**DEBREMARKOS UNIVERSITY TECHNOLOGY INSTITUTE**

**SCHOOL OF COMPUTING, INFORMATION A/P**

**COURSE OUTLINE: ADVANCED INTERNET PROGRAMMING**

**3RD YEAR INFORMATION TECHNOLOGY STUDENTS**

**Course Title:** Advanced Internet Programming

**Course Code:** **ITect3092**

**Credit Hours:** 3

**Target Group:** 3rd Year Information Technology Students

**Instructor: Wobetu S. (**[**wobetushiferaw@gmail.com**](mailto:wobetushiferaw@gmail.com)**)**

**Course objective:**

After completing this course, the student shall be able to

* Understanding client-side scripts with CSS and JavaScript libraries
* Understand server-side scripting
* Create Forms on Websites
* Connect Webpages to databases
* Design and develop enterprise web applications

**Course content:**

**Chapter 1: Front-end web development fundamentals**

* CSS Review, Basics of Bootstrap and JQuery

**Chapter 2: Server - Side Scripting Basics**

* Introduction, Server-side scripting languages, PHP Scripting Fundamentals

**Chapter 3: PHP statements and Form manipulation**

* Writing basic statements in PHP, manipulating form data and send to the server, form validation, working with arrays of data, functions, error handling

**Chapter 4: PHP and Databases**

* Creating database information, connect to an existing database, sending data to a database, retrieve data from a database, modify existing data, remove existing data, database security using server-side scripting

**Chapter 5: File inclusion, cookies and sessions**

* File inclusions, PHP cookies, PHP Sessions
* Upload and download files

**Chapter 6: In-class Project**

* Online **bookstore** application

**Chapter 7: Developing applications based on LARAVEL, the PHP framework**

* Introduction, installation, MVC architecture, Databases, Networking, Security

**LAB SESSION**

* Step-by-step project based in-class exercises

**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. Bootstrap resources and documentation: <https://getbootstrap.com>
7. Web development tutorials: <https://www.w3schools.com>
8. Web development tutorials: <https://www.tutorialspoint.com>

**Learn more at my YouTube channel: Roha TechShow (**[**https://www.YouTube.com/RohaTechShow**](https://www.YouTube.com/RohaTechShow)**)**

**Assessment Method**

* + Lab practical .……………………………………………………...10%
  + Project………………………………………………………….......25%
  + Test ………………………………………………………………..20%
  + Final examination …………………………………………………45%