Virginia Western Community College
ITP 246
Java – Server-Side Programming

Prerequisites
ITP220 and ITD 130

Course Description
Provides instruction in application and integration of web-based clients and server-side java to three-tier business applications. Includes us of tools UML, XML, Java servlets, JSPs, and JDBC database access.

Semester Credits: 4   Lecture Hours: 4   Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:
Murach's JavaServlets and JSPs, 3rd edition by Murach and Urban (Murach) ISBN 978-1-890774-78-3

Core JavaServer Faces, 3rd by Geary and Horstmann (Prentice Hall) ISBN 978-0137012893

Other Required Materials:
NetBeans (latest version) – downloadable from the web

Course Outcomes

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

- Understand the concepts of server-side programming
- Understand web servers and web application servers.
- Be able to write server-side applications utilizing servlets and JSPs
- Understand how to make script-free JSP code
- Be able to work with the JSTL
- Understand MVC, Conversational States, Sessions, and JavaBeans
- Be able to program for database access from your applications
- Understand how to connect Java to databases with both raw code and tools such as JPA
- Understand how Java handles web security
- Understand the advanced concepts of frameworks in server-side Java applications
- Be able to work with JavaServer Faces

- Understand the concepts of threading, especially their server-side applications

Topical Description

Module 1: Introduction to JSPs, Servlets, and Web apps- Overview
Module 2: Introduction to Servlets and JSP
Module 3: Conversational States, Cookies, Sessions, and Working with HTTP Requests and Responses
Module 4: Script-free Pages, Custom Tags, and JSTL
Module 5: Database Access and Security Issues
Module 6: How to use JPA and Threading topics
Module 7: Intro to the Music Store Web Site
Mod 8: Intro to JavaServer Faces

Notes to Instructors

- Each module is two weeks long and requires both a quiz and a laboratory assignment submitted through Blackboard
- A half-semester long project may be included.
- A comprehensive final exam may replace the project