**QUALIFICATION STUDY GUIDE**

ICAWEB506A – Develop complex cascading style sheets

ICAWEB505A – Develop complex web layouts

ICAWEB502A – Create dynamic web pages

Semester 1 2016

**GENERAL INFORMATION**

**Assessment**

TAFE delivers competency based training (CBT) under the National Vet Regulator (NVR) Standards. CBT focuses on the skills and knowledge required to perform tasks and duties to the standard expected in employment. A student who has been assessed as satisfactory for all assessment items in a unit of competency will receive a J result. Students who are assessed as Not Satisfactory for all assessment items after two attempts will receive an M result. Students who partially participate but who do not complete assessment/s will receive an AW result.

**Flexible/Distance Participation**

Students will need to demonstrate participation within the learning activity for each unit/module being studied. You will need to be in regular contact with your teacher to demonstrate your progress and understanding of the content of the unit/module. You may therefore be asked to submit activities or exercises to your teacher and/or to respond to contact from your teacher. Please be aware that no evidence of participation or not achieving competency may affect Centrelink benefits.

**Library**

The library has a full range of services, DVDs, magazines, journals, online catalogue and online resources that may assist you in the completion of your studies. Read more here: xxxx

**My.TAFE**

Students can assess TAFE’s online learning management system my.TAFE as <http://my.tafe.qld.gov.au/>. The username is your student number, and your password is initially emailed on enrolment. Within my.TAFE all students can assess the orientation site and those with online program materials will also see a link to their online program group on the message desktop.

**Orientation**

Students are required to undergo a Student Orientation which covers Occupational Health and safety and important information about studying at TAFE. This may be undertaken in class or in my.TAFE for online students. Student Rules are available on the TAFE Queensland Internet: <http://www.tafe.qld.gov.au/students/rules/index.html>, a Handbook is available for TNQIT and MIIT and a Student Welcome Letter is available for BRIT.

**Recognition of Prior Learning**

Recognition of Prior Learning (RPL) recognises your existing experience grained through life or work for which you may not have obtained a formal qualification. We will work with you to identify your existing skills, and assess if you can then achieve a full or partial qualification. This also helps to avoid unnecessary duplication of training, saving you time and money. More information: xxxx

**Student Self-Service**

To view your progress, including results, and manage your my.TAFE password, visit <http://enrol.tafe.qld.gov.au>.

**Student Support and Access Information**

Free student counselling, equity, disability, learning support, Aboriginal and Torres Strait Islander and International Student Support are available. Read more on our internet site.

GETTING STARTED

## *Welcome*

Welcome to Diploma Web Cluster. We hope that the learning experiences provided to you will be both enjoyable and provide you with the skills to advance your information technology career.

The mode of delivery is classroom sessions supplemented with tutorial activities. Students will be studying via a mixed delivery consisting of face-to-face, web based learning tools, handouts, self-directed learning and various internet resources.

It is an expectation at Diploma level that you have the necessary skills and knowledge before undertaking this course.

If a student attends all scheduled classes and works well during these sessions, it should be possible to complete the cluster without an excessive need of home computing equipment and resources. However, students will still be required to do study and research in their own time. Extra facilities are available at both the City campus and Pimlico campus library.

## *Contact Details*

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**ICAWEB505A Develop complex web page layouts**

**Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to design and create a web page layout to an advanced level.

**Application of the Unit**

This unit applies to web designers and web developers who are involved in the layout and appearance of web pages.

**Licensing/Regulatory Information**

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

**Pre-Requisites**

Not applicable.

## Elements

Element 1. Build a web page according to the design prototype

1.1 Identify main sections of the web page layout

1.2 Create web page structure

1.3 Position web page elements to achieve design specification

Element 2. Ensure web page is validated and tested in major browsers

2.1 Validate cascading style sheet (CSS) against ***industry standards***

2.2 Correct ***browser*** incompatibilities using the most robust techniques

2.3 Test website in various browsers

Element 3. Ensure website is accessible

3.1 Check website is ***accessible*** to ensure it can be viewed

3.2 Check website sections to ensure accessibility

3.3 Check web page elements to ensure accessibility

**Critical aspect of Evidence**

Evidence of the ability to:

* develop a complex website layout
* layout page elements to suit a variety of devices
* test web pages in a variety of browsers
* validate the pages against industry standards.

To demonstrate competency in this unit the person will require access to:

* appropriate learning and assessment support when required
* modified equipment for people with special needs
* computer
* aesthetic presentation brief
* variety of browsers
* Internet access to validate web pages against W3C.

## *Qualification Units/Modules*

## ICAWEB506A Develop complex cascading style sheets

## Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to develop complex cascading style sheets (CSS) that are attached to a mark-up language document.

## Application of the Unit

This unit applies to web designers and web developers who are involved in the layout and appearance of web pages.

## Licensing/Regulatory Information

## No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

## Pre-Requisites

Not applicable.

## Elements

## Element 1. Determine requirements and develop CSS

* 1. Obtain user requirements for style
  2. Develop CSS to match user requirements

Element 2. Use advanced CSS techniques to create web pages

2.1 Style elements of a web page using advanced CSS techniques

2.2 Position document elements using advanced CSS

2.3 Apply style sheets to multiple pages in a website

Element 3. Ensure web page and CSS are validated and tested in all major browsers

3.1 Validate CSS against industry standards

3.2 Test website in various browsers

3.3 Rectify browser differences to ensure website is accessible

**Critical aspect of Evidence**

Evidence of the ability to:

* develop a complex website styled and formatted using CSS
* create a complex page layout using CSS
* test web pages in a variety of browsers
* validate the CSS against industry standards.

To demonstrate competency in this unit the person will require access to:

* appropriate learning and assessment support when required
* modified equipment for people with special needs
* computer
* aesthetic presentation brief
* HTML documents to have CSS applied to them
* internet access to validate the CSS against the W3C
* variety of browsers.

## ICAWEB502A Create dynamic web pages

**Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to build active or dynamic web pages.

**Application of the Unit**

This unit applies to web developers responsible for creating dynamic pages to provide interaction between the user and the website.

**Licensing/Regulatory Information**

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

**Pre-Requisites**

## Not applicable.

## Elements

Element 1. Identify client and server-side dynamic content

1.1 Review technical requirements

1.2 Identify sections of the website requiring client-side dynamic content

1.3 Identify sections of the website requiring server-side dynamic content

1.4 Select appropriate ***languages*** and technology to meet the requirements

Element 2. Create dynamic content

2.1 Create pages using appropriate languages

2.2 Ensure code conforms to current industry best practice and standards

Element 3. Test dynamic pages

3.1 Test website in a variety of browsers

3.2 Ensure required dynamic content functions according to specified requirements

**Critical aspect of Evidence**

Evidence of the ability to:

* develop a complex website layout
* layout page elements to suit a variety of devices
* test web pages in a variety of browsers
* validate the pages against industry standards.

To demonstrate competency in this unit the person will require access to:

* appropriate learning and assessment support when required
* modified equipment for people with special needs
* computer
* aesthetic presentation brief
* variety of browsers
* internet access to validate web pages against W3C.

## *Legislative/Licensing Requirements*

**NIL**

## *Study Progress, Workload Pace and Timeline*

Students are expected to achieve satisfactory progress in their studies. If you are having difficulty, discuss the situation with your teacher or a Student Counsellor as soon as possible.

The following is a suggested sequence and timeline for your studies. This is a guide only and is intended to assist students in gaining maximum benefit from their study and to ensure completion within the allowed timeframe (that is prior to the official close of study).

## *Learning Skills*

Whilst most of us enjoy gaining new skills and knowledge, some students may find studying a challenge.  Useful tips to assist you as you work your way through this qualification can be found on the my.TAFE page for this qualification under the heading ‘Learning Skills’.

## *Texts*

**Nil**

## *Study Schedule*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Session** | **Topic** | **Assessment/ Activities** | **NTP Relation** | **Date Delivered** |
| Week 1  11 Jan 16 | * Writing neat code * Best practices for css and html code layout * Css selectors * Media queries * Mobile first design * Applying css style * Em sizing * Html5 new elements | Assessment 1 - ICAWEB505A  ICAWEB506A | ICAWEB505A  ICAWEB506A |  |
| Week 2  18 Jan 16 | * HTML5 forms * Advanced CSS   + Flexbox   + Advanced selectors   + Transitions/transform   + animations * Media Queries   + Meta tag for mobile devices   + Orientation-specific CSS   + Device Specific CSS * **Javascript introduction** | Assessment 1 - ICAWEB505A  ICAWEB506A | ICAWEB505A  ICAWEB506A |  |
| Week 3  25 Jan 16 | Javascript  Using JavaScript and php to Validate data   * Variables and arrays * Functions * String functions * Conditional   J Query | Assessment 1 Due - ICAWEB505A  ICAWEB506A  Hand out Assessment 2 - ICAWEB502A | ICAWEB502A |  |
| Week 4  01 Feb | PHP  Use php to Validate data   * Variables and arrays * Functions * String functions * Conditional * upload to server | Assessment 2 - ICAWEB502A  (due end of week) | ICAWEB502A |  |
| Week 5  08 Feb | Databases |  |  |  |
| Week 6  15 Feb |  |  |  |  |
| Week 7  22 Feb |  |  |  |  |
| Week 8  29 Feb |  |  |  |  |
| Week 9  7 Mar |  |  |  |  |
| Week 10  14 Mar |  |  |  |  |
| Week 11  21 Mar |  |  |  |  |
| Week 12  21 Mar |  |  |  |  |

## *Additional Requirements*

Memory Stick/External Hard drive