

North Central Michigan College

NCMC MASTER COURSE SYLLABUS FOR YEARS 2001-2003

DIVISION/AREA: Business and Technology

DEPARTMENT: CIS

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

ORIGINATOR: Joe Palm

DEAN OF INSTRUCTION: Timothy Dykstra, Ph.D.

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

COURSE NUMBER: CIS105

CREDIT HOURS: 3

COURSE TITLE: Visual BASIC Programming I

TRANSFERABLE YES: (dependent on institution)

NO:

TO:

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

CATALOG DESCRIPTION:

An introduction to programming in a Windows environment using MS Visual BASIC. Students will learn program development tools, object-oriented programming techniques and will develop applications by creating objects, user interfaces and procedures. 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
- Write and speak effectively

COURSE OBJECTIVES & OUTCOMES:

- Design programs using OOED tools, pseudocode and flowcharts
- Correctly code Visual Basic programs of 50-200 lines using good interface design, values of properties and code that makes use of variables, constants, procedures, sequence, selection and repetition structures, menus, dialog boxes, error traps, random and sequential files, databases and arrays.
- Document programs in a professional fashion

METHODS OF INSTRUCTION:

Lecture
Demonstration
Hands-on tutorials
Internet based materials
Student programming

METHODS OF EVALUATION:

Quizzes: 50%
Programming assignments: 50%

REQUIRED TEXTS AND MATERIALS:

- Text:
Zak, Diane. Programming with Microsoft Visual Basic 6.0 for Windows Enhanced Edition. Cambridge. Course Technology. (1999) ISBN 0-619-0-6204-5
 - Required additional materials:
 - 20 1.44 floppy disks (or 2 LS120's) recommended. You **must** have at least two 1.44 floppies or two LS120's for the first session of the second week
 - A plastic envelope for turning in disks/paperwork for assignments
 - Scantron 882's for testing backup backup
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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	Have Read	Due & Do	Quiz on this tutorial
1	Course requirements; lab environment. CIS105 provides prerequisite knowledge for MSCD Instructor-led Course 1013 (Exam 70-176) number systems; program execution;	syllabus; Certifications (MCSD) (see CIS105 links, above for added info.)	Grading Spreadsheet Fill out general questionnaire Assignment previews	
	Working Model ; history of VB; compilers/interpreters; resources; syntax rules			On-line test system
2	disk setup; backup procedures: LS120 or 1.44's? Project organization Basic Controls	housekeeping Tutorial 1A 1B	CIS105 links MSDN Online and in VB6.0; VB samples E2, D5	
	Writing Code;	1C (note) (Tut01 answers)	D6-7; Debugging D1-4	
3	Planning OOED Apps.	2A	E3	#1
	Building an Interface;	2B Interface Design	E1,3	
4	Code, test, debug & document	2C (Tut02 answers)	E1,3; D16 TOE	
	Variables & Constants	3A	D20 VB & numbers & Coercion	#2
5	Local & form level variables	3B	E4	

	Code modules, timer control, dialog box	3C Tut03 answers)	E4 Asgn #1	
6	Conditionals & logical operators	4A	E1-3	#3
	Icons, check boxes, frames, user defined subs	4B		
7	Static variables, GotFocus event	4C (Tut04 answers)	Debugging E1	
	Looping, counters & accumulators; Control Arrays	5A 5B	E15-28 Asgn #2	#4
8	Change, unload events; msgbox	5C (Tut05 answers)	D6	
	Sequential files; Reports;	6A		
9	Menuing	6B		#5
	String functions	6C (Tut06 answers)	Asgn #3	
10	Dialog boxes	7A		#6
	Text Editor app: File Save As, File New, error-handling	7B		
11	File Save, File Print, File Open, form unload event	7C (Tut07 answers)		
	Random access files	8A		#7
12	Subs, parameters, color constants, file open	8B		
	Control Arrays	8C (Tut08 answers)	Asgn #4	
13	Using VB Data Manager	9A		#8
	Using the ADO Data Control	9B		

14	Code to add, delete and update random records	9C (Tut09 answers)		
	Variable Arrays The Data Grid Control and Object Variables	10A 10B	Asgn #5	#9
15	Functions	10C (Tut10 answers)		
	VB.Net (possible, if we can set up a server - note special requirements on pp. xxiii-xxiv)	11 (read for your own benefit: no quiz) VB.Net /VB.6.0VB.Net Links	Asgn #6	
16	VB.Net	12 (read for your own benefit: no quiz)		#10
	Wrap-up			

APPROVED FOR ADOPTION BY THE CRD/AP COMMITTEE ON _____