# MONTGOMERY COLLEGE

Rockville Campus

Engineering, Physical and Computer Sciences Department CMSC224 Web Application Using C# and ASP.NET

#### **Instructor Information**

Name:
Mailbox:
Email:
Office Hours:

Office Location: Office Phone:

### **Course Information**

Semester: Class starts:

Class Meetings: Midterm Exam:

Check MyMC class schedule for your Specific Deadline to Drop without a grade W or to change from audit to credit or from credit to audit Course CRN: Class ends:

Classroom: Final Exam:

Check MyMC class schedule for your Specific Refund Deadlines

## **Course Description**

Examines developing web applications using C# and ASP.NET and introduces web services. Students create applications using tools such as web Forms, Visual Studio.NET, ASP.NET, and ADO.NET. Students also optimize applications using configuration, security, and caching. **PREREQUISITE(S):** CMSC 140 *or consent of department. Three hours each week. Formerly CS 224.* 

3 semester hours Course Outcomes

#	Upon completion of the course, the student will be able to:
1.	Describe the syntax and idioms of the C# programming language.
2.	Use the principles of object-oriented programming techniques using C#.
3.	Create programs that use flow control structures and exception handling.
4.	Configure the .NET Framework, ASP.NET, to use the response and request objects and
	to create a Web Application with Visual Studio.NET.
5.	Implement Basic State Management in Web applications using techniques such as
	cookies, hidden fields, query strings and session, application and global objects.
6.	Apply web controls such as validation controls to construct controls with code,
	templates with the repeater and data list controls, and to describe user controls,
	properties, and events.
7.	Configure a database and manipulate database records using .NET library.
8.	Explain, implement, and test Web services and deploy Web applications.

#### **Course Materials**

1. **Murach's C# 2015** by Joel Murach and Anne Boehm Publisher: Murach ISBN 978-1-890774-94-3 2. **Murach's ASP.NET 4.6 Web Programming with C# 2015 (6<sup>th</sup> edition)** by Mary Delamater and Anne Boehm Publisher: Murach ISBN: 978-1-890774-95-0

Companion Web Site: <u>http://www.murach.com</u> Textbooks and other materials may be purchased through the bookstore.

#### <u>Grade Basis</u>

Final Project	25%
Quizzes on Reading Assignments	20%
Homework/Projects	55%
Total:	100%

#### Grading Scale:

90 - 100%	А
80 - 89%	В
70 - 79%	С
60 - 69%	D
Below 60%	F

#### **General Class Policies**

- You are responsible for all work missed, and for meeting assignment due dates when absent. Please call or email your instructor if you are going to be late or absent.
- You are strongly encouraged to contact your instructor at home by phone or e-mail if you are having difficulties, or have any questions about assignments.
- Please include your name and the course information in the submitted assignments.
- Incomplete assignments receive no more than 50% of the grade.
- Assignments are considered incomplete, if they do not compile, they do not contain reasonable comments.
- There is always a means to submit your assignments on time. Be creative, be persistent, and keep your instructor informed!
- All assignments (Tests, Quizzes, Assignments, and Projects) must be turned in on or before the due dates to receive full credits.
- Missed Quizzes, Assignments, and Projects: NO MAKEUPS without a doctor's excuse. If the Final Project is not submitted, the student will receive a grade of F for the course.

#### **Course Topics**

Topics	
Textbook Murach's C# 2015	
Chapter 1 How to get started with Visual Studio	
Chapter 2 How Do Design A windows Form Application	
Chapter 3 How to test and Code a Windows Form Application	
Chapter 4 How to work with numeric and string data	
Chapter 5 How to code control structures	
Chapter 6 How to code methods and event handlers	
Chapter 7 How to handle exceptions and validate data	
Chapter 8 How to use arrays and collections	
Chapter 9 How to work with dates and strings	
Chapter 12 How to create and use classes	
Chapter 13 How to work with indexers, delegates, events, and operators	
Chapter 14 How to work with inheritance	
Chapter 15 How to work with interfaces and generics	
Textbook Murach's ASP.NET 4.5 web programming with C#2015	
Chapter 1 An introduction to ASP.NET web programming	
Chapter 2 How to develop a one-page web application	
Chapter 3 How to use HTM5 and CSS3	
Chapter 4 How to develop a multi-page web application	
Chapter 5 How to test and debug an ASP.NET application	
Chapter 6 How to use the standard server controls Chapter 7 How to use the validation controls	
Chapter 8 How to work with state	
Chapter 9 How to use master pages Chapter 10 How to use themes	
Chapter 12 An introduction to database programming	
Chapter 12 An introduction to database programming Chapter 13 How to use SQL data sources	
Chapter 14 How to use the GridView control	
Chapter 15 How to use the DetailsView and FormView controls	
Chapter 16 How to use the ListView and DataPager controls	
Chapter 17 How to use object data sources	
Chapter 18 How to secure a web site	
Chapter 19 How to authenticate and authorize users	
Chapter 20 How to use email, custom error pages, and back-button control	
Chapter 21 How to configure and deploy a web application	
Final Project Due	