



**Course Descriptor**  
**INTE403 Database Driven System**

<b>Proposed Academic Year</b>	2021/ 2022	<b>Last Reviewed Academic Year</b>	2020/2021
<b>Course Code</b>	INTE403	<b>Course Title</b>	Database Driven System
<b>Credit hours</b>	3	<b>Level of study</b>	Undergraduate
<b>College / Centre</b>	COBA	<b>Department</b>	MIFS
<b>Co-requisites</b>	None	<b>Pre-requisites</b>	

**1. COURSE OUTLINE**

This course is designed to equip the students with the advanced skills needed for developing database i.e. developing dynamic database, Database-driven Web applications (DDWA). Students will extensively use client and server-side technologies. particularly, the combination of JavaScript, HTML, MySQL and PHP. The course will allow students to systematically build a dynamic application to respond to the business need.

**2. AIMS**

The course aims to gain the students with the advanced skills needed for developing advanced database, structures, and mechanism. The course will also improve the students' capacity in terms of web-scripting and how to combine programming, database and client-server side technologies to deliver a business solution. Most importantly, students will learn how to translate the business needs into an information system to manage business.

**3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS**

<b>Learning Outcomes (Definitive)</b>	<b>Teaching and Learning methods (Indicative)</b>	<b>Assessment (Indicative)</b>	<b>Graduate Attributes</b>
Upon successful completion of this course, students will be able to:			
<b>1.</b> Demonstrate a broad understanding of standard web technologies and identify issues of significance in selecting appropriate hosting/ development strategies	Lectures online videos tutorials and seminars, online group discussions using LMS, independent readings, individual or group work, presentation	tests, assignments, individual or group project, participation	-Knowledge of a discipline. -Innovative spirit. -Global insight.
<b>2.</b> Effectively and efficiently combine the power of JavaScript, HTML, PHP, and MySQL to deliver business solutions.	Lectures, online videos, tutorials, and seminars. Online group discussions using LMS, independent readings, individual or group work, presentation	tests, assignments, individual or group project, participation	Knowledge of a discipline
<b>3.</b> Demonstrate an appropriate understanding of the concept of dynamic web application development and how could	Lectures online videos tutorials and seminars, online group discussions using LMS, independent readings,	tests, assignments, individual or group project, participation	Knowledge of a discipline



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be used to deliver a business solution	individual or group work, presentation		
4. Design a conceptual web application component, and their internal connectivity.	Lectures online videos tutorials and seminars, online group discussions using LMS, independent readings, individual or group work, presentation	tests, assignments, individual or group project, participation	Knowledge of a discipline
5. Translate the technical documents into a testable prototype.	Lectures online videos tutorials and seminars, online group discussions using LMS, independent readings, individual or group work, presentation	tests, assignments, individual or group project, participation	Knowledge of a discipline

**4. ASSESSMENT WEIGHTING**

Assessment	Percentage of final mark (%)
Final	30
MID	30
Assignment	30
Participation	10
Final	30
<b>TOTAL</b>	<b>100%</b>

**5. ACHIEVING A PASS**

Students will achieve 3 credit hours for this course by achieving a minimum overall score of 50%  
***NB \*Ensure that ALL learning outcomes are considered.***

**6. COURSE CONTENT (Indicative)**

LECTURE TOPIC	TIME (HOURS)
Web Technologies	02
Review of HTML and CSS	06
Introduction to server scripting language	02
Working with PHP. Instillation and configuration of localhost, and basic syntax of PHP	02
Working with PHP: Variables, Datatypes, and print/echo statements	04
Working with PHP: constraint and operator	06
Working with PHP: array, conditional and loops statements	06
Working with PHP: Function	06
Working with PHP: Forms	05
Review MySQL	03



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DB connection	03
<b>TOTAL HOURS</b>	<b>45</b>
Plus, <b>RECOMMENDED INDEPENDENT STUDY HOURS</b>	
<b>TOTAL COURSE HOURS</b>	

**7. RECOMMENDED READING**

**Core text/s:**

1. Rochkind, M., 2013. Expert PHP and MySQL: application design and development. Apress. Meloni, J.C., 2012. Sams teach yourself PHP, MySQL and Apache all in one. Sams Publishing.
2. Meloni, J.C., 2012. Sams teach yourself PHP, MySQL and Apache all in one. Sams Publishing.
3. Felke-Morris, T. and Morris, T.A., 2007. Web development & design foundations with XHTML. Pearson/Addison Wesley.

**Library + online resources:**

- ASU library
- ASU online resources (ProQuest and ebrary)
- Sultan Qaboos University Library (by agreement)

[Resource Under Creative Commons LC:](#)



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1. <https://phptherightway.com/>
2. <https://phpbestpractices.org/>
3. <http://cs.wellesley.edu/~cs304/resources.html>