| 1  | TUISD - TEKS Tracker   |              |                                  |                            |                     |
|--|--|--------------|----------------------------------|----------------------------|---------------------|
| Author Tracy Clanton-Smith   | Submission Date/   |              |                                  |                            |                     |
| Evaluator  | Evaluation Date/   |              |                                  |                            |                     |
| TTII   | Course: Web Design v.1.0 (TAWEBDN)   |              |                                  |                            |                     |
|  | esign (One Credit), Beginning with School Yea  | ar 2012-2013 |                                  |                            |                     |
|  |  |              |                                  |                            |                     |
| Web Development & Design Foundation  | ons with HTML5 (6th Edition) by Terry Felk   | ke-Morris Pe | earson Publishing                | g [ISBN 13#: 978-0-:       | L3-278339-2]        |
| TEKS Requirement (Secondary)   |  | Sem. B       | Lesson &<br>Assignment<br>Number | Textbook<br>Chapter/Page # | Bloom's<br>Taxonomy |
| §126.47. Web Design (One Credit), Begin  | ning with School Year 2012-2013.   |              |                                  |                            |                     |
| <ul><li>(a) General requirements. Students shall be completion of this course. This course is rec</li><li>(b) Introduction.</li></ul>  |  |              |                                  |                            |                     |
| (e) mireduction  |  |              |                                  |                            |                     |
| (1) The technology applications curriculum Educational Technology Standards for Studieveloped by the International Society for T and innovation; communication and collaboritical thinking, problem solving, and decist technology operations and concepts. This is (2) Statements that contain the word "including mastered, while those containing the phrase illustrative examples. | ents (NETS•S) and performance indicators Cechnology in Education (ISTE): creativity ration; research and information fluency; ion making; digital citizenship; and an introductory course in web design.  ding" reference content that must be |              |                                  |                            |                     |
| (c) Knowledge and skills.  |  |              |                                  |                            |                     |
| (1) Creativity and innovation. The student of knowledge, and develops innovative product student is expected to:   |  |              |                                  |                            |                     |
| (A) demonstrate proficiency in local and on  | lline collaboration;   |              |                                  |                            | Apply               |
| (B) create a website using web editors and   | web authoring programs;  | В            | All Units                        | Ch. 2-14                   | Create              |
| (C) evaluate the accessibility and usability audience;   | of an original website as it relates to a target   |              |                                  |                            | Evaluate            |
| (D) conceptualize new possible technologie   | es based on current technical trends;  |              |                                  |                            | Apply               |
| (E) analyze the use of virtualization such as storage, and a virtual operating system;   | s virtual classrooms, distance learning, virtual   | В            | Unit 3                           | Ch. 10                     | Analyze             |
| (F) demonstrate knowledge and appropriate applications, and communication and netwo  |  |              |                                  |                            | Apply               |
| (G) make decisions regarding the selection, consideration its quality, appropriateness, ef   | acquisition, and use of software, taking into fectiveness, and efficiency.   | В            | Unit 5                           | Ch. 12                     | Apply               |
| to communicate and work collaboratively, in<br>learning and contribute to the learning expension   | rience of others. The student is expected to:  |              |                                  |                            |                     |
| <ul> <li>(A) analyze and implement the proper and a<br/>communications technologies such as instannetworking;</li> </ul>   |  | В            | Unit 5                           | Ch. 12-13                  | Analyze             |
| (B) define and implement the acquisition, s consideration their primary ownership and c  |  | В            | Unit 4                           | Ch. 11                     | Apply               |
|  | acquisition, and sharing of uniform resource   | В            | Unit 3                           | Ch. 10                     | Apply               |
| (D) solve problems using critical-thinking s   | strategies; and  | В            | All Units                        | All                        | Apply               |
| (E) compare, evaluate, and implement the u   |  | В            | Unit 6                           | Ch. 7                      | Evaluate            |
| (3) Research and information fluency. The  | student applies digital tools to gather,   |              |                                  |                            |                     |

| (A) verify the accuracy, validity, and currency of acquired information;   | В   | All          | All     | Evaluate   |
|--|-----|--------------|---------|------------|
| (B) conduct effective searches with Boolean operators;   | В   | Unit 5       | Ch. 13  | Apply      |
| (C) acquire and use appropriate vocabulary terms;  | В   | All Units    | All     | Apply      |
| (D) cite sources appropriately using established methods;  | В   | Unit 4       | Ch. 11  | Understand |
| (E) model ethical and legal acquisition of digital information following guidelines in the   | D   |              |         |            |
| student code of conduct, including plagiarism and copyright laws;  | В   | Unit 4       | Ch. 11  | Apply      |
| (F) identify and discuss emerging technologies and their impact;   |     |              |         | Understand |
| (G) understand Internet history and structure and how they impact current use;   |     |              |         | Understand |
| (H) demonstrate appropriate use of grammar, spelling, and vocabulary when creating   | В   | All Units    | All     | Apply      |
| original work;   | В   | 7 III CIIIII | 7 111   | търгу      |
| (I) acquire, evaluate, and use various web standards such as World Wide Web  |     |              |         |            |
| Consortium (W3C), Ecma International, and Internet Corporation for Assigned Names  |     |              |         | Evaluate   |
| and Numbers (ICANN) to make informed decisions and implement standards in original work;   |     |              |         |            |
| (J) understand, analyze, and use interactive websites;   | В   | All Units    | All     | Analyze    |
| (K) understand, evaluate, and determine the appropriate use of dynamic and static  |     |              |         |            |
| websites;  | В   | Unit 5       | Ch. 13  | Evaluate   |
| (L) understand, evaluate, and determine the appropriate use of open/closed source file   |     |              |         | Б 1 .      |
| formats and software;  |     |              |         | Evaluate   |
| (M) explain and demonstrate how search engines work such as advanced options,  | В   | Unit 5       | Ch. 13  | Apply      |
| preferences, advertising, and search categories;   | ь   | Onit 3       | CII. 13 | Apply      |
| (N) evaluate, create, and apply principles of project management, including web  |     |              |         |            |
| storyboards, site maps, job duties, time constraints, group dynamics, communication  | В   | Unit 3       | Ch. 10  | Create     |
| interaction, and project completion, evaluation, and feedback;   |     |              |         | A 1        |
| (O) understand the use and application of a virtual private network (VPN);   |     |              |         | Apply      |
| (P) distinguish among protocols, including Hypertext Transfer Protocol (HTTP) and File Transfer Protocol (FTP);  |     |              |         | Understand |
| (Q) summarize the technical needs of a World Wide Web server, including random   |     |              |         |            |
| access memory (RAM), hard disk capacity, central processing unit (CPU) speed, busses,  |     |              |         | Evaluate   |
| methods of connectivity, and appropriate software;   |     |              |         | D'araute   |
| (R) demonstrate proficiency in the use of a variety of electronic input devices such as  |     |              |         |            |
| keyboard, scanner, voice/sound recorder, mouse, touch screen, or digital video by  | В   | All Units    | All     | Apply      |
| incorporating such components while publishing web pages;  |     |              |         |            |
| (S) demonstrate proper digital etiquette and knowledge of acceptable use policies when   |     |              |         | Apply      |
| using networks, especially resources on the Internet and intranets;  |     |              |         | rr J       |
| (T) demonstrate proficiency in and appropriate use and navigation of local area networks (LANs), wide area networks (WANs), the Internet, and intranets for research |     |              |         | A noly     |
| and resource sharing;  |     |              |         | Apply      |
| and resource sharing,  |     |              |         |            |
| (U) construct appropriate search strategies in the acquisition of information from the   | В   | Unit 5       | Ch. 13  | Create     |
| Internet, including keyword searches and searches with Boolean operators; and  |     |              |         |            |
| (V) acquire information in electronic formats, including text, audio, video, and graphics,   | D   | A 11 T Tuite | Cl. 11  | Crasta     |
| citing the source.   | В   | All Units    | Ch. 11  | Create     |
| (4) Critical thinking, problem solving, and decision making. The student uses critical-  |     |              |         |            |
| thinking skills to plan and conduct research, manage projects, solve problems, and make  |     |              |         |            |
| informed decisions using appropriate digital tools and resources. The student is expected  |     |              |         |            |
| to: (A) demonstrate the transfer and adaptation of knowledge through the creation of   |     |              |         |            |
| (A) demonstrate the transfer and adaptation of knowledge through the creation of original work;  | В   | All Units    | All     | Create     |
| (B) evaluate and implement security measures to protect original work such as firewalls  |     |              |         |            |
| and Hypertext Transfer Protocol Secure (HTTPS);  | В   | Unit 5       | Ch. 12  | Evaluate   |
|  | - D | II'. 2       | Cl. 10  | A          |
| (C) analyze and follow timelines needed to create, edit, and present original work;  | В   | Unit 3       | Ch. 10  | Analyze    |
| (D) verify current licensing issues for software being used for the creation of original   | В   | Unit 4       | Ch. 11  | Evaluate   |
| work;  |     |              |         |            |
| (E) identify and evaluate the design and functionality of web pages using rubrics;   | В   | Unit 3       | Ch. 10  | Evaluate   |
| (F) optimize web information for fast download such as dial-up and high speed Internet   |     |              |         | Evaluate   |
| and mobile devices;  |     |              |         |            |

| (G) evaluate original work through self-, peer, and professional review of websites;   | В   | All Projects  | All         | Evaluate   |
|--|-----|---------------|-------------|------------|
| (H) evaluate the types, functions, and target audiences of websites;   |     |               |             | Evaluate   |
| (I) read, use, and develop technical documents;  | В   | All Units     | All         | Create     |
| (J) analyze, examine, assess, and decide on servers as they relate to the management of a  |     |               |             |            |
| website;   | В   | Unit 2        | Ch. 9-10    | Evaluate   |
| (K) analyze, examine, assess, and decide on a web host;  | В   | Unit 3        | Ch. 10      | Evaluate   |
|  | - D | TT 1: 0       | Cl. 10      | P 1        |
| (L) analyze, examine, assess, and decide on domain name acquisition and retention;   | В   | Unit 3        | Ch. 10      | Evaluate   |
| (M) evaluate the functionality of a website such as color scheme, grammar,   |     |               |             |            |
| technological constraints, age appropriateness, cross-platform usability, and user   | В   | Unit 3        | Ch. 10      | Evaluate   |
| relevant criteria as it relates to an intended audience;   |     |               |             |            |
| (N) identify software file formats and their characteristics and appropriate use;  |     |               |             | Understand |
| (O) identify and apply search engine optimization (SEO) to ensure optimal website  | В   | Unit 5        | Ch. 13      | Apply      |
| visibility;  |     | C III C       |             | 1.191.7    |
| (P) investigate and choose electronic security methods for a web server to protect from unauthorized access and negative intentions; and | В   | Units 2, 5    | Ch. 9, 12   | Evaluate   |
| (Q) draw conclusions from data gathered from electronic and telecommunication  |     |               |             |            |
| resources.   | В   | All Units     | All         | Evaluate   |
|  |     |               |             |            |
| (5) Digital citizenship. The student understands human, cultural, and societal issues  |     |               |             |            |
| related to technology and practices legal and ethical behavior. The student is expected to   |     |               |             |            |
| (A) engage in online activities that follow appropriate behavioral, communication, and   |     |               |             |            |
| privacy guidelines, including ethics, personal security, verbiage determined by the  | В   | All Units     | All         | Apply      |
| intended audience, and ethical use of files and file sharing;  |     |               |             |            |
| (B) understand the negative impact of inappropriate technology use, including online bullying and harassment;                            |     |               |             | Understand |
| (C) implement online security guidelines, including identity protection, limited personal  |     |               | ~           |            |
| information sharing, and password protection of a secure website;  | В   | Units 2, 5    | Ch. 9, 12   | Apply      |
| (D) engage in safe, legal, and responsible use of information and technology;  |     |               |             | Apply      |
| (E) understand and respond to local, state, national, and global issues to ensure  |     |               |             | Apply      |
| appropriate cross-browser and cross-platform usability;  |     |               |             |            |
| (F) interpret, use, and develop a safe online shared computing environment;  | В   | Unit 5        | Ch. 12      | Create     |
| (G) identify legal, ethical, appropriate, and safe website marketing practices;  | В   | Unit 3        | Ch. 10      | Analyze    |
| (H) identify legal, ethical, appropriate, and safe multimedia usage, including video, audio, graphics, animation, and emerging trends;   | В   | Unit 4        | Ch. 11      | Analyze    |
| (I) analyze the impact of the World Wide Web on society through research, interviews,  |     |               |             |            |
| and personal observation; and  |     |               |             | Analyze    |
| (J) participate in relevant and meaningful activities in the larger community and society  | В   | All Projuects | Ch. 2-14    | Create     |
| to create electronic projects.   | ь   | All Plojuects | CII. 2-14   | Create     |
| (6) Technology operations and concepts. The student demonstrates a sound   |     |               |             |            |
| understanding of technology concepts, systems, and operations. The student is expected   |     |               |             |            |
| to: (A) demonstrate knowledge of hardware, including scanners, cameras, printers, video  |     |               |             |            |
| cameras, and external hard drives;   |     |               |             | Apply      |
| (B) identify the parts of a computer and explain its functions;  |     |               |             | Understand |
| (C) summarize the need for and functionality and use of servers;   |     |               |             | Evaluate   |
| (D) identify the advantages and disadvantages of running a personal web server versus  | В   | Units 3, 5    | Ch. 10, 12  | Understand |
| using a web server provider;   | ь   | Offits 3, 3   | CII. 10, 12 | Understand |
| (E) differentiate and appropriately use various input, processing, output, and   |     |               |             | Apply      |
| primary/secondary storage devices;   |     |               |             |            |
| (F) create and implement universally accessible documents;   |     |               |             | Create     |
|  |     |               |             | Analyze    |
| (G) analyze bandwidth issues as related to audience, server, connectivity, and cost;   |     |               |             |            |
| (H) establish a folder/directory hierarchy for storage of a web page and its related or linked files;                                    |     |               |             | Create     |
| mined mess,  |     |               |             |            |

| (I) create file and folder naming conventions to follow established guidelines, including spacing, special characters, and capitalization;   |   |              |            | Create  |
|--|---|--------------|------------|---------|
| (J) identify basic design principles when creating a website, including white space, color theory, background color, shape, line, proximity, unity, balance (ratio of text to white space), alignment, typography, font size, type, style, image file size, repetition, contrast, consistency, and aesthetics; | В | Unit 1       | Ch. 8      | Analyze |
| (K) demonstrate knowledge of the six core domains (gov, net, com, mil, org, edu) and be familiar with new domain implementation;   |   |              |            | Apply   |
| (L) implement escape codes, HyperText Markup Language (HTML), cascading style sheets (CSS), and javascript through hard coding, web editors, and web authoring programs;   | В | All Projects | All        | Apply   |
| (M) identify and use FTP client software;  |   |              |            | Analyze |
| (N) implement java applet insertion;   | В | Units 4, 6   | Ch. 11, 14 | Apply   |
| (O) identify and differentiate various network topologies, including physical and logical;   |   |              |            | Analyze |
| (P) create, evaluate, and use web-based animation;   | В | Units 3, 4   | Ch. 10, 11 | Create  |
| (Q) create, evaluate, and use video, including editing, compression, exporting, appropriateness, and delivery;   | В | Unit 4       | Ch. 11     | Create  |
| (R) demonstrate the ability to conduct secure communications from a web server to a client; and  | В | Units 2, 5   | Ch. 9, 12  | Apply   |
| (S) use hypertext linking appropriately when creating web pages.   |   |              |            | Apply   |
| Source: The provisions of this §126.47 adopted to be effective September 26, 2011, 36 TexReg 6263.   |   |              |            |         |