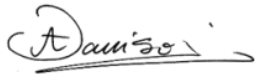


Approved by Chair:



Dec 15, 2021

Signature

### COURSE SECTION INFORMATION

<b>Course Title</b> <b>Program Title (If applicable)</b>
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**Teacher's Name:** Sergio Santilli

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**Phone**

**Office:** C467

**Out of Class Assistance**

**Course Code:** COMP 2139

**Course Section:**

**Academic Year:** Winter 2021-2022

**Term:** Winter 2022

### LIST OF TEXTBOOKS AND OTHER TEACHING AIDS:

**Required:**

Murach's ASP.NET Core MVC with C#, 2020 By Mary Delamater and Joel Murach ISBN 978-1-943872-49-7

**Recommended Resources:**

1- MSDN (See help menu in Visual Studio .NET)

2- Blackboard: <https://bb-gbc.blackboard.com>

**Course Delivery Mode:**

- **Lectures:** All sessions except mid-term and final exams will be online.
- **Labs:** All sessions will be in-person, and students must attend all the classes on campus.

**Any variation to the above note will be posted on the blackboard in advance**

# Detailed Evaluation System

Assessment Tool:	Description:	Outcome(s) assessed:	EES assessed:	Date / Week:	% of Final Grade:
Quizzes	Weekly quizzes that on the weekly chapters content	1,2,3,4	1,2,3,4,5	Weekly (2-14)	10
Assignment 1	Create a web application that implements proper user interface based on provided specification. It should also provide proper input validation and exception handling mechanisms.	1, 2, 3, 4	1, 2, 3, 4, 5	~Week 6	17.5
Assignment 2	Create a web application that implements proper user interface based on provided specification. The application will contain state management and database connectivity. It should also provide proper input validation and exception handling mechanisms.	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5, 6, 10,11	~Week 13	17.5
Mid-Term Exam	Mixed format exam that includes MC and short answer question exam covering course chapters.	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 10, 11	Week 7	25
Final Exam	Mixed format exam that includes MC and short answer question exam covering course chapters.	5, 6, 7, 8, 9	1, 2, 3, 4, 5,6, 10, 11	Week 15	30
<b>TOTAL:</b>					<b>100%</b>

**TOPICAL OUTLINE:**

Week	Topic/ Task	Outcome(s)	Content / Activities	Resources
1	1	1	Introduction to web programming with ASP.NET Core <ul style="list-style-type: none"> <li>• An introduction to web apps</li> <li>• An introduction to ASP.NET Core MVC</li> <li>• Tools for working with ASP.NET Core</li> <li>• How an ASP.NET Core MVC App works</li> </ul>	Chapter 1
2	2	1	How to develop a single-page MVC web app <ul style="list-style-type: none"> <li>• How to create a core MVC web application</li> <li>• How to run a web application and fix errors</li> <li>• How to work with a model</li> <li>• How to organize the files for a view</li> <li>• How to validate user input</li> </ul>	Chapter 2
3	3	1, 2	How to develop a data-driven MVC web application <ul style="list-style-type: none"> <li>• How to use EF core</li> <li>• How to work with data</li> <li>• How to work with related data</li> <li>• How to make user-friendly URLs</li> </ul> How to test and debug an ASP.NET Core web application <ul style="list-style-type: none"> <li>• How to test an ASP Core Web Application</li> <li>• How to use the exception handler</li> <li>• How to use the debugger</li> <li>• How to set breakpoints in ASP.NET</li> <li>• How to monitor expressions</li> <li>• How to use trace points</li> </ul>	Chapter 4, Chapter 5
4	4	1,2	How to work with controllers and routing <ul style="list-style-type: none"> <li>• How to use the default route</li> <li>• How to create custom routes</li> <li>• How to use attribute routing</li> <li>• Best practices for creating URLs</li> <li>• How to work with areas</li> </ul>	Chapter 6
5	5	1, 3, 4	How to work with Razor views <ul style="list-style-type: none"> <li>• How to work with Razor syntax</li> <li>• Essentials skills for Razor views</li> <li>• How to work with a model</li> <li>• How to work with a Razor layout</li> </ul>	Chapter 7
6	6	1, 2, 3, 5	How to transfer data from controllers <ul style="list-style-type: none"> <li>• How to use ActionResult objects</li> <li>• How to use the ViewData and ViewBag properties</li> <li>• How to work with view models</li> <li>• How to redirect a request</li> <li>• How to use the TempData property</li> </ul>	Chapter 8
7	*** Mid-Term Exam ***			

8	Interession Week			
9	7	4, 5, 6	How to work with session state and cookies <ul style="list-style-type: none"><li>Different ways to maintain application state</li><li>Introduction to session state</li><li>How ASP.NET handles state</li><li>How to work with session cookies</li><li>How to work with persistent cookies</li><li>How to work with cookies</li></ul>	Chapter 9
10	8	4, 5, 6	How to work with model binding <ul style="list-style-type: none"><li>An introduction to MVC model binding</li><li>How to use controller properties to retrieve GET and POST data</li><li>Action methods that bind primitive types</li><li>Action methods that bind complex types</li><li>Coding submission buttons</li><li>Control the source of bound values</li><li>Binding data</li></ul>	Chapter 10
11	9	5, 6, 7	How to validate data <ul style="list-style-type: none"><li>How data validation works in MVC</li><li>How to control the user experience</li><li>How to customize server-side validation</li><li>How to customize client-side validation</li></ul>	Chapter 11
12	10	5,6,7	How to use EF Core <ul style="list-style-type: none"><li>How to create a database from code</li><li>How to work with relationships</li><li>How to create code from a database</li><li>How to work with data in a database</li><li>How to handle concurrency conflicts</li><li>How to encapsulate your EF code</li></ul>	Chapter 12
13	11	5,6,7	How to use dependency injection and unit testing <ul style="list-style-type: none"><li>How to use dependency injection</li><li>How to get started with unit testing</li><li>How to test methods that have dependencies</li><li>How to create fake objects with Moq</li></ul>	Chapter 14
14	11	5,6,7	How to authenticate and authorize users <ul style="list-style-type: none"><li>An introduction to authentication</li><li>How to get started with Identity</li><li>How to register a user</li><li>How to log in a user</li><li>How to work with roles</li><li>How to change a user’s password</li><li>Working with registration fields</li></ul>	Chapter 16
15	*** Final Exam ***			
<b>Please note: this schedule may change as resources and circumstances require.</b> For information on withdrawing from this course without academic penalty, please refer to the College Academic Calendar: <a href="http://www.georgebrown.ca/Admin/Registr/PSCal.aspx">http://www.georgebrown.ca/Admin/Registr/PSCal.aspx</a>				