PHP Programming (ITSE 1406)

Credit: 3 semester credit hours (2 hours lecture, 2 hours lab)

Prerequisite/Co-requisite: None

Course Description
Introduction to PHP including the design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security.

Required Textbook and Materials
1. Beginning PHP 5.3
   a. ISBN: 9780470413968
2. USB Flash Memory drive
3. Text Editor such as Textpad, Notepad, Dreamweaver
4. Access to Web Server
5. Internet Access

Course Objectives
Upon completion of this course, the student will be able to:
1. Design and write PHP programs
2. Identify and resolve security-related issues.

Course Outline
A. Introducing PHP
   - What is PHP
   - Evolution of PHP
   - PHP 5.3
B. Your First PHP Script
   - Installing PHP
   - Ways to Run PHP
C. PHP Language Basics
   - Variables in PHP
   - Data Types
   - Operators & Expressions
D. Decisions & Loops
   - Making Decisions
   - Repetitive Task with Loops
E. Strings
   - Creating & Accessing Strings
   - Searching Strings
   - Replacing Text
F. Arrays
   - Array Elements
   - Looping through Arrays
   - Multidimensional Arrays
G. Functions
   - Writing Functions
   - References
H. Objects
   - Creating Classes & Objects
   - Working with Methods
   - Object Overloading
   - Constructors & Destructors
I. Handling HTML Forms with PHP
   - Capturing Form Data
   - Generating Web Forms
   - Storing Variables
   - File Upload Forms

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J. Preserving State with Query Strings, Cookies, and Sessions
   • Saving State w/ Query Strings
   • Cookies
   • PHP Sessions to Store Data

K. Files & Directories
   • Getting Information
   • Opening & Closing Files
   • Reading & Writing Files
   • File Permissions
   • Directories

L. Databases & SQL
   • How to Store Data
   • Setting Up My SQL
   • Connecting to MySQL from PHP

M. Retrieving Data
   • Retrieving Data with Select
   • Record Viewer

N. Manipulating MySQL Data with PHP
   • Inserting
   • Updating Records
   • Deleting Records

O. PEAR
   • Installing PEAR
   • Using PEAR
   • HTML Tables & Table Packages
   • Quick WebForms

P. PHP & the Outside World
   • Working with Dates & Times
   • Working with HTTP
   • Getting Info from the Web Server

Q. Generating Images
   • Basics of Graphics
   • Creating Images
   • Manipulating Images
   • Text in Images

R. String Matching
   • What Are Regular Expressions
   • Pattern Matching
   • Finding Multiple Matches
   • Searching Arrays
   • Replacing Text

S. Working with XML
   • XML Structure
   • XML Documents
   • Manipulating XML

T. High-Quality Code
   • Modular Code
   • Coding Standards
   • Coding Consistency
   • Error Handling

Grade Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
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<tr>
<td>80 – 89</td>
<td>B</td>
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<tr>
<td>70 – 79</td>
<td>C</td>
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<tr>
<td>60 – 69</td>
<td>D</td>
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<tr>
<td>0 – 59</td>
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</table>

Course Evaluation
Final grades will be calculated according to the following criteria:

1. Daily Assignments 35%
2. Homework 35%
3. Quizzes & Test 30%

Course Requirements
1. Identify database terminology and concepts
2. Plan, define, and design a database

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3. Design and generate tables, forms, and reports
4. Devise and process queries

Course Policies
1. No food, drinks, or use of tobacco products in class.
2. Cellphones, MP3 players, notebook/netbook(s) and any other electronic devices
must be turned off while in class.
3. Do not bring children to class.
4. No late assignments will be accepted. Any assignment submitted after the
Blackboard cut-off time will result in a ‘0’.
5. Tests. Students that miss a test are not allowed to make up the test. Students that
miss a test will receive a grade of ‘0’.
6. If you wish to drop a course, the student is responsible for initiating and
completing the drop process. If you stop coming to class and fail to drop the
course, you will earn an ‘F’ in the course.
7. A grade of ‘C’ or better must be earned in this course for credit toward degree
requirement
8. All assignments will be completed using Blackboard. Assignment may not be
submitted via email.
9. Attendance: Students should be present and punctual for all classes. Any
assignment missed due to absence will result in a zero.
10. Tardiness: If tardy, enter quietly and do not disturb the class. Students that are
tardy or miss a class are responsible for all work and/or discussion missed. The
student is responsible to obtain missed material from a classmate. Do not expect
your instructor to repeat a lecture & do not interrupt your instructor.
11. Do not talk, type, or print while the instructor is talking to the class or when a
student is asking a question that pertains to the class.
12. Refrain from “surfing” the Web during class, unless directed by your instructor.

Disabilities Statement
The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of
1973 are federal anti-discrimination statutes that provide comprehensive civil rights for
persons with disabilities. Among other things, these statutes require that all students with
documented disabilities be guaranteed a learning environment that provides for reasonable
accommodations for their disabilities. If you believe you have a disability requiring an
accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or
visit the office in Student Services, Cecil Beeson Building.

Course Schedule
Refer to Blackboard for actual assignments and due date

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>Reference</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introducing PHP</td>
<td>Chapter 1</td>
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<tr>
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<td>Your First PHP Script</td>
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<tr>
<td>Week 2</td>
<td>Your First PHP Script</td>
<td>Chapter 3</td>
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<tbody>
<tr>
<td>Week 3</td>
<td>Decisions &amp; Loops</td>
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<td>Strings</td>
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<td>Chapter 7</td>
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<td>Objects</td>
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<td>Week 6</td>
<td>Handling HTML Forms with PHP</td>
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<td>Week 7</td>
<td>Files &amp; Directories</td>
<td>Chapter 11</td>
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<td>Databases &amp; SQL</td>
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<td>Week 8</td>
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<td>Week 9</td>
<td>Retrieving Data</td>
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<td>Manipulating MySQL Data with PHP</td>
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<td>Week 10</td>
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<td>PHP &amp; the Outside World</td>
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<td>Generating Images</td>
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<td>Working with XML</td>
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<td>Week 15</td>
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<td>Week 16</td>
<td>Final Project</td>
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**Contact Information:**
Varies by Instructor