

Branch Name:	BCA (Bachelor of Computer Applications)
Program Code:	CS101
Course Title :	Web Development
Course Code:	2CS1010501
Prerequisite:	Basic Knowledge of Design and Development of Web Applications

Course Objective:

- This course is intended to make the students aware of web programming concepts.
- Students are expected to learn various terminologies related to web programming such as web server, Server controls, web page life cycle, Ajax technology.
- learn advanced web development tools for database connections.
- The course aims to make the students formulate a website using web programming.

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)								
Lecture	Tutorial	Practical	Credit	Theory				Practical				Total
				University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
				Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
				Marks	Marks	Marks	Marks	Marks	Mark s	Marks	Marks	
4	-	4	6	28	70	12	30	12	30	8	20	150

Subject Contents			
Sr. No.	Topics	Total Hours	Weight (%)
1	Introduction to ASP.Net: NET Framework components like CTS, CLS, CLR, CL, BCL, Metadata concept in .NET. Working With Asp.Net: Introduction to Web-Form and its events, Asp.net Application Life Cycle, ASP.net Page Life Cycle, ASP.Net Server Control Events, IIS Server, Difference between Window based and Web based Applications.	9	20
2	Working with ASP.Net Standard Controls: Label, TextBox, Button, Link Button, ImageButton, HyperLink, ListBox, DropDownList, CheckBox, CheckboxList, RadioButton, RadioButtonList, BulletedList, Image, Table, Panel, File Upload.	9	20
3	Validation Control: RequiredFieldValidator, RangeValidator, RegularExpressionValidator, CompareValidator, CustomValidator, ValidationSummary. Rich Controls: Calendar Control, AdRotator Control, MultiView Control. Navigation Control: Menu Control, TreeView Control, SiteMapPath Control. Ajax Technology: Need of Ajax, ScriptManager Control, UpdatePanel Control, UpdateProgress	10	20

	Control, Timer Control.		
4	Introduction of Client – Server Process : Introductions about Client – Server architecture , Comparison of Client – Server , characteristics of client process , characteristics of server process, Desktop base Client server process , Web based Client server process. Concept of Front-End and Back-End. Comparison of Front-end and Back-end. Web based front-end and back-end technology for project development.	10	20
5	ADO.NET Architecture: Difference between ADO and ADO.NET, use of ADO.NET with its features. ADO.NET architecture. Classes of ADO.NET – Connection, Command, Adapter, Dataset, Data Reader with all the methods of each. Reports: Introduction of report, Creating Simple report.	10	20

Course Learning Outcomes (CLO.):

At the end of this course, the student would be able

- CLO.1 To understand the major tools, tools types with its properties, methods and events.
CLO.2 To understand and implement Web Application Development environment software.
CLO.3 To have fundamental knowledge of SQL server and database concepts.
CLO.4 To design and develop websites using advanced web technology tools.
CLO.5 To understand and implement various types of web pages.
CLO.6 To understand the concept of Project development at server level.

Mapping of CLO , PO And PSO

	PO. 1	PO. 2	PO. 3	PO. 4	PO. 5	PO. 6	PO. 7	PO. 8	PO. 9	PO.1 0	PO.1 1	PO.1 2	PSO. 1	PSO. 2	PSO. 3
CLO.1	L	H		H	H	M		M	L				L		
CLO.2			M	H	M	L		H						M	
CLO.3		M	L	H	H	M	L	L							M
CLO.4	L	L		M	M	L	M		M					M	
CLO.5		L	M		H		M		L				M	H	
CLO.6	L	H	M	H	M	M	H	H	H				H	H	M

List of References:

1. Beginning ASP.NET 4 in C# 2010 (Expert's Voice in .NET), By Matthew MacDonald (Author), Published by Apress.
2. C# 2010 Programming Black Book, By Kogent Learning Solutions Inc.
3. C# 4.0 The Complete Reference, By Herbert Schildt, Tata McGraw-Hill Publishing Company Limited.

E-Resources / Web Links:

- <https://www.w3schools.com/asp/>
- <http://www.tutorialspoint.com/listtutorials/asp-dot-net/1>
- http://www.pragimtech.com/dot_net_tutorials_for_beginners.aspx

List of Experiments:

Note: The experiment list provided beneath is for reference only. The course teacher may change/formulate it as per his/her methodology and requirement.

1. Write an ASP.Net Program to Print a Message 'Hello Web Programming "on web form.
2. Write an ASP.Net Program to create a simple web application using two or more web forms.
3. Write an ASP.Net Program to add the value of Textbox into Dropdown List and List box Controls.
4. Write an ASP.Net Program to Delete Items from Dropdown list and List box.
5. Write an ASP.Net Program to set Image on Image Control according to selection of image name from dropdown list.
6. Write an ASP.Net program to calculate the age from the selected date using a calculator.
7. Write an ASP.Net Program to create a student admission form with all standard controls.
8. Write an ASP.Net Program to create Email Registration form with all validation controls.
9. Write an ASP.Net Program to implement Calendar Control.
10. Write an ASP.Net Program to implement AdRotator Control.
11. Write an ASP.Net Program using Menu Control.
12. Write an ASP.Net Program using TreeView Control.
13. Write an ASP.Net Program using Sitemap Control.
14. Write an ASP.Net Program to implement UpdatePanel Control.
15. Write an ASP.Net Program to implement UpdateProgress Control.
16. Write an ASP.Net Program to display data into GridView control using wizard.
17. Write an ASP.Net Program to demonstrate CRUD operation with SQL database.(Create, Read, Update, Delete)
18. Write an ASP.Net Program to Signup Form record into SQL Database using coding method.
19. Write an ASP.Net Program to Login Form record into SQL Database using coding method.
20. Write an ASP.Net Program to create a simple report.