

Online Course Syllabus

CST 2309: Introduction to Web Programming

Instructor Information

Instructor:

Email Address:

Virtual Office: *Blackboard Collaborate Ultra Chat, Zoom, email*

Virtual Office Hours:

BlackBoard Support: Check college website.

Course Prerequisite:

CST1201 – Programming Fundamentals

Technology Prerequisite:

1. This course is conducted totally online. You should have access to a computer and be able to use the Chrome, Firefox, or Internet Explorer browsers.
2. You will need your City Tech email account and should be comfortable using it. The college provides an email account to all students.

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.

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.

Assessment Criteria:

| For the successful completion of this course a student should be able to: | Evaluation methods and criteria |
|---|---|
| 1. Know the basic structure of HTML | 1. Students will use a standard text editor, either Notepad or Notepad++ (open source), to create basic Web pages. |
| 2. Demonstrate an understanding on how to format Web pages | 2. Student will write basic HTML code with tags that format the way text is displayed in a browser and tags that create hypertext links. |
| 3. Learn how to work with images and tables | 3. Students will insert images and tables into Web pages and manipulate size, style, and color of fonts. |
| 4. Demonstrate an understanding of design techniques | 4. Students will create Web pages with different navigation systems working together. |
| 5. Know the basics of JavaScript | 5. Students will create Web page containing JavaScript code containing object-oriented elements such as operators, objects, and methods. |
| 6. Work with images using JavaScript | 6. Students will use graphic images in conjunction with JavaScript events and functions to add visual effects to a Web page. These effects include image rollovers, hyperlink rollovers, cycling ad banners, random image displays, and electronic slide shows. |
| 7. Learn how to create and do form validation with JavaScript | 7. Students will build on the introduction to form presented in chapter 3. Students will demonstrate how JavaScript can be used to enhance the functionality of HTML forms. Students will create Web pages containing forms and will employ JavaScript to validate user input data. |

General Education Outcomes:

- SKILLS/Inquiry/Analysis: Student will employ logical reasoning.
- SKILLS/Communication: Students will communicate by written, oral, and visual venue.
- Values, Ethics, Relationships: Students will work within teams to build consensus, respect and foster creative thinking. Students will employ ethical responsibility in creating webpages.
- Information Literacies: Gather, interpret, evaluate, and apply information from a variety of resources.

Course Communication:

Blackboard is our course management system. It is strongly commended that you become familiar with the content and resources available for this course. For example, you will find in the left-hand course menu the items Blackboard Help.

Announcements

Announcements will be regularly posted on Blackboard and sent to your City Tech email address as listed.

Discussion Forums - Participation

Participation is essential to doing well in the course. The discussion forums will be considered as part of your participation in the class. At the end of each week, there will be a forum linked to the topic covered. To get full credit for each discussion, you must post a thoughtful, well-written response to the question.

Netiquette:

Netiquette rules for the course:

- Do not dominate any discussion. Give other students the opportunity to join in the discussion.
- Do not use offensive language. Be respectful in responding to each other.
- Be cautious in using Internet language. For example, do not capitalize all letters – may be perceived as shouting.
- Avoid slang language. This could possibly lead to misunderstanding.

Course Participation Policy:

In order to get full credit for participation, you must complete your discussion assignments and lesson assignments – homework.

Required Textbook:

**Introduction to Web Development Using HTML 5, Kris Jamsa, Jones and Bartlett
Publisher, ISBN: 978-1-4496-8654-3**

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

Both may be in a digital format.

Academic Integrity Policy:

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion. The complete text of the College policy on Academic Integrity may be found in the catalog.

Grading Procedure:

| | |
|------------------------|-------|
| Midterm Project | 25% |
| Final Project | 35% |
| First Exam (HTML) | 10% |
| JavaScript Exam | 20% |
| Homework/Participation | 10% |
| | ===== |
| Total | 100% |

Grading Policy:

| Letter Grade | A | A- | B+ | B | B- | C+ | C | D | F |
|---------------|--------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Numeric Grade | 93-100 | 90-92.9 | 87-89.9 | 83-86.9 | 80-82.9 | 77-79.9 | 70-76.9 | 60-69.9 | 59 and below |

Projects:

In lieu of a written exam for the midterm and final, students will be required to do **two major projects**. The first project is the midterm. Students will use all the concepts discussed in the first half of the term to create a **restaurant menu with three (3) linking pages** –

1) introduction page, 2) menu 3) your creative page. The students will be required to use creativity in developing their webpages.

In the final project, students will create a gym website with a required membership form and form validation using HTML 5, JavaScript and Cascade Style Sheets. Students will use their creativity in creating the gym website. **The final project will consist of the following three pages: 1) an introduction page, 2) creating the form with all the elements, and 3) the last page is to validate the form with JavaScript working functions as presented in class.**

The website will include the numerous concepts presented throughout the course.

Assignments/Projects: All assignments are expected to be submitted when due. **Assignments not submitted when due will not receive full credit – reductions will be taken.**

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 | |

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