

COURSE TITLE AND NUMBER:

North Central Michigan College

NMC MASTER COURSE SYLLABUS

Last Date Revised: 5/29/2002

DIVISION/AREA: Business and Technology

DEPARTMENT:

DIVISION DIRECTOR: Robert J. Marsh, Ph.D., P.E.

ORIGINATOR:

DEAN OF INSTRUCTION: Timothy Dykstra, Ph.D.

TOTAL HOURS OF INSTRUCTION: 3 LECTURE: 2 LAB: 2 TOTAL CONTACT HOURS: 70.4

COURSE NUMBER: CIS 115

CREDIT HOURS: 3

COURSE TITLE: C++ Programming I

TRANSFERABLE YES: NO: X TO:

PREREQUISITE(S)/COREQUISITE(S)/ADVISORY: CIS 100

CATALOG DESCRIPTION:

An introductory course in object-oriented design and programming using the C++ language. Sample topics include libraries, data types, expressions, arrays, conditionals and looping, functions, custom date types, console and file I/O. (CIS 105 is recommended as a first programming language course for students with minimal programming experience. Students should be skilled in file management within Windows and use of Windows' accessories; if not, these skills should first be acquired in CIS 120.)

GENERAL EDUCATION OUTCOMES:

- Think critically and analytically
- Independently acquire knowledge
- Select and use mathematical tools for problem solving and decision making

COURSE OBJECTIVES & OUTCOMES:

Be familiar with the following areas:

- Overview and history of C++
- Program structure
- Control structures
- Functions
- Arrays

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- Pointers and strings
- Introduction to classes

METHODS OF INSTRUCTION:

Lecture and in class exercises on computer. Students are expected to spend additional time outside of class in computer lab

METHODS OF EVALUATION:

<u>Description</u>	<u>Points</u>
Quizzes (2 @ 25 points)	50
Mid term exam	100
Final exam	100
Assignments (10 @ 10 points)	100
Class participation/attendance	<u>75</u>
TOTAL	425

REQUIRED TEXTS: C++ How to Program, Deitel and Deitel, 3rd ed. Prentice Hall

OPTIONAL SUPPLEMENTARY MATERIALS:

Reasonable accommodations may be provided for students with documented physical, sensory, cognitive, systemic, and/or psychiatric disabilities. Please contact the Education Opportunity Program (EOP) at (231) 348-6687 to arrange services for this course.

TIME ALLOWANCE AND SEQUENCE OF INSTRUCTION:

Week	Topic	Chapter
1	Introduction, orientation to class and lab	1
2	Structures	2
3	Structures	2
4	Functions	3
5	Functions	3
6	Arrays	4
7	Arrays	4
8	Exam	
9	Pointers	5
10	Pointers	5
11	Break (spring or Thanksgiving)	
12	Classes	6
13	Classes	7
14	Classes/review	7

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15	Final Exam	
16	Wrap up	

APPROVED FOR ADOPTION BY THE CRD/AP COMMITTEE ON _____