

# COMPUTER & OFFICE STUDIES, WEB DEVELOPMENT (COSW)

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## **COSW 10 4 units**

### **Beginning Website Development**

#### **72 hours lecture**

Recommended Preparation: COSA 1.

Grading: letter grade or pass/no pass.

Formerly CBIS 207AD and CBIS 211AD and COSW 10AD. This course introduces the fundamental skills needed to design, develop and publish websites using industry standard software. Students will create websites by coding in HTML and CSS and incorporate web design principles such as site planning, usability and accessibility standards. Topics covered include formatting text, creating hyperlinks, building navigation menus, inserting images and other media, creating tables, creating forms, using CSS for layout and design, and understanding the purpose of responsive web development. Students should have completed a basic computer concepts course such as COSA 1 as preparation for this course.

Transferable to CSU Only

## **COSW 20 4 units**

### **Front End Website Development**

#### **72 hours lecture**

Recommended Preparation: COSW 10.

Grading: letter grade.

Formerly CBIS 207E. This course develops knowledge in modern front-end web development skills including intermediate level HTML/CSS, mobile websites, responsive web development, CSS frameworks, jQuery, accessibility, usability and emerging web development trends/tools. Students are encouraged to have a basic knowledge of web development from COSW 10 or equivalent in preparation for this course.

Transferable to CSU Only

## **COSW 30 4 units**

### **Web Development with PHP/MySQL**

#### **72 hours lecture**

Recommended Preparation: COSP 38 and COSW 10.

Grading: letter grade or pass/no pass.

Formerly COSW 220. This course covers PHP & MySQL, one of the most popular technology combinations for developing interactive Web sites. It is designed to provide students with a real-world experience in developing database driven website programming concepts for personal and small business needs. Students write PHP code to interact with data stored in a database including record creation, update, deletion and retrieval. Emphasis will be placed on creating web forms, searching databases, and session management. It is recommended that students enter this course with beginning knowledge of Web development concepts including HTML and CSS.

Transferable to CSU Only

## **COSW 200 4 units**

### **Introduction to JavaScript**

#### **72 hours lecture**

Recommended Preparation: COSW 10.

Grading: letter grade or pass/no pass.

This course provides an introduction to client-side programming using JavaScript; including variables, data types, control structures, arrays, functions, event handlers, objects, and form validation. Students will learn through real-world projects and gain experience working with the DOM, AJAX, JSON, and explore popular JavaScript frameworks.

## **COSW 230 4 units**

### **Web Development Frameworks**

#### **72 hours lecture**

Recommended Preparation: COSW 10 and COSW 200.

Grading: letter grade or pass/no pass.

Formerly CBIS 430. This course is an introduction to modern web development frameworks and is intended for students with prior web development knowledge. Students will learn a web development framework, programming concepts, syntax and data management. Installation and setup, unit testing, structure of the web development framework, debugging tools, module/component creation, application deployment, and code repositories will be covered. Students should have working knowledge of at least one programming language (preferably JavaScript) and have an intermediate level of understanding of HTML and CSS as preparation for this course.

## **COSW 240 3 units**

### **Intro to Content Management Systems**

#### **54 hours lecture**

Recommended Preparation: COSW 10.

Grading: letter grade or pass/no pass.

Students will create and manage websites using popular web-based content management systems (CMS) such as WordPress, Drupal, and/or Joomla. This course introduces fundamental concepts of CMS administration including installation, setup, management of user accounts, and security. Students will design a site, create navigation, integrate with social media, publish diverse content, and optimize content for search engine optimization (SEO) purposes.