

SEMESTER V

Course Code	USA20501J	Course Name	WEB PROGRAMMING	Course Category	C	Professional Core Course			
						L	T	P	C
						4	0	4	6

Pre-requisite Courses	Nil	Co-requisite Courses	Nil	Progressive Courses	Nil
Course Offering Department	Computer Applications	Data Book / Codes/Standards	Nil		

Course Learning Rationale (CLR):	The purpose of learning this course is to,	Learning	Program Learning Outcomes (PLO)
----------------------------------	--	----------	---------------------------------

CLR-1 : To gain knowledge about Open Source Software	1	2	3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CLR-2 : To Learn basic file and directory commands in Linux																		
CLR-3 : To develop simple PHP programs																		
CLR-4 : To understand working with arrays and functions																		
CLR-5 : To learn various MySQL queries																		
CLR-6 : To create database-driven applications																		

Course Learning Outcomes (CLO):	At the end of this course, learners will be able to:	Level of Thinking (Bloom)	Expected Proficiency (%)	Expected Attainment (%)	Fundamental Knowledge	Application of Concepts	Link with Related Disciplines	Procedural Knowledge	Skills in Specialization	Ability to Utilize Knowledge	Skills in Modeling	Analyze, Interpret Data	Investigative Skills	Problem Solving Skills	Communication Skills	Analytical Skills	ICT Skills	Professional Behavior	Life Long Learning
CLO-1 : Create files using Vi editor		2	85	80	L	H	H	H	H	-	-	M	M	L	-	H	-	-	H
CLO-2 : Write PHP scripts to handle HTML forms.		3	85	80	L	H	H	H	H	-	-	M	M	L	-	H	-	-	H
CLO-3 : Write regular expressions including modifiers, operators, and metacharacters.		3	85	80	L	H	H	H	H	-	-	M	M	L	-	H	-	-	H
CLO-4 : Create PHP programs that use various PHP library functions, and that manipulate files and directories		3	85	80	L	H	H	H	H	-	-	M	M	L	-	H	-	-	H
CLO-5 : Analyze and solve various database tasks using the PHP language		3	85	80	L	H	H	H	H	-	-	M	M	L	-	H	-	-	H
CLO-6 : Analyze and solve common Web application tasks by writing PHP programs.		3	85	80	L	H	H	H	H	-	-	M	M	L	-	H	-	-	H

Duration (hour)	24	24	24	24	24
S-1	SLO-1 Introduction to Linux	What Does PHP Do?	Introduction to Function	Introduction to Arrays	Introduction to MySQL Database
	SLO-2 Features of Linux	A Brief History of PHP	Calling a Function	Indexed Versus Associative Arrays	Connecting to and disconnecting from the server
S-2	SLO-1 Introduction to Linux Distributions	Language Basics	Defining a Function	Identifying Elements of an Array	Creating and using a database
	SLO-2 Widely used Linux distros	Lexical Structure	Variable scope	Storing Data in Arrays	Selecting a database
S-3	SLO-1 Open Source software	Introduction to Data Types	Passing parameters by value	Multidimensional Arrays	Creating a table
	SLO-2 Benefits of Open Source software	Scalar Types	Passing parameters by reference	Extracting Multiple Values	Loading data into a table

S-4	SLO-1	Linux Files	Compound Types	Default Parameters	Converting Between Arrays and Variables	Retrieving information from a table
	SLO-2	The File Structure	Special Types	Variable Parameters	Traversing Arrays	Selecting all data
S 5-8	SLO-1	Lab1: Learning to work with linux server	Lab 4: Writing Simple PHP Programs	Lab 7: Passing parameters to a function	Lab 10: Arrays	Lab 13: Creating Database, tables
	SLO-2					
S-9	SLO-1	Listing files	Defining Variables	Missing Parameters	Sorting	Selecting particular rows
	SLO-2	Working with ls command	Variable Scope	Return Values	Reversing an array	Selecting particular columns
S-10	SLO-1	Displaying Files	Introduction to Expressions and Operators	Variable Functions	Introduction to Object	Sorting rows
	SLO-2	Working with cat, more, less command	Arithmetic operators, Comparison operators, Bitwise operators	Anonymous Functions	Creating an Object	Date Calculation
S-11	SLO-1	Printing Files	Logical operators, Casting operators & Miscellaneous Operators	Introduction to Strings	Accessing Properties and Methods	Working with Null values
	SLO-2	Working with lpr	Operator precedence	Quoting String Constants	Declaring a Class	Pattern Matchin
S-12	SLO-1	Managing Directories	Introduction to Flow-Control Statements	Variable Interpolation	Declaring methods and properties	Counting Rows
	SLO-2	Working with mkdir, rmdir, cd and pwd commands	Working with If & Switch	Printing Strings	Declaring constant	Using more than one table
S 13-16	SLO-1	Lab2: Working with files and directory commands	Lab 5: Operators & Control Statements	Lab 8: Functions & Strings	Lab 11: Arrays & Objects	Lab 14: Working with various MySQL Queries
	SLO-2					
S-17	SLO-1	Listing directories	Working with While, for, foreach,	Accessing Individual Characters	Inheritance	Introduction to Working with MySQL Database using PHP
	SLO-2	ls command	Using exit, return, goto statements	Cleaning Strings	Interfaces	Connecting to MySQL database
S-18	SLO-1	File and directory operations	Including Code form another module	Encoding and Escaping	Traits	Querying database
	SLO-2	find, cp, mv, rm and ln commands	Working with include and require construct	Comparing Strings	Abstract Methods	Retrieving and displaying the results
S-19	SLO-1	Controlling Access to directories and files	Embedding PHP in Web Pages	Manipulating and Searching Strings	Constructors	Modifying data
	SLO-2	Working with chmod command	Standard (XML) Style, SGML Style	Introduction to Regular expression	Destructors	Deleting data
S-20	SLO-1	Introduction to Vi editor	ASP Style	Pattern matching and substituting new text for matching text	Introduction to Introspection	Designing simple database application
	SLO-2	Working with Vi editor	Script Style	Splitting a string into an array of smaller chunks	Examining an Object	
S	SLO-1	Lab 3: Working with file commands,	Lab 6: Embedding PHP script in	Lab 9: String Manipulation	Lab 12:: Introspection and	Lab 15: Developing Simple

21-24	SLO-2	Creating and modifying files using Vi Editor	HTML		Serialization	Database Applications
-------	-------	--	------	--	---------------	-----------------------

Learning Resources	1. Richard Petersen, (2006), "Linux : The Complete Reference", Sixth edition, McGraw Hill Professional. 2. Rasmus Lerdorf, Kevin Tatroe, Bob Kaehms, Ric McGredy (2002), "Programming PHP", O'REILLY (SPD).	3. Lee Babin, Nathan A. Good, Frank M. Kromann, Jon Stephens (2005), "PHP 5 Recipes, A problem solution approach", après. 4. Vikram Vaswani (2008), PHP: A BEGINNER'S GUIDE, McGraw-Hill.
--------------------	--	--

Learning Assessment											
Level	Bloom's Level of Thinking	Continuous Learning Assessment (50% weightage)								Final Examination (50% weightage)	
		CLA – 1 (10%)		CLA – 2 (10%)		CLA – 3 (20%)		CLA – 4 (10%)#			
		Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice
Level 1	Remember	20%	20%	15%	15%	15%	15%	15%	15%	15%	15%
	Understand										
Level 2	Apply	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
	Analyze										
Level 3	Evaluate	10%	10%	15%	15%	15%	15%	15%	15%	15%	15%
	Create										
	Total	100 %		100 %		100 %		100 %		100 %	

CLA – 4 can be from any combination of these: Assignments, Seminars, Tech Talks, Mini-Projects, Case-Studies, Self-Study, MOOCs, Certifications, Conf. Paper etc.,

Course Designers		
Experts from Industry	Experts from Higher Technical Institutions	Internal Experts
Mr.G.Muruganandam, Group Project Manager, HCL Technologies, Chennai	Dr.S.Gopinathan, Professor, University of Madras, Chennai	Mrs. S. Chandrakala, SRMIST
Mr.M. Hemachandar, Tech Lead, Wipro Limited, Chennai		Mrs. Surya, SRMIST