Course Descriptor
MIFS 401 Advanced Web Application Development

Proposed Academic Year	2020-2021	Last Reviewed Academic Year	2020-2021
Course Code	MIFS401	Course Title	Advanced Web Application Development
Credit hours	03	Level of study	Undergraduate
College / Centre	CoBA	Department	MIS
Co-requisites		Pre-requisites	MIFS202

1.   COURSE OUTLINE

This course is designed to teach students the advanced skills needed for developing dynamic and database driven web-based business applications. The course will build on MIFS202 Web Application Development. Students will extensity use client and server side technologies, in particular, 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 equip students with an understanding of the web-based applications development, its structures, and mechanism. The course will also develop 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 the business.

3.   LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS

Learning Outcomes (Definitive) Upon successful completion of this course, students will be able to:	Teaching and Learning methods (Indicative)	Assessment (Indicative)
1. Ability to demonstrate a broad understanding of standard web technologies and identify issues of significance in selecting appropriate hosting/ development strategies	e.g., 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
2. Ability to effectively and efficiently combine the power of JavaScript, HTML, PHP, and MySQL to deliver business solutions.	e.g., 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
3. Demonstrate an appropriate understanding of the concept of dynamic web application	e.g., lectures online videos tutorials and seminars, online group discussions using LMS,	tests, assignments, individual or group project, participation

development and how they could be used to deliver a business solution	independent readings, individual or group work, presentation	
4. Understand the structures for designing a conceptual web application components and their internal connectivity	e.g., 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
5. Translate the technical documents into a testable prototype	e.g., 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

4.   ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Final	30
MID	30
Assignment	30
Participation	10
TOTAL	**100%**

5.   ACHIEVING A PASS

Students will achieve **03** credit hours for this course by passing **ALL** of the course assessments *[alternatively, list the compulsory pass assessments*]* and achieving a **minimum overall score of 50%**

NB *Ensure that ALL learning outcomes are taken into account*

6.   COURSE CONTENT (Indicative)

Web Technologies
Review of HTML and CSS
Introduction to server scripting language
Working with PHP : Instillation and configuration of localhost, and basic syntax of PHP
Working with PHP: Variables, Datatypes, and print/echo statements
Working with PHP: constraint and operator
Working with PHP: array, conditional and loops statements
Working with PHP: Function
Working with PHP: Forms
Review MySQL

DB connection	
TOTAL HOURS	
Plus **RECOMMENDED INDEPENDENT STUDY HOURS**	
TOTAL COURSE HOURS	

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)

Open Educational Resources: