Las Positas College
3000 Campus Hill Drive
Livermore, CA 94551-7650
(925) 424-1000
(925) 443-0742 (Fax)

Course Outline for CIS 92

WEB: PHP PROGRAMMING, MYSQL

Effective: Spring 2018

I. CATALOG DESCRIPTION:
CIS 92 — WEB: PHP PROGRAMMING, MYSQL — 3.00 units

This course showcases the popular and powerful PHP (Hypertext Preprocessor), an open oource, server-side scripting language that can be easily integrated with HTML and SQL. For web developers who need to add dynamic content to their web sites, including form processing, database-driven content, password protection, cookie processing. You will learn how PHP can be combined with MySQL to integrate database functions into websites.

2.50 Units Lecture 0.50 Units Lab

Strongly Recommended
CIS 59 - Web Dev: HTML/CSS/Javascript

Grading Methods:
Letter or P/NP

Discipline:
- Computer Information Systems

	MIN
Lecture Hours:	45.00
Lab Hours:	27.00
Total Hours:	72.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

Before entering this course, it is strongly recommended that the student should be able to:

A. CIS59
1. Create basic web pages using hypertext markup language (HTML), cascading style sheets (CSS) and Javascript;
2. Using Javascript coding techniques to create interactive web pages, form validation;

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

A. Summarize PHP's uses and limitations
B. Apply PHP commands and program structure
C. Evaluate and employ the basic elements of the PHP language
D. Use PHP to process HTML forms
E. Read and write files with PHP
F. Build database-driven application
G. Design and create web-based applications

V. CONTENT:
A. Introduction to Web Development
B. Hypertext Preprocessor (PHP): A Web Server-Side Technology
1. Client-Side vs. Server-Side Web Technologies
2. The Web's Client-Server Relationship
3. Which Web Servers Support PHP?
4. Getting Started with PHP
C. Writing PHP Pages
1. PHP Code In An HTML Context
2. PHP Statements
3. Working with Data Types and Operators
4. Enclosing Scripting Code within your PHP Pages
5. Manipulating Strings in PHP
6. Developing PHPs in This Class
7. An Example: "Hello World"
8. Conditional Constructs with "if"

9. Comparison Operators in PHP
10. The Logical AND (&&) and OR (||)

D. Processing Data from Online Forms
1. The Tag and Its Attributes
2. Scalar Variables in PHP
3. Demonstration: Displaying a Customized Greeting
4. Combining the Form and Its Processing Code In One PHP File

E. Working with Cookies
1. Setting a Cookie
2. Retrieving a Cookie
3. Example: Setting, Retrieving, and Expiring a Cookie

F. Maintaining State with Sessions
1. Sessions
2. Storing and Retrieving Session Values
3. Example: Using the Session Object to Track a Shopping Cart

G. Email with PHP
1. Sending E mail PHP

H. Writing To A Text File
1. Accessing Files and Directories
2. Example: Writing to a Tab-Delimited File
3. Example: Reading from a tab-delimited text file

I. Functions and Loop Structures
1. Building Functions and Control Structures
2. Manipulating Data in Arrays and Strings
3. For Loops
4. For each Loops
5. While Loops

J. Database Integration with PHP
1. The Databases Used in this Class
2. Working with Databases and MySQL
3. Manipulating MySQL Databases with PHP
4. Issuing Database Commands with SQL
5. Example: Selecting and Viewing Data From guestbook.mdb
6. Connecting and Issuing Commands to the Database
7. Displaying Database Results

K. Installations
1. Installing PHP
2. Installing MySQL

VI. METHODS OF INSTRUCTION:
A. **Lab** -
B. **Lecture** -

VII. TYPICAL ASSIGNMENTS:
A. Create a website containing the following elements: password protection via database lookup, input forms with validated fields
B. Research PHP resource sites and newsgroups for assistance with problems and to exchange ideas

VIII. EVALUATION:
A. **Methods**
1. Exams/Tests
2. Quizzes
3. Lab Activities

B. **Frequency**
1. Quizzes (theory) 2 times per semester
2. Mid-term (theory or hands-on) once per semester - optional
3. Final exam (theory or hands-on) required once per semester
4. Weekly hands-on lab activity

IX. TYPICAL TEXTS:
1. Gosselin, Don. *PHP Programming with MySQL: The Web Technologies Series.* 2nd ed., Cengage, 2015.
2. Welling, Luke. *PHP and MySQL Web Development, 5th Edition.* 5th ed., Pearson, 2016.
3. Forbes, Alan. *The Joy of PHP: A Beginner's Guide to Programming Interactive Web Applications with PHP and mySQL.* 3rd ed., CreateSpace Independent Publishing Platform, 2015.

X. OTHER MATERIALS REQUIRED OF STUDENTS: