

OPEN SOURCE TECHNOLOGIES LAB	
<b>CSE 326</b>	<b>Credits : 2</b>
Instruction : 3 Hr lab/Week	Sessional Marks : 50
End Exam : 3 Periods	End Exam Marks : 50

**Prerequisites:**

Basic knowledge of Computer Networks

Exposure to Problem solving techniques and programming skills

**Course Objectives:**

- Introducing Open Source project development to students.
- Introducing Open Source Technologies stack LAMP and Java Script.

**Course Outcomes:**

By the end of the course, the student will be able to:	
1.	Discover the steps in open source project management
2.	Examine open source project workflow using github
3.	Develop a project using most successful Open source technologies on the Web
4.	Design Client and Server side scripts for application development
5.	Integrate php,javascript and mysql technologies in open source environments.

**Mapping of course outcomes with program outcomes:**

Mapping		PO												PSO	
		1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO	1	2	1	2		3				2		2		2	1
	2	1	1	2		3				2		2		1	
	3	2	1	2	3	3				3		2		2	1
	4	3	2	2	2	3				2		2		2	1
	5	2	2	2		3				3		2		2	

## SYLLABUS

### LIST OF EXPERIMENTS:

#### 1 week

Technical report on Open Source Software Development Style and famous open source projects

#### GITUB(version Control System) 2 weeks

Install git and create a GitHub account, Create a local git repository, Add a new file to the repository, Add a file to the staging environment, Create a commit, Create a new branch, Create a new repository on GitHub.

#### HTML & Java Script(Technologies for Client Side Programming)

4 weeks

HTML basic tags, HTML forms. Java script Basics, JavaScript syntax, Statements, Comments, Variables, Operators, If...Else, Popup Boxes, For Loop, While Loops, Events, Functions, Objects.

#### PHP(Technology for Server Side Programming)

5 weeks

Creating simple webpage using PHP, Use of conditional statements in PHP, Use of looping statements in PHP, Creating different types of arrays, Usage of array functions, Creating user defined functions, Creation of sessions, cookies, Creation of cookies, Database connectivity in

PHP with MySQL, Validating Input, Formatting the Output.

3 weeks

Developing an Open Source Project using PHP,MySQL,Java Script and uploading in GitHub .

### Text Books :

1. Dietel and Nieto, " *Internet and World Wide Web – How to program* ", 4<sup>th</sup> Edition  
PHI/Pearson Education Asia.
2. Steven Holzner, " *PHP : Complete reference* ", 1<sup>st</sup> Edition, McGraw Hill Education

### Reference Books:

#### Web Resources:

<https://www.udacity.com/course/how-to-use-git-and-github--ud775>

<https://www.codecademy.com/learn/learn-git>

<https://www.coursera.org/learn/html-css-javascript>

<https://www.coursera.org/learn/duke-programming-web>

<https://www.w3schools.com/php/>