Coding in HTML and CSS: An Introduction to Web Development and Design

Presented by AcademiaEdge

Teacher: Raghav Sriram (10th)
Assistant Teachers: Avinash Valuveri (10th) Maxwell Ye (10th)

First Class: November 15th, 2020
Contact Email: academiaedgelearning@gmail.com
Phone Number: 317-675-8645

Requirements: Grades 3 and up. But any student may join if interested. Students also must have a personal gmail account to access google classroom and class materials.

About Us:

We are a group of sophomores from Carmel High School with ample coding and web development expertise. As a group, we have developed multiple websites including voicesofcarmel.com, nexedgeinnovations.com, and tutorsedge.com. With these classes, we hope to expand our students' knowledge in web development and inspire them to develop projects of their own.

Class Description:

This class is taught by highschoolers from CHS. This course is an in-depth overview of HTML/CSS and Web Development. There are 16 classes in total, each class 45 minutes long. For this course's final project we will have students create and share a website about themselves. A detailed description of the class syllabus can be found below. All classes are virtual and will be held through google meets. In addition to using google meets we will be using google classroom to submit assignments and google calendar for parents and students to keep track of classes and due dates for assignments. Each class lecture will be recorded and put in a google drive along with the class slides for all students to reference too when doing their assignments.

Students can ask questions at any time during the class and the assistant or teacher will answer them. Additionally, students may message teachers via google classroom or by email and our teachers will respond as soon as possible. In order to give this individualized experience filled with fun projects and assignments guided towards students, classes will be limited to 10-20 students so that teachers can give high-quality attention to each student. Sign up is first come first serve and a waitlist may be created if there is excessive student participation. This course will be guided towards students of grades 6 and up, but any student may join if interested. We can't wait to help your child create their own website!

Syllabus:

First Class Schedule (special):

10 minutes	Introduction to the Class. Downloading Visual Studio Code and other necessary software for HTML and CSS.
15 minutes	Going over basic rules and expectations. Setting up Google Classroom and explaining how we will use it throughout the course. Also showing other resources we will use such as W3 Schools and the class google drive.
15 minutes	First Lesson of the Course! Explaining what HTML and CSS is and it's uses and importance in everyday life. Then diving headfirst into HTML anatomy.
5 minutes	A brief review of what we learned in class. Break for questions or comments. Explaining the homework for the next class.

Second Class Schedule:

3 min	Time for students to join and get ready for the beginning of class. Questions about the content over the last class.
6 minutes	Go over the answers to last week's assignment. Students may ask any questions they had about the answers to the homework at this time
30 minutes	Lesson Time! Overview of paragraphs, headings, and semantics in HTML. We will explain the different tags and how to comment using google slides and interactive examples through Visual Studio Code
6 minutes	Brief summary of what we learned in this week's class. Time for questions about the content learned. Overview of this week's homework and what we expect.

General Class Schedule:

3 min	Time for students to join and get ready. Questions over content of last class.
6 min	Go over the answers to the homework from the previous class.
27 min	Teaching this week's lesson.
6 min	Summary of what we learned in class. Questions about the current class.
3 min	Overview of the homework and what we expect from students.

Course Content

1. First Class
    a. Introduction to HTML/CSS, Visual Studio Code,
    b. Class Resources, Policies, Expectations
2. Basic Elements
    a. Paragraphs, headings, and containers
3. Readability and Semantics
    a. Make code easy for other coders to read
    b. Introduction to elements that have specialized purposes
4. More Complex Elements
    a. Images, links and videos
5. Basic Styling
    a. Decorating text through CSS
6. Preview of Parent/Child, Review of Color
    a. Lists
    b. Different ways to code in color
7. Parent and Child Relationship: Part 1
    a. Nesting and Inheritance
    b. CSS Syntax
8. Parent and Child Relationship: Part 2
    a. Importance and Specificity
    b. CSS Selectors
9. Transitions
    a. Pseudo-class selectors
    b. Buttons
10. External CSS
    a. Organizing files and folders
    b. Inline vs. Embedded vs. External CSS
11. Box Model: Part 1
    a. <Div>
    b. Margins, paddings, width, and height
12. Box Model: Part 2
    a. <Div>
    b. Display and position
13. Tables
    a. Arranging data into rows and columns

14. Forms
    a. Way to collect user input
    b. Information about JS or PHP needed for complete function of forms will be previewed but not taught
15. Final Project: Part 1
    a. Peer Review
16. Final Project: Part 2
    a. Show and Tell

Class Resources

Class Google Drive:
https://drive.google.com/drive/folders/0B_K1VrhwR5FXfjhZbURabXR1M3l0aE5CMWI0OUFEOFUxRjM1R3FRNTlVRFNOVl85NUZjRnM?usp=sharing
Class Google Classroom:
https://classroom.google.com/c/MTQwNDQxODMyNjc0?cjc=nak7pnt
Class Schedule (Google Calendar):
https://calendar.google.com/calendar/u/0?cid=Y2xhc3Nyb29tMTAwNjI5Mjg1NTEzNTYyNDQ2MTc1QGdyb3VwLmNhbGVuZGFyLmdvb2dsZS5jb20
W3Schools HTML:
https://www.w3schools.com/html/
W3Schools CSS:
https://www.w3schools.com/css/default.asp
Visual Studio Code:
https://code.visualstudio.com/download
HostGator:
https://www.hostgator.com/

Rules and Expectations

Classroom Procedures:

Students are to stay muted at all times except if they have a question or when asked to be unmuted. The student may temporarily unmute himself to ask his/her question. Alternatively, if the student would not like to speak in front of the class, then the student may ask his/her question in the Google Meets chat. We encourage students to ask questions and regularly participate in class. Also, we would like students to be respectful to their classmates and teachers.

Students, please do not:
- Eat or drink with your microphone turned on
- Be disrespectful to teachers or other students
- Put inappropriate pictures on your webcam
- Send inappropriate messages in the class chat

Please do:
- Ask questions
- Be attentive
- Be engaged and active throughout the class
- Make sure to have your camera on throughout the class
- Do assignments thoroughly
- Submit assignments before deadline
- Have Fun!

Google Classroom Layout:

Each lesson's recording will be found on google classroom along with the class's slides and notes. Homework assignments will be assigned and submitted via google classroom as well. Students can ask questions through the messaging system in google classroom or via email.

Homework procedures:

Students will be given homework in google classroom via google docs, which will consist of inserting screenshots or short-answer/multiple-choice questions, or google forms. The google forms will mainly be used for knowledge checks, while the google docs will be used for general homework assignments. Each assignment is due 24 hours before the next class to give ample time for teachers to grade students' assignments. Students should send a message or an email if they are unable to turn in their homework by then with a valid explanation of why they will not be able to turn in their homework by the deadline, and the teachers will come up with a possible solution. This also applies to missing a class.