CS 55.13 Course Outline as of Summer 2011

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	4	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 CIS 58.51B) and CS 10 (or CIS 10); OR Course Completion of CS 50.11B (or CIS 58.51B) and CS 19.11A (or CIS 16A)

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 CIS 58.51B) and CS 10 (or CIS 10); OR Course Completion of CS 50.11B (or CIS 58.51B) and CS 19.11A (or CIS 16A)

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:

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.
- 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.

Homework problems, 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.

Quizzes: multiple choice, true/false, matching items, completion, short answer

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