



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

**Detailed Course Description - Course Plan Development and Updating Procedures/
Management Information System Department**

QF05/0408-3.0E

Faculty	Business	Department	Management Information System
Course number	0506312	Course title	Advanced visual programming language for Business
Number of credit hours	3	Pre-requisite/co-requisite	Computer programming for Business

Advanced visual basic provides an introduction to event driven programming in windows environment using visual basic. Further applications of programming techniques are provide. The student will develop well documented programs containing complex data structures and develop graphical user interface

	Course goals and learning outcomes
Goal 1	Creating a Windows-Based Application in Visual Basic .NET
Learning outcomes	The student shall be able to Start and customize Visual Studio.NET, Create a Visual Studio .NET solution, Add a Visual Basic .NET project to a solution, Set the properties of an object, Restore a property to its default setting
Goal 2	Planning an Object-Oriented (OO) Application in Visual Basic .NET
Learning outcomes	The student shall be able to Plan an OO application in Visual Basic .NET, Complete a TOE (Task, Object, Event) chart and Follow the Windows standards regarding the layout and labeling of controls
Goal 3	Creating Variables and Named Constants
Learning outcomes	The student shall be able to Create a procedure-level and module-level variable, Select an appropriate data type for a variable, Select an appropriate name for a variable, Assign data to an existing variable, Explain the scope and lifetime of a variable and Create a named constant
Goal 4	The If...Then...Else Statement
Learning outcomes	The student shall be able to Write pseudocode for the selection structure, Create a flowchart to help you plan an application's code, Write an If...Then...Else statement, Write code that uses comparison operators and logical operators, Format numbers using the ToString method and Change the case of a string
Goal 5	Nested, If/ElseIf/Else, and Case Selection Structures
Learning outcomes	The student shall be able to Code a nested selection structure Desk-check an algorithm Recognize common logic errors in selection structures Code an If/ElseIf/Else selection structure Include a Case selection structure in pseudocode and in a flowchart Code a Case selection structure Write code that uses the Is, TypeOf...Is, and Like comparison operators



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

**Detailed Course Description - Course Plan Development and Updating Procedures/
Management Information System Department**

QF05/0408-3.0E

Goal 6	The Repetition Structure (Looping)
Learning outcomes	<p>The student shall be able to</p> <ul style="list-style-type: none"> Code the repetition structure using the For...Next and Do...Loop statements Write pseudocode for the repetition structure Create a flowchart for the repetition structure Initialize and update counters and accumulators
Goal 7	Database Terminology
Learning outcomes	<p>The student shall be able to</p> <ul style="list-style-type: none"> Define the terms used when talking about databases Explain the purpose of the DataAdapter, Connection, and DataSet objects Explain the role of the provider Create and configure an OleDbDataAdapter object Write SQL SELECT statements Create a dataset Display a dataset in a DataGrid control
Textbook	Visual Basic.net how to program, H.M. Deitel, P.J.Deitel, , Prentice Hall, 2011.
Supplementary references	---

Course timeline

Week	Number of hours	Course topics	Pages (textbook)	Notes
01	1 1 1	The .NET Framework <ul style="list-style-type: none"> Overview of the .NET Framework and Common Language Runtime Class Library/API Assemblies What's new in the Visual Basic Language 		1
02	1 1 1	The Visual Studio .NET IDE <ul style="list-style-type: none"> Creating a new Visual Basic project and choices of projects Development Environment windows Using controls from the Toolbox Using the MSDN Library Help Files 		1
03	1 1 1	Integrated development environment <ul style="list-style-type: none"> Project window. Tool box. Forms. Events. Methods. Menu bar& tool bar 		1 و 2



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

**Detailed Course Description - Course Plan Development and Updating Procedures/
Management Information System Department**

QF05/0408-3.0E

04	1 1 1	Fundamentals of Visual Basic Programming <ul style="list-style-type: none"> • Program Structure • Namespaces • Data Types • Variables 		2
05	1 1 1	Fundamentals of Visual Basic Programming <ul style="list-style-type: none"> • Conversions • Operators and Expressions • Console I/O 		2
06	1 1 1	Control Structures <ul style="list-style-type: none"> • If Statement • Select Case Statement • Do/Loop Statement • For/Next Statement • Exit and Continue 		2
07	1 1 1	Procedures <ul style="list-style-type: none"> • Subroutines • Functions • Pass-by-value Versus Pass-by-reference • Access modifiers • Overloading • Optional Parameters 		2
08	1 1 1	Advanced Data Types <ul style="list-style-type: none"> • Arrays • Enumerations • Structures 		2
09	1 1 1	Object-Oriented Programming <ul style="list-style-type: none"> • Object-Oriented Concepts • Defining Classes • Methods and Properties • Shared Data and Methods • Constructors 		3
10	1 1 1	Inheritance <ul style="list-style-type: none"> • Inheritance • Controlling Base Class Construction • Access Control • Polymorphism • Events • Abstract and Not Inheritable Classes • Type Conversion in Inheritance 		4و3
11	1 1 1	Interfaces and Collections <ul style="list-style-type: none"> • Interface Fundamentals • Programming with Interfaces • Using Interfaces at Runtime • Resolving Ambiguities • Collections • Generic Types • Type-Safe Collections 		4و3
12	1 1 1	Windows Forms Controls <ul style="list-style-type: none"> • Buttons, Labels and Textboxes • Radio Buttons and Group Boxes • Check Boxes • List Boxes and Combo Boxes 		4



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

**Detailed Course Description - Course Plan Development and Updating Procedures/
Management Information System Department**

QF05/0408-3.0E

		<ul style="list-style-type: none"> • Scroll Bar • Timer Control • Flexible Event Handling 		
13	1 1 1	User Interface Features <ul style="list-style-type: none"> • Dialog Boxes • Menus • Files 		4
14	1 1 1	Database Programming <ul style="list-style-type: none"> • ADO.NET • .NET Data Providers • Using Data Readers • Using Data Sets • .NET 2.0 Data Binding 		4
15	1 1 1	New Features in Visual Basic 2008 <ul style="list-style-type: none"> • Local Type Inference • Object Initializers • Array Initializers • Anonymous Types • Partial Methods • Extension Methods • Lambda Expressions • Query Keywords 		5

Theoretical course evaluation methods and weight	Participation = 10% First exam 20% Second exam 20% Final exam 50%	Practical (clinical) course evaluation methods	Semester students' work = 50% (Reports, research, quizzes, etc.) Final exam = 50%
---	--	---	---

Approved by head of department		Date of approval	
---------------------------------------	--	-------------------------	--

Extra information (to be updated every semester by corresponding faculty member)

Name of teacher		Office Number	
Phone number (extension)		Email	_____@zug.edu.jo
Office hours			