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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | |
| **Lesson Identification and TEKS Addressed** | |
| **Career Cluster** | Information Technology |
| **Course Name** | Web Technologies |
| **Lesson/Unit Title** | Designing A Web Page Layout with a Bitmap & Vector Graphic Editor |
| **TEKS Student Expectations** | **130.308. (c) Knowledge and Skills**  (7) The student demonstrates and employs knowledge of Internet programming strategies to develop and maintain web applications.  (A) The students are expected to explain the importance of Internet programming standards  (B) The students are expected to differentiate among various web coding standards such as HyperText Markup Language, and cascading style sheets  (C) The students are expected to use standard applications to develop web applications such as text-based editing programs, word processors, and web authoring software  (D) The students are expected to compare and contrast the impact of different browsers on web development |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | |
| **Instructional Objectives** | **Performance Objective:**  Upon completion of the lesson, students will understand the basic format and structure of cascading style sheets and learn how to create containers and position them onto a webpage.  **Specific Objectives:**   * Students will understand how style sheets can enhance a web page. * Students will understand the benefits of using style sheets. * Students will be able to create and position content containers onto a web page. |
| **Rationale** | It is critical that students understand the basic format and structure of cascading style sheets and how to create containers and position them onto a webpage. |
| **Duration of Lesson** | 3 hours |
| **Word Wall/Key Vocabulary**  *(ELPS c1a,c,f; c2b; c3a,b,d; c4c; c5b) PDAS II(5)* |  |
| **Materials/Specialized Equipment Needed** | **Equipment Needed:**   * Computer with a text editor and a web browser for each student   **Materials Needed:**   * Printouts of the CSS Activity * Printout of the presentation * Quiz following the activity |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | 1. Start out by showing the student ***example.htm*** in the browser with the style sheet link removed. Explain that the page is without style and only contains the html structure and content. The idea of Cascading Style Sheets is to separate style and design layout from structure and content.  2. Next, display the code for the page and attach the ***example1.css*** style sheet to the page.  3. Refresh the browser and explain how the style sheet controls the look of the site. Also, explain that the style and layout are defined in a separate page; it only needs to be done once and can be attached to all the pages of their sites. |
| **Direct Instruction \*** | I. Introduction to style sheets  A. What style sheets are used for and their purpose  B. Benefits of using style sheets  C. How style sheets are used with web pages  II. Style sheet structure  A. Structure of the style rule  B. Property groups  C. Multiple styles on a single rule  III. Applying style sheets   1. External style sheets 2. Embedded style sheets 3. Inline style sheets   IV. Positioning content   1. Absolute positioning 2. Relative positioning   V. Students complete hands-on labs on their own  A. Incorporating the imbedded style sheet on a web page  B. Incorporating the external style sheet om a website  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Guided Practice \*** | The instructor will present the presentation while students follow along taking notes and completing the example shown in the slides.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Each student should be provided with a copy of the CSS Activity. The students should create the web page and style sheet described in the activity.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Lesson Closure** | |  | | --- | | Following the activity, the instructor should discuss any difficulties students had. | | The instructor should also ask students why using style sheets to | | control layout might be a more efficient method of web design. | |
| **Summative/End of Lesson Assessment \*** | The instructor should check the completed CSS Activity for each student, verifying both the appearance in the browser as well as the code usage.  The instructor should give the students a short quiz following the lesson.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **References/Resources/**  **Teacher Preparation** | **Instructional Aids:**   * Beginning CSS Presentation * Student Files Folder * CSS Activity * CSS Lesson Quiz & Key   **References:**   * Using your favorite web browser, perform a search on “cascading style sheet tutorials” or   “beginning cascading style sheets”. |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** | |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy**  **Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** |  |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication**  **90 Second Speech Topics** |  |
| **Other Essential Lesson Components** | |
| **Enrichment Activity**  (e.g., homework assignment) | Students can locate websites online that use table layouts, and they could attempt to recreate the same layout using style sheets. |
| **Family/Community Connection** |  |
| **CTSO connection(s)** | SkillsUSA, TSA |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)