



C. U. SHAH UNIVERSITY
Wadhwan City

FACULTY OF: - Technology and Engineering
DEPARTMENT OF: - Information Technology
SEMESTER: - VII
CODE: - 4TE07DNT1
NAME: – Dot Net Technology

Teaching & Evaluation Scheme: -

Subject Code	Subject Name	Teaching Scheme (Hours)				Credits	Evaluation Scheme								
		Th	Tu	Pr	Total		Theory				Practical (Marks)				Total
							Sessional Exam		University Exam		Internal		University		
							Marks	Hours	Marks	Hours	Pr/Viva	TW	Pr		
4TE07DNT1	Dot Net Technology	3	0	2	5	4	30	1.5	70	3.0	-	20	30	150	

Objectives:

The objectives of the course are:

- To gain the knowledge in .Net Framework, Assemblies, use of namespaces
- To gain the knowledge of programming with C#.
- To gain the knowledge of ASP.Net for web programming, web designing and web services.
- To gain knowledge of database connectivity in web based applications.

Prerequisites:

- Basic knowledge about Discrete Structures (sets, functions, relations, countability, proofs, Boolean logic, first-order logic, formal reasoning and deduction)
- Basic knowledge of HTML, CSS, JavaScript, programming methodology.
- Basic knowledge of relational databases

Course outline:

Sr. No.	Course Contents	Total Hrs.
1	Introduction to .Net: .Net Framework, MSIL, CLR, CLS, Assemblies, Metadata & Intermediate Language, Garbage Collection, Versioning and Side-by-Side Execution, DLL Hell, The End to DLL Hell, Managed Execution, Understanding .NET Data Types, Exploring Assemblies and Namespaces, String Manipulation, Files and I/O	03
2	Programming with C#: Introduction to C#, Namespaces and classes, Constructors and Destructors, Function Overloading and Inheritance, Modifiers, Properties and Indexers, Attributes, Reflection API, Unsafe Code, Events and Delegates.	10

3	Designing Windows forms and controls: Benefits of Windows Forms , .NET Events , The Windows Forms Model ,Creating Windows Forms ,Windows Forms Properties and Events, Dialogs, ToolTips, Windows Form Controls, Resizing, Menus, Visual Inheritance, Apply, Inheritance techniques to Forms, Creating Base Forms , Programming Derived Forms , MDI Form, Custom control creation, Using ActiveX Controls, Printing, Handling Multiple Events, GDI+	04
4	ADO.Net: Introduction to Ado. NET, Understanding the Connection Object Building the Connection String, Understanding the Command Object, Understanding Data Readers, Understanding Data Sets and Data Adapters, Data Table, Data Column, Data Row, Differences between Data Reader Model and Dataset Model Understanding the Data View Object, Working with System Data OleDb	03
5	ASP.Net: Introduction to ASP.NET, Difference between ASP and ASP .Net, Working with Controls, Using Rich Server Controls, Configuration Overview , Using the Web Site Administration Tool , Programming Configuration Files , Encrypting Configuration Sections, Accessing Data using ADO .Net, Connecting to Data, Executing Commands , Working with Data	10
6	Managing State: Preserving State in Web Applications , Page-Level State , Using Cookies to Preserve State , ASP.NET Session State , Storing Objects in Session State, Configuring Session State , Setting Up an Out-of-Process State Server , Storing Session State in SQL Server , Using Cookie less Session IDs , Application State	06
7	Themes and Master Pages: Creating a Consistent Web Site, ASP.NET Themes: Working with CSS and Scene files, Master Pages: working with Content place holder and Nested Master page.	02
8	Using the Data Bound controls and Repeater Controls: Overview of List-Bound Controls , Creating a Repeater Control , Creating a DataList Control	04
9	Creating and Consuming Web Services: The Motivation for XML Web Services , Creating an XML Web Service with Visual Studio , Designing XML Web Services , Creating Web Service Consumers, Discovering Web Services Using UDDI	03
10	Advance .Net Concepts: Introduction Windows Presentation Foundation (WPF), Introduction to Windows Communication Foundation (WCF), Introduction to Windows Work Flow (WF), Silver light, Introduction to Ajax Controls.	03
	Total	48

Learning Outcomes:

After completing this course, students will be able to:

- Design and develop web and windows based application
- Develop dynamic web site or desktop system with database connectivity.
- Develop web services.

Books Recommended:

1. ProC# 2010 and the .NET 4 Platform, 5th Edition, **Andrew Troelsen**, apress publication (March 2010)
2. Professional ASP.net 4.5 in C# and VB - **Jason N. Gaylord, Christian Wenz, Pranav Rastogi, Todd Miranda, Scott Hanselman, Scott Hunter**, WROX Publication
3. The complete reference, ASP .NET - **Matthew MacDonald**, TMH
4. C# -The Basic - **Vijay Mukhi**, bpb publication
5. Pro ASP.net 4.5 in C# - **Adam Freeman , Matthew MacDonald , Mario Szpuszta**, Apress
6. ASP.NET 4.5, **Black Book**, Dreamtech publication
7. Professional C# .Net - **Christian Nagel, Jay Glynn, Morgan Skinner**, Wrox publication
8. Windows Forms Programming in C#, 1st Edition, **Chris Sells**, Addison-Wesley Professional