

In the web programming course, high school students and middle school students discover how websites are built and learn the foundational languages and coding techniques of modern web development, including HTML, CSS, and Javascript. Students also explore new capabilities available through the most recent version of the HTML specification, HTML5, and learn the basics of mobile-friendly responsive web design using CSS3. Students are also introduced to content management systems through WordPress. No prior design or coding experience is necessary for this program.

This web programming class for high school students focuses primarily on the coding and development aspects of the web site creation. For students interested in gaining experience with user experience (UX) and visual design for the web, the web design summer course is a great option to take either on its own, or prior to enrollment in this course.



### WEB PROGRAMMING COURSE TOPICS COVERED:

- Building a website with HTML
- Using CSS for style and layouts
- Adding interactivity with Javascript
- Semantic HTML5 elements
- Making a website responsive
- Introduction to WordPress/CMS

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Learn how to use HTML and CSS to make webpages. HTML is the markup language that you surround content with, to tell browsers about headings, lists, tables, etc. CSS is the stylesheet language that you style the page with, to tell browsers to change the color, font, layout, and more. Use HTML & CSS to code layouts with images, text, links, call-to-action buttons, and more.

In this lesson plan, students will be introduced to web page development using HTML and CSS. Starting from building their very first web page, they progress to learn about paragraphs, lists, tables, inserting images, audio and video files and hyperlinking while they work on different hands-on practical do-it-yourself projects, several hands-on programming challenges, and assessment quizzes throughout the course.

This course is ideal for students who are comfortable with text entry. This course will help them transition to HTML and CSS - the web development languages, and adapt to the additional challenges of text-based syntax.

Students who successfully complete this lesson plan will demonstrate a strong mastery of HTML and CSS syntax, as well as the ability to create their own web sites from scratch. They will be able to create web pages for other projects in their academic curriculum, such as book reports, presentations and STEM assignments.

## **TOPICS COVERED**



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#### WEB PROGRAMMING COURSE APPLICATIONS USED

- NotePad++
- Adobe Creative Suite
- WordPress



# BY THE END OF THE WEEK, WEB PROGRAMMING STUDENTS WILL HAVE GAINED:

- Knowledge how websites are built
- Experience with HTML, CSS, and Javascript
- Insight into the opportunities and challenges of a career in web programming
- A final website showcasing their work

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