ITSE 1406 PHP Programming

Syllabus Spring 2016

BROOKHAVEN COLLEGE
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Instructor: Stephen Herd
Phone: 972-860-4184
E-mail: sherd@dcccd.edu
Office: Q209
Office hours: Mon-Wed 1-5 pm or by appointment

ITSE 1406 PHP Programming (4) Introduction to PHP including design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Emphasizes hands-on programming skills necessary to develop secure and reliable PHP based web applications. (3 Lec., 4 Lab.)

Objectives: The objective is to provide a comprehensive introduction to the PHP programming language. This course will focus on the knowledge and skills necessary for creating web applications using PHP and integrating with databases using SQL. The Apache web server will also be covered.

Textbook:

There is no required textbook for this course. We will be using online tutorials instead. Most of the tutorials are free, but I have also listed some excellent tutorials from Lynda.com that you might find useful. These are completely optional and there is a monthly fee to access the Lynda.com tutorials. This is provided as an option for those who would like more resources.

Competencies:
Successful completion of this course will enable the student to:

- Basic language skills
  - Use proper PHP syntax
  - Create a script
  - Create variables
  - Use appropriate data types
  - Write PHP statements
  - Code operations and expressions
  - Handle conditions
  - Handle loops
  - Write functions
- Use server-side includes
- Create and utilize a numeric array
- Create and utilize an associative array
- Create and utilize a multi-dimensional array

**PHP and HTML**
- Display information on a web page from a PHP script
- Read data from a form
- Perform validation
- Use string functions
- Create a regular expression
- Get the current date and time
- Format dates and times
- Convert a string to a date
- Debug PHP scripts
- Upload files using PHP

**PHP Database Interaction**
- Connect to a database from a PHP script
- Create tables
- Send queries to a database
- Parse query results from a database and display on a web page
- Insert, update and delete data from a PHP script
- Filter and escape user input
- Handle errors

**Cookies and Sessions**
- Read and write cookies
- Create a session
- Create, use and destroy session variables

**Program Objectives:**

<table>
<thead>
<tr>
<th>Produce graphics, layout elements and applicable code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform web programming including HTML, CSS, JavaScript, PHP, CMS or other technologies to develop a website</td>
</tr>
<tr>
<td>Gather customer requirements and develop a project plan</td>
</tr>
<tr>
<td>Develop, deliver and manage web site content</td>
</tr>
<tr>
<td>Implement web site and hand over to user</td>
</tr>
</tbody>
</table>

**Course Overview:**

This course is competency based which means that the students must demonstrate proficiency in the stated competencies to progress through the course. There are 4 major competencies for the course. Each major competency has required competencies and desired competencies. To pass a competency and move on to
the next one, you must demonstrate proficiency in all required competencies. Desired competencies are provided for personal development and are optional. Completion of desired competencies can be used to achieve a higher grade in the course.

Each competency has a self-assessment provided for those who have some prior experience with PHP to identify competencies they have already mastered and areas where they need further study. Following the self-assessment is a study guide with tutorials, lecture notes and lab exercises to help you gain proficiency in each competency. When you are ready, you can then take the Competency Proficiency exam to demonstrate your competency. You will have 3 attempts to successfully complete the proficiency exam. Once completed, you can move to the desired competencies if you choose or you can move on to the next major competency. Students must demonstrate proficiency in all required competencies to pass the course.

Course Outline:

This course is competency based which means that the student can progress through the material at their own pace. However, all work must be completed by the course end date of December 17th. This outline can be used as a guide to help you stay on track to finish at the end of the semester.

- Weeks 1-3: Competency 1 - Basic Language Skills
- Weeks 4-6: Competency 2 - PHP and HTML
- Weeks 7-11: Competency 3 - PHP Database Interaction
- Weeks 12-16: Competency 4 - Cookies and Sessions

Student Participation:

Students are expected to take the self-assessment exams, review the necessary tutorials, read the lecture notes, and complete the practice labs as needed to achieve competency in the material prior to completing the Proficiency Assessments. It is the responsibility of the student to contact the professor to review any self-assessment or practice labs that they wish to have graded and to schedule tutoring time when one-on-one time is needed with the professor.

Grading Procedures

You will accumulate course points for work done as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Maximum Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Required Proficiency</td>
<td>40</td>
</tr>
</tbody>
</table>
Assessments @ 10 points each

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Desired Proficiency</td>
<td>4</td>
</tr>
<tr>
<td>Assessments @ 1 point each</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

Your final course grade will be determined as shown:

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>42-44</td>
<td>A</td>
</tr>
<tr>
<td>40-41</td>
<td>B</td>
</tr>
<tr>
<td>0-39</td>
<td>F</td>
</tr>
</tbody>
</table>

**Late Points**

There are no late points in the course, but it is the responsibility of the student to ensure they complete all required proficiency exams by the semester end date.

**Communication with your instructor**

I try to review and grade all proficiency assessments within 2-3 days. Also, you can expect me to respond to your e-mails normally within 24 hours. Be aware that while this is my general and intended practice, it is subject to the changes and chances of life. Self-assessments and practice labs will not be graded unless requested by the student. It is the student's responsibility to contact me if you would like me to review your work on these items. I am available for questions and tutoring as needed via phone, email, Blackboard IM or in person. It is the student's responsibility to schedule tutoring time with the professor.

**Last date to withdraw with a W:** Thursday, November 19, 2015

Your instructor reserves the right to modify the course requirements, assignments, grading procedures and other related policies as circumstances dictate. Additional exam or course information may be posted in the Announcements section of the course throughout the semester.

All students in this course are expected to abide by the rules and regulations as set forth in both the DCCCD Student Code of Conduct and the DCCCD Rules for Responsible Computing. Failure to comply may result in legal and/or disciplinary action.

Fall 2015 Syllabus Addendum - Institutional Policies: View Syllabus Addendum