

Course Objectives/Course Outline
Spokane Community College

Course Title: Responsive Website Design

Prefix and Course Number: CIS 130

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Implement responsive CSS techniques
- Use Flexbox to layout components of an application or create small-scale layouts
- Create complex responsive designs using CSS Grids
- Implement a Front-end Framework

Course Outline:

- I. Responsive Design Techniques
 - A. Media Queries
 - B. Responsive Units (rem, em , %, vw)
 - C. Responsive Typography
 - D. Responsive Images
 - E. Responsive navigation
 - F. Border box
 - G. Pseudo elements
 - i. Clearfix
 - ii. Inserting content
 - iii. Positioning Usage (z-index)
 - H. Calc()
 - I. CSS Variables (:root)
- II. Float Layouts
 - A. History of float layout
 - B. Float behavior
 - C. Using containers, rows and columns
 - D. Breakpoints for layout changes
- III. Flexbox
 - A. Purpose of Flexbox
 - B. Flex Container
 - C. Flex Flow Direction
 - D. Flex Line Wrapping
 - E. Display Order
 - F. Flexibility
 - G. Alignment

IV. CSS Grids

- A. Purpose of CSS Grids
- B. Grid Layout
- C. Setting up a Grid
- D. Auto Grid Features
- E. Grid Shorthand
- F. Name Grid Lines and Grid Areas
- G. Auto, Fractional Unit and Overlapping/Layering Items
- H. Grid Layout and Box Alignment

V. Responsive Front-end Framework

- A. Installing and Configuring
- B. Grid Structure
- C. Navigation
- D. Theming
- E. jQuery Plugins

VI. Project Planning

- A. Design Theory
- B. Annotated Wireframes
- C. Responsive Website Wireframe