

Government Graduate College Sadigabad
Department of Computer Science
Course Outline

Professor: Sajjad Abdullah
 Course Title: Visual Programming

Class: BSCS 5th

Week No.	Contents
1	Introduction <ul style="list-style-type: none"> • Introduction to .NET Framework • Common Language Runtime • Console Application, Input and Output • GUI Application (Visual Studio IDE Introduction, Toolbox, Solution Explorer, Properties, Code View and Designer View, Namespace, Partial Class, Methods and Events, Designer Code) • Mouse and Keyboard Events
2	C# Language Core <ul style="list-style-type: none"> • Variables, Data Types, Expressions, Operators, Conversions, Scope and Life Type of Variables • Introduction to Class and Object, Value Types and Reference Types • Control Structures (Conditional and Looping) • Functions • Arrays • Structures • Strings • Enums • Exception Handling
3	
4	
5	
6	Object Oriented Programming in C# <ul style="list-style-type: none"> • Class, Namespace, Object, Properties, Methods, Events • Constructors and Destructors, Events and Delegates • Inheritance, Polymorphism, Encapsulation, Interfaces
7	
8	Graphical User Elements <ul style="list-style-type: none"> • Common Controls (Label, Button, TextBox, MaskedTextBox, NumericUpDown, RichTextBox, CheckBox, RadioButton)
9	Mid Term Exams
10	Graphical User Elements – Continued <ul style="list-style-type: none"> • Common Controls (ListBox, ComboBox, CheckedListBox, DomainUpDown, DateTimePicker, MonthCalendar, PictureBox, ListView, TreeView, ToolTip, ProgressBar, Trackbar) • Containers (Form, GroupBox, TabControl, Panel, TableLayoutPanel, FlowLayoutPanel) • Menu and Toolbars (MenuStrip, ContextMenuStrip, StatusStrip, ToolStrip, ToolStrip Container) • Components (ErrorProvider, Timer) • Dialogs (ColorDialog, FontDialog, FolderBrowserDialog, OpenFileDialog, SaveFileDialog, Model vs Modeless Dialogs, MessageBox) • Multiple Document Interface • Resources (Image Resources, File Resources, String Resources)
11	
12	
13	
14	Database Programming <ul style="list-style-type: none"> • ADO.NET (.NET Data Providers, DataReaders, DataSets, DataTables) • Introduction to SQL (Select, Insert, Delete, Update) • LINQ • Data Controls (Chart, BindingNavigator, BindingSource, DataGridView, DataSet) • Interacting with XML Data
15	
16	Reporting

Reference Material Prescribed by The Islamia University of Bahawalpur (IUB), Bahawalpur:

1. Visual C# How to Program by Deitel and Deitel Pearson 6th Edition 2016
2. Programming in Visual C# 2008 Bradley Millspaugh McGraw 3rd Edition 2009 Practice of Computing Using Python by William F. Punch and Richard Enbody, Pearson, 3rd Edition 2016; ISBN-13: 978-0134380315.
3. Microsoft Visual C# 2013 Step by Step John Sharp Microsoft Press 1st Edition 2013

Sajjad Abdullah
Lecturer in Computer Science
Government Graduate College
Sadiqabad
sajjad.abdullah@gmail.com
+92 333 741 5625