Bachelor of Technical-Vocational Teacher Education
MAJOR IN COMPUTER PROGRAMMING:
WEB DEVELOPMENT 1

COURSE MODULE	COURSE UNIT	WEEK
1	2	3
HTML (Event Attributes, Canvas and Audio / Video DOM)		

CHECKLIST

- ✓ Read course and unit objectives
- ✓ Read study guide prior to class attendance
- ✓ Read required learning resources; refer to unit terminologies for jargons
- ✓ Proactively participate in classroom discussions
- ✓ Participate in weekly discussion
- ✓ Answer and submit course unit tasks

UNIT EXPECTED OUTCOMES (UEOs)

At the end of this unit, the students are expected to:

Cognitive:
1. Classify Event Attributes, Canvas and Audio / Video DOM.
2. Demonstrate HTML Event Attributes, Canvas and Audio / Video DOM.
3. Create a simple webpage or website using HTML.

Affective:
1. Listen attentively during class discussions
2. Demonstrate tact and respect when challenging other people's opinions and ideas
3. Accept comments and reactions of classmates on one's opinions openly and graciously.

Psychomotor:
1. Participate actively during class discussions and group activities
2. Express opinion and thoughts in front of the class

REQUIRED READINGS

HTML Tutorial. (n.d.). https://www.w3schools.com/html/html_intro.asp

STUDY GUIDE

HTML Event Attributes
When a browser reacts on user action, then it is called as an **event**. For example, when you click on the submit button, then if the browser displays an information box.

Following are Event Attributes: (See additional material HTML Event Attributes)
  ➤ Windows Event Attributes - are related for the window object, and it can only be applied with <body> tag.
  ➤ Form Event Attributes - occurs when the user performs some action within the form such as submitting the form, selecting input field, etc. The form events can be used with any element, but these are mainly used with HTML form elements.
  ➤ Keyboard Event Attributes - occurs when a user interacts with the keyboard.
  ➤ Mouse Event Attributes - occurs when a user interacts with the mouse.
  ➤ Clipboard Event Attributes
  ➤ Media Event Attributes - Events triggered by medias like videos, images and audio (applies to all HTML elements, but is most common in media elements, like <audio>, <embed>, <img>, <object>, and <video>).
  ➤ Drag Event Attributes
  ➤ Misc Events

HTML Canvas
The HTML <canvas> element is used to draw graphics on a web page.
The HTML <canvas> element is used to draw graphics, on the fly, via JavaScript.
The <canvas> element is only a container for graphics. You must use JavaScript to actually draw the graphics.
Canvas has several methods for drawing paths, boxes, circles, text, and adding images.

Browser Support

The numbers in the table specify the first browser version that fully supports the <canvas> element.

Element	![Chrome]	![Edge]	![Firefox]	![Safari]	![Opera]
<canvas>	4.0	9.0	2.0	3.1	9.0

A canvas is a rectangular area on an HTML page. By default, a canvas has no border and no content.

The markup looks like this:

```
<canvas id="myCanvas" width="200" height="100"></canvas>
```

Note: Always specify an `id` attribute (to be referred to in a script), and a `width` and `height` attribute to define the size of the canvas. To add a border, use the `style` attribute.

Add a JavaScript

After creating the rectangular canvas area, you must add a JavaScript to do the drawing.
- ➢ Draw a Line
- ➢ Draw a Circle
- ➢ Draw a Text
- ➢ Stroke Text
- ➢ Draw Linear Gradient
- ➢ Draw Circular Gradient
- ➢ Draw Image

HTML Canvas Reference (See additional material HTML Canvas**)**
- ➢ Colors, Styles, and Shadows
- ➢ Line Styles
- ➢ Rectangles
- ➢ Paths
- ➢ Transformations
- ➢ Text
- ➢ Image Drawing
- ➢ Pixel Manipulation
- ➢ Compositing
- ➢ Other

HTML Audio
The HTML `<audio>` element is used to play an audio file on a web page.
The `controls` attribute adds audio controls, like play, pause, and volume.
The `<source>` element allows you to specify alternative audio files which the browser may choose from. The browser will use the first recognized format.
The text between the `<audio>` and `</audio>` tags will only be displayed in browsers that do not support the `<audio>` element.

HTML Video
The HTML `<video>` element is used to show a video on a web page.
The `controls` attribute adds video controls, like play, pause, and volume.
It is a good idea to always include `width` and `height` attributes. If height and width are not set, the page might flicker while the video loads.
The `<source>` element allows you to specify alternative video files which the browser may choose from. The browser will use the first recognized format.
The text between the `<video>` and `</video>` tags will only be displayed in browsers that do not support the `<video>` element.

HTML Audio/Video DOM
The HTML5 DOM has methods, properties, and events for
the `<audio>` and `<video>` elements. (See additional material HTML Audio/Video DOM)

TERMINOLOGIES

BROWSER - a computer program with a graphical user interface for displaying and navigating between web pages.

CLIENT - a program, person or things that are capable of obtaining services provided by another program.

CODING - sometimes called computer programming, is how we communicate with computers.

DOMAIN NAME - refers to your website address. This is what users type in a browser's search bar to directly access your website.

FRAMEWORK - a layered structure indicating what kind of programs can or should be built and how they would interrelate.

FRONT-END - refers to the user interface / client-side, everything with which the user interacts.

HYPERTEXT - a word, phrase or chunk of text that can be linked to another document or text.

HYPERTEXT TRANSFER PROTOCOL (HTTP) - The communications protocol used to connect to Web servers on the Internet or on a local network (intranet).

INTERNET PROTOCOL - a set of rules governing the format of data sent over the internet or other network.

IP ADDRESS (INTERNET PROTOCOL ADDRESS) - a series of numbers that identifies any device on a network.

SEARCH ENGINE - a program that searches for and identifies items in a database that correspond to keywords or characters specified by the user, used especially for finding particular sites on the World Wide Web.

SERVER - a computer or system that provides resources, data, services, or programs to other computers, known as clients, over a network.

WEB PAGES - a hypertext document on the World Wide Web.

WEBSITE - a set of related web pages located under a single domain name, typically produced by a single person or organization.

WIREFRAME - a simplified visual guide that represents the skeletal framework of a website.

WORLD WIDE WEB - an information system on the internet which allows documents to be connected to other documents by hypertext links, enabling the user to search for information by moving from one document to another.

FURTHER READINGS

HTML Tutorial. (n.d.). https://www.w3schools.com/html/html_intro.asp

UNIT TASK

- Proactively participate in classroom discussions
- Answer and submit course unit tasks

REFERENCES

HTML Tutorial. (n.d.). https://www.javatpoint.com/html-tutorial

HTML Tutorial. (n.d.). https://www.tutorialspoint.com/html/index.htm

HTML Tutorial. (n.d.). https://www.w3schools.com/html/html_intro.asp