

Virginia Western Community College

ITP 225

Web Scripting Languages

Prerequisites

ITP140, ITD110, ITD130

Course Description

Introduces students to the principles, systems, and tools used to implement Web applications. Provides students with a comprehensive introduction to the programming tools and skills required to build and maintain interactive Web sites. Students will develop Web applications utilizing client-side and server-side scripting languages along with auxiliary tools needed for complete applications.

Semester Credits: 3 Lecture Hours: 3 Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:

Murach's PHP and MySQL 3rd Edition ISBN: 9781943872381

Other Required Materials:

NetBeans and xampp (latest versions – available for download from the Internet)

Course Outcomes

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

- Be able to review and program using the introductory topics from ITD110 and ITP140
- Be able to create simple PHP programs
- Understand constructs of the PHP language
- Understand how to debug PHP applications
- Be able to work with arrays (associative and indexed)
- Be able to create HTML forms, and respond to the forms with PHP
- Be able to create a MySQL driven web site
- Understand common programming techniques for adding, deleting, editing, and sorting database output
- Understand how to use cookies and sessions
- Be able to code to prevent XSS and SQL Injection attacks
- Be able to code applications that combine, jQuery, Ajax, and PHP
- Understand web security topics
- Be able to work with PHP classes and objects and understand the singleton design pattern.

Topical Description

Module 1: Intro to PHP and How to code a PHP application
Module 2: PHP & MySQL
Module 3: MVC to organize code, Testing & Debugging
Module 4: Form data and control statements
Module 5: String, numbers, and dates – oh my!
Module 6: Arrays, Cookies & Sessions
Module 7: Functions & Objects
Module 8: Regular expressions, exceptions & security

Notes to Instructors

- Each module is two weeks long and requires both a quiz and a laboratory assignment submitted through Blackboard
- A midterm exam is optional
- A semester long project is required
- A comprehensive final may be used in lieu of the project