

South Central College

# COMP 2145 Web Programming

## Common Course Outline

### Course Information

**Description** This course teaches you one of the popular server-side programming languages so that you can design and build secure web applications. In this class, you will learn the principles of the client-server architecture and protocols that govern the network communication and data transfer. You will implement a web framework to create dynamic websites that use databases to store and process data. You will design and create user-facing web applications with security and user experience in mind. (Prerequisites: COMP 1130 with a C [2.0] or higher, and COMP 1140 with a C [2.0], OR higher OR instructor permission.)

It is strongly recommended that you have a minimum typing speed of at least 35 wpm as well as knowledge of database programming (COMP1125).

**Total Credits** 4

**Total Hours** 64

### Types of Instruction

Instruction Type	Credits/Hours
Lecture	4/64

### Pre/Corequisites

Prerequisite C (2.0) or better in COMP1140

Prerequisite C (2.0) or better in COMP1130

OR Instructor permission

### Institutional Core Competencies

Civic Engagement and Social Responsibility - Students will be able to demonstrate the ability to engage in the social responsibilities expected of a community member.

Communication - Students will be able to demonstrate appropriate and effective interactions with others to achieve their personal, academic, and professional objectives.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.



Create tables.  
Query multiple tables using simple joins.  
Query multiple tables using inner and outer joins.  
Use stored procedures.  
Demonstrate how stored procedures can prevent security breaches.

**10. Implement CRUD (Create, Read, Update, Delete) operations.**

**Learning Objectives**

Apply database CRUD (Create, Read, Update, Delete) operations from the web application.  
Utilize GET and POST methods in your programs.

**11. Create dynamic websites.**