Wyoming Department of Education Required Virtual Education Course Syllabus

BIG HORN COUNTY SCHOOL DISTRICT #1

Program Name	WYCA	Content Area	Vocational Education
Course ID	CAOT78146	Grade Level	9, 10, 11, 12
Course Name	Web Design I B	# of Credits	0.5
SCED Code	10201G0.5022	Curriculum Type	Connections Academy

COURSE DESCRIPTION

Students learn basic website design principles and development languages such as HTML and CSS. Topics include networking, audience, analysis, Internet security, project management, and website navigation. Students utilize the programs GIMP for image editing and Nvu for web development.

WYOMING CONTENT AND PERFORMANCE STANDARDS

STANDARD#	BENCHMARK
CV12.1.1	College and career-ready students evaluate current knowledge and interests in order to set career goals.
CV12.1.3	College and career-ready students prepare an educational and career plan to enable them to gain desired knowledge and experience.
CV12.1.4	College and career-ready students demonstrate employability skills that enable them to be responsible and contributing citizens and employees.
CV12.4.1	College and career-ready students produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (*CCSS W.11.4)
CV12.4.2	College and career-ready students determine the meaning of symbols, key terms, and other content-specific words and phrases as they are used in technical context. (*Adapted from CCSS RL.9.11)
CV12.4.4	College and career-ready students precisely follow a complex multistep procedure when performing technical tasks. (*Adapted from CCSS RL.9.3)
CV12.5.1	College and career-ready students manage resources to develop, analyze, and implement systems and applications.
CV12.5.2	College and career-ready students productively complete tasks taking constraints, priorities and resources into account.
CV12.5.3	College and career-ready students safely and ethically use current industry-standard tools and emerging technologies.
CV12.5.4	College and career-ready students utilize technology to develop innovative solutions or products.

SCOPE AND SEQUENCE

UNIT OUTLINE	STANDARD#	OUTCOMES
Unit 1: Basics of HTML Once a website has been designed and planned out, development of the site can begin. The development of a website starts with HTML code. Though several other types of languages—such as JavaScript, CSS, and PHP—are used to create websites, HTML is the building block on which all sites are based. This module introduces the basics of HTML code.	CV12.1.4, CV12.4.1, CV12.4.2, CV12.4.4, CV12.5.1, CV12.5.2, CV12.5.3	• create a simple web page using basic HTML code •open and edit an HTML document •explain why formatting, capitalization, and spacing are important when writing HTML •describe concerns about HTML formatting •identify the three main tags that identify an HTML page •identify the most common HTML tags and how they are written •explain what attributes are in HTML •use attributes to define specific characteristics of •various elements on an HTML page •create ordered and unordered lists using HTML •use HTML code to create an ordered list that starts with a specific number other than the number 1 •use HTML code to create unordered lists that use a •variety of bullet types •create a simple table using HTML •use attributes to define specific table characteristics in HTML •create space, signs, and symbols in HTML using entities •format an HTML page using CSS •create file and folder naming conventions to follow •established guidelines, including spacing and special characters •define virtual private networking (VPN) •describe how a VPN connection can be used to store website files •describe the benefits of using a VPN connection for •website design •identify how a VPN client connects to the server
Unit 2: Introduction to JavaScript JavaScript is a popular scripting language that can be used with HTML to add functionality and interactivity to a web page. This unit introduces the basics of JavaScript.	CV12.1.4, CV12.4.1, CV12.4.2, CV12.4.4, CV12.5.1, CV12.5.2, CV12.5.3	• explain in your own words what JavaScript is and why and how it is used • define object, property, and method • define event and event handler • define variable, value, and string value • label various parts in a line of script written with dot syntax • add comments to the script on a web page • script a comparison in JavaScript • define a variable in JavaScript • script a conditional statement in JavaScript • explain in your own words what a comparison is used for in JavaScript • explain in your own words what a conditional is used for in JavaScript
Unit 3: Website Images and Videos Since a big part of creating a website involves creating the graphics to be used on it, web developers must be able to use image-editing software. In this module, you will be using GIMP, a free, open-source image-editing software program, to practice a variety of image-editing tasks, such as selecting parts of an image, cropping an image, rotating or transforming an image, or creating a new image altogether. You will also have a chance to learn about locating images that are in the public domain and review copyright laws.	CV12.1.3, CV12.1.4, CV12.4.1, CV12.4.2, CV12.4.4, CV12.5.1, CV12.5.2, CV12.5.3, CV12.5.4	• Name the various image file types that are compatible with the Web • Define resolution • State what size an image should be for use on the Web • Define rollover • Define image map • Explain the copyright laws that apply to the use of images on the Web • Create a new Web-friendly graphic using GIMP • Edit a photograph using GIMP • Use the basic tools in GIMP to edit a graphic • Use GIMP to crop an image • Create, evaluate, and use web-based animation • Use a video camera, smartphone camera, or screencasting app to create a short video • Edit a video using Windows® Movie Maker or Apple iMovie • Save a video using appropriate file formats • Produce and export a video
Unit 4: Using Nvu Rather than write code manually, Web developers often use WYSIWYG (What You See Is What You Get) editors to develop Web sites. One such Web authoring system is Nvu (pronounced "N-view"), a cross-platform, open-source WYSIWYG editor. In this module, you will learn to use Nvu to create, edit, and maintain Web sites.	CV12.1.1, CV12.1.4, CV12.4.1, CV12.4.2, CV12.4.4, CV12.5.2, CV12.5.4	• construct a simple Web site using Nvu • describe the benefits of using the site functions to maintain a Web site • use the basic tools in Nvu to format a Web page, format text, create tables, insert hyperlinks, and insert lists • create a CSS file using Nvu • insert rollovers onto a Web page • insert an image map onto a Web page