## **Critical Path**

## Web Lab 1 (C# ASP.NET)

**Instructor: Christine Bittle** 

The Critical Path is the course schedule. It is an important document that lays out weekly **and/or** module objectives that you are responsible for to ensure academic success. Download and/or print out a copy of the Critical Path and refer to it regularly. Critical path subject to change with course pacing.

## **Module Breakdown**

Module	Topics, Readings, and Activities	Due Dates	Weight
1	Module 1: Introduction to Web Applications  Topics:	-	-
	<ul><li>Introduction to web applications.</li><li>Client and web server</li></ul>		
	Resources:		
	Articles, Documentation, Handouts on BB		
	Github Examples on BB		
	Activities:		
	<ul> <li>Installing and setting up a project space with ASP.NET</li> <li>In class exercise</li> </ul>		

2	Module 2: ASP.NET, WebAPI, and C#
2	Topics:
	<ul> <li>Communication between client and server</li> <li>C# syntax - Variables</li> <li>C# syntax - Methods</li> <li>Navigating the Server Environment</li> </ul>
	Resources:
	Articles, Documentation, Handouts on BB
	Github Examples on BB
	Activities:
	DEMO: URL Routing     DEMO: POST vs GET
	ACTIVITY: Strings, Integers, Boolean
3	Module 3: HTTP and Github
	Topics:
	<ul><li>Client to Server Communication</li><li>Complex Data Types</li></ul>
	Working with Github
	Resources:
	Articles, Documentation, Handouts on BB
	Github Examples on BB
	Activities:
	DEMO: HTML forms

	<ul> <li>DEMO: CURL</li> <li>DEMO: Lists, IEnumerable</li> <li>DEMO: Github</li> </ul>		
4	Module 4: IF Statement  Topics:	A1	20%
5	Module 5: Loops and Algorithms  Topics:      Loops     Pseudo Code  Resources:		

	Github Examples on BB		
	Activities:		
	DEMO: J2 Problems		
	ACTIVITY: Pseudo Code		
6	Module 6: Dynamic Web Pages		
	Topics:		
	<ul><li>Server Rendered Pages</li><li>Views</li></ul>		
	Controllers		
	Resources:		
	Articles, Documentation, Handouts on BB		
	Github Examples on BB		
	Activities:		
	<ul><li>DEMO: Controller and View</li><li>ACTIVITY: Dynamic Page</li></ul>		
7	Module 7: Models & Object Oriented Programming	A2	20%
	Topics:		
	<ul><li>Object Oriented Programming</li><li>Models</li></ul>		
	Resources:		

	Articles, Documentation, Handouts on BB
	Github Examples on BB
	Activities:
	DEMO: Model
	Activity: MVC Architecture
8	Module 8: DB Connections
	Topics:
	Data Access
	MySQL Client Library
	Resources:
	Articles, Documentation, Handouts on BB
	Github Examples on BB
	Activities:
	DEMO: Install Blog Database     ACTIVITY: Query the DB
9	Module 9: CRUD & Read Functionality
	Topics:
	Combining Data access and Dynamic     Web pages
	Data Driven Web Pages
	Read functionality
	Resources:

	<ul> <li>Articles, Documentation, Handouts on BB</li> <li>Github Examples on BB</li> <li>Activities:</li> <li>DEMO: List View</li> </ul>		
	DEMO: Show View		
10	Module 10: Data Driven Features & Parameterized SQL	C1	20%
	Topics:		
	<ul><li>Data Driven Features</li><li>N Tier Architecture</li></ul>		
	Parameterized SQL		
	Resources:		
	Articles, Documentation, Handouts on BB		
	Github Examples on BB		
	Activities:		
	<ul> <li>DEMO: Build a Search Bar</li> <li>ACTIVITY: Improve the Search Bar</li> </ul>		
11	Module 11: CRUD & Add, Delete Functionality		
	Topics:		
	<ul><li>Delete Functionality</li><li>Insert Functionality</li></ul>		
	Resources:		

			1
	Articles, Documentation, Handouts on BB		
	Github Examples on BB		
	Activities:		
	<ul><li>DEMO: Insert</li><li>DEMO: Delete</li></ul>		
	ACTIVITY: Improve Insert Functionality		
	ACTIVITY: Improve Delete Functionality		
12	Module 12: Catch Up Week!	C2	20%
	Topics:		
	Course Review		
	Resources:		
	Articles, Documentation, Handouts on BB		
	Github Examples on BB		
	Activities:		
	Individual Meetings		
	DEMO: Taking Requests		
13	Module 13: CRUD & Update Functionality		
	Topics:		
	Update Functionality		
	Resources:		
		<u> </u>	

	Articles, Documentation, Handouts on BB		
	Github Examples on BB		
	Activities:		
	<ul> <li>DEMO: Update Functionality</li> <li>Activity: Improve Update Functionality</li> </ul>		
14	Module 14: Relational Data	C3	20%
	Topics:		
	<ul><li>Representing 1-M Relationships</li><li>Representing M-M Relationships</li></ul>		
	Resources:		
	Articles, Documentation, Handouts on BB		
	Github Examples on BB		
	Activities:		
	DEMO: 1-M Relationship		
	DEMO: M-M Relationship		
	Activity: Improvements to 1-M, M-M		

## **Summary of Graded Course Components**

Summary	Weight
Total for all Assignments	40%

Assignment 1 : 20%	
Assignment 2 : 20%	
Cumulative	60%
Cumulative 1 : 20%	
Cumulative 2 : 20%	
Cumulative 3 : 20%	
Total	100%