ILLINOIS VALLEY COMMUNITY COLLEGE					
		Course Outline			
			DIVISION: Career and Technical Programs		
	and H	ſML	Course:	CSN 1201; Web page Development	
	Date: Feb	oruary	/ 11, 2009		
	Credit Hours:		3		
	Prerequisite(s)	:			
	Delivery Metho	d:	⊠ Lecture	2 Contact Hours	
			Seminar	0 Contact Hours	
			🖂 Lab	2 Contact Hours	
			Clinical	0 Contact Hours	
			Online		
			Blended		
	Offered: 🛛 Fa	all	🖂 Spring	Summer	

IAI Equivalent -Only for Transfer Courses-go to http://www.itransfer.org:

# CATALOG DESCRIPTION:

The major emphasis of this course is to expose the student to the practical applications of the Internet and how the Internet can contribute to the enhancement of personal, family, and professional growth. The main topics of the course include Web page layout, design, and HTML programming. Lecture, two hours per week; lab, two hours per week. (Previous computer and internet experience recommended.)

#### **GENERAL EDUCATION GOALS ADDRESSED**

[See the last page of this form for more information.]

#### Upon completion of the course, the student will be able:

[Choose those goals that apply to this course.]

To apply analytical and problem solving skills to personal, social and professional issues and situations.

To communicate orally and in writing, socially and interpersonally.

- To develop an awareness of the contributions made to civilization by the diverse cultures of the world.
- To understand and use contemporary technology effectively and to understand its impact on the individual and society.
- To work and study effectively both individually and in collaboration with others.
- To understand what it means to act ethically and responsibly as an individual in one's career and as a member of society.
- To develop and maintain a healthy lifestyle physically, mentally, and spiritually.
- To appreciate the ongoing values of learning, self-improvement, and career planning.

#### EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

[Outcomes related to course specific goals.]

#### Upon completion of the course, the student will be able to:

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- 1. Create a basic Web Page
- 2. Add Hypertext Links to a Web Page and what constitutes good linkage in a web page.
- 3. Add color to a Web Page
- 4. Add graphics to a Web Page.
- 5. Create a Web Page with text and graphic tables
- 6. Create a Web Page with frames
- 7. Create a Web Page with forms
- 8. Create a Web Page with marquees, sound and video
- 9. Explain the different types of connections for the World Wide Web
- 10. Use telnet to enhance their knowledge how their data is transmitted

11. Explain the use of Java applets and Javascript in web pages as well as CGI scripts.

12. Explain the basic principles behind good web page design and the people in the organization behind good web page design.

Outcome 1 – Upon successful completion of the course, the student will be able to create a basic web page.

Competency 1.1 – The student will be able to define HTML and explain the syntax used for HTML.

Competency 1.2 – The student will be able to define and use the logical sections of an HTML document.

Competency 1.3 – The student will be able to define a tag, a property, and the values assigned to a property.

Competency 1.4 – The student will be able to use a text editor to create and save a web page in HTML format.

Competency 1.5 – The student will be able to use a browser such as Internet Explorer or Netscape to view their created web page.

Competency 1.6 – The student will be able to view a web page's source code and explain what that source code stands for.

Competency 1.7 - The student will be able to use two-sided tags to enhance their web page; specifically, the <H> tags.

Competency 1.8 – The student will be able to create an ordered list, an unordered list, and a definition list in a web page document using the appropriate tags along with any properties necessary.

Competency 1.9 – The student will be able to explain the difference between a logical character tag and a physical character tag.

Outcome 2 – Upon successful completion of the course, the student will be able to add Hypertext Links to a Web Page

Competency 2.1 – The student will be able to add a basic hyperlink to an external web page using the anchor tag.

Competency 2.2 – The student will be able to add a basic hyperlink to another spot within the same web page using the anchor tag along with the name property.

Competency 2.3 – The student will be able to explain the difference between a linear structure, a hierarchical structure, and a mixed structure of web page organization.

Competency 2.4 – The student will be able to explain the difference between an absolute path and a relative path for web page documents.

Competency 2.5 – The student will be able to define the parts of a URL.

Competency 2.6 – The student will be able to define HTTP.

Competency 2.7 – The student will be able to define FTP and newsgroups.

Competency 2.8 – The student will be able to add a hyperlink to his/her e-mail address.

Outcome 3 – Upon successful completion of the course, the student will be able to add color to a Web Page.

Competency 3.1 – The student will be able to add background color to a web page. Competency 3.2 – The student will be able to explain how color values are determined in hexadecimal format.

Competency 3.3 – The student will be able to add a background image to a web page.

Competency 3.4 – The student will be able to use the body tag with the link and text properties to change the color scheme of a web page.

Outcome 4 – Upon successful completion of the course, the student will be able to add graphics to a web page.

Competency 4.1—The student will be able to explain the difference between an inline image and an external image.

Competency 4.2 – The student will be able to use the image tag to insert a graphic into a web page.

Competency 4.3 – The student will be able use to the align command to position a graphic on a web page.

Competency 4.4 – The student will be able to explain the differences between a jpeg file and a gif file.

Competency 4.5 – The student will be able to add alternate text to a web page for a graphic; to place white space around a graphic; and use the height and width properties to enhance the loading of a graphic onto a web page.

Competency 4.6 – The student will be able to create an image map in conjunction with an image tag and map tags to create hyperlinks in a web page.

Competency 4.7 – The student will be able to explain how an image mapping program can be used to create an image map more efficiently.

Competency 4.8 – The student will be able to explain the difference between a server side and a client side image map.

Outcome 5 – Upon successful completion of the course, the student will be able to create a Web Page with text and graphic tables.

Competency 5.1 - The student will be able to create a text table in a text editor and use the PRE tag to maintain the format of the text table when interpreted by the browser.

Competency 5.2 – The student will be able to create a basic graphic table in a web page using the table, row, and data tags.

Competency 5.3 – The student will be able to create an enhanced graphic table in a web page using cell padding and cell spacing properties.

Competency 5.4 – The student will be able to create table headers in a graphic table in a web page.

Competency 5.5 - The student will be able to create a table caption in a graphic table in a web page.

Competency 5.6 – The student will be able to enhance a table with a border property and alignment property.

Competency 5.7 – The student will be able to determine the size of the table with the height and width properties.

Competency 5.8 – The student will be able to create different column and row layouts in a graphic table by using the rowspan and colspan properties.

Competency 5.9 – The student will be able to design a complete layout for a web page using the table tags.

Outcome 6 – Upon successful completion of the course, the student will be able to create a Web Page with frames.

Competency 6.1 - The student will be able to define what a frame is.

Competency 6.2 – The student will be able to explain how web page frames are displayed differently in different browsers.

Competency 6.3 - The student will be able to use the frameset tag in an HTML file. Competency 6.4 - The student will be able to define the size of the frames in the frameset definitions.

Competency 6.5 – The student will be able to nest frameset tags.

Competency 6.6 – The student will be able to use the properties source, scrolling, and margins in a web page document.

Competency 6.7 – The student will be able to specify a link target for frame hyperlinks.

Outcome 7 – Upon successful completion of the course, the student will be able to create forms in a web page document.

Competency 7.1 – The student will be able to define the types of forms that can be inserted into a web page document

Competency 7.2 – The student will be able to be able to explain the submit and reset buttons on a web page document.

Competency 7.3 – The student will be able to create an input box into a web page document using the button, checkbox, radio, and text properties.

Competency 7.4 – The student will be able to create a submit button in a web page document that contains a form.

Competency 7.5 – The student will be able to create a selection list in a web page document.

Competency 7.6 – The student will be able to use the MAILTO action in a web page document.

Outcome 8 – Upon successful completion of the course, the student will be able to create a Web Page with marquees, sound and video.

Competency 8.1 – The student will be able to insert an inline media clip in a web page using the embed tag.

Competency 8.2 – The student will be able to explain the difference between a way, snd, au, and real audio file.

Competency 8.3 – The student will be able to use the properties width, height, loop, and autostart when inserting an audio file.

Competency 8.4 – The student will be able to define the video formats avi, mpeg, and QuickTime.

Competency 8.5 – The student will be able to create a web page with a marquee.

Outcome 9 – Upon successful completion of the course, the student will be able to explain the different types of connections for the World Wide Web.

Competency 9.1 – The student will be able to explain the different types of internet connections; i.e, dial up, ISDN, DSL, or T1.

Competency 9.2 – The student will be able to figure the download time of web pages for the different types of connections.

Competency 9.3 – The student will be able to explain how to reduce the size of certain graphics/pages to reduce the download time.

Outcome 10 – Upon successful completion of the course, the student will be able to use telnet to enhance their knowledge how their data is transmitted.

Competency 10.1 – The student will be able to use the nslookup command to find the IP address of a web server.

Competency 10.2 – The student will be able to use the traceroute command to find the route a web page takes from the server to their current machine.

Competency 10.2 – The student will be able to use the ping command to find the length of time a packet takes to get from one machine to another.

Outcome 11 – Upon successful completion of the course, the student will be able to explain the use of Java applets and Javascript in web pages as well as CGI scripts. Competency 11.1 – The student will be able to define a Java applet, Javascript, and CGI script.

Competency 11.2 – The student will be able to find examples in current web pages of a Java applet, Javascript, and CGI script.

Outcome 12 – Upon successful completion of the course, the student will be able to explain the basic principles behind good web page design and the people in the organization behind good web page design.

Competency 12.1 – The student will be able to compose a web page that incorporates good web page design principles.

Competency 12.2 – The student will be able to explain the principle players and their roles in web page design and creation.

Competency 12.3 – The student will be able to give a presentation of their web page and give the rationale for the links incorporated in their web page, as well as giving a rationale and purpose for the entire site.

Competency 12.4 – The student will be able to use the web for research on and presentation of good web page principles and HTML research.

# COURSE TOPICS AND CONTENT REQUIREMENTS:

Introduction to World Wide Web Presentations

Idea Generation for Web Pages

Types of connections for the internet – dial up, ISDN, DSL, wireless, and T1 Connection time for internet connections

Using Telnet to find the route a web page from the server to your computer and the transfer time

Creating a Basic Web page – Logical Parts and Head tags

Creating Lists

Inserting a Graphic

Reducing the size of graphic files

**Creating Anchors** 

Creating Links to a section of a document

Web Page Structures – Linear and Hierarchical

Creating Links between documents Relative vs. Absolute paths Linking to E-mail Defining Color and figuring hexadecimal color numbers for web pages Using color in the background Using the Text Tag with its properties of size, color, face Using the Font tag Creating a background image Gif and jpeg images – inserting them in web pages with the properties size, alignment and spacing Image maps – server side and client Creating Hotspots on graphics Using a mapping program to create image maps Creating a text table Creating a graphic table Enhancing a graphic table with the properties cell spacing, cell padding, alignment, table and cell size, caption and table headers Creating a page layout with a table Creating a frame layout Using the properties of scroll bars, frame margins, and frame resizing within the frame tag Using the target property within the frame tag Creating forms within a web page Working with text input, selection lists, radio buttons, check boxes and submit or mailto action within forms Introduction of JavaScript, Java Applets, and CGI Inserting sound files within a web page – either linked or embedded Creating background sound for a web page Inserting a video file into a web page

# **INSTRUCTIONAL METHODS:**

Lecture Teacher demonstration Class presentations Class projects Class discussions

# **INSTRUCTIONAL MATERIALS:**

Creating Web Pages with HTML – New Perspectives Comprehensive Carey

# STUDENT REQUIREMENTS AND METHODS OF EVALUATION:

Class attendance Completion of assignments Completion of quizzes Class project Capstone web page presentation

90 - 100 = A80 - 89 = B70 - 79 = C60 - 69 = D

#### OTHER REFERENCES

Planning and Designing Effective Web Sites The World Wide Web The 10-Minute Guide to HTML HTML Publishing Bible The Web Page Workbook

Form Revised: 3/2/05