURSE NUMBER:** 2240

**NUMBER OF CREDITS:** 4  
Lecture: 4 Lab: 0 OJT 0

<table>
<thead>
<tr>
<th>Course Title:</th>
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<tbody>
<tr>
<td>Fundamentals of Programming I</td>
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<th>Catalog Description:</th>
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<td>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.</td>
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<th>Prerequisites or Necessary Entry Skills/Knowledge:</th>
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<td>CSCI 1102</td>
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## 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:

## Topics to be Covered
- 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.

Is this course part of a transfer pathway:  Yes ☐  No ☒

*If yes, please list the competencies below

Revised Date: 1/18/2022