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**Lesson Plan**

HTML and Website Development

MODULE 12

This **lesson plan** was written for the Florida Public School System DIGITAL INFORMATION TECHNOLOGY (8207310) course. Funded by the Cyber/IT Pathways Program, Cyber Florida, and the Florida Department of Education.

**Digital Information Technology (8207310)**

This Lesson Plan is designed to aid high-quality instruction through the identification of components that support learning and teaching. Each section of this Lesson Plan is modeled after 2022-2023 CTE Standards and Benchmarks for Digital Information Technology (8207310) as published by the Florida Department of Education Student Performance Standards.

HTML and Website Development

# Module Overview

This module will give students the opportunity to increase their web page development skills. Upon completion of this module, students will be able to create a basic web page using HTML, learn how to edit and enhance the appearance of a web page by using CSS and adding images, and explain the advantages and disadvantages of using various editors and converter.

## DIT Textbook Chapter Overview

The *Introduction to HTML and Website Development* chapter in the accompanying DIT textbook supports the conceptual understanding of the content covered in this module*.*

## CTE Standard and Benchmark

**Standard 13.0:** Demonstrate an understanding of basic html by creating a simple web page. The student will be able to:

* **13.01** Create a basic web page.
* **13.02** Use basic storyboarding techniques.
* **13.03** Use basic functions of WYSIWYG editors.
* **13.04** Use basic functions of HTML, DHTML, and XML editors and converters.
* **13.05** Enhance web pages through the addition of images and graphics.

# Continuity

Students will have read all content included in the *Computer Networks* chapterto prepare for the lessons included in this module.

Table 1 Continuity

| **Standard** | **Recommended Previous Lesson/Knowledge** | **This Lesson** | **Recommended Upcoming Lessons** |
| --- | --- | --- | --- |
| 13.01 | Students should read the *Introduction to HTML and Website Development* chapter.  Students should know how to utilize basic word processing commands such as copy and paste.  Students should know how to create HTML tags. | Students will use a computer with Internet access to create and edit a HTML-based web page. | Students will use the knowledge from this lesson to learn future DIT modules. |
| 13.02 | Students should read the *Introduction to HTML and Website Development* chapter.  Students should know how to utilize basic word processing commands such as copy and paste. | Students will use the storyboarding technique to plan the contents and appearance of their web page. | Students will use the knowledge from this lesson to learn future DIT modules. |
| 13.03 | Students should read the *Introduction to HTML and Website Development* chapter.  Students should know how to utilize basic word processing commands such as copy and paste. | Students will use a WYSIWYG editor (Google Site) to create a web page. | Students will use the knowledge from this lesson to learn future DIT modules. |
| 13.04 | Students should read the *Introduction to HTML and Website Development* chapter. | Students will use a HTML and DHTML to edit a web page that enhances visitors’ interaction with the web page. | Students will use the knowledge from this lesson to learn future DIT modules. |
| 13.05 | Students should read the *Introduction to HTML and Website Development* chapter.  Students should know how to create HTML tags. | Students will use a HTML and DHTML to insert images and other elements to enhance the appearance of their web page using HTML tags. | Students will use the knowledge from this lesson to learn future DIT modules. |

# Student Learning Outcomes

**Standard 13.01**

Students will be able to create and edit a web page using HTML and DHTML.

**Standard 13.02**

Students will be able to use the storyboard technique in the planning phase of creating their web page.

**Standard 13.03**

Student will be able to use a WYSIWYG editor to create a web page.

**Standard 13.04**

Student will be able use HTML, DHTML, and XML editors and converters.

**Standard 13.05**

Student will be able to enhance a web page with images and graphics.

# Materials Needed

All activities require a computing device for each student with Internet access, and Notepad ++ installed on the computing device. A computing device can include a personal computer, laptop, smart phone, or tablet.

# Use of Space

Activities associated with standards will require a classroom space that includes computing devices. If the space does not have computing devices, the teacher can consider the use of student personal devices (ex. smart phones, tablets, laptops). If the student does not have a computing device, the teacher can consider using a device for class demonstration purposes. For instance, the teacher could use their own school-supplied or personal computing device to demonstrate to all students. Consideration should also be given to where furniture and students are placed within the classroom to accommodate diverse needs.

# Prepare for the Lesson

Table 2 shows how the teacher and students should prepare for this lesson.

Table 2 Preparations

| **Teacher** | **Student** | **Assessment/Assignment** |
| --- | --- | --- |
| The teacher should read the *Introduction to HTML and Website Development* chapter*.*  The teacher should be proficient with using HTML and CSS. The teacher should know how to create a website using Google Sites.  The teacher should consider if a computing device should be used for instruction if computer devices are not available for all students.  The teacher should read the chapter case and consider how to receive feedback from the students. | The student should read the *Introduction to HTML and Website Development* chapter and study all terms.  Students should practice creating HTML tags before completing the student activities. | Worksheets will assess the student’s ability to perform the activities in class.  The teacher will review the chapter case in class. The teacher will conduct a verbal discussion to solicit student responses and participation. Students will be assessed on the chapter case based on their written responses to the chapter case questions and in-class discussion.  An answer key and/or rubric is provided for all student activities. |

# Activities

Table 3 shows the student workload effort for each activity in this module.

Table 3 Student Activities and Workload

| **Activity** | **Description** | **Estimated Student Completion Time** | **DIT Standard Alignment** |
| --- | --- | --- | --- |
| A Simple Word Web Page | Student creates a basic web page using Microsoft Word.  Student compares the type of files that were created with the Microsoft Word web page vs the HTML/Notepad++ web page. | 45 minutes in-class activity | 13.01, 13.04, 13.05 |
| My Favorite City Website | Student use Google Sites to create a website about their favorite city or a city they would like to visit. | 45 minutes in-class activities x 4-5 classes | 13.01, 13.02, 13.03, 13.04, 13.05 |
| My Favorite Apps Web Page | Student creates a web page about their favorite apps.  Student edits and creates HTML/DHTML code to enhance the appearance of their web page. | 45 minutes in-class activities x 4-5 classes | 13.01, 13.04, 13.05 |
| My Resume Web Page | Student copies code for their resume web page.  Student edits their resume web page by adding their personal information. | 45 minutes in-class activities x 3-4 classes | 13.01, 13.04 |
| Student Interest Form Web Page | Student copies code for the student interest form web page.  Student edits the form by adding HTML code for radio buttons. | 45 minutes in-class activity | 13.01, 13.04 |
| Chapter Case: Wrenley Saves the Pets | Student reviews the case from the *Introduction to HTML and Website Development* chapter and answers critical thinking questions. | 45 minutes in-class activity | 13.02 |

# Assessments

The teacher may use various informative assessments to check students’ understanding of HTML and CSS during and after teacher demonstrations before the students complete the individual student activities in the module.

Additionally, the teacher will evaluate the student’s critical thinking ability as they work in the chapter case. The teacher will use the assessment for formative purposes and will provide feedback on the accuracy of the student’s response and on means to promote student success.

The teacher will score assignments on a scale of 1-4 measuring the level of understanding the student is able to communicate about the subject.

# Accommodations

Please adhere to the [Florida Department of Education (2018) Accommodations Assisting Students with Disability Guidelines](https://www.fldoe.org/core/fileparse.php/7690/urlt/0070069-accomm-educator.pdf).

To reduce anxiety while completing activities, provide students with support while completing their assignments and sufficient time to complete their assignments in class.

Students can be encouraged to work with a peer to identify appropriate responses for the chapter cases.