



Dublin and Dun Laoghaire ETB

Programme Module for

Web Authoring

leading to

NFQ Level 5 QQI Certificate in

Web Authoring 5N1910

Introduction

This programme module may be delivered as a standalone module leading to certification in a QQI minor award. It may also be delivered as part of an overall validated programme leading to a Level 5 QQI Certificate.

The teacher/tutor should familiarise themselves with the information contained in Dublin and Dun Laoghaire ETB's programme descriptor for the relevant validated programme prior to delivering this programme module.

The programme module is structured as follows:

1. Title of Programme Module
2. QQI Component Title and Code
3. Duration in hours
4. Credit Value of QQI Component
5. Status
6. Special Requirements
7. Aim of the Programme Module
8. Objectives of the Programme Module
9. Learning Outcomes
10. Indicative Content
11. Assessment <ul style="list-style-type: none"> a. Assessment Technique(s) b. Mapping of Learning Outcomes to Assessment Technique(s) c. Guidelines for Assessment Activities
12. Grading
13. Learner Marking Sheet(s), including Assessment Criteria

Integrated Delivery and Assessment

The teacher/tutor is encouraged to integrate the delivery of content where an overlap between content of this programme module and one or more other programme modules is identified. This programme module will facilitate the learner to develop the academic and vocational language, literacy and numeracy skills relevant to the themes and content of the module.

Likewise the teacher/tutor is encouraged to integrate assessment where there is an opportunity to facilitate a learner to produce one piece of assessment evidence which demonstrates the learning outcomes from more than one programme module. The integration of the delivery and assessment of level 5 Communications and level 5 Mathematics modules with that of other level 5 modules is specifically encouraged, as appropriate.

Indicative Content

The indicative content in Section 10 does not cover all teaching possibilities. The teacher/tutor is encouraged to be creative in devising and implementing other approaches, as appropriate. The use of examples is there to provide suggestions. The teacher/tutor is free to use other examples, as appropriate. The indicative content ensures all learning outcomes are addressed but it may not

follow the same sequence as that in which the learning outcomes are listed in Section 9. It is the teacher's/tutor's responsibility to ensure that all learning outcomes are included in the delivery of this programme module.

1. Title of Programme Module Web Authoring
2. Component Name and Code Web Authoring 5N1910
3. Duration in Hours 150 Hours (typical learner effort, to include both directed and self directed learning)
4. Credit Value 15 Credits
5. Status This programme module may be compulsory or optional within the context of the validated programme. Please refer to the relevant programme descriptor, Section 9 Programme Structure
6. Special Requirements None
7. Aim of the Programme Module This programme module aims to provide a Learner with the personal knowledge, skills and capacity to understand Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) standards and editors in the construction, testing and maintenance of webpages and sites
8. Objectives of the Programme Module <ul style="list-style-type: none">• To enable the learner to understand the development of the Internet and World Wide Web (WWW) from their inception.• To enable the learner to understand the latest web authoring standards and trends including browser developments and the use of Management Systems.• To enable the learner to acquire the knowledge and skills necessary to build web-page's using both HTML text editors and WYSIWYG editors.• To enable the learner to acquire the skills to plan, design, construct and maintain webpages and a website.• To assist the learner to develop the academic and vocational language, literacy and numeracy skills related to Web Authoring through the medium of the indicative content• To enable the learner to take responsibility for his/her own learning.

9. Learning Outcomes of Level 5 Web Authoring [5N1910]

Learners will be able to:

1. Discuss the development of HTML and CSS to include the evolution of each version of the standards
2. Comment on the use, purpose and attributes of a range of HTML tags and the web browsers that support their use
3. Explore the currently available development and editing tools for generating HTML tags and CSS style sheets
4. Discuss the principles of good website design to include target market, site objectives, navigation solutions, site structure, user interface and access speeds
5. Investigate currently available web authoring tools to include desktop publishing programs, website management systems and webpage builders
6. Discuss the maintenance of evidence for a web authoring project to include documenting relevant research, hardware and software specifications and website evaluation
7. Plan an appropriate design and user interface for a specified website to include documenting each stage of the development process and the selection of an appropriate web authoring tool
8. Employ HTML tags in the construction of web pages and sites for an identified audience that conform to W3C standards and correspond to a given design
9. Use CSS in the construction of web pages and sites for an identified audience that conforms to W3C standards and correspond to a given design
10. Test website functionality to include an examination of browser compatibility and the resolution of any functional issues encountered during testing
11. Recommend a course of action for the future upgrading, maintenance and testing of a website
12. Employ HTML and CSS code generators and evaluate their merits
13. Work independently to design, implement and maintain webpages independent of ISPs and web browsers
14. Apply the principles of good website design in the creation of web pages and web site

10. Indicative Content

This section provides suggestions for programme content but is not intended to be prescriptive. The programme module can be delivered through classroom based learning activities, group discussions, one-to-one tutorials, field trips, case studies, role play and other suitable activities, as appropriate.

1. To enable the learner to discuss the development of HTML and CSS to include the evolution of each version of the standards.

Facilitate the learner to gain a good understanding of HTML and CSS and how they were developed by including:

- A brief history of the internet and the WWW (World Wide Web)
- The difference between the Internet and the WWW
- Understand the term deprecated with relation to HTML
- Understand the different versions of HTML. From HTML 2.0 to the latest version and the features that were and are supported by each. Identify deprecated and non-deprecated tags
- The difference between XHTML and HTML
- Understand the different versions of CSS. From CSS1 to the latest version and the features that were and are supported by each

2. To enable the learner to comment on the use, purpose and attributes of a range of HTML tags and the web browsers that support their use.

Facilitate the learner to identify a comprehensive range of currently used HTML tags and their attributes, to ensure the learner has an understanding of the how HTML tags behave and how they form the structure of a webpage. Students should also understand how different versions of HTML are rendered in the most commonly used web browsers as stated by World Wide Web Consortium W3C. For example:

- Doctype - what it is for and why it is used.
- html - <html>
- Sections of a webpage - <head><body>
- Page title - <title>
- Page paragraphs and sections - <p><div>
- Header elements - <h1><h2><h3><h4><h5><h6>
- formatting elements -
- data tables - <table><tr><th><td><caption>
- lists - , , , <dd>, <dt>, <dl>
- images -

- links - <a>, <link>
 - quotes - <q>, <blockquote>
 - abbreviations - <abbr>
 - meta - <meta>
 - divisions (div tags) - <div>
 - forms - <form>, <input>, <textarea>
 - Special symbols and character entities:
 - Copyright symbol - ©
 - Registered trademark - ®
 - Trademark - ™
 - Ampersand symbol - &
 - Euro sign - €
 - Non-breaking space –
 - Less than - <
 - Greater than - >
3. To enable the learner to explore the currently available development and editing tools for generating HTML tags and CSS style sheets
- Facilitate the Learner to identify the latest industry standard editors available for HTML and CSS. The learner should be able to differentiate between a WYSIWYG and a text editor, for example:
- Adobe Dreamweaver **VS** Notepad
4. To enable the learner to discuss the principles of good website design to include target market, site objectives, navigation solutions, site structure, user interface and access speeds
- Facilitate the Learner to:
- Understand the different target audiences, for example:
 - Designing a website for children **VS** corporate clients
 - Create a site structure and a corresponding site map for example
 - Linear
 - Hierarchy
 - Maxtrix
 - Plan a logical consistent navigational solution
 - Understand the importance of website templates and their role in maintaining site consistency.
5. To enable the learner to investigate currently available web authoring tools to include desktop publishing programs, web-site management systems and webpage builders

Facilitate the learner to identify the leading industry standard tools and what they are used for, for example:

- Adobe Dreamweaver
- Adobe Photoshop
- Adobe Fireworks
- Adobe Flash
- GIMP
- Joomla
- Drupal
- Wordpress

6. To enable the learner to discuss the maintenance of evidence for a web authoring project to include documenting relevant research, hardware and software specifications and website evaluation

Facilitate the learner to be competent in the following:

- Understanding the importance of research for a website including copyright issues of material such as text, images and multimedia from the internet.
- Understand the hardware required to create a website for example:
 - PC or MAC
- Understand what software is required to create a website, for example :
 - TextPad,
 - Adobe Dreamweaver,
 - Adobe Fireworks
 - Adobe Photoshop.

7. To enable the learner to plan an appropriate design and user interface for a specified website to include documenting each stage of the development process and the selection of an appropriate web authoring tool

Facilitate the learner to understand the theoretical process of designing and developing a professional website project. Explore with the learner the following:

- The basic theoretical principles of design and their application to web authoring:
 - Contrast

- Repetition
 - Alignment
 - Proximity
 - Creation of a site structure and a corresponding site map for a specified audience
 - Creation of website template
 - Planning a logical consistent navigational solution for a specified audience.
8. To enable the learner to employ HTML tags in the construction of web pages and sites for an identified audience that conform to W3C standards and correspond to a given design
- Facilitate the learner to understand the steps that should be taken to ensure a website conforms to W3C standards and to correctly use HTML to create webpages for an intended audience by a comprehensive range of currently used HTML tags for example:
- Doctype - what it is for and why it is used.
 - html - <html>
 - Sections of a webpage - <head><body>
 - Page title - <title>
 - Page paragraphs and sections - <p><div>
 - Header elements - <h1><h2><h3><h4><h5><h6>
 - formatting elements -
 - data tables - <table><tr><th><td><caption>
 - lists - , , , <dd>, <dt>, <dl>
 - images -
 - links - <a>, <link>
 - quotes - <q>, <blockquote>
 - abbreviations - <abbr>
 - meta - <meta>
 - divisions (div tags) - <div>
 - forms - <form>, <input>, <textarea>
 - Special symbols and character entities:
 - Copyright symbol - ©
 - Registered trademark - ®
 - Trademark - ™
 - Ampersand symbol - &
 - Euro sign - €
 - Non-breaking space –
 - Less than - <
 - Greater than - >

9. To enable the learner to use CSS in the construction of web pages and sites for an identified audience that conform to W3C standards and correspond to a given design

Facilitate the Learner to explore how to ensure that a web site conforms to W3C standards and the importance of this and to gain a good understanding of CSS enabling them to correctly employ CSS structures to create styles for appropriate HTML tags while designing for an intended audience, illustrating the following:

- Linked, embedded and inline styles and evaluate the advantages and disadvantages of each
- A working knowledge of CSS styling using HTML tags, class and id as selectors.
- Font and text properties: font-family, font-style, font-variant, font-weight, font-size, font, text-decoration, text-decoration, text-align, line-height
- Colour and background properties: color, background-color, background-image, background, url
- Positioning: absolute, relative, static, fixed, float -borders: border, border-color, border-width
- Style -lists: list-style-type, list-style-image -units: %, ems, small / medium / large

Demonstrate an understanding of pseudo-elements

a:link
a:hover
a:active
a:visited

10. To enable the learner to test website functionality to include an examination of browser compatibility and the resolution of any functional issues encountered during testing

Enable the learner to test browser compatibility, resolution and link functionality. The learner will recognise how to identify such issues, for example:

- Understand how to test websites locally using the most popular used browsers

11. To enable the learner to recommend a course of action for the future upgrading, maintenance and testing of a website

Enable the learner to create a set of notes or a maintenance guideline for a potential client to update and maintain a website

12. To enable the learner to employ HTML and CSS code generators and evaluate their merits

Facilitate the learner to be competent in the use of a WYSIWYG and also evaluate the effectiveness of this tool to complete the following :

- Create a new HTML document
- Create a style sheet for that document
- Insert text, images, multimedia tables, forms on a webpage
- Create an organised file management system
- Create an intuitive navigation system
- Create styled links
- Create a custom layout using HTML and CSS

13. To enable the learner to work independently to design, implement and maintain webpages

independent of ISPs and web browsers.

- Facilitate the learner to complete whole webpages using either a WYSIWYG or a HTML editor.

14. To enable the learner to apply the principles of good website design in the creation of web pages and web site

Facilitate the learner to design and develop a professional industry standard website, for a specified target audience, ensuring the learner has a good knowledge of each of the following:

- Practical application of basic principles of design, for web authoring:
 - Contrast
 - Repetition
 - Alignment
 - Proximity
- Create a site structure and a corresponding site map
- Importance of website template
- Plan and create a logical consistent navigational solution.
- Execute a site map and navigational solution.
- Ensure that all content is accurately presented and easy to access.

11. Assessment

11a. Assessment Techniques

Assignment 30%

Project 70%

11b. Mapping of Learning Outcomes to Assessment Techniques

In order to ensure that the learner is facilitated to demonstrate the achievement of all learning outcomes from the component specification; each learning outcome is mapped to an assessment technique(s). This mapping should not restrict an assessor from taking an integrated approach to assessment.

Learning Outcome	Assessment Technique
1 Discuss the development of HTML and CSS to include the evolution of each version of the standards	Assignment
2. Comment on the use, purpose and attributes of a range of HTML tags and the web browsers that support their use	Assignment
3. Explore the currently available development and editing tools for generating HTML tags and CSS style sheets	Assignment or Project
4. Discuss the principles of good website design to include target market, site objectives, navigation solutions, site structure, user interface and access speeds	Project
5. Investigate currently available web authoring tools to include desktop publishing programs, website management systems and webpage builders	Project
6. Discuss the maintenance of evidence for a web authoring project to include documenting relevant research, hardware and software specifications and website evaluation	Project
7. Plan an appropriate design and user interface for a specified website to include documenting each stage of the development process and the selection of an appropriate web authoring tool	Project
8. Employ HTML tags in the construction of web pages and sites for an identified audience that conform to W3C standards and correspond to a given design	Assignment or Project
9. Use CSS in the construction of web pages and sites for an identified	Project

audience that conform to W3C standards and correspond to a given design	
10. Test website functionality to include an examination of browser compatibility and the resolution of any functional issues encountered during testing.	Project
11. Recommend a course of action for the future upgrading, maintenance and testing of a website	Project
12. Employ HTML and CSS code generators and evaluate their merits	Project
13. Work independently to design, implement and maintain webpages independent of ISPs and web browsers	Assignment or Project
14. Apply the principles of good website design in the creation of web pages and web site	Project

11c. Guidelines for Assessment Activities

The assessor is required to devise assessment briefs and marking schemes for the Assignment and the Project. In devising the assessment briefs, care should be taken to ensure that the learner is given the opportunity to show evidence of achievement of ALL the learning outcomes. Assessment briefs may be designed to allow the learner to make use of a wide range of media in presenting assessment evidence, as appropriate. Quality assured procedures must be in place to ensure the reliability of learner evidence.

Assignment	30%
The learner will complete an assignment over a period of no more than 2-4 weeks	
The learner will complete an assignment to include evidence that demonstrates an understanding of the following:	
<ul style="list-style-type: none"> • The development of HTML and CSS to include the evolution of each version of the standards • HTML tags and attributes to include a selection of each of the following: <ul style="list-style-type: none"> • Doctype - what it is for and why it is used. • html - <html> • Sections of a webpage - <head><body> • Page title - <title> • Page paragraphs and sections - <p><div> • Header elements - <h1><h2><h3><h4><h5><h6> • formatting elements - • data tables - <table><tr><th><td><caption> • lists - , , , <dd>, <dt>, <dl> • images - • links - <a>, <link> • quotes - <q>, <blockquote> • abbreviations - <abbr> • meta - <meta> • forms - <form>, <input>, <textarea> • Special symbols and character entities: <ul style="list-style-type: none"> ○ Copyright symbol - &copy; ○ Registered trademark - &reg; ○ Trademark - &trade; ○ Ampersand symbol - &amp; ○ Euro sign - &euro; ○ Non-breaking space – &nbsp; ○ Less than - &lt; ○ Greater than - &gt; • The application of CSS to include elements of each of the following: <ul style="list-style-type: none"> ○ Application of CSS to correspond to a given design ○ A working knowledge of CSS styling using HTML tags, class and id as selectors. ○ Font and text properties: font-family, font-style, font-variant, font-weight, font-size, font, text-decoration, text-decoration, text-align, line-height ○ Colour and background properties: colour, background-colour, background-image, background, url 	

- Positioning: absolute, relative, static, fixed, float -borders: border, border-colour, border-width, border-
- Style - lists: list-style-type, list-style-image - units: %, ems, small / medium / large
- Demonstrate an understanding of pseudo-elements
 - a:link
 - a:hover
 - a:active
 - a:visited

Evidence for this assessment technique may take the form of written, oral, graphic, or digital evidence, or any combination of these (select as appropriate). Any audio, video or digital evidence must be provided in a suitable format.

All instructions for the learner must be clearly outlined in an assessment brief

Project	70%
The project may be produced in a specified time allocated by the assessor throughout the duration of this programme module.	
The learner will complete a project to include evidence that demonstrates an understanding of the following:	
<ul style="list-style-type: none"> ● Planning and preparation to include: <ul style="list-style-type: none"> ○ Identify target market ○ List site objectives ○ Create site map and logical navigation solution ○ Sketching of initial design concepts ○ Identify tools for creation and maintenance of website including <ul style="list-style-type: none"> ■ HTML and CSS ■ Graphics ■ Site uploading ○ Design a user interface for specified target audience to include <ul style="list-style-type: none"> ■ Contrast ■ Repetition ■ Alignment ■ Proximity ● Development of website to include: <ul style="list-style-type: none"> ○ Text ○ Images ○ Multimedia ○ Correct employment of HTML and CSS to include: <ul style="list-style-type: none"> ■ Correct HTML page structure ■ Use of current HTML tags ○ Correct use of CSS to execute planned design of website to include: <ul style="list-style-type: none"> ■ Class and id as selectors ■ Font and text properties ■ Background properties 	

- Positioning; absolute, relative, static, fixed, float
- Borders
- Padding and margins
- Site uploaded to a web server or local server
 - Use of FTP
- Test website functionality
- **Future planning** to include
 - Create maintenance guidelines to include the following
 - Updating text on a webpage
 - Creating a new webpage
 - Inserting and image
 - Creating a link
 - Uploading updated content to a website

Evidence for this assessment technique may take the form of written, oral, graphic, or digital evidence, or any combination of these. Any audio, video or digital evidence must be provided in a suitable format.

All instructions for the learner must be clearly outlined in an assessment brief.

12. Grading

Distinction: 80% - 100%

Merit: 65% - 79%

Pass: 50% - 64%

Unsuccessful: 0% - 49%

At levels 4, 5 and 6 major and minor awards will be graded. The grade achieved for the major award will be determined by the grades achieved in the minor awards.

Web Authoring 5N1910	Learner Marking Sheet Assignment 30%
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Learner's Name: _____

Assessment Criteria	Maximum Mark	Learner Mark
<ul style="list-style-type: none"> • Understanding of the development of HTML and CSS and the evolution of each version of the standards • Understanding and use of HTML tags and attributes, to include a selection of the following: <ul style="list-style-type: none"> • Doctype - what it is for and why it is used. • html - <html> • Sections of a webpage - <head><body> • Page title - <title> • Page paragraphs and sections - <p><div> • Header elements - <h1><h2><h3><h4><h5><h6> • formatting elements - • data tables - <table><tr><th><td><caption> • lists - , , , <dd>, <dt>, <dl> • images - • links - <a>, <link> • quotes - <q>, <blockquote> • abbreviations - <abbr> • meta - <meta> • forms - <form>, <input>, <textarea> • Special symbols and character entities: <ul style="list-style-type: none"> • Copyright symbol - &copy; • Registered trademark - &reg; • Trademark - &trade; • Ampersand symbol - &amp; • Euro sign - &euro; • Non-breaking space – &nbsp; • Less than - &lt; • Greater than - &gt; 	4	
<ul style="list-style-type: none"> • Understanding and application of CSS to include elements of the following: <ul style="list-style-type: none"> ○ Application of CSS to correspond to a given design ○ A working knowledge of CSS styling using HTML tags, class and id as selectors. ○ Font and text properties: font-family, font-style, font-variant, font-weight, font-size, font, text-decoration, text-decoration, 	13	

<p>text-align, line-height</p> <ul style="list-style-type: none">○ Colour and background properties: colour, background-colour, background-image, background, url○ Positioning: absolute, relative, static, fixed, float -borders: border, border-colour, border-width, border-○ Style - lists: list-style-type, list-style-image - units: %, ems, small / medium / large○ Demonstrate an understanding of pseudo-elements<ul style="list-style-type: none">a:linka:hovera:activea:visited		
Total Mark	30	

Assessor's Signature: _____

Date: _____

External Authenticator's Signature: _____

Date: _____

Web Authoring 5N1910	Learner Marking Sheet Project 70%
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Learner's Name: _____

Assessment Criteria	Maximum Mark	Learner Mark
<ul style="list-style-type: none"> ● Planning and preparation to include: <ul style="list-style-type: none"> ○ Identify target market ○ List site objectives ○ Create site map and logical navigation solution ○ Sketching of initial design concepts ○ Identify tools for creation and maintenance of website including <ul style="list-style-type: none"> ■ HTML and CSS ■ Graphics ■ Site uploading ○ Design a user interface for specified target audience to include <ul style="list-style-type: none"> ■ Contrast ■ Repetition ■ Alignment ■ Proximity 	20	
<ul style="list-style-type: none"> ● Development of website to include: <ul style="list-style-type: none"> ○ Text ○ Images ○ Multimedia ○ Correct employment of HTML and CSS to include: <ul style="list-style-type: none"> ■ Correct HTML page structure ■ Use of current HTML tags ○ Correct use of CSS to execute planned design of website to include: <ul style="list-style-type: none"> ■ Class and id as selectors ■ Font and text properties ■ Background properties ■ Positioning; absolute, relative, static, fixed, float ■ Borders ■ Padding and margins ○ Site uploaded to a web server / local server <ul style="list-style-type: none"> ■ Use of FTP ○ Test website functionality 	40	

<ul style="list-style-type: none">• Future planning to include<ul style="list-style-type: none">○ Create maintenance guidelines to include the following<ul style="list-style-type: none">■ Updating text on a webpage■ Creating a new webpage■ Inserting an image■ Creating a link■ Uploading updated content to a website	10	
Total Mark	70	

Assessor's Signature: _____ Date: _____

External Authenticator's Signature: _____ Date: _____