هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Web Application Development 2**
Course Code:	**IS1505**
Program:	**Computer Information Systems**
Department:	**Computer Information Systems**
College:	**Computer Science and Information Technology**
Institution:	**Al-Baha University**
Version:	**v1.0**
Last Revision Date:	**24-5-2023**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	4 Credit Hours (3, 2, 0) (Lecture, Lab, Tutorial) (5 Contact Hours)				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	**7th level/ 3rd Year**				
4. Course general Description This course introduces students to server-side web development using a powerful modern framework and architectural pattern. Students will learn how to build dynamic, database-driven web applications that interact with the client-side.					
5. Pre-requirements for this course (if any): Web application development 1 (IS1253)					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) Upon completion of this course, students will be able to: • Explain the server-side programming languages, framework and architectural patterns. • Implement a website using server-side framework. • Implement CRUD operations with a database from the website. • Take responsibility for his/her learning. • Work both independently and collaboratively.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	30	60%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		
5.	Lab	20	40%

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	20
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	50

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Explain the server-side programming languages, framework and architectural patterns.	K1	▪ Lectures	▪ Midterm exam ▪ Final Exam
2.0	Skills			
2.1	Implement a website using server-side framework.	S2	▪ Tutorials ▪ Lectures ▪ Task-based learning ▪ Assignment ▪ Project	▪ Midterm exam ▪ Assignment (rubric) ▪ Project (rubric) ▪ or Final Exam
2.2	Implement CRUD operations with a database from the website.	S2	▪ Tutorials ▪ Lectures ▪ Task-based learning ▪ Assignment ▪ Project	▪ Midterm exam ▪ Assignment (rubric) ▪ Project (rubric) ▪ or Final Exam
3.0	Values, autonomy, and responsibility			
3.1	Work both independently and collaboratively.	V2	▪ Assignment ▪ Project	▪ Assignment (rubric) ▪ Project (rubric)
3.2	Take responsibility for his/her learning.	V3	▪ Task-based learning ▪ Assignment	▪ Assignment (rubric)

D. Course Content

No	List of Topics (Lectures)	Contact Hours
1.	Introduction to the server-side web development and the used programming language	6
2.	The MVC architectural pattern	9
3	Database migrations	3
4	Working with Database	6
5	Controller actions and views	3
6	Add search, add new field, add validation and delete	3
Total		30

No	List of Topics (Labs)	Contact Hours
1.	Introduction to the used programming language (types and variables, operations and expressions, inputs and outputs, conditional statements, loops)	4
2	Add a controller	2
3	Add a view	2
4	Add a model	2
5	Database migrations	2
6	Working with Database	4
7	Controller actions and views	2
8	Add search, add new field, add validation and delete	2
Total		20

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm exam	5	15%
2.	Assignments/Discussions	Periodically	25%
3.	Final project and presentation	12	20%
4	Final exam	13	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	- https://learn.microsoft.com/en-us/aspnet/ - "C# 11 and .NET 7 – Modern Cross-Platform Development Fundamentals: Start building websites and services with

	ASP.NET Core 7, Blazor, and EF Core 7", 7th ed., by Mark J. Price, Packt, 2022. - "C#: 3 books in 1 - The Ultimate Beginner, Intermediate & Advanced Guides to Master C# Programming Quickly with No Experience (Computer Programming)" by Mark Reed, 2022
Supportive References	"Eloquent JavaScript: A Modern Introduction to Programming by Marijn Haverbeke, 2018.

Electronic Materials	• Access to the Saudi Digital Library (SDL).
	• Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/).
	• Online websites:
	  • https://learn.microsoft.com/en-us/aspnet/
	  • https://www.freecodecamp.org/news/learn-asp-net-core-mvc-net-6/

Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	All the lectures should be in a well-prepared lab that can accommodate 25 students at most.
Technology equipment (projector, smart board, software)	• A digital image projection system with a connection to a computer. • High-speed Internet connection. • An instructor computer station. • An application to manage labs and learning sessions (e.g. NetSupport School). • Visual Studio.
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching		
Effectiveness of students' assessment	▪ Students ▪ Exam Evaluation Committee ▪ Course Coordinator	▪ Survey (indirect) ▪ Exam Review (direct) ▪ Review of course file (direct)
Quality of learning resources	▪ Faculty ▪ Students	▪ Survey (indirect)

Assessment Areas/Issues	Assessor	Assessment Methods
The extent to which CLOs have been achieved	▪ Faculty ▪ Program Leaders or Course Coordinator	▪ Exams (direct) ▪ Exit Exams (direct)
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Curriculum Committee Meeting
REFERENCE NO.	
DATE	May 24, 2023