



# COIT20268 Responsive Web Design

## Term 2 - 2022

Profile information current as at 20/09/2024 03:20 pm

All details in this unit profile for COIT20268 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

## General Information

### Overview

In this unit, you will create web sites that provide an optimal viewing experience across a wide range of devices. The basics of developing web pages will first be discussed, along with the theory and practice to support this development. Then, using responsive design, you will develop solutions that adapt the layout of the viewing environment by using fluid grids, proportional images and layout rules. A mobile-first approach is taken, where you will learn problem solving and programming skills to provide progressive enhancement, producing innovative and engaging digital content for mobile devices and for desktop systems.

### Details

Career Level: *Postgraduate*

Unit Level: *Level 9*

Credit Points: *6*

Student Contribution Band: *8*

Fraction of Full-Time Student Load: *0.125*

### Pre-requisites or Co-requisites

Pre-Req: COIT20245 Introduction to Programming, COIT20248 Information Systems Analysis & DesignAnti-Req:

COIS21001 Web Applications for Business

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 2 - 2022

- Brisbane
- Melbourne
- Online
- Rockhampton
- Sydney

### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit Postgraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### **Regional Campuses**

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### **Metropolitan Campuses**

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### **1. Practical and Written Assessment**

Weighting: 30%

#### **2. Written Assessment**

Weighting: 30%

#### **3. Practical and Written Assessment**

Weighting: 40%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from Unit Evaluation

##### **Feedback**

More practical examples should be provided during workshops.

##### **Recommendation**

Tutors will provide extra sets of exercises followed by a top-down solution to demonstrate each concept taught in class to help build understanding.

#### Feedback from Unit Evaluation

##### **Feedback**

The lecturers and tutors were excellent and passionate in delivering the unit.

##### **Recommendation**

The teaching team will continue to commit, improve and work towards maintaining this positive outcome.

#### Feedback from Unit Evaluation

##### **Feedback**

The assessment materials were well organised, providing students to build upon previous concepts as they complete each weekly design requirements, working towards a complete portfolio that accumulates into the final assessment.

##### **Recommendation**

The teaching team will continue to commit, improve and work towards maintaining this positive outcome.

## Unit Learning Outcomes

### **On successful completion of this unit, you will be able to:**

1. Develop web pages tailored for a range of screen resolutions, incorporating text, images, audio and video
2. Apply principles of progressive enhancement to optimise content for the limited memory and processing power of mobile devices, whilst simultaneously delivering a richer experience on non-mobile devices
3. Critically assess given cases and apply problem solving techniques to create mobile-first solutions using web technology
4. Critically review the mobile content industry, mobile technologies and characteristics of mobile devices, and likely future trends.

Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is in use in over 100 countries

and provides a widely used and consistent definition of ICT skills. SFIA is increasingly being used when developing job descriptions and role profiles.

ACS members can use the tool MySFIA to build a skills profile at  
<https://www.acs.org.au/professionalrecognition/mysfia-b2c.html>

This unit contributes to the following workplace skills as defined by SFIA. The SFIA code is included:

- (1) User experience analysis (UNAN)
- (2) User experience evaluation (USEV)
- (3) Information content publishing (ICPM)
- (4) Program ming/software development (PROG)
- (5) Testing (TEST)

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks                                  | Learning Outcomes |   |   |   |
|---|-------------------|---|---|---|
|   | 1                 | 2 | 3 | 4 |
| <b>1 - Practical and Written Assessment - 30%</b> | •                 |   |   |   |
| <b>2 - Written Assessment - 30%</b>               |                   | • | • | • |
| <b>3 - Practical and Written Assessment - 40%</b> | •                 |   |   |   |

### Alignment of Graduate Attributes to Learning Outcomes

| Graduate Attributes                                       | Learning Outcomes |   |   |   |
|---|-------------------|---|---|---|
|   | 1                 | 2 | 3 | 4 |
| <b>1 - Knowledge</b>                                      | ◦                 | ◦ | ◦ | ◦ |
| <b>2 - Communication</b>                                  |                   |   |   | ◦ |
| <b>3 - Cognitive, technical and creative skills</b>       | ◦                 | ◦ | ◦ | ◦ |
| <b>4 - Research</b>                                       |                   |   | ◦ | ◦ |
| <b>5 - Self-management</b>                                | ◦                 | ◦ | ◦ |   |
| <b>6 - Ethical and Professional Responsibility</b>        |                   |   |   |   |
| <b>7 - Leadership</b>                                     |                   |   |   |   |
| <b>8 - Aboriginal and Torres Strait Islander Cultures</b> |                   |   |   |   |

### Alignment of Assessment Tasks to Graduate Attributes

| Assessment Tasks                                  | Graduate Attributes |   |   |   |   |   |   |   |
|---|---------------------|---|---|---|---|---|---|---|
|   | 1                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| <b>1 - Practical and Written Assessment - 30%</b> | ◦                   |   | ◦ |   | ◦ |   |   |   |
| <b>2 - Written Assessment - 30%</b>               | ◦                   | ◦ | ◦ | ◦ | ◦ |   |   |   |
| <b>3 - Practical and Written Assessment - 40%</b> | ◦                   |   | ◦ |   |   | ◦ |   |   |

## Textbooks and Resources

### Textbooks

COIT20268

#### Prescribed

##### **Principles of Web Design: The Web Warrior Series**

6th Edition (2015)

Authors: Joel Sklar

Cengage

Boston , USA

ISBN: SBN-10: 1285852648 / ISBN-13: 9781285852645

Binding: Paperback

#### **Additional Textbook Information**

Both paper and eBook copies can now be purchased at the CQUni Bookshop here:

<http://bookshop.cqu.edu.au> (search on the Unit code).

[\*\*View textbooks at the CQUniversity Bookshop\*\*](#)

### IT Resources

#### **You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Notepad or Notepad ++
- Web browser: FireFox, Microsoft Internet Explorer, Chrome
- Zoom.us

## Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Andrew Chiou** Unit Coordinator

[a.chiou@cqu.edu.au](mailto:a.chiou@cqu.edu.au)

## Schedule

### **Week 1 - 11 Jul 2022**

| Module/Topic                       | Chapter              | Events and Submissions/Topic |
|------------------------------------|----------------------|------------------------------|
| Introduction and Overview of HTML5 | Sklar, Chap 1: HTML5 |                              |

### **Week 2 - 18 Jul 2022**

| Module/Topic                         | Chapter   | Events and Submissions/Topic |
|--------------------------------------|---|------------------------------|
| Foundations of Responsive Web Design | Sklar, Chap 2: Web Site Design Principles<br>Sklar, Chap 3: Site Planning |                              |

### **Week 3 - 25 Jul 2022**

| Module/Topic                      | Chapter                                 | Events and Submissions/Topic |
|-----------------------------------|---|------------------------------|
| Introduction and Overview of CSS3 | • Sklar, Chap 4: Cascading Style Sheets |                              |

|  |   |  |
|--|---|--|
| <b>Week 4 - 01 Aug 2022</b>  |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• Fonts: Type, Style and Size - the Key to Readability.</li> <li>• CSS3 Visual Formatting and Box Model</li> </ul>          | <ul style="list-style-type: none"> <li>• Sklar, Chap 5: Web Typography</li> <li>• Sklar, Chap 6: Box Properties</li> </ul>    |  |
| <b>Week 5 - 08 Aug 2022</b>  |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• Normal Flow of Elements and Containers</li> <li>• How to Manipulate Graphics, Pictures and Colour on a Webpage</li> </ul> | <ul style="list-style-type: none"> <li>• Sklar, Chap 7: Page Layouts</li> <li>• Sklar, Chap 8: Graphics and Colour</li> </ul> |  |
| <b>Vacation Week - 15 Aug 2022</b>   |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <b>Week 6 - 22 Aug 2022</b>  |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• Creating Usable Website Navigation for Desktop and Mobile Devices</li> </ul>  | <ul style="list-style-type: none"> <li>• Sklar, Chap 9: Site Navigation</li> </ul>  | <b>Practical Assessment 1</b> Due: Week 6 Friday (26 Aug 2022) 11:45 pm AEST |
| <b>Week 7 - 29 Aug 2022</b>  |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• Using Tables to Display Data</li> <li>• Understanding and Using Web Forms</li> </ul>                                      | <ul style="list-style-type: none"> <li>• Sklar, Chap 10: Using Table Elements</li> <li>• Sklar, Chap 11: Web Forms</li> </ul> |  |
| <b>Week 8 - 05 Sep 2022</b>  |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• Putting it all together: The Responsive Web</li> </ul>  | <ul style="list-style-type: none"> <li>• Sklar, Chap 12: Responsive Web Design</li> </ul>                                     |  |
| <b>Week 9 - 12 Sep 2022</b>  |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• Human-Computer Interaction: Usability Heuristics</li> </ul>   | <ul style="list-style-type: none"> <li>• Online Resource</li> </ul>   | <b>Written Assessment</b> Due: Week 9 Friday (16 Sept 2022) 11:45 pm AEST    |
| <b>Week 10 - 19 Sep 2022</b>   |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• JavaScript Part 1</li> </ul>  | <ul style="list-style-type: none"> <li>• Online Resource</li> </ul>   |  |
| <b>Week 11 - 26 Sep 2022</b>   |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• JavaScript Part 2</li> </ul>  | <ul style="list-style-type: none"> <li>• Online Resource</li> </ul>   |  |
| <b>Week 12 - 03 Oct 2022</b>   |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <ul style="list-style-type: none"> <li>• JavaScript Part 3</li> </ul>  |   | <b>Practical Assessment 2</b> Due: Week 12 Friday (7 Oct 2022) 11:45 pm AEST |
| <b>Review/Exam Week - 10 Oct 2022</b>  |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |
| <b>Exam Week - 17 Oct 2022</b>   |   |  |
| <b>Module/Topic</b>  | <b>Chapter</b>  | <b>Events and Submissions/Topic</b>  |

## Assessment Tasks

# 1 Practical Assessment 1

## **Assessment Type**

Practical and Written Assessment

## **Task Description**

Create a website with HTML5 and CSS3 as specified for the unit. The website should demonstrate functionality and interactivity between the components rendered and the end user. The components should incorporate text, images, colour and if required, media elements.

Specific details will be available on the Moodle unit website by Week 1.

## **Assessment Due Date**

Week 6 Friday (26 Aug 2022) 11:45 pm AEST

Online via Moodle

## **Return Date to Students**

Within 2 weeks of submission date.

## **Weighting**

30%

## **Assessment Criteria**

Practical Assessment 1 (total of 30 marks allocated as follow):

- The functionality of the website (10 marks).
- Design and rationale (10 marks).
- Development techniques (5 marks).
- Commentary and general (5 marks).

## **Referencing Style**

- [Harvard \(author-date\)](#)

## **Submission**

Online

## **Submission Instructions**

Submission instructions will be available on the Moodle unit website.

## **Graduate Attributes**

- Knowledge
- Cognitive, technical and creative skills
- Self-management

## **Learning Outcomes Assessed**

- Develop web pages tailored for a range of screen resolutions, incorporating text, images, audio and video

# 2 Written Assessment

## **Assessment Type**

Written Assessment

## **Task Description**

You are to critically evaluate a given website in the context of principles of responsive web design. You are also to address specific questions relating to the given website.

The specific website and questions will be made available by Week 1 on the Moodle unit website.

## **Assessment Due Date**

Week 9 Friday (16 Sept 2022) 11:45 pm AEST

Online via Moodle

## **Return Date to Students**

Within 2 weeks of submission date.

**Weighting**

30%

**Assessment Criteria**

Written Assessment (total of 30 marks allocated as follow):

- Critical evaluation (15 marks).
- Answers to questions (15 marks).

Specific details will be available on the Moodle unit website by Week 1.

**Referencing Style**

- [Harvard \(author-date\)](#)

**Submission**

Online

**Submission Instructions**

Submission instructions will be available on the Moodle unit website.

**Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management

**Learning Outcomes Assessed**

- Critically assess given cases and apply problem solving techniques to create mobile-first solutions using web technology
- Critically review the mobile content industry, mobile technologies and characteristics of mobile devices, and likely future trends.

## 3 Practical Assessment 2

**Assessment Type**

Practical and Written Assessment

**Task Description**

Create a website with HTML5 and CSS3 as specified for the unit. This should be an improvement and modification from Practical Assessment 1. The website should demonstrate functionality and interactivity between the components rendered on the web browser and the end-user. The components should incorporate text, images, and if necessary, media elements. It should also further demonstrate, without diminished functionality, responsiveness (self-adapting) to different screen formats and to at least one type of mobile web browser.

Specific details will be available by week 1 on the Moodle unit website.

**Assessment Due Date**

Week 12 Friday (7 Oct 2022) 11:45 pm AEST

Online via Moodle

**Return Date to Students**

Marked assignments will be returned after certification date.

**Weighting**

40%

**Assessment Criteria**

Practical Assessment 2 (total of 40 marks allocated as follow):

- Functionality of website (20 marks).
- Javascript (10 marks)
- Development techniques (5 marks).
- Commentary and general (5 marks).

Details of the marking schedule will be available on the Moodle unit website.

## **Referencing Style**

- [Harvard \(author-date\)](#)

## **Submission**

Online

## **Submission Instructions**

Submission instructions will be available on the Moodle unit website.

## **Graduate Attributes**

- Knowledge
- Cognitive, technical and creative skills
- Self-management

## **Learning Outcomes Assessed**

- Apply principles of progressive enhancement to optimise content for the limited memory and processing power of mobile devices, whilst simultaneously delivering a richer experience on non-mobile devices

## **Academic Integrity Statement**

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [\*\*Student Academic Integrity Policy and Procedure\*\*](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### **What is a breach of academic integrity?**

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### **Why is academic integrity important?**

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### **Where can I get assistance?**

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### **What can you do to act with integrity?**

**Be Honest**

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own

**Seek Help**

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)

**Produce Original Work**

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem