

North Central Michigan College

NCMC MASTER COURSE SYLLABUS

DIVISION/AREA: Business and Technology

DEPARTMENT: CIS

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

ORIGINATOR: Hwee-Joo Kam

DEAN OF INSTRUCTION: Timothy Dykstra, Ph.D.

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

COURSE NUMBER: CIS 220

CREDIT HOURS: 3

COURSE TITLE: Visual Basic Programming II

TRANSFERABLE YES: NO: xx TO:

PREREQUISITE(S)/COREQUISITE(S)/ADVISORY: CIS 105

CATALOG DESCRIPTION:

Develops competency in business application programming using the Visual Basic language. Students will design and create solutions to common business problems using advanced Visual Basic tools to create a sophisticated user interface. Strong emphasis will be placed on object-oriented programming and programs that interact with files and relational database. Prerequisites: CIS 105

GENERAL EDUCATION OUTCOMES:

- Think critically and analytically
- Write and speak effectively

COURSE OBJECTIVES & OUTCOMES:

- Provide a solid but rapid introduction to Visual Basic for programmers
- Focus on more advanced techniques in Window Forms application, including multiple document interface applications, class libraries and reusable codes, user-designed controls, and advanced notions of object-oriented programming.
- Emphasize on the software development life cycle (SDLC)
- Emphasize on relational database programming and File Input and Output

METHODS OF INSTRUCTION:

Lecture
Demonstration
Hands-on tutorials
Internet based materials
Student programming

METHODS OF EVALUATION:

Exams, take home assignments, hands-on lab exercises, quizzes and class participation.

REQUIRED TEXTS AND MATERIALS:

- TEXTS:
 - *Microsoft® Visual Basic® 2005 Reloaded: Advance*; Richard A. Johnson; Diane Zak; Course Technology: Boston, MA, 2007[©]; ISBN-10: 1-4188-3643-5; ISBN-13: 978-1-4188-3643-6
 - *Expert One-on-One: Visual Basic 2005 Database Programming*; Roger Jennings; Wiley, 2005; ISBN-13: 978-0-7645-7678-2

OPTIONAL SUPPLEMENTARY MATERIALS:

Reasonable accommodations can be provided to students with documented disabilities. Please contact Learning Support Services at 348-6817 to arrange these.

TIME ALLOWANCE AND SEQUENCE OF INSTRUCTION:

Week	Course Topic
1	a. Course Overview b. Visual Basic Review
2	a. Object and Classes
3	a. Inheritance and Polymorphism
4	a. Exam I
5	a. Inheritance and Polymorphism (continued)
6	a. Input Validation, Error Handling, and Exception Handling
7	a. Relational Database and SQL
8	a. Accessing Data with ADO.NET
9	a. Programming TableAdapters, BindingSources, and DataGridView
10	a. Adding Data Validation and Concurrency Management
11	a. Adding Data Validation and Concurrency Management (continued)
12	a. Working on Final Project
13	a. Working on Final Project
14	a. Working on Final Project
15	a. Working on Final Project
16	a. Final Project Presentation