	Jadara University Faculty of Science and Information Technology Department of Computer Networks Syllabus 2020 - 2021	

Course Title	Credit Hours	Course No.	Prerequisite	Year (semester)	Lec./Lab. Credit
Pharmacy Computer Programming	***3***	***891117***	***--------***	***2020 – 2021 1first Semester***	***Lecture: 3 Room : online***

Lecturer	Room No.	E-mail	Office Hours
T. Mohammad Al-issa	***D216***	***Mohammadal-issa@jadara.edu.jo***	***11:00—12:00 [Su,Tu]***

Course Description:

This is an advanced course in web application development. Students design and develop web-based applications using web forms and MVC technologies. Multi-tier "full stack" applications will be developed using Microsoft SQL Server databases, client-side scripting using JavaScript and server-side scripting for business logic using server-based components written in C#. User interfaces will be created using HTML5/CSS3 using responsive design techniques (Bootstrap). Students will design and develop their own original web applications using these technologies..

Course Objectives:

- Understand the difference between desktop and dynamic web applications.
- Understand the ASP.NET web application execution model.
- Create and modify multi-page Web Form applications that involve and demonstrate features such as flow control, the use of style sheets, state management, data access, data binding, security, and data verification and validation.
- Understand web application configuration and demonstrate the ability to manage basic configuration issues.
- Define and describe what a web service is and how web services are used.
- Create and modify simple web services.
- Create desktop and web applications that consume simple web services.

Course Learning Outcomes :

- Create HTML5/CSS3 user interfaces that are responsive on different platforms (PC, tablet and mobile) to industry standards.
- Describe the difference between client-side and server-side scripting in web applications to current industry standards
- Create an interactive web application using active server pages to maintain state using cookies, application and session to current industry standards.
- Create a multi-tier web application using Active Data Objects (ADO.NET) database technology with SQL Server, active server pages and Visual Studio server components to current industry standards.
- Develop and test responsive Model View Controller (MVC) web applications using HTML5, CSS3 and the ADO.NET Entity Framework as the database model.
- May use Microsoft Azure to host databases.
- Add security to existing web applications using ASP.NET identity technologies.

Course Content	
Week	Topic
1,2,3	• JavaScript, HTML/CSS • Client-side user input validation • Client vs server-side scripting • HTTP protocol and web hosting • Introduction to ASP.NET using web forms • Build the Feedback and Feedback Answer forms of the classroom demo web application
4,5,6	• Using server-side controls on ASP.NET web forms o Code-behind pages • Build the Login form using Server validation controls • Using master pages • Incorporate master page into the classroom demo web application
7,8,9	• Maintaining state using application and session objects • Incorporate session and application state into the classroom demo o Using HTTP Request Server Variables collection • Maintaining state using cookies • Incorporate cookies into the classroom demo application • Completion and demonstration (video presentation) of Phase One of the original web application by each student incorporating all of the technologies in weeks 1 - 4

10,11	• Completion and demonstration (video presentation) of Phase two of the original web application by each student incorporating all of the technologies in weeks 1 - 6
	• Model View Controller - Models
	  o Discuss the theory behind model view controller web development
	  o Create an MVC model using the Microsoft Data Entity Framework code-first model in the classroom demo application

12,13	• MVC - Controllers and Views
	  o Create MVC controllers
	  o Create HTML5/ MVC views
	  o Complete a sample application using database model, controllers and views to do CRUD (create, read, update and delete) operations on the data.
	• Design an original e-commerce MVC web application using the Data Entity Framework

14	• Test and debug the original e-commerce MVC web application project • Demonstrate the application. • Demonstrate the final MVC project in a video presentation
10	

Grade Distribution :

Assessment	Grade	Date
- First Exam	20%	After 4 weeks
- Second Exam	20%	After 11 weeks
- Assignments (Reports /Quizzes/ Seminar / Tutorials ….)	10%	During the sem
- Final Examination	50%	After 14 weeks

- No Makeup exams are given under any condition. On time attendance of classes is required.

Reading List:

Text Book	The textbook for the course is ***ASP.NET 4.5 Web Programming with C# 2012*** by Mary Delamater and Anne Boehm, published by Murach, 2013
Other References	InterNet

Note : https://rtc.instructure.com/courses/1375635/assignments/syllabus

*Last updated on **17/10/2020** by:* **Mr. Mohammad Al-issa**