

# Syllabus for Web Development 2: ASP.NET MVC

<b>Course Number</b>	CS 296N	<b>Instructor</b>	Brian Bird
<b>CRN</b>	33391	<b>E-mail</b>	<a href="mailto:birdb@lanecc.edu">birdb@lanecc.edu</a>
<b>Classroom</b>	19/120	<b>Office</b>	Building 19, Room 152
<b>Credits</b>	4	<b>Office Phone</b>	541-463-3024
<b>Day &amp; Time</b>	T, Th, 10:00 – 11:50	<b>Office Hours</b>	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

### ***Texts***

*Professional ASP.NET MVC 5* by Jon Galloway, Brad Wilson, K. Scott Allen, and David Matson. Published 2014 by Wrox. ISBN: 978-1-118-79475-3 is the textbook for the course. An 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](http://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](http://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:

	-		+
<b><i>A</i></b>	90 - 91	92 – 97	98 - 100
<b><i>B</i></b>	80 - 81	82 – 87	88 - 89
<b><i>C</i></b>	70 – 71	72 – 77	78 - 79
<b><i>D</i></b>	60 - 61	62 – 67	68 - 69
<b><i>F</i></b>	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><b>Week</b></i>	<i><b>In Class Learning Activities</b></i>	<i><b>Homework (outside of class)</b></i>
<b>1</b> 1/04–1/10	<ul style="list-style-type: none"> <li>• Lecture: Intro to MVC</li> <li>• Practice: Tip of the Day MVC site</li> </ul>	<ul style="list-style-type: none"> <li>• Read Ch. 1</li> <li>• Ch. 1 tutorial: MVC Music Store</li> <li>• Lab 1: Pluralsite intro to MVC, Restaurant Review site</li> <li>• Read Ch. 2 &amp; 3</li> </ul>
<b>2</b> 1/11–1/17	<ul style="list-style-type: none"> <li>• Lab 1 peer review</li> <li>• Lecture: controllers and views</li> <li>• Practice: Tip of the Day web site</li> </ul>	<ul style="list-style-type: none"> <li>• Ch. 2 &amp; 3 tutorials: Controllers and Views</li> <li>• Project proposal</li> <li>• Lab 2: Pluralsite intro to MVC, unit testing &amp; styling</li> <li>• Read Ch. 4: Models</li> </ul>
<b>3</b> 1/18–1/24	<ul style="list-style-type: none"> <li>• Lab 2 peer review</li> <li>• Lectures: Models</li> <li>• Practice: Tip of the Day web site</li> </ul>	<ul style="list-style-type: none"> <li>• Ch. 4 tutorial: Models</li> <li>• Lab 3: Create your MVC site</li> <li>• Read Ch. 5: Forms and HTML helpers</li> </ul>
<b>4</b> 1/25–1/31	<ul style="list-style-type: none"> <li>• Lab 3 peer review</li> <li>• Lectures: Forms and HTML helpers</li> <li>• Practice: Tip of the Day web site</li> </ul>	<ul style="list-style-type: none"> <li>• Ch. 5 tutorial: Forms and HTML helpers</li> <li>• Lab 4: Add forms and HTML helpers to your web site</li> <li>• Read Ch. 6: Data annotations and validation</li> </ul>
<b>5</b> 2/1–2/7	<ul style="list-style-type: none"> <li>• Lab 4 peer review</li> <li>• Lectures: Annotation and validation</li> <li>• Practice: Tip of the Day web site</li> </ul>	<ul style="list-style-type: none"> <li>• Ch. 6 tutorial</li> <li>• Lab 5: Add validation to your web site</li> <li>• Review for mid-term</li> </ul>
<b>6</b> 2/8–2/14	<ul style="list-style-type: none"> <li>• Lab 5 peer review</li> <li>• Lectures: Review</li> <li>• Practice: To-do list web site</li> <li>• Midterm exam</li> </ul>	<ul style="list-style-type: none"> <li>• No tutorial or Lab this week</li> <li>• Midterm programming problem</li> <li>• Read Ch. 7: Membership, Authorization and Security</li> </ul>
<b>7</b> 2/15–2/21	<ul style="list-style-type: none"> <li>• Midterm discussion</li> <li>• Lectures: Membership, etc.</li> <li>• Practice: Tip of the Day web site</li> </ul>	<ul style="list-style-type: none"> <li>• Ch. 7 tutorial</li> <li>• Lab 6: Add membership, etc. to your web site</li> <li>• Read Ch. 9: Routing (Skip Ch. 8)</li> </ul>
<b>8</b> 2/22–2/28	<ul style="list-style-type: none"> <li>• Lab 6 peer review</li> <li>• Lectures: Routing</li> <li>• Practice: Tip of the Day web site</li> </ul>	<ul style="list-style-type: none"> <li>• Ch. 9 tutorial</li> <li>• Lab 7: Add routing to your web site</li> <li>• Read Ch. 11: ASP.NET Web API (Skip Ch. 10)</li> </ul>
<b>9</b> 2/29–3/6	<ul style="list-style-type: none"> <li>• Lab 7 peer review</li> <li>• Lectures: Web API</li> <li>• Practice: Tip of the Day web site</li> </ul>	<ul style="list-style-type: none"> <li>• Ch. 11 tutorial</li> <li>• Lab 8: Web API</li> <li>• Read Ch. 13 &amp; 14 Dependency Injection, Unit Testing</li> </ul>
<b>10</b> 3/7–3/13	<ul style="list-style-type: none"> <li>• Lab 8 peer review</li> <li>• Lectures: DI and Unit Testing</li> <li>• Practice: Tip of the Day web site</li> </ul>	<ul style="list-style-type: none"> <li>• Ch. 13 &amp; 14 tutorials</li> <li>• Lab 9: Unit Testing</li> </ul>
<b>11</b> 3/15	Finals Week <b>Final Exam</b>	

### *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.