

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE MARIE, ON



COURSE OUTLINE

Course Title: Advanced Visual Basic

Code No.: CSD300

Semester: Four

Program: Computer Programmer/Analyst

Author: Willem de Bruyne

Date: January 2002

Previous Outline Date: Dec. 2001

Approved: _____

Dean

Date

Total Credits: 5

Prerequisite(s): CSD206, CSD204

Length of Course: 16 WKS

Total Credit Hours: 80

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COURSE NAME

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I. COURSE DESCRIPTION:

Advanced Visual Basic is an extension to the CDS206 Introduction to Visual Basic course. More fundamental programming concepts are covered in this course, such as data arrays, and control arrays. Two fundamental controls were left until after the data and control arrays were covered, they are; ListBoxes and ComboBoxes. These controls are better understood after array concepts are mastered. We will also cover the creation and manipulation of Menu Bars. The final part of the course will focus on data base applications (which focuses on ADO) and file handling.

The course focuses on hands-on, so there will be plenty of do-it-yourself features throughout the course.

1) Work with ListBoxes and ComboBoxes

Potential Elements of the Performance:

- Use ListBox properties at design and run time
- Add, remove and clear items in a ListBox
- Understand the ItemData and NewIndex Properties
- Work through examples of ListBoxes; selecting screen fonts, copying elements from one ListBox to another, perform computations.
- Create Drive ListBoxes, Directory ListBoxes, and File ListBoxes and manipulate their properties.
- Create ComboBoxes; creating three styles
- Manipulate the ComboBox properties and methods.

2) Manipulate Visual Basics Built-In Functions

Potential Elements of the Performance:

- Use the Financial functions to perform various calculations such as depreciation costs, loan payments, investment returns....
- Use the Date-Time functions
- Use the Math functions
- Use the String functions

COURSE NAME

COURSE NUMBER

3) Menus

Potential Elements of the Performance:

- Set a text box control's MultiLine and ScrollBars properties
- Code the Resize event
- Set the ScaleHeight and ScaleWidth properties
- Add a menu control to the form
- Access the Clipboard object using the Clear, GetText(), and SetText methods
- Select text with the SelText Property

4) Create and Manipulate Sequential Files and Random Access and Binary Files

Potential Elements of the Performance:

- Create Sequential Files
- Use TextBoxes, CheckBoxes, and ListBoxes with Sequential Files
- Create Random Access Files
- Use Random Access Files, and commands
- Use Binary Files

5) Data-Bound Controls

Potential Elements of the Performance:

- Tables and databases
- Relational databases
- ActiveX Data Objects (ADO)
- Using the ADO control
- Using data-bound controls
- ADODB recordsets
- Displaying records
- Moving the recordset pointer
- Adding, deleting, and updating records
- Sorting records
- Filtering records
- Using SQL to create recordsets
- Using the find method
- Displaying images
- ADO control events
- DataGrid, DataCombo, and DataList

6) Objects and Collections

COURSE NAME

COURSE NUMBER

Potential Elements of the Performance:

- Introduces objects
- Collections
- the ListView
- TreeView
- CoolBar controls
- MDI applications

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Application Programming in Visual Basic 5, by Mark Simkins, as well as Instructor hand outs.
 Advanced Visual Basic 6, 2nd Ed, by Kip Irvine and Kaiyang Liang

V. EVALUATION PROCESS/GRADING SYSTEM

The mark for this course will be arrived at as follows:

Quizzes 3 @ 20%	= 60%
Assignments 3 @ 12%	= 36%
Participation @ 4%	= <u>4%</u>
	100%

Grading Scheme:

- A+ 90–100% (Outstanding)
- A 80–89% (Excellent)
- B 70–79% (Average)
- C 60–69% (Satisfactory)
- R (Repeat)

VI. SPECIAL NOTES:

- Students will receive a grade of zero for late assignments, or missed tests unless prior permission is granted from the instructor.
- **You must attain a minimum of 60% on your quizzes in order to receive a passing grade in this course.**
- Students are expected to attend classes on a regular bases and treat their peers and instructors in a business like manner.

VII. PRIOR LEARNING ASSESSMENT

- Students who wish to apply for advanced credit in the course should consult the instructor.