Deber Berhan University

College of Computing Science

Department of Information Technology

Summer Program (2016 E.C)

Course Code: ITec2108

Course Title: Internet Programming II

Pre-request: Internet Programming I

**Course Description**

This course is a continuation of Internet Programming. It deals with web application development using an *enterprise application framework* focusing on *server-side scripting*. Topics offered include an introduction to basic syntax, the development environment, state management, and controls, connecting web page to database, Web Services, security and design web page for E-commerce.

**Course Objectives**

After completing this course, the student shall be able to

❖ Understand server-side scripting

❖ Develop web-based applications

❖ Create Forms on Websites

❖ Connect Webpages to databases

❖ Design web page for e-commerce

**Course Outline**

**Chapter One: Server-Side Scripting Basics**

1.1. Introduction to server-side scripting

1.2. Server-side scripting languages

1.3. Use Basic Syntax

1.4. Send Data to the Web Browser

1.5. Write Comments

1.6. Utilize Variables

1.7. Manipulate Strings

1.8. Manipulate Numbers

1.9 Work with constants

1.10 Loops and Array

**Chapter Two: Server-Side Scripting**

2.1. Use Conditionals and Operators

2.2. Function

2.3. Validate Form

2.3 Exception handling

**Chapter 3: Files and Directories**

3.1. Write to Files

3.2. Read from Files

3.3. Create Directories

3.4. Upload Files

3.5. Rename and Delete Files and Directories

**Chapter 4: Connecting to Databases**

4.1. Connect to an existing Database

4.2. Send Data to a Database

4.3. Retrieve Data from a Database

4.4. Modify Existing Data

4.5. Remove Existing Data

4.6. Data base security using server-side scripting

**Chapter 5: Cookies and Sessions**

5.1. Describe the stateless model

5.2. Explain the concepts of maintaining state with sessions

5.3. Create and Read data from sessions

5.4. Putting PHP session IDs in pages

5.5. Create and Read data from Cookies

5.6. Destroy a session

5.7. Maintain session data using Cookies

5.8. Add Parameters to a Cookie

5.9. Delete a Cookie

**Chapter 6: CMS (Joomla / WordPress / Drupal /Wix..)**

6.1. Overview of Content Management Systems (CMS) Using

6.1 Joomla

6.2.Installation of Joomla

6.3.The Joomla elements

6.4.Joomla! Back-end

6.5.Joomla! Front end

6.6.Joomla! Templates

6.7 Joomla Plugins

**Lab Contents**

➢ Server-side program

➢ Configuring web server

➢ Get way

➢ PHP

➢ Database driven website

➢ PHP and MY SQL server

➢ Generate dynamic content

➢ Advanced internet programming

➢ Java applet

➢ Java server page

➢ CMS

➢ Creating website using content management systems (CMS)

**References**

1. PHP AND MYSQL FOR DYNAMIC WEB SITES by Larry Ullman

2. PHP and MySQL Web development by Luke Welling and Laura Thomson

3. PHP5 and MySQL Bible by Tim Converse and Joyce Park with Clark Morgan

4. Web Server Programming by Neil Gray

5. PHP Cookbook, 2nd Edition By David Sklar, Adam Trachtenberg

6. Beginning joomla by Dan Rahmel

7. Joomla for Dummies by Steven Holzner and Nancy Conner

8. SAM’s Teach yourself PHP in 24 hours