

Course Number	CS 296N	Instructor	Brian Bird
CRN	32672	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, 2:30 – 3:30

Course Description

This course continues coverage of server-side programming in C# using the ASP.NET framework. You will learn the concepts underlying the MVC (Model View Controller) design pattern and learn to use the Microsoft ASP.NET MVC 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
C#	T-SQL	Razor
LINQ	Git	Entity Framework

Themes and Issues

Software engineering	Architectural Design Patterns	Test-driven development
Web standards	Extensibility	Object oriented programming
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

Pro ASP.NET Core MVC, 6th Edition, by Adam Freeman, Apress, 2016 ISBN-13: 978-1484203989 is the textbook for the course. The source code for the sample programs in the text is available for download on the publisher's web site: <http://www.apress.com/us/book/9781484203989>

Web Sites

<https://classes.lanecc.edu> will give you access to the Moodle 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 are 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 2015 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 Microsoft Imagine account (formerly Microsoft Dream Spark, and before that called 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 Points</i>	<i>Total Percentage</i>
8 Labs	50	400	40%
8 Lab Reviews	10	80	8%
8 Tutorial exercises	10	80	8%
Midterm exam	150	150	15%
Term Project	100	100	10%
Final exam	150	150	15%

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

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

Late Work

- The grade for labs submitted after the due date will be reduced by 10%.
Labs submitted after the in-class code review will be reduced by 25%
- 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 entirely your 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>1/10</i>	Lecture: Intro to MVC	Read Freeman Ch. 1 – Core MVC in Context Exercise 1: Freeman Ch. 2– Your 1 st MVC Application	Tue Wed
1/12	Practice: Tip of the Day MVC site	Lab 1: Propose a web site term project	Sun
2 <i>1/17</i>	Lab 1 code review Lecture: controllers and views	Read Freeman Ch. 3 – The MVC Pattern Exercise 2: TBD (To Be Determined)	Mon Wed
1/19	Practice: Tip of the Day web site	Lab 1 Release version and completed code review form. Lab 2: Start your new web site project	Thu Sun
3 <i>1/24</i>	Lab 2 code review Lecture: Models	Read Freeman Ch. 4 – Essential Language Features Exercise 3: MSDN, Getting Started with LINQ in C#	Mon Wed
1/26	Practice: Tip of the Day web site	Lab 2 Release version and completed code review form. Lab 3 Beta: TBD	Thu Sun
4 <i>1/31</i>	Lab 3 code review Forms and HTML helpers	Read Freeman Ch. 5 – Working with Razor Exercise 4: MSDN, EF Dev Workflows , Database First .	Mon Wed
2/2	Practice: Tip of the Day web site	Lab 3 Release version and completed code review form. Lab 4 Beta: Add Razor to your web site, add a database	Thu Sun
5 <i>2/7</i>	Lab 4 code review Lecture: Annotation and validation	Read: Freeman Ch. 6 – Working with Visual Studio, and Ch. 7 – Unit Testing MVC Applications Exercise 5: TBD	Mon Wed
2/9	Practice: Tip of the Day web site	Lab 4 Release version and completed code review form. Lab 5 Beta: Add unit tests to your web site	Thu Sun

6 2/14	Lab 5 code review Midterm review Practice: To-do list	No new reading, exercise or Lab this week	Thu
2/16	Midterm exam	Lab 5 Release version and completed code review form.	
7 2/21	Midterm discussion Lecture: Database, Deploying to Azure	Read Freeman Ch. 8 – SportsStore -- A Real Application Exercise 6: Ch. 8 SportsStore, MSDN, Getting Started with Windows Azure SQL Database , MSDN, Migrating Databases to Azure	Mon Wed
2/23	Practice: Tip of the Day web site	Lab 5 Release version and completed code review form. Lab 6 Beta: Add a database to your web site, deploy to Azure SQL	Sun
8 2/28	Lab 6 code review	Read Freeman Ch. 9 – SportsStore: Navigation Exercise 7: TBD	Mon Wed
3/2	Lecture: navigation Practice: Tip of the Day web site	Lab 6 Release version and completed code review form. Lab 7: TBD	Thu Sun
9 3/7	Lab 7 code review Lecture: TBD	Read Freeman Ch. 10 – SportsStore: Completing the Cart Exercise 8: TBD	Mon Wed
3/9	Practice: Tip of the Day web site	Lab 7 Release version and completed code review form. Lab 8 Beta: TBD	Thu Sun
10 3/14	Lab 8 code review Lecture: TBD	Read Ch. 11 – SportsStore: Administration, and Ch. 12 – Security and Finishing Touches Exercise 10: TBD	Mon Wed
3/16	Practice: Tip of the Day web site	Lab 8 Release version and completed code review form.	Thu
11 3/21	Finals Week Final Exam		

Academic Calendar for Winter Term 2017

First day of class	1/9/17
Last day to receive refund	1/15/17, 11:59 pm
Martin Luther King Jr. holiday	1/16/17
President's Day holiday	2/20/17
Last day for schedule changes	3/3/17
Finals week	3/20/17 – 3/19/16
Term ends	3/25/17

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.