

North Central Michigan College

NCMC MASTER COURSE SYLLABUS FOR YEARS 2001-2003

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: 4 LECTURE: 2 LAB: 2 TOTAL CONTACT HOURS: 70.4

COURSE NUMBER: CIS 205

CREDIT HOURS: 3

COURSE TITLE: C++ Programming II

TRANSFERABLE YES: NO: X TO:

PREREQUISITE(S)/COREQUISITE(S)/ADVISORY: CIS 115 or equivalent

CATALOG DESCRIPTION:

Advanced C++ Programming, a continuation of CIS115. Sample topics include arrays, dynamic data types, classes, pointers, and references, inheritance, linked lists, stream and file I/O, and Microsoft Foundation Classes. There will also be discussion on current topics related to C++, programming development, and the implications of .NET.

GENERAL EDUCATION OUTCOMES:

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

COURSE OBJECTIVES & OUTCOMES:

Upon successful completion of the course, the student will be able to:

- Write C++ programs
 - Problem solve with operators, functions arrays, structures, pointers, files, templates, classes
 - Use Microsoft Development environment to write beginning windows programs
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METHODS OF INSTRUCTION:
Lecture, assignments

METHODS OF EVALUATION:

Description	Point Value	Percent of Total Grade
Quizzes (25pts each – 2 Total)	50	10%
Mid-Term Exam	100	20%
Final Exam	100	20%
Project	100	20%
Assignments (10 pts each – 5 Total)	50	10%
Class Participation	25	5%
Attendance	75	15%
Totals	500	100%

REQUIRED TEXTS: Dietel & Dietel, C++ How to Program, 3rd Edition, 2001. Upper Saddle River, NJ, Prentice-Hall, Inc. ISBN: 0-13-089571-1

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 #1: Introduction, Orientation, and Review.
- Week #2: Review Pointers/Classes
- Week #3: Chapter 8 Overloading
Chapter 9 Inheritance
Project Topic Due.
- Week #4: Chapter 9 Inheritance (Continued)
Chapter 10 –Virtual Functions.
- Week #5: Chapter 11 – Stream I/O
Chapter 19 – String Stream Processing
- Week #6: Chapter 12 – Templates
Quiz #1
- Week #7: Chapter 12 – Templates (Continued)
Chapter 20 – Standard Template Library
Review for Mid Term
- Week #8: Mid-Term Exam
- Week #9: Chapter 13 – Exception Handling
Project Status Report Due
- Week #10: Chapter 14 – File Processing
- Week #11: Chapter 15 – Data Structures.
Quiz #2
- Week #12: Chapter 16 – Bits, Characters, Strings, and Structures.
- Week #13: No Class
- Week #14: Review for Final.
Project Presentations.
Project Due.
- Week #15: Final Exam
- Week# 16: Class Wrap-Up

APPROVED FOR ADOPTION BY THE CRD/AP COMMITTEE ON _____