

Common Course Outline
CSIT 221
Introduction to Server-Side Scripting
3 Semester Hours

The Community College of Baltimore County

Description

CSIT 221 – 3 Credits – Introduction to Server-Side Scripting introduces students to the concept of server-side scripting and web applications development. Topics include dynamic website development, session management, security, network protocols, and web services. Students develop and interact with MySQL tables using common scripting languages including PHP, ASP, and Cold Fusion.

3 credits; 2 lecture hours per week; 2 laboratory hours per week

Prerequisite: CSIT 121 or consent of the Program Director

Overall Course Objectives

Upon completion of this course the student will be able to:

1. explain the process of server calls and illustrate the flow of data in a web application;
2. list the similarities and differences among common server side scripting languages including PHP, ASP, and CFML;
3. integrate server-side code with XHTML within the source code of a web document;
4. code web site functionality using multiple common server-side languages;
5. manage sessions for multiple users on a web site;
6. use scripts to manipulate a file system;
7. design and develop database tables in MySQL;
8. define and apply Object-Oriented principles to a web application;
9. define common security issues with web applications and list solutions;
10. utilize network and protocol function within a web application;
11. define common web services such as SOAP and WSDL; and
12. develop a dynamic database driven web site.

Major Topics

- I. Introduction
 - a. Making Calls to the Server
 - b. Discuss similarities and differences of common server-side languages

- II. Add dynamic functionality to a web page
 - a. Connecting to a database
 - b. Variables
 - c. Cookies
 - d. Counters
 - e. Comments
- III. History of data communication on the web
 - a. TCP/IP
 - b. Telnet
 - c. Origins of the Web
- IV. Exploring HTTP
- V. Web Servers
 - a. Discuss Server Requests
 - b. Server Configuration
 - c. Secure HTTP
- VI. Dynamic Web Applications
 - a. Application Architecture
 - b. Accessing Databases
- VII. Approaches to Web Application Development
 - a. Template Approaches
 - b. Programmatic Approaches
 - c. Hybrid Approaches
 - c. Software Development Methodologies
- VIII. Web Services
 - a. SOAP
 - b. WSDL

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

- 2 Exams
- 5 Projects
- 1 Final Web Site Project

Other Course Information

This course is taught in a computerized environment.

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common Course Outline.

This is a required course for the Web Development option of the Information Technology Degree Program.