

# **COURSE SYLLABUS**

## Web Development/ASP.NET 2.0, 3.5

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Syllabus

## **Avtech Institute of Technology Course**

Instructor: Course Duration: 15 weeks Date/Time: Training Location:

### Course:

#### Text / Lab Books:

#### **PROVIDED TEXT BOOK:**

- 1. Microsoft<sup>®</sup> .NET Framework 2.0 Web-Based Client Development by Glenn Johnson; Tony Northrup
- 2. Dreamweaver CS3 by David Sawyer Garrick Chow
- 3. Avtech Ecommerce Material (all available in digital format)

## **Course Description**

This complete curriculum provides the learner with an overview of the state of e-commerce today. It defines electronic commerce and discusses electronic commerce elements. Also addressed are issues and technologies available for companies wishing to engage in e-commerce. This curriculum is intended for students who wish to consider some of the costs, as well as the potential benefits of e-commerce.

This course enables students to target specific technologies and distinguish themselves by demonstrating in-depth knowledge and expertise in developing .NET Framework 2.0 Web Applications (MCTS: .NET Framework 2.0 Web Applications) and data access (ADO.NET) in Web applications.

This course helps students to focus in Visual Studio 2005 and Microsoft ASP.NET 2.0/3.5 training and will help them to autonomously find learning resources so that they can upgrade from Visual Studio .NET and ASP.NET 1.0 or ASP.NET 1.1.

#### **Learning Objectives**

At the end of this course, the student should be able to:

- 1. Understand internet technology
- 2. Create a simple webpage using HTML, CSS, DHTML
- 3. Create an interactive JavaScript program
- 4. Explain the purpose and syntax of XML
- 5. Create webpage using graphical tools such as Dreamweaver 8
- 6. Understand SQL, Stored Procedure
- 7. Understand Object Oriented Programming in VB.NET 2005
- 8. Work on a team in a medium or large development environment that uses Microsoft Visual Studio .NET 2005
- 9. Develop web-based application using Microsoft .NET framework 2.0, 3.5
- 10. Understand web service technology
- 11. Understand ADO.NET
- 12. Understand Microsoft's client-side AJAX framework to build the web applications of the future: pure client-side AJAX applications

#### Prerequisite

- Understanding of the Windows operating system (XP)
- Understanding of the principles of computer programming

#### **Teaching Strategies**

A variety of teaching strategies may be utilized in this course, including but not limited to, lecture, discussion, written classroom exercises, written lab exercises, performance based lab exercises, demonstrations, quizzes and examinations. Some quizzes may be entirely or contain lab based components. A mid-course and end course examination will be given.

Tentauve Schedule					
SESSION	DATE	MAJOR TOPIC	SUB-TOPICS		
1		Internet	Course Overview		
		Introduction	Introduction of Internet Technology		
		Client-Side	Web Page Layout		
		Technology	Web Development Process		
		HTML			
2			HTML Building Blocks		
			Starting your web page		
			Text Formatting		
		C	Creating/using web images		
			Hyperlinks		
			Image Map		
			BrP		
3			Special Characters		
			Bulleted lists		
			Table creation		
			Forms		
			Frames		
			Cascading Style Sheets and publishing		
4		CSS	Introduction to Cascading Style Sheets		
			Setting Up style sheets		
			Formatting Text with Styles		
5			Layout Styles		
			CSS Style Switcher		
6		DHTML,	DHTML		
		JavaScript	Introducing Java Script		
			JavaScript Fundamental		
			Variables and Operators		
			Function mad Control Structure		
7		JavaScript	Object-Based Programming with JavaScript		
		-	Form validation		
			Arrays		
8		XML	Introduction to XML		
			XML Syntax Rules		
			XML Validator		
			XML Browsers		
			XML XSL		
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9			Introduction to XSLT		
			XSLT Template, value-of, for-each, sort, if,		
			choose		
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		Introduction to Document type definitions
		XML Schema
10	IDE DreamWeaver CS3	Introduction to Dreamweaver 8 Interface Site Control Basics
11		Linking Cascading Style Sheets Tables Typography
12		Layout Designing for Devices Rollovers XHTML
13		Forms Behaviors Templates and Library Items Automation
14		Accessibility Inserting Media Objects Getting your site Online FTP
15	Database Development with SQL Server 2005	Introduction to SQL Entering Information Extracting Information
16		Advanced Database Design Manipulating Data Grouping and Aggregating Data
17		Queries within Queries Advanced Queries Views Transaction Stored Procedures
18	Visual Basic 2005(VB.NET)	Intro to Object-Oriented Programming in VB .NET: What you Need to Know Fundamental to VB.NET Control Structure

19			Procedures
			Advanced Data Types
20			Advanced Data Types
			Exception Handing
21			Object-Oriented Programming
21			object offented Hogramming
22			Inheritance
22			Interfaces and Collection
			Interfaces and Conection
22		ACD NET 2.0	Introducing the ACD NET 2.0 Web Site
23		ASP.NET 2.0,	Introducing the ASP.NET 2.0 Web Site
		3.5	Adding and Configuring Server Controls
		ADO.NET	
24			Exploring Specialized Server Controls
	· · · ·		Create Custom Web Controls
25			ADO.NET and XML with ASP.NET
26			Input Validation and Site Management
			Programming the Web Application
27			Customizing and Personalizing a web
			Application
			Globalization and Accessibility
			Stoculation and recebbiolity
28			Implementing Authentication and Authorization
			Web Service
29			Using ASP.NET Ajax Control Toolkit
2)			Client-Side ASP.NET Ajax
30			8
30			Resume Workshop

Note: This syllabus is subject to revision

## **Requirements for Successful Completion of the Course**

At a minimum, students must achieve the following:

- A passing grade of **C** or above
- Completion of all required examinations
- Submission of all required lab exercises and projects and;
- Adherence to the school attendance policy.

### **Equipment Needed**

Industry standard desktop computer for lab exercises.

Equipment Breakdown Lab room

Videos and Projector

## Library Assignments

To be determined by the instructor.

## **Portfolio Assignment**

Student program outcome portfolios are required to demonstrate student competencies. In conjunction with your course structure, please select a project/paper that best demonstrates what you have learned in this course and add it to your program portfolio.

#### **Course Policies**

#### **Disruptive Behavior**

Disruptive behavior is an activity that interferes with learning and teaching. Inappropriate talking during class, surfing inappropriate website, tardiness, cheating, alcohol or drug use, use of cell phone, playing lout music during class, etc. all disrupt the learning process.

#### **Copyright Infringement**

Specific exemptions to copyright infringement are made for student use in the context of learning activities. Graphic design students often download images from the Internet, or scan images from publications. As long as this work is for educational purpose, and subject to faculty permission, this is not a problem.

#### Plagiarism

Faculty cannot tolerate the *misrepresentation of work as the student's own*. This often involves the use by one student or another student's design, whether voluntarily or involuntarily. In the event that plagiarism is evident and documented, all students involved in the conscious decision to misrepresent work must receive an F as the grade for the project. A second occurrence may result in suspension for the rest of the quarter, and return to the school only after a review by the Academic Standards Committee.

#### Attendance

#### Attendance and Lateness

In education and the workplace, regular attendance is necessary if individuals are to excel. There is a direct correlation between attendance and academic success. Attendance is mandatory. All students must arrive on time and prepared to learn at each class session. At the faculty member's discretion, students may be marked absent if they arrive more than 15 minutes late to any class. More that five absences in a class that meets twice per week or more that two absences in a class that meets once per week may result in a failure.

## Make-Up Work

#### Late Projects and Homework

All projects and homework must be handed in on time. Homework should be emailed to your instructor if you are going to miss a class. Work that is submitted one week late will result in the loss of one full grade; and work that is submitted two weeks late will result in the loss of two full grades; more than two weeks late you will receive a failing grade on the project.

## **Student's Responsibility**

The student is responsible for attending all classes and participating on a regular basis. If you must miss a class, you must notify the professor in person or via email the day before.

Classroom discussions will occur and the student is expected to make meaningful contributions to the discussions. The student is responsible for doing all assignments, including homework, and handing them in on time.

The student must behave in a mature manner at all times – unusual, disturbing or harassing behavior will not be tolerated. Such behavior will lead to ejection from class and possible further actions, including a requested withdrawal from class. Avtech Institute's school policies must be followed at all times.