

**HOSTOS COMMUNITY COLLEGE
DEPARTMENT OF MATHEMATICS
AND COMPUTER SCIENCE**

CST 230: INTRODUCTION TO WEB PROGRAMMING

Credit Hours: 3.0

Lab Hours: 2.0

Class Hours: 2.0

Prerequisite: CSC 140

Corequisite: CSC 215

Course Description:

This course focuses on how to design and maintain interactive and dynamic Web sites using HTML, Cascading Style Sheets (CSS) and client-side scripting with JavaScript. The goal is to develop dynamic, effective, and pleasing Web sites. The students will learn JavaScript programming, the JavaScript Data Object Model (DOM), JavaScript event handlers; and how to integrate JavaScript programs in a HTML document. Students will apply this knowledge to create Web sites that include pop-up windows and scrolling messages, as well as to validate forms and enhance the Web pages with the use of images and form objects.

Required Text:

Introduction to Web Development Using HTML5, Kris Jamsa, Jones and BartlettPublisher, ISBN: 978-1-4496-8654-3

HTML and JavaScript BASICS 4th Ed., by Barksdale & Turner, Cengage Technology, ISBN: 978-0-538-74235-1

Grades: A, A-, B+, B, B-, C+, C, D, F

Course Objectives:

This course is an introduction to creating web pages using HTML and JavaScript. This course will allow students to gather information, design, and upload their web pages to a web server.

The student will get an understanding of what is client-side scripting. An emphasis will be placed on creating forms using the various text fields such as checkbox, option box, text box, password, and doing form validation.

Specific objectives for the course are:

- To understand the structure of a web page using HTML5.
- To understand how to design a web page.
- To understand and implement web page form validation.
- To understand and employ Cascading Style Sheets
- To understand and use JavaScript in creating webpages.
- To create webpages utilizing the skills presented in class.

Student Learning Outcomes:

1. Students will demonstrate proficiency using various HTML tags to embed videos, audio, images, lists, and tables and create static web pages.
2. Students will demonstrate proficiency in creating consistent navigation to be able to transition from one page to another or within the same Web page.
3. Students will demonstrate proficiency in identifying different styles for HTML tags and creating styled pages using CSS.
4. Students will demonstrate proficiency in writing JavaScript code using decision statements, looping statements, images, arrays, functions, and events handling.
5. Students will demonstrate proficiency in creating forms and checking for data accuracy and web sites deployment.

Course Outline:

Week	Topics-HTML 5	Reading
1	HTML5 textbook - Getting Started with HTML	Lesson 1
2	Integrating Images	Lesson 2
3	Using Hyperlinks to Connect Content	Lesson 3
4&5	Integrating Audio and Video	Lesson 18
6	Presenting List and Tables	Lesson 4 & 5

7	Introducing Cascade Style Sheets	Lesson 7
8	Styling Content Using Cascade Style Sheets	Lesson 7
9	Advanced CSS	Lesson 8
9	Midterm Project	
10	HTML , JavaScript, and Advanced Internet Technologies BASICS Textbook - Introduction to JavaScript	Lesson 6
11	Using Images with JavaScript	Lesson 7
12	Creating Forms and Form Validation	Lesson 8
13	Continuation of Forms	Lesson 8
14	Third Exam - covering JavaScript	Lesson 18
15	Final Project	