

Washtenaw Community College Comprehensive Report

CPS 276 Web Programming Using PHP and MySQL Effective Term: Fall 2020

Course Cover

Division: Business and Computer Technologies

Department: Computer Science & Information Technology

Discipline: Computer Science

Course Number: 276

Org Number: 13410

Full Course Title: Web Programming Using PHP and MySQL

Transcript Title: Web Program using PHP & MySQL

Is Consultation with other department(s) required: Yes

Please Explain:

Met with WEB faculty to discuss changes.

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Course Change

Change Information:

Course description

Pre-requisite, co-requisite, or enrollment restrictions

Rationale: We are allowing students who took WEB210 to be allowed to take CPS276. The reason is they would have been able to take WEB250, but that class was removed and replaced with CPS276 because they were the same class.

Proposed Start Semester: Fall 2020

Course Description: In this course, students will build dynamic database-driven Web applications using PHP and MySQL. Application output will be displayed in a browser. Students will be working on a Linux VM server with root privileges. In addition, students will be introduced to some basic HTML and limited CSS. Students who have not taken the prerequisite courses, but have equivalent programming experience in any language, should request an override from the instructor or department chair. HTML knowledge is helpful. The title of this course was previously Web Programming Using Apache, MySQL, and PHP.

Course Credit Hours

Variable hours: No

Credits: 4

Lecture Hours: Instructor: 60 Student: 60

Lab: Instructor: 0 Student: 0

Clinical: Instructor: 0 Student: 0

Total Contact Hours: Instructor: 60 Student: 60

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

Prerequisite

CPS 161 minimum grade "C"

or

Prerequisite

CPS 171 minimum grade "C"

or

Prerequisite

WEB 210 minimum grade "C"

General Education

General Education Area 7 - Computer and Information Literacy

Assoc in Arts - Comp Lit

Assoc in Applied Sci - Comp Lit

Assoc in Science - Comp Lit

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Recognize appropriate use of PHP programming basics.

Assessment 1

Assessment Tool: Outcome-related multiple-choice and short answer questions on a departmental exam

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: The multiple choice and short answer questions have well-defined answers that can be objectively scored as correct or incorrect.

Standard of success to be used for this assessment: The standard for success will be that 70% of the students will score better than 70% or higher on the outcome-related questions.

Who will score and analyze the data: Instructors teaching CPS 276 will analyze the data.

2. Identify relational database design and MySQL database server fundamentals.

Assessment 1

Assessment Tool: Outcome-related multiple-choice and short answer questions on a departmental exam

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: The multiple-choice and short answer questions have well-defined answers that can be objectively scored as correct or incorrect.

Standard of success to be used for this assessment: The standard for success will be that 70% of the students will score better than 70% or higher on the outcome-related questions.

Who will score and analyze the data: Instructors teaching CPS 276 will analyze the data.

3. Identify appropriate techniques for accessing MySQL from the PHP programming language.

Assessment 1

Assessment Tool: Outcome-related multiple-choice and short answer questions on a departmental exam

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: The multiple-choice and short answer questions have well-defined answers that can be objectively scored as correct or incorrect.

Standard of success to be used for this assessment: The standard for success will be that 70% of the students will score better than 70% or higher on the outcome-related questions.

Who will score and analyze the data: Instructors teaching CPS 276 will analyze the data.

4. Apply sound software engineering techniques in developing a working software project.

Assessment 1

Assessment Tool: A portfolio of software programs submitted by the students

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: The standard for success will be that 70% of students will score 70% or higher on the rubric.

Who will score and analyze the data: Instructors teaching CPS 276 will analyze the data.

Course Objectives

1. Develop basic HTML elements (input, text boxes and forms).
2. Develop basic PHP code (logic, arrays, loops, operators, post and get statements, variables and functions).
3. Develop database SQL code in MySQL (select, input, update and delete).
4. Access a MySQL database from PHP code using PDO.
5. Demonstrate sound software engineering techniques in developing a working web database driven application which is robust and maintainable.
6. Identify the differences of PHP over other server-side scripting languages.
7. Recognize and use correct PHP syntax.
8. Demonstrate how to create PHP classes.
9. Properly use PHP objects
10. Recognize and correctly apply loops for getting recordset data.
11. Use MySQL for data storage and manipulation.
12. Differentiate between SQL for relational databases and PHP.

New Resources for Course

Course Textbooks/Resources

Textbooks

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

Reviewer

Action

Date

Faculty Preparer:

Scott Shaper

Faculty Preparer

May 06, 2020

Department Chair/Area Director:

<i>Cyndi Millns</i>	<i>Recommend Approval</i>	<i>May 07, 2020</i>
Dean:		
<i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>May 08, 2020</i>
Curriculum Committee Chair:		
<i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Jul 15, 2020</i>
Assessment Committee Chair:		
<i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Jul 21, 2020</i>
Vice President for Instruction:		
<i>Kimberly Hurns</i>	<i>Approve</i>	<i>Jul 28, 2020</i>