COURSE DESCRIPTION

Prerequisites: Basic web generation skills or instructor approval.

Course Description: Techniques for Web development. Includes server-side and client-side scripting.

Intermediate applications for web authoring. Techniques for web development. Includes server-side and client-side scripting. This course may be repeated if topic and learning outcomes vary.

This section will include JavaScript, server side/ server side scripting, CGI, and ASP to design and implement a web page.

This is a 4 credit hour course. (3 lec., 4 lab.)

WECM END-OF-COURSE OUTCOMES: Create and use client-side and server-side scripts to design and implement dynamic websites.

STUDENT LEARNING OUTCOMES:
Upon successful completion of ITSC 2402, students will be able to:
  - Create complex procedural object-oriented programs for the web utilizing JavaScript and DHTML code.
  - Implement dynamic objects to XHTTPML.
  - Generate client-side objects to perform dynamic events on web sites.
  - Discuss the role of JavaScript in today’s Internet environment and its impact on the web environment.
  - Explain functional uses of JavaScript, PHP and AJAX in electronic commerce.

COURSE MATERIALS

Textbook: Web-Based Application Development, Grove, Ralph, Jones and Bartlett, 2010
(ISBN #978-0-763759407)

And
Course will use http://Lynda.com tutorials. Cost $40.67 for access between Jan 17 to May 17, 2012. Tutorials include:

<table>
<thead>
<tr>
<th>Course Names</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ASP.NET Essential Training (required)</td>
<td>06h .08m</td>
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<tr>
<td>JavaScript Essential Training (2007)</td>
<td>07h 14 m</td>
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<tr>
<td>MySQL Essential Training (optional)</td>
<td>02h.07m</td>
</tr>
<tr>
<td>PHP with MySQL Essential Training (required)</td>
<td>11h.02m</td>
</tr>
<tr>
<td>Web Design Fundamentals 02h 43m</td>
<td>2h 43m</td>
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A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

**MAJOR COURSE REQUIREMENT**

Students will participate in Discussion Forums which allow them to communicate on a project in a life-like environment.

Students will complete Lynda.com tutorials, exercises and quizzes to demonstrate their understanding and enhance their skills using ASP.NET, JavaScript, MySQL, PHP and web design fundamentals.

Students will produce web pages in their Web Portfolio Project using programming languages and technologies for building web applications using JavaScript, J2EE, MySQL, PHP and ASP.

Students will complete Lab Assignments which include the following:
- Implementing dynamic objects to XHTML
- Identifying Web protocol designs & components making up the Web and its applications
- Defining the role of JavaScript in today's Internet environment and its impact on the web environment
- Utilizing client-side objects that perform dynamic events on web sites and complex procedural object-oriented programs for the web with JavaScript and DHTML code

The web-based portfolio will include a component of each of the programming languages covered in the class and will evaluate the student's understanding of intermediate web programming concepts and knowledge presented.

**SUBJECT MATTER**

Topics covered in the lecture portion of the course include:

- Internet and Web Protocols
- Client-server Architecture
- Web Software
- HTML/CSS
Java Servlets
JavaScript and AJAX
Java Server Pages
Databases
Web Application Design
Security and Encryption
Performance and Reliability
Internationalization and Accessibility
Web Application Infrastructure
Advanced Architectural Styles
The Mobile Web

DISCLAIMER
The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instruction. When necessary, appropriate notice of such changes will be given to the student.

The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

POLICIES
Students should click on the links below and read all of these policies.

General institutional policies
Course-related institutional policies