

Course Outline of Record

1. Course Code: CIS-085C
2.
  - a. Long Course Title: Web Programming
  - b. Short Course Title: WEB PROGRAMMING
3.
  - a. Catalog Course Description:
 

This course teaches the fundamentals of client-side and server-side web programming, using JavaScript, PHP, Perl and MySQL. Students learn how to understand and use simple variables, proper programming syntax, arithmetic and string operations, conditional and logical operators, functions and subroutines, loops and arrays, data file operations and database concepts.
  - b. Class Schedule Course Description:
 

Fundamentals of client-side and server-side web programming, using JavaScript, PHP, Perl and MySQL.
  - c. Semester Cycle (*if applicable*): N/A
  - d. Name of Approved Program(s):
    - ADMINISTRATIVE OFFICE ASSISTANT
    - ADMINISTRATIVE OFFICE PROFESSIONAL
    - COMPUTER INFORMATION SYSTEMS
    - COMPUTER INFORMATION SYSTEMS
4. Total Units: 3.00      Total Semester Hrs: 90.00  
 Lecture Units: 2      Semester Lecture Hrs: 36.00  
 Lab Units: 1      Semester Lab Hrs: 54.00  
 Class Size Maximum: 32      Allow Audit: No  
 Repeatability No Repeats Allowed  
 Justification 0
5. Prerequisite or Corequisite Courses or Advisories:
 

*Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm1-A)*

 Prerequisite: CIS 082C
6. Textbooks, Required Reading or Software: (*List in APA or MLA format.*)
  - a. Nixon, Robin. (2014). *Learning PHP, MySQL, JavaScript, CSS and HTML 5*. O'Reilly Media. . ISBN: 978-1-4919-49  
 College Level: Yes  
 Flesch-Kincaid reading level: 13.5
7. Entrance Skills: *Before entering the course students must be able:*
  - a. Define the key elements of World Wide Web publishing and Hypertext Markup Language (HTML).
    - CIS 082C - Define the key elements of World Wide Web publishing and Hypertext Markup Language (HTML).
  - b. Analyze and demonstrate the key concepts of effective Web page layout and navigation.
    - CIS 082C - Analyze and demonstrate the key concepts of effective Web page layout and navigation.
  - c. Conceptualize, plan and format a complex set of effective Web pages.
    - CIS 082C - Conceptualize, plan and format a complex set of effective Web pages.
  - d. Format and use lists, tables, Internet URL links, and fill-out forms in Web pages.
    - CIS 082C - Format and use lists, tables, Internet URL links, and fill-out forms in Web pages.
8. Course Content and Scope:

Lecture:

1. Overview and comparison of web programming languages.
  1. Client-side programming using JavaScript
  2. Server-side programming using PHP and Perl
  3. Database fundamentals using MySQL
2. Variable type, scope and usage.
  1. Defining and using simple variables of various data types and scope
  2. Understanding and using proper programming syntax to create working scripts
3. Arithmetic, Boolean and string operators.
  1. Use of standard arithmetical operators (+, -, \*, /, modulus)
  2. Operator precedence
  3. Use of string operators to parse and concatenate strings
4. Logical and conditional operators.
  1. ==, >, <, >=,
  2. AND, OR and NOT
  3. IF ... ELSE
5. Loops and arrays.
  1. Using FOR and DO loops to process array data
  2. Iteration and recursion
6. Functions and subroutines.
  1. Defining and calling functions
  2. Passing parameters to functions
  3. Returning values from functions
  4. Built-in functions and user-defined functions
7. Data file and database operations.
  1. Creating, manipulating and deleting server-side data files
  2. Using MySQL to create Databases and Tables
  3. Adding, updating and removing entries from a MySQL table.

Lab: (if the "Lab Hours" is greater than zero this is required)

1. Hands on practice on all of the concepts listed above.
2. Logic and debugging

9. Course Student Learning Outcomes:

1.

Demonstrate the ability to write client-side and server-side scripts using standard programming concepts and syntax, using the JavaScript, PHP, Perl and MySQL languages.

10. Course Objectives: *Upon completion of this course, students will be able to:*

- a. Understand and explain the differences between client-side and server-side web scripts.
- b. Demonstrate the ability to debug and troubleshoot JavaScript, PHP, Perl and MySQL programs.
- c. Use a basic subset of Unix commands to upload and execute server-side scripts.

11. Methods of Instruction: *(Integration: Elements should validate parallel course outline elements)*

- a. Demonstration, Repetition/Practice
- b. Discussion
- c. Distance Education
- d. Laboratory
- e. Lecture
- f. Observation
- g. Technology-based instruction

Other Methods:

- Reading assignments

12. Assignments: *(List samples of specific activities/assignments students are expected to complete both in and outside of class.)*

In Class Hours: 90.00

Outside Class Hours: 99.00

a. In-class Assignments

1. Create web pages that utilize image rollovers and other dynamic elements.
2. Create and implement HTML form validation scripts using JavaScript.
3. Use PHP and Perl to generate dynamic HTML web pages.
4. Create and maintain a student database using MySQL,

b. Out-of-class Assignments

1. Create web pages that utilize image rollovers and other dynamic elements.
2. Create and implement HTML form validation scripts using JavaScript.
3. Use PHP and Perl to generate dynamic HTML web pages.
4. Create and maintain a student database using MySQL,

13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*

- Computational/problem solving evaluations
- True/false/multiple choice examinations
- Mid-term and final evaluations

14. Methods of Evaluating: Additional Assesment Information:

Non-computational problem solving Skill demonstration through completion of computer exercises

15. Need/Purpose/Rationale -- *All courses must meet one or more CCC missions.*

PO - Career and Technical Education

Fulfill the requirements for an entry- level position in their field.

Apply critical thinking skills to execute daily duties in their area of employment.

Apply critical thinking skills to research, evaluate, analyze, and synthesize information.

IO - Critical Thinking and Communication

Apply principles of logic to problem solve and reason with a fair and open mind.

16. Comparable Transfer Course

University System	Campus	Course Number	Course Title	Catalog Year
CSU	CSU Channel Island	IT 280		
CSU	CSU Dominguez Hills	CSC 255		
CSU	CSU Fresno	CSCI 130		

17. Special Materials and/or Equipment Required of Students:

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18. Materials Fees:  Required Material?

**Material or Item**

**Cost Per Unit**

**Total Cost**

19. Provide Reasons for the Substantial Modifications or New Course:

Two year periodic review

20. a. Cross-Listed Course *(Enter Course Code):* N/A

b. Replacement Course *(Enter original Course Code):* N/A

21. Grading Method *(choose one):* Letter Grade Only

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000513201
- b. T.O.P. Code [CB03]: 70200.00 - Computer Information Syst
- c. Credit Status [CB04]: D - Credit - Degree Applicable
- d. Course Transfer Status [CB05]: B = Transfer CSU
- e. Basic Skills Status [CB08]: 2N = Not basic skills course
- f. Vocational Status [CB09]: Advanced Occupational
- g. Course Classification [CB11]: Y - Credit Course
- h. Special Class Status [CB13]: N - Not Special
- i. Course CAN Code [CB14]: N/A
- j. Course Prior to College Level [CB21]: Y = Not Applicable
- k. Course Noncredit Category [CB22]: Y - Not Applicable
- l. Funding Agency Category [CB23]: Y = Not Applicable
- m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (if program-applicable): ADMINISTRATIVE OFFICE ASSISTANT,ADMINISTRATIVE OFFICE PROFESSIONAL,COMPUTER INFORMATION SYSTEMS,COMPUTER INFORMATION SYSTEMS  
*Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)*

23. Enrollment - Estimate Enrollment

First Year: 30  
Third Year: 30

24. Resources - Faculty - Discipline and Other Qualifications:

- a. Sufficient Faculty Resources: Yes
- b. If No, list number of FTE needed to offer this course: N/A

25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (Explain:)

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

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28. Originator Zerryl L. Becker Origination Date 10/05/14