Approved (Changed Course)

CS 55.13 Course Outline as of Fall 2015

CATALOG INFORMATION

Dept and Nbr: CS 55.13   Title: PHP PROGRAMMING
Full Title: PHP Programming
Last Reviewed: 10/24/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00   Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable
Grading: Grade or P/NP
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly: CIS 58.41

Catalog Description:
This class will introduce the student to the Open Source, server side scripting language PHP. Students will create a PHP project that integrates database, password protection and cookie processing that can be applied to web applications such as shopping carts, auction sites, and portal web sites.

Prerequisites/Corequisites:
Course Completion of CS 50.11B OR Course Completion of CS 50A

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: This class will introduce the student to the Open Source, server side scripting language PHP. Students will create a PHP project that integrates database, password protection and cookie processing that can be applied to web applications such as shopping carts, auction sites, and portal web sites. (Grade or P/NP)
Prerequisites/Corequisites: Course Completion of CS 50.11B OR Course Completion of CS 50A

Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

			Effective:	Inactive:
AS Degree:	**Area**		Effective:	Inactive:
CSU GE:	**Transfer Area**		Effective:	Inactive:
IGETC:	**Transfer Area**		Effective:	Inactive:
CSU Transfer:	Transferable	Effective: Fall 2002	Inactive:	
UC Transfer:		Effective:	Inactive:	

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
Upon completion of the course students will be able to:
1. Summarize PHP's uses and limitations.
2. Evaluate and employ the basic elements of the PHP language.
3. Design and create web-based applications, implementing database access, session management, and various forms of user authentication from a set of business requirements.
4. Examine and implement the software-development life cycle.
5. Create correct and efficient algorithms involving control structures and functions.
6. Implement and appraise algorithms using PHP flow-control constructs.

Topics and Scope:

1. Server side and client side scripting
    a. Choices for Server side scripting
    b. Why choose PHP
    c. History of PHP
2. Basic Syntax
3. Types
    a. Simple Types
    b. Arrays
    c. Objects
4. Variables
    a. Declaring
    b. Assigning
    c. Reassigning
    d. Unassigning
    e. Variable scope

5. Constants
6. Expressions
7. Operators
   a. Boolean
   b. Logical
   c. Comparison
   d. Trinary
8. Control Structures
   a. Branching
   b. Looping
9. Functions
   a. Using Functions
   b. User Defined Functions
10. Classes and Objects
    a. Object-Oriented Programming and PHP
    b. Object Serialization
    c. Interfaces
11. Error Handling
12. Input forms
    a. HTML (hypertext markup language) form review
    b. HTTP (hypertext transfer protocol) commands
13. Processing input forms with PHP
14. Database access
    a. Choosing a database
    b. Connecting to a database
    c. SQL (Structured Query Language) and PHP
    e. Displaying Queries in Tables
    f. Dynamic HTML Forms
    g. Database Efficiency
15. Session Management and Authentication
    a. What is Session Management?
    b. Home-Grown Session Management
    c. PHP Session Management
    d. What is Authentication?
    e. Authentication mechanisms.
16. Cookies and HTTP
    a. Cookies
    b. Sending HTTP Headers
17. Email
    a. Email Basics
    b. Receiving Email with PHP
    c. Sending Email with PHP

Assignment:

1. Create a web site containing the following elements:
   a. Password protection via database lookup
   b. A connection to a back-end relational database
   c. Input forms with validated fields
   d. PHP programs to process form data
   e. Extract information from the database with SQL using inserts, selects, deletes and updates
   f. Process cookies on client machines

g. Email messages automatically as the results of queries
h. Full user interface

2. Research PHP resource sites and newsgroups for assistance with problems and to exchange ideas
3. Present web site to the class
4. Take four to six quizzes on material
5. Read approximately 25 pages per week

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Creating automated web pages with PHP	Problem solving 30 - 50%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class presentation	Skill Demonstrations 10 - 20%

Exams: All forms of formal testing, other than skill performance exams.

Four to six quizzes on material	Exams 20 - 45%

Other: Includes any assessment tools that do not logically fit into the above categories.

Research and share resource sites and newsgroups	Other Category 5 - 10%

Representative Textbooks and Materials:
PHP the Complete Reference (1st). Holzner, Steven. McGraw-Hill Osborne: 2007 (Classic)