Course Specification
▬ (Bachelor)

Course Title: APPLIED WEB PROGRAMMING
Course Code: ITEC 4BB(4**)
Program: Bachelor in Information Technology (BIT)
Department: Computer Science
College: College of Engineering and Computer Science
Institution: Jazan University
Version: 1
LastRevision Date: August 18, 2024

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A. General information about the course:

1. Course Identification

1. Credit hours: (3)

2. Course type

A.	☐University	☐College	☒Department	☐Track	Others
B.	☐Required		☒Elective		

3. Level/year at which this course is offered: (7th Level /4TH Year)

4. Course General Description:

This course is designed to give students the opportunity to enhance and enrich their skills in Web programming. Students will learn to develop Web applications that use three-tier architecture, session and cookies management, object-oriented techniques, and advance database interactions. Concepts such as advanced PHP concepts, rich interactive Web environments, authentication, and security will also be explored. The main objective of the Applied Web Programming course is to discuss state of the art technologies in Web Programming and some open research issues of the domain. It represents the next generation of Internet applications, business strategy and technologies that supports contribution to the online community.

5. Pre-requirements for this course (if any):

ITEC-342

6. Co-requisites for this course (if any):

Nil

7. Course Main Objective(s):

Adding dynamic content to websites by using PHP
Use variables, constants, and operators in PHP script
Incorporate statements,expressions and arrays in PHP script
Create functions & files in PHP script
Apply conditional statements in PHP script
Use HTML code to create server-side scripts (using PHP) for interactive databases (using MySQL)

2. Teaching mode(mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	64	100
2	E-learning	--	--
3	Hybrid • Traditional classroom • E-learning	--	--
4	Distancelearning	--	--

3. Contact Hours(based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	30
3.	Field	--
4.	Tutorial	--
5.	Others (Revision + Final Lab or Case-Study Exam)	04
Total		64

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

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	**Define** the basic concepts of Server Side Scripting, PHP environment like, constants, operators, characteristics, functions, files, arrays, expressions, control structures etc.	K1	Lectures/ Presentations	Midterm Exam/ FinalExam
1.2	**Analyze** the use of control structures, file functions, error handling, cookies	K2	Lectures/ Presentations	Midterm Exam / FinalExam/Assignment

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
	&sessions, HTML forms in PHP script**.**			
2.0	**Skills**			
2.1	**Identify** various regular expressions functions, control statements and exception handling techniques to solve error handling problems in php script and HTML code.	**S2**	Lectures/ / Lab Exercise	Final Exam, Assignment
2.2	**Apply** functions, arrays, different conditional statements, regular expressions, control structures, and file functions and exception handling to make website.	**S3**	Lectures/ Lab Exercise	Final Exam, / Lab Assignment or Exam.
2.3	**Design** and **Implement** an application with PHP script and HTML code by using database security and mysql.	**S4**	Lectures/ Lab Exercise	Mini Project/Final Lab
3.0	**Values, autonomy, and responsibility**			
3.1	**Draft** professional documentation that clearly represents technical topics.	**V2**	Documentation	Mini Project
3.2	**Deliver** effective oral presentations on technical topics using appropriate visuals aids.	**V3**	Presentation	Mini Project

C. Course Content

No	List of Topics	Contact Hours
1.	**UNIT 1:**Introduction to Server side programming using PHP	**4+4 Practical**
2.	**UNIT 2:**PHP control structures & arrays	**5 + 4 Practical**
3.	**UNIT 3:**PHP functions & files	**6+ 6 Practical**
4.	**UNIT 4:**PHP with HTML forms	**6+ 5 Practical**
5.	**UNIT 5:**Cookies & Sessions	**5+ 5 Practical**

6.	UNIT 6: Errors & Exception Handling		4+ 6 Practical
	Total		**32T+32P**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	**Midterm Exam**	**8-9th**	**15%**
2.	**Assignment**	**4th**	**10%**
3.	**Mini Project**	**16th**	**15%**
4.	**Lab Tasks /Lab Assignment**	**10**	**10%**
5.	**Final Lab Exam**	**As Scheduled**	**10%**
6.	**Final Exam**	**As Scheduled**	**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	Luke Welling and Laura Thomson, PHP and MySQL Web Development (5th Edition), 2014, Pearson education Inc. ISBN-10: 0321833899
Supportive References	Marty Matthews and John Cronan, Dynamic Web Programming, McGrawHill, 2009, ISBN: 978-0-07-163344-4
Electronic Materials	World Wide Web Consortium (W3C) standards and architectures through: http://www.w3.org/standards/webarch/
Other Learning Materials	-

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms, laboratories
Technology equipment (projector, smart board, software)	Projector, smart board, software WAMP, Internet
Other equipment (depending on the nature of the specialty)	High speed Internet Connection

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Student	Indirect
Effectiveness of Student sassessment	Faculty	Direct
Quality of learning resources	Track Leader	Direct
The extent to which CLOs have been achieved	HOD/ QAU	Direct
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods(Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	DEPARTMENT COUNCIL
REFERENCE NO.	ENGCSCS2406
DATE	19/09/2024