Module Plan

Module Title:	Web Application Development		
Module Code:	CO550	Academic Year:	2018-2019
Tutor(s):	Jon Jackson	Semester:	N/A
Tutor's Office details:	N/A	Level:	5
Tutor's Email:	jonathan.jackson@bucks.ac.uk		
Tutor's Telephone			

Learning Outcomes:

1. Design a web-based application along with its data model.
2. Create an ASP.net web application which interacts with a database.
3. Demonstrate an understanding of fundamental web application development concepts as well as the MVC approach.

Assessment Summary:

Assessment Task	**Submission Dates**
CW1A Database Design (group work) **- 20%**	23:59pm, Thursday 8th Nov 2018
CW1B ASP.net Logbook (individual work) **- 15%**	23:59pm, Thursday 6th Dec 2018
CW2 Database Implementation (group work) **- 65%**	23:59pm, Thursday 31st Jan 2019

Wk Commencing	Wk #	Content
01/10/2018	1	Module plan, Reading list, Assessment schedule; **Unit 1: Introduction to ASP.NET and server-side scripting**
08/10/2018	2	**Unit 2: Razor Pages and Capturing User Input**
15/10/2018	3	**Unit 3: Data Modelling**
22/10/2018	4	**Unit 4: Introducing MVC** Workshop: Start ASP.NET Core Tutorial
29/10/2018	5	**Unit 5: ASP.NET data models, scaffolding and seeding the database** Workshop: Continue ASP.NET Core Tutorial (finish first step)
05/11/2018	6	Assignment workshop **CW1A Deadline**
12/11/2018	7	**Unit 6: Code Versioning and Collaboration with Visual Studio** Workshop: Continue ASP.NET Core Tutorial
19/11/2018	8	**Unit 7: Customising the CRUD pages; Sorting, Filtering, Pagination and Grouping** Workshop: Continue ASP.NET Core Tutorial
26/11/2018	9	**Unit 8: Database migrations** Workshop: Tutorial & Project
03/12/2018	10	**Unit 9: Complex Data Models** Workshop: Tutorial & Project **CW1B Deadline**
10/12/2018	11	**Unit 10: Wider Context of Web Applications, Progressive Web Apps and beyond** Assignment workshop
17/12/2018	12	Assignment workshop
		Christmas
14/01/2019	16	Assignment workshop
21/01/2019	17	Assignment workshop
28/01/2019	18	Assignment workshop **CW2 Deadline**

Core Texts:

Freeman, Adam. (2013). Pro ASP.NET MVC 5 (5th ed.). Apress/Springer.

Tutorial: Razor Pages with Entity Framework Core in ASP.NET Core

https://docs.microsoft.com/en-us/aspnet/core/data/ef-rp/intro?view=aspnetcore-2.1&tabs=visual-studio

Papers:

Shakya, S., 2018. Cross Platform Web Application Development Using ASP. NET Core.

Bogárdi-Mészöly, &., Levendovszky, T., & Charaf, H. (2007). Models for predicting the performance of ASP.NET Web applications. Periodica Polytechnica Electrical Engineering,51(3-4), 111-118.

Kronis Kristiāns, & Uhanova Marina. (2018). Performance Comparison of Java EE and ASP.NET Core Technologies for Web API Development. Applied Computer Systems, 23(1), 37-44.

Books:

FitzMacken, T 2014 Getting Started with Entity Framework 6 Database First Using MVC 5

MacDonald, M 2013 Beginning ASP.NET 4.5 in C# 3rd ed. Apress

Gaylord, J 2013 Professional ASP.NET 4.5 in C# and VB Indianapolis: John Wiley and Sons

Ritchie, C 2008 Relational Database Principles 3rd ed. Continuum