COURSE SYLLABUS
COM350: Visual Basic Programming

Course Description

This course introduces students to Visual Basic .NET and the use of Graphic User Interface (GUI) forms to develop event-driven solutions to business problems. Students also acquire skills using advanced Visual Basic .NET tools to access databases as well as random access of text files. Sequential I/O access of text files is also covered. Projects are designed to simulate actual industry application solution scenarios.

General Course Information

Number of Units/Weeks	4/10
#Hours Lecture/#Hours Laboratory/#Hours Homework	30/20/60
Prerequisite(s)	COM290
Co-requisites (s)	None
Course Developer(s)	Christopher Oson, B.S.
Date Approved / Last Review	February 2009 / November 2012

Learning Outcomes

- Design modularized, structured software solutions
- Implement event-driven, user-interactive solutions to business problems
- Translate object-oriented designs into code, including classes, objects, attributes and methods
- Demonstrate knowledge of the paradigm and process of event-driven programming
- Demonstrate proficiency in automated database access and manipulation

Instructional Methods Employed in this Course

- Lecture and reading assignments
- Hands-on exercises and labs
- Research
- Practical application of theory and skills in authentic projects
- Build on prior knowledge and experience of students to enhance richness of class activities

Information Resources for this Course

 **Textbook**

Boehm, A. (2006). Murach's Visual Basic 2005: Training & Reference. USA: Mike Murach & Associates, Inc. ISBN-13: 978-1890774387.

 **Other Materials**

<Optional>Visual Studio 2005, 2008 or 2010

 **Web Site Readings**

VB.NET Tutorial
http://www.java2s.com/Tutorial/VB/CatalogVB.htm (Retrieved November 6, 2012)

StartVBdotnet.com FREE VB.NET, ASP.NET tutorials
http://www.startvbdotnet.com/ (Retrieved November 6, 2012)

Table/Topics & Assignments

Types of Assignments:
Lecture -
Considered Lecture Hours

Classroom Discussion -
Considered Lecture Hours

In Class Critique -
Considered Lecture Hours

Delivering Oral Presentations -
Considered Lecture Hours

In Class (IC) Exercise -
Considered Lecture Hours

Reading -
Considered Homework (HW), work done outside of class

WebClass lesson (non-online courses) -
Considered HW, work done outside of class

Lab Work -
Considered Lab Hours

Quiz, Midterm or Final -
Considered Lecture Hours

Week 1						
Type	**Topic/Description**	**LEC Time**	**LAB Time**	**HW Time**	**Point Value**	**Due**
LEC 1A	Introduction to Visual Studio and in Visual Basic	3	0	0	0	
LAB 1A	Invoice Total Form and Application, Part 1	0	1	0	15	
LAB 1B	Future Value Application, Part 1	0	1	0	15	
HW 1A	Read Chapters 1 through 5 – 157 pages (evaluated by labs 2A & 2B)	0	0	17.4	0	
Total Week 1		3	2	17.4	30	
Week 2						
Type	**Topic/Description**	**LEC Time**	**LAB Time**	**HW Time**	**Point Value**	**Due**
LEC 2A	Coding procedures and event handlers. Exception handling, data validation, arrays and collections	3	0	0	0	
LAB 2A	Invoice Total Application, Part 2	0	.75	0	25	Week 3
LAB 2B	Future Value Application, Part 2 (including arrays & lists)	0	.75	0	25	Week 3
LAB 2C	Arrays, Lists, Rectangular Arrays	0	.5	0	20	Week 3
HW 2A	Read Chapters 6 through 8 – 94 pages (Evaluated via labs 3A & 3B)	0	0	10.4	0	
Total Week 2		3	2	10.4	70	
Week 3						
Type	**Topic/Description**	**LEC Time**	**LAB Time**	**HW Time**	**Point Value**	**Due**
LEC 3A	Working with Dates & Strings. Additional controls	2.5	0	0	0	
LAB 3A	Payment Application	0	1.25	0	40	Week 4
LAB 3B	Future Value Application, Part 3	0	1.25	0	40	Week 4
HW 3A	Read Chapters 9 & 10 – 65 pages (Evaluated via lab 4A)	0	0	7.2	0	

Total Week 3		2.5	2.5	7.2	80	

Week 4

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 4A	Working with files. Introduction to generic classes and structures	2	0	0	0	
EXAM	Midterm Quiz	.5	0	0	0	
LAB 4A	Work with Text and Binary Files	0	1.25	0	30	Week 5
LAB 4B	Customer Maintenance Application with Classes	0	1.25	0	40	Week 5
HW 4A	Read Chapters 11, 20, & 22 – 80 pages (Evaluated via lab 5A)	0	0	8.8	0	
Total Week 4		2.5	2.5	8.8	70	

Week 5

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 5A	Introduction to Database Programming	2	0	0	0	
EXAM	Midterm (Chapters 3-11)	2	0	0	250	Same Day
LAB 5A	Step Through an Application	0	1	0	0	Same Day
HW 5A	Read chapter 13 – 29 pages (Evaluated via labs 6A & 6B)	0	0	3.2	0	
Total Week 5		4	1	3.2	250	

Week 6

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 6A	Using data sources with databases (part 1)	2.5	0	0	0	
LAB 6A	DataGridView Application	0	1	0	20	Week 7
LAB 6B	Textbox-based Application	0	1	0	20	Week 7
LAB 6C	Parameterized Queries	0	.5	0	20	Week 7
HW 6A	Read Chapter 14 – 49 pages (Evaluated via lab 7A)	0	0	5.4	0	
Total Week 6		2.5	2.5	5.4	60	

Week 7

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due

LEC 7A	Using data sources with databases (part II)	2.5	0	0	0	
LAB7A	Customer Invoice Form	0	2.5	0	70	Week 8
hW 7A	Read Chapter 15 – 53 pages (evaluated via lab 8A)	0	0	5.9	0	
Total Week 7		2.5	2.5	5.9	70	

Week 8

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 8A	Using ADO.NET to write data access code	2.5	0	0	0	
LAB 8A	ADO.NET Access code library	0	2.5	0	80	Week 9
HW 8A	Read chapter 16 – 37 pages (evaluated via lab 9A)	0	0	4.1	0	
Total Week 8		2.5	2.5	4.1	80	

Week 9

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 9A	Using data sources with business objects	2.5	0	0	0	
LAB 9A	Data Source – Business Object Project	0	2.5	0	40	Week 10
HW 9A	Read Chapter 17 – 27 pages (Evaluated via Final)	0	0	3	0	
Total Week 9		2.5	2.5	3	40	

Week 10

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC10A	Review	3	0	0	0	
EXAM 10A	Final (Covers chapters 13-17, 20 & 22)	2	0	0	250	Same Day
Total Week 10		5	0	0	250	

Course Hours Summary

Week	Topic	LEC Time	LAB Time	HW Time
1	Introduction to Visual Studio and in Visual Basic	3	2	17.4
2	Coding procedures and event handlers.	3	2	10.4
3	Working with Dates & Strings. Additional controls	2.5	2.5	7.2
4	Working with files. Introduction to generic classes and structures	2.5	2.5	8.8

5	Introduction to Database Programming	4	1	3.2
6	Using data sources with databases (part 1)	2.5	2.5	5.4
7	Using data sources with databases (part II)	2.5	2.5	5.9
8	Using ADO.NET to write data access code	2.5	2.5	4.1
9	Using data sources with business objects	2.5	2.5	3
10	Review and Final	5	0	0
Total		30	20	65.4

Table/Point Breakdown

Assignment	Possible Points	Percent of Grade
Labs	500	50%
Midterm	250	25%
Final	250	25%
	1000	100%

Your Grades for this Course

Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity.
Students in this course should be graded following Coleman University assessment practices and policies. A point system is used in the University to indicate student performance on various required activities or projects. For this course, it is recommended that points be distributed as follows:

Coleman University Grade Assignment Policy:

Percent	Letter Grade	Grade Points
94-100	A	4
90-93	A-	3.67
87-89	B+	3.33
84-86	B	3
80-83	B-	2.67
77-79	C+	2.33
74-76	C	2
70-73	C-	1.67
67-69	D+	1.33
64-66	D	1

60-63	D-	0.67
N/A	INC	0
N/A	W	0
60 or above	CR	0
59 or below	NC	0
N/A	I	0
N/A	W	0
N/A	AU	0
N/A	TR	0
N/A	WV	0

Legend	
CR = Credit	NC = No Credit
I = Incomplete	W = Course Withdrawal
AU = Audit	TR = Transfer Credit
WV = Waiver	

Academic Accommodation / Adjustment Policy:

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals.

To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at ada@coleman.edu. The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations.

After the academic accommodations have been determined, the students' instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures.