

Syllabus for Web Development 2: ASP.NET MVC

Course Number	CS 296N	Instructor	Brian Bird
CRN	33391	E-mail	birdb@lanecc.edu
Classroom	19/120	Office	Building 19, Room 152
Credits	4	Office Phone	541-463-3024
Day & Time	T, Th, 10:00 – 11:50	Office Hours	M – Th, 4:00 – 5:00

Course Description

This course continues coverage of server-side programming in C# using the ASP.NET 4.5 framework. You will learn the concepts underlying the MVC (Model View Controller) design pattern and learn to use the Microsoft ASP.NET MVC 4 framework with SQL Server. Programming assignments will consist of guided tutorial exercises as well as labs in which you will design and program a complete web site on your own. In the last part of the term we will start a large-scale team project that will be continued in the Capstone Project course next term.

Learning Outcome

To be able to design and program a web site that uses the ASP.NET MVC framework for a moderately complex web site.

Course Content

Technologies

ASP.NET	Visual Studio	ASP.NET MVC 5
C#	T-SQL	Razor
Linq	git	Entity Framework

Themes and Issues

Software engineering	Agile project management	Test-driven development
Web standards	Extensibility	Object oriented development
Separation of concerns	Avoiding dependencies	Data driven web applications

Skills

Use Visual Studio to develop and publish ASP.NET MVC web sites.
Effectively use software development tools like the MS unit test framework
Design, implement, test and debug a web application
Design and manage an SQL Server database that is used by an MVC web application

Learning Resources

Textbook

Professional ASP.NET MVC 5 by Jon Galloway, Brad Wilson, K. Scott Allen, and David Matson. Published 2014 by Wrox Press. ISBN: 978-1-118-79475-3 is the textbook for the course. The source code for all of the sample programs in the text is available for download on the publisher's web site: www.wrox.com/WileyCDA/WroxTitle/Professional-ASP-NET-MVC-5.productCd-1118794753.html

Web Sites

<https://classes.lanecc.edu> will host the web site for the course. The site is designed as a supplement to the in-class section of the course.

Software

The hardware and software required for the course is available to all students in the CIT Main Lab on campus. You paid a fee when you registered for this course that provides you with unlimited access to CIT lab facilities.

Visual Studio Ultimate 2013 will be the development environment provided in class and in the CIT Main Lab. This software can be obtained free of charge through your LCC account on Microsoft Dream Spark Premium (formerly MSDNAA), <http://e5.onthehub.com/WebStore/Welcome.aspx?vsro=8&ws=EC37AD18-ED9B-E011-969D-0030487D8897>. You can download it or borrow the setup DVD from the CIT computer lab.

You may alternatively use the Visual Studio Community edition which is a free download from Microsoft at www.visualstudio.com/en-us/products/visual-studio-community-vs.

Assessment and Grading

Specific grading criteria will be applied to each of the labs, quizzes, and exams you will be working on in this class. Part of the lab involves peer evaluation. You will be provided with lab evaluation worksheets for each lab. Attendance is not graded.

The table below summarizes the grade distribution for each of the assessment tasks:

<i>Assessment Activities</i>	<i>Points for each</i>	<i>Total Percentage</i>
8 Labs	50	40%
8 Lab Evaluations	10	10%
9 Tutorial exercises	10	10%
1 Midterm exam	150	15%
1 Final exam	250	25%

Letter grades for the course will be determined by the following percentages:

	-		+
A	90 - 91	92 – 97	98 - 100
B	80 - 81	82 – 87	88 - 89
C	70 – 71	72 – 77	78 - 79
D	60 - 61	62 – 67	68 - 69
F	Below 60		

Late Work

- The grade for labs submitted after the due date will be reduced by 10%.
Labs submitted after the in-class lab evaluation will be reduced by 25%
- Quizzes and exams cannot be taken after the due date. Plan ahead!
- Exceptions will only be made for severe illness or emergency situations.

Academic Honesty

While students are encouraged to discuss labs and to use each other as resources, each student is responsible for his/her own work. In other words you can help each other, but you can't copy any part of someone else's work. The end product must be each student's own individual work.

Attendance

Class attendance is not graded but will be essential for successful completion of the class. Students who miss a class are responsible for obtaining the course content provided in class and mastering it.

Tentative Course Schedule

<i>Week</i>	<i>In Class Learning Activities</i>	<i>Homework (outside of class)</i>	<i>Due</i>
1 <i>1/5</i>	Lecture: Intro to MVC	Read Ch. 1 in <i>Pro ASP.NET MVC 5</i>	Tues, 1/5
<i>1/7</i>	Practice: Tip of the Day MVC site	Lab 1 Beta: Getting Started with ASP.NET MVC 5 Tutorial , and term project proposal	Sun, 1/10
2 <i>1/12</i>	Lab 1 code review Lecture: controllers and views	Read Ch. 2 & 3: Controllers and Views	Tue, 1/12
<i>1/14</i>	Practice: Tip of the Day web site	Lab 1 Release version and completed code review form. Lab 2 Beta	Wed, 1/13 Sun, 1/17
3 <i>1/19</i>	Lab 2 code review Lecture: Models	Read Ch. 4: Models	Tues, 1/19
<i>1/21</i>	Practice: Tip of the Day web site	Lab 2 Release version and completed code review form. Lab 3 Beta	Wed, 1/20 Sun, 1/24
4 <i>1/26</i>	Lab 3 code review Forms and HTML helpers	Read Ch. 5: Forms and HTML helpers	Tues, 1/26
<i>1/28</i>	Practice: Tip of the Day web site	Lab 3 Release version and completed code review form. Lab 4 Beta	Wed, 1/27 Sun, 1/31
5 <i>2/2</i>	Lab 4 code review Lecture: Annotation and validation	Read Ch. 6: Data annotations and validation	Tues, 2/2
<i>2/4</i>	Practice: Tip of the Day web site	Lab 4 Release version and completed code review form. Lab 5 Beta	Wed, 2/3 Sun, 2/7

6 2/9	Lab 5 code review Midterm review, Practice: To-do list	* No new reading, exercise or Lab this week	
2/11	Midterm exam	Lab 5 Release version and completed code review form.	Wed, 2/10
7 2/16	Midterm discussion	Read Ch. 7: Membership, Authorization and Security	Tues, 2/16
2/18	Lectures: Membership, etc. Practice: Tip of the Day web site	Lab 6 Beta: Add membership, etc. to your web site	Sun, 2/21
8 2/23	Lab 6 code review	Read Ch. 9: Routing (Skip Ch. 8)	Tues, 2/23
2/25	Lectures: Routing Practice: Tip of the Day web site	Lab 6 Release version and completed code review form. Lab 7 Beta	Wed, 2/24 Sun, 2/28
9 3/1	Lab 7 code review	Read Ch. 13: Dependency Injection (Skip Ch. 10--12)	Tues, 3/1
3/3	Lectures: Web API Practice: Tip of the Day web site	Lab 7 Release version and completed code review form. Lab 8 Beta: Dependency Injection	Wed, 3/2 Sun, 3/6
10 3/8	Lab 8 code review	Read Ch. 14 Unit Testing	Tues, 3/8
3/10	Lectures: DI and Unit Testing Practice: Tip of the Day web site	Lab 8 Release version and completed code review form. Lab 9 Release: Unit Testing (no beta)	Wed, 3/9 Sun, 3/13
11 3/15	Finals Week Final Exam		

Academic Calendar for Winter Term 2016

First day of class	1/4/16
Last day to receive refund	1/10/16, 11:59 pm
Martin Luther King Jr. holiday	1/18/16
Presidents' Day holiday	2/15/16
Last day for schedule changes	2/26/16
Finals week	3/14/16–3/19/16
Term ends	3/19/16

Disability Services

If you need support or assistance because of a disability, you may be eligible for academic accommodations through Disability Services. For more information, contact Disability Services at 463-5150 (voice) or 463-3079 (TTY), or stop by building 1, room 218.