

WEB PROGRAMMING		
DITM 2123	SEMESTER 2	SESSION 2020/2021

DITM 2113 WEB PROGRAMMING [3, 2, 2]

TYPE OF COURSE : P

EDITION : 1

UPDATED : 25-03-2021

1.0 LEARNING OUTCOMES

Upon completion of this course the student will able to:

1. Explain the concept and the principle of Internet and WWW based on the latest technologies.
(A2, LL)
2. Use the important components in web applications which are Client Site Technology, Server Site Technology, Database Server and Web Server. (C3,CTPS)
3. Demonstrate the appropriate use of important components in developing web applications.
(C3,P3)

2.0 SYNOPSIS

The purpose of this course is to provide students with a comprehensive understanding of the tools and problem-solving techniques related to building effective World Wide Web sites. It emphasis 4 components in developing web applications which are

- Client Site Technologies: HTML, HTML5, CSS, and JavaScript
- Content Management System: Wordpress
- Server Site Technologies: PHP
- Database Server: MySQL.
- Web Servers : Apache

This course also brings together all of the elements of Web site design, graphics, animation, data storage in the construction of fully functional commercial Web site applications.

3.0 PRE-REQUISITE

None

4.0 LAB AND PRACTICAL

Hands-on practice is to equip the students with a broad range of skills required for designing advanced Internet applications. These skills enable them to design, build and extend the Internet and use it for designing a variety of online applications. The group project concentrates on web development using Apache, PHP and MySQL.

5.0 REFERENCES

- [1] John Dean (2018), **Web Programming with HTML, CSS, and JavaScript**, Jones and Bartlett Publishers, Inc., ISBN: 1284091791
- [2] Robin Nixon (2018), **Learning PHP, MySQL & JavaScript: With jQuery, CSS & HTML5 - 5th Edition**, O'Reilly Media, Inc., ISBN: 1491979070
- [3] Jennifer Niederst Robbins(2018), **Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics 5th Edition**, O'Reilly. ISBN:1491960205
- [4] Larry Ullman (2017), **PHP and MySQL for Dynamic Web Sites 5th Edition**, Peachpit Press. ISBN: 0134301846
- [5] Laura Lemay, Rafe Coburn, Jennifer Kyrnin (2016), **Sams Teach Yourself HTML, CSS & JavaScript Web Publishing in One Hour a Day - 7th Edition**, Pearson Education, Inc., ISBN: 9780672336232

6.0 COURSE IMPLEMENTATION

- a. Lecture: 2 hrs per week for 14 weeks (Total = 28 hrs)
- b. Lab: 2 hrs per week for 14 weeks (Total = 28 hrs)

7.0 COURSE EVALUATION

Assessment Method	LO 1	LO 2	LO 3	Scheme, Rubric / Guideline
Project (1) = 20%			P1 (20%)	
Assignment (1) = 10%		A1 (10%)		
Lab Test (2) = 20%		LT (10%)	LT (10%)	
Quiz (2) = 10%	Q1(5%)	Q2(5%)		
Mid Term (1) = 10%	MT1 (10%)			
Final (1) = 30%	F1 (10%)	F2 (10%)	F3 (10%)	
TOTAL	25%	35%	40%	

8.0 STUDENT LEARNING TIME

TYPE	LEARNING ACTIVITIES	(a) Time (Hours)	(b) Frequencies	Total (a) x (b)
LCL	LECTURE	2	14	28
SCL	TUTORIAL	2	0	0
SCL	LABORATORY PRACTISE	2	14	28
SCL	ASSIGNMENT	0	0	0
SCL	PROJECT (PRESENTATION)	0.25	1	0.25
SCL	PROBLEM BASED LEARNING	0	0	0
SCL	OTHERS	0	0	0
SDL	QUIZ	0.25	2	0.5
SDL	ASSIGNMENT	4	1	4
SDL	LAB TEST	1.25	2	2.5
SDL	PROJECT	8	1	8
SDL	PROBLEM BASED LEARNING	0	0	0
SDL	FINAL EXAMINATION	2	1	2
SDL	MID TERM EXAM	1	1	1
SDL	ASSESSMENT REVISION			24
SDL	CLASS PREPARATION	2	14	28

Total Face to Face Learning (FFL)

Total Independent Learning (IL)

Total SLT (FFL+IL)

Total Equivalent Credit Hours

(TOTAL SLT/40)

56.25

70

126.25

3.15625

LCL-Lecture Centered Learning

SCL- Student Centered Learning (Guided/Facilitated in Class)

SDL - Student Directed Learning (Self-study)

*Assignment/Project/PBL time is inclusive of report writing/presentation/other related activities if available

General guidelines:

- 1 credit hour = 1 hour lecture/ week = 2 hour lab/week = 3 hour SCL or SCL Project/week
- 1 credit hour course is equivalent to approximately 40 hours student learning time
- 1 hour assessment = 4 hour assessment revisions
- 1 hour class preparation = 1 hour of lecture = 2-3 hours of laboratory practice
- SCL hours Project/PBL = 2 SDL hours Project/ PBL

9.0 DETAILED SYLLABUS AND TEACHING PLAN

Week	Contents	References	Delivery Method
1	INTRODUCTION TO THE INTERNET AND WWW <ul style="list-style-type: none"> A Brief Introduction to the Internet Internet Protocol and Domain Name The World Wide Web (WWW) Web Browsers and Web Servers Uniform Resource Locator (URL) Multipurpose Internet Mail Extension (MIME) Hypertext Transfer Protocol (HTTP) Client-Side Scripting vs. Server-Side Scripting (with examples) Example of web development tools Lab 1 <ul style="list-style-type: none"> Use a search engine to find specific information on the web, learn about Internet service providers, MIME file type 	[1] [2]	Lecture Lab
2	INTRODUCTION TO HTML <ul style="list-style-type: none"> HTML Basic - Origins and Evolution of HTML, Basic Tags, Formatting, Links, Frames, Tables, Lists, Forms, Images Lab 2 <ul style="list-style-type: none"> Construct a few HTML pages featuring text, hyperlinks, images, backgrounds, colors, form and formatting tools such as horizontal rules, line breaks, etc using Text Editor (Sublime Text 3) 	[1] [2]	Lecture Lab
3	CASCADING STYLE SHEETS (CSS) <ul style="list-style-type: none"> Introduction to CSS Level of Style Sheets Style Specification Formats Property and property values Font, List, Text, Margin Colors Introduction to Bootstrap Lab 3 <ul style="list-style-type: none"> Create External, Internal and Inline style sheets Update pages from html formation to style sheets. 	[1] [3]	Lecture Lab
4	HTML 5 <ul style="list-style-type: none"> Introduction HTML VS HTML5 HTML 5 Elements HTML 5 Semantics HTML 5 Blocks HTML 5 Graphics HTML 5 Media HTML 5 APIs 	[1] [3]	Lecture Assignment Quiz 1

	<ul style="list-style-type: none"> ○ Returning the Result Set Row by Row ○ Resetting the Result Set Pointer ○ Returning the Result Set in Associative Array • Working with Result Set <p>Lab 12</p> <ul style="list-style-type: none"> • Accessing MySQL Database from the Web with PHP <ul style="list-style-type: none"> ○ Creating HTML form ○ Querying the database ○ Displaying query results ○ Putting new information in the database 		<p>Lab Test 2</p> <p>Lab</p>
14	Final Project Development		
15	Final Project Presentation and Evaluation		