

## **INEW 1074 Course Syllabus**

**1. Name of Course:** ASP.NET 3.5

**2. Number of Clock Hours:** 16

### **3. Course Description:**

This two-day instructor-led course provides students with the knowledge and skills to create a fully functional Web application by using ASP.NET 3.5. This course helps students to prepare for Exam 70-562 TS: Microsoft .NET Framework 3.5, ASP.NET Application Development, which is a core requirement for the MCTS certification. MOC 6463. Prerequisites: INEW 1073 or equivalent

### **4. Course Objectives**

After completing this course, students will be able to:

- Explain how to create dynamic Web pages by using ASP.NET.
- Manage state, handle requests, and improve accessibility by using the features of ASP.NET.
- Configure an ASP.NET application by using .config files
- Create a user interface on an ASP.NET page by using standard Web server controls.
- Create a user control and a custom server control and add them to an ASP.NET page.
- Access and manipulate data from different sources by using ADO.NET 3.5.
- Access and manipulate data from Windows Communication Foundation services or Web services.
- Present data to the user by placing data-bound controls on an ASP.NET page.
- Improve page responsiveness by using the ASP.NET AJAX controls.
- Interact with the user, access services, and access the AJAX client-side library by using client scripts.
- Find and eliminate bugs in an ASP.NET application.
- Deploy an ASP.NET application to a production Web server.
- Write pages that adapt to the capabilities of mobile devices.
- Utilize controls that adapt to the capabilities of mobile devices.

### **5. Rationale:**

Upon completion of this course, students will have a better understanding of Microsoft .NET, the most popular framework in use today.

### **6. Required Materials:**

Microsoft Official Curriculum, MOC 6463, included.

## **7. Evaluation**

Those who participate in class discussions, complete course lab work, and miss no more than three class meetings will be awarded 1.6 continuing education units.

## **8. Course Outline**

### **Module 1: Getting Started with ASP.NET 3.5**

This module explains how to build and configure a simple ASP.NET application.

#### **Lessons**

- Building Dynamic Web Pages with ASP.NET 3.5
- ASP.NET 3.5 Features
- Configuring ASP.NET Applications

#### **Lab: Creating and Configuring an ASP.NET 3.5 Application**

- Creating an ASP.NET Application
- Configuring Session State
- Configuring Caching

After completing this module, students will be able to:

- Explain how to create dynamic Web pages by using ASP.NET.
- Manage state, handle requests, and improve accessibility by using the features of ASP.NET.
- Configure an ASP.NET application by using .config files

### **Module 2: Implementing a User Interface with ASP.NET Server Controls**

This module explains how to implement a dynamic user interface by using ASP.NET controls.

#### **Lessons**

- Consuming Controls to Interact with Users
- Creating Custom Controls

#### **Lab: Consuming and Creating ASP.NET Server Controls**

- Creating a User Interface by Using Web Server Controls in an ASP.NET Form
- Creating User Controls and Custom Server Controls

After completing this module, students will be able to:

- Create a user interface on an ASP.NET page by using standard Web server controls.

- Create a user control and a custom server control and add them to an ASP.NET page.

### **Module 3: Displaying and Manipulating Data in ASP.NET 3.5**

This module explains how to display and manipulate data from any source in an ASP.NET application.

#### **Lessons**

- Accessing Data by Using ADO.NET 3.5
- Accessing Data from Services
- Rendering Data in Web Controls

#### **Lab: Displaying and Manipulating Data in ASP.NET 3.5**

- Accessing Data from an XML File as a Data Source
- Consuming Data from a Web Service
- Displaying and Updating Data by Using Data-Bound Controls

After completing this module, students will be able to:

- Access and manipulate data from different sources by using ADO.NET 3.5.
- Access and manipulate data from Windows Communication Foundation services or Web services.
- Present data to the user by placing data-bound controls on an ASP.NET page.

### **Module 4: Creating Responsive Pages by Using Client-Side Technologies**

This module explains how to create pages that respond rapidly to user requests.

#### **Lessons**

- Creating Partial Page Updates by Using AJAX
- Scripting Actions on the Web Client

#### **Lab: Creating Responsive Pages by Using Client-Side Technologies**

- Implementing Partial Page Updates by Using AJAX Controls
- Accessing a Web Service by Using a Client-Side Script

After completing this module, students will be able to:

- Improve page responsiveness by using the ASP.NET AJAX controls.
- Interact with the user, access services, and access the AJAX client-side library by using client scripts.

## **Module 5: Debugging and Deploying ASP.NET Applications**

This module explains how to deploy a reliable, robust Web application to a Web server.

### **Lessons**

- Troubleshooting and Debugging ASP.NET Applications
- Deploying Completed ASP.NET Applications

### **Lab: Debugging and Deploying ASP.NET Applications**

- Debugging an ASP.NET Application
- Deploying an ASP.NET Application

After completing this module, students will be able to:

- Find and eliminate bugs in an ASP.NET application.
- Deploy an ASP.NET application to a production Web server.

## **Module 6: Writing ASP.NET Applications for Mobile Devices**

This module explains how to ensure that mobile device users can access all the functionality of a Web site.

### **Lessons**

- Rendering Pages According to Device Capabilities
- Creating Pages with Mobile Web Controls

### **Lab: Adding Support for Mobile Devices**

- Adding a Mobile Web Form to Your Application
- Displaying Data by Using Mobile Web Controls

After completing this module, students will be able to:

- Write pages that adapt to the capabilities of mobile devices.
- Utilize controls that adapt to the capabilities of mobile devices.