

# CPCS-403 Syllabus

## Catalog Description

**CPCS-403** Internet Application Programming

**Credit:** 3 ( Theory: 3, Lab: 0, Practical: 0)

**Prerequisite:** CPCS-371 , CPCS-324

**Classification:** Elective

The objective of this course is to provide a broad overview of Internet and Web technologies. Topics include HTML, XHTML, CSS, client-side scripting (JavaScript), server-side scripting (PHP), Web data-base connectivity, and XML Technologies. The students will be encouraged to design, implement, and evaluate small-scaled Web projects in groups/teams.

### Class Schedule

Meet 50 minutes 3 times/week or 80 minutes 2 times/week

Lab/Tutorial 90 minutes 1 times/week

## Textbook

Paul J. Deitel, Harvey M. Deitel, Abbey Deitel, , "Internet and World Wide Web", Prentice Hall; 5 edition (2011-11)

**ISBN-13** 9780132151009

**ISBN-10** 0132151006

## Grade Distribution

| Week | Assessment             | Grade % |
|------|------------------------|---------|
| 4    | Homework Assignments 1 | 5       |
| 6    | Exam 1                 | 15      |
| 8    | Homework Assignments 2 | 5       |
| 12   | Exam 2                 | 15      |
| 13   | Homework Assignments 3 | 5       |
| 14   | Lab Exam               | 15      |
| 15   | Project (Individual)   | 40      |

## Topics Coverage Durations

| Topics  | Weeks |
|---|-------|
| Introduction to Internet and Web technologies | 1     |
| Introduction to XHTML                         | 2     |
| CSS   | 1     |
| Client-side programming                       | 4     |
| Server-side programming                       | 4     |
| Overview of XML technologies                  | 2     |

## Last Articulated

December 23, 2015

## Relationship to Student Outcomes

| a | b | c | d | e | f | g | h | i | j | k |
|---|---|---|---|---|---|---|---|---|---|---|
| x |   | x |   |   |   |   |   | x |   |   |

## Course Learning Outcomes (CLO)

By completion of the course the students should be able to

- Describe the Web fundamentals, including Web Directory Structure. (a)
- Differentiate between client and server-side programming. (a)
- Develop static Web pages, including lists, tables and forms using XHTML. (c)
- Write XHTML programs to navigate from one page to another. (c)
- Use W3C validation service to validate XHTML pages. (a)**
- Distinguish between inline, embedded and external styles. (a)
- Apply CSS for uniform formatting to all pages in a Website. (c)**
- Write simple JavaScripts, including (array) variables, selection statements and loops. (c)
- Develop JavaScript code for client-side form validation. (c)**
- Distinguish between inline and traditional model of event handling. (a)
- Write simple event handlers that respond to various mouse events, including mouse move/click. (c)
- Discuss the functionality of a Web server. (a)
- Write regular expressions in PHP to search for patterns. (c)
- Write PHP scripts for server-side form processing, including form validation. (c)**
- Use SQL to perform various database operations. (i)
- Create PHP scripts to interact with a MySQL database. (c)**

## Coordinator(s)

Mr. Noor-Ul-Qayyum Maroof, Lecturer