

Montgomery County Community College  
CIS 235  
Object Oriented Programming in C++

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
4. Implement more advanced programming constructs in C++ such as effective memory management, in-line methods, I/O access, static data/methods, collections/containers, nested classes, exception handling, and compositions.	Lab Exercises Final Project	Tests Grade Labs/Final Project

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria*.

#### SEQUENCE OF TOPICS:

1. Course Overview; Why C++; Overview on Objects and Classes, C++ Development Environment
2. C++ Programming Basics (Variables, I/O, Arithmetic, Assignment, Loops and Decisions)
3. Structures; Functions
4. Objects and Classes; Arrays
5. Operator Overloading
6. Inheritance
7. Graphics; Pointers
8. Virtual Functions
9. Streams and Files
10. Larger Programs
11. Templates and Exceptions
12. Class Library Organization
13. Windows Programming
14. Projects and Review

#### LEARNING MATERIALS:

Savitch, Walter, *Problem Solving with C++, 10<sup>th</sup> Edition*, Pearson, 2018.  
ISBN 9780134448282

#### Additional resources on the web:

<http://www.cplusplus.com>

<http://www.cprogramming.com>

Other learning

COURSE APPROVAL:

Prepared by: Lee Bender

Date: 2/1998

Revised by: Linda Moulton

Date: 6/1998

Revised by: Kathy Kelly

Date: 9/2013

VPAA/Provost or designee Compliance Verification:  
Victoria Bastecki-Perez, Ed.D.

Date: 12/3/2013

Revised by: Kathy Kelly

Date: 1/9/2018

VPAA/Provost or designee Compliance Verification:

Date: 1/30/2018



*This course is consistent with Montgomery County Co*

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