

# 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:**

Visual Studio Code 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.

### **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