# School of Science, Computing and Engineering Technologies

# **Unit Outline**

COS10005

# **Web Development**

Semester January, 2024



# Please read this Unit Outline carefully. It includes:

PART A Unit summary

PART B Your Unit in more detail

PART C Further information



# PART A: Unit Summary

Unit Code(s)	COS10005		
Unit Title	Web Development		
Duration	One semester or equivalent		
Total Contact Hours	36 hours		
Requisites:			
Pre-requisites	Nil		
	Nil		
Co-requisites	Programming would be an advantage, e.g., HIT1301 Algorithmic Problem Solving, HIT1404 Introduction to Programming in .NET or HIT2080 Introduction to Programming		
Concurrent pre-requisites	Nil		
Anti-requisites	COS60001: The Internet and The World Wide Web 1 And COS60004 Creating Web Applications		
Assumed knowledge	Nil		
Credit Points	12.5		
Campus/Location	Ho Chi Minh City		
Mode of Delivery	Blended		
Assessment Summary	Assignments: 70%     Labs work: 10%     Mid-term test: 20%		

#### **Aims**

To introduce the technology of the Internet and World Wide Web and to develop an understanding of the technologies associated with programming for the World Wide Web.

# **Unit Learning Outcomes**

Students who successfully complete this unit will be able to:

- 1. Develop web pages using HTML, JavaScript and CSS.
- 2. Analyse the key technologies of the World Wide Web
- 3. Describe the protocols of the World Wide Web.
- 4. Design effective and user-friendly web pages using usability principles and style guides.
- 5. Explain the history of the Internet and World Wide Web.

#### **Graduate Attributes**

This unit may contribute to the development of the following Swinburne Graduate Attributes:

- · Communication skills
- Digital literacies
- · Analysis skills
- Problem solving skills
- Ability to work independently

#### Content

- · Web concepts: definition, history and fundamental concepts
- Introduction to HTML, CSS and Web Development processes
- HTML5: logical document structure, syntax, images, links, maps, tables, frames, forms
   W3C standards, validation
- Design, Layout and Usability: principles of navigation, usability, page style guides, standards
- Protocols and server technology: HTTP, TCP/IP, MIME, URI, DNS
- JavaScript: syntax, object model, event handling, common tasks
- Interactivity: DOM, and some evolving technologies forms processing, common tasks
- Style sheets: fundamentals, CSS formatting, CSS positioning, standards
- Accessible Web design and Usability: principles of navigation, user accessibility guidelines, style guides and standards
- Web Data Interchange Formats and AJAX: XML, AJAX, JSON, API

#### PART B: Your Unit in more detail

#### **Unit Improvements**

Feedback provided by previous students through the Student Survey has resulted in improvements that have been made to this unit. Recent improvements include:

- · Assessment have been modified to meet the current requirements of the unit
- · Assessments deadlines have been adjusted
- Updates were performed to the unit content

#### **Unit Teaching Staff**

Name	Role	Email	Consultation Times
Mr Frie I F	ecturer	higula@swin adu au	By email appointment
Mr Eric LE Le	ecturer	hieule@swin.edu.au	By email a

**Learning and Teaching Structure** 

Activity	Total Hours	Hours per Week	Teaching Period Weeks
In person lectures	24 hours	1.5 hours (in two sessions) +30 minutes of offline discussion board support	Weeks 1 to 12
Labs	12 hours	1 hour	Weeks 1 to 12

Veek by Week Schedule				
	Week			
Week	beginning	Lecture Topic	Tutorial Topic	Assessment
1	Jan 02	Introduction	Introduction and Getting Started	Lab Work
			HTML Markup and	
2	Jan 08	HTML: Part 1	Validation	Lab Work
3	Jan 15	HTML: Part 2	HTML Form and Web Site Design	Lab Work Assignment 1 released on Canvas
4	Jan 22	HTML: Part 3 CSS: Part 1	HTML Page Structure and CSS Presentation	Lab Work
5	Jan 29	CSS: Part 2	Content Models and CSS Page Layout	Lab Work
<u> </u>	Lui	nar New Year's Holiday □	(05-18 February 2024, inclu	ısively)
				Lab Work Mid-Semester Test
				(in class and organized
				by lecturer)
				Assignment 1 due
				Assignment 1 due at
		Responsive CSS	Responsive CSS	23:59 VN Time of
6	Feb 19	Usability/Accessibility	Usability/Accessibility	Sunday, 25 Feb 2024

7	Feb 26	JavaScript: Part 1	JavaScript: Part 1	Lab Work Assignment 2 - released on Canvas
8	Mar 04	JavaScript: Part 2	JavaScript: Part 2	Lab Work
9	Mar 11	Document Object Model	Document Object Model	Lab Work
10	Mar 18	Client and Server Side Scripting	jQuery	Lab Work
11	Mar 25	Introduction to Web Data Interchange Formats and AJAX	XML, JSON, AJAX , API	Lab Work Assignment 2 due at 23:59 (VN Time) of Sunday, 31 Mar 2024
12	Apr 01	Q & A	7.11.12, 00011, 7.10, 07, 711 1	Lab Work

# **Assessment Overview**

Tasks and Details	Individual or Group	Weighting	Unit Learning Outcomes that this assessment task relates to	Assessment Due Date
1. Assignment 1	Individual	30%	1, 2, 4	Week 6 Due 23:59 VN Time of Sunday, 25 Feb 2024
2. Assignment 2	Individual	40%	1, 2, 4	Week 12 Due 23:59 VN Time of Sunday, 31 Mar 2024
3. Mid-Semester Test	Individual	20%	2, 3, 5	Week 6 (in class)
4. Lab Works	Individual	10%	1, 2, 4	Weekly

**Tutorial lab exercises:** in the tutorial lab your tutor will check the completion of your completed lab exercises. If you do not manage to complete the activities during or prior to the lab, they may be assessed by you tutor in the tutorial of the following week but no later.

#### b) Minimum requirements to pass this unit To

pass this unit, you must:

• achieve an overall mark for the unit of 50% or more, and

#### c) Examinations

Not applicable

#### d) Submission Requirements

Assignments must be submitted through the Electronic Submission System in Canvas.

Please ensure you keep a copy of all assessments that are submitted.

# e) Extensions and Late Submission

Late Submissions - Unless an extension has been approved, late submissions will result in a penalty. You will be penalised 10% of your achieved mark for each working day the task is late, up to a maximum of 5 working days. After 5 working days, a zero result will be recorded. Extension – please check the university policy for obtaining an extension. You need to apply for an extension at least 24h before the assignment due date. **f) Referencing** 

To avoid plagiarism, you must provide a reference whenever you include information from other sources in your work. Further details regarding plagiarism are available in Section C of this document.

Referencing convention required for this unit is APA Style. Helpful information on referencing can be found at <a href="http://www.swinburne.edu.au/library/referencing/">http://www.swinburne.edu.au/library/referencing/</a> g) Group work Guidelines

Not applicable for this unit in this semester

#### Required Textbook(s)

N/A

#### **Recommended Reading Materials**

The Library has a large collection of resource materials, both texts and current journals. Listed below are some references that will provide valuable supplementary information to this unit. It is also recommended that you explore other sources to broaden your understanding.

- 1. JavaScript: the Definitive Guide 6th edition, *By David Flanagan*access the book through Swinburne Library

  <a href="https://ebookcentral.proquest.com/lib/swin/detail.action?docID=686420">https://ebookcentral.proquest.com/lib/swin/detail.action?docID=686420</a>
- A Smarter Way to Learn JavaScript, by Mark Myers
   Hard copies are available at Swinburne Library in Hawthorn
- 3. Glenn Johnson, Training Guide Programming in HTML5 with JavaScript and CSS3, Microsoft, 2013

Note: Please refer to Canvas for some useful materials for this Unit under Web Links

### PART C: FURTHER INFORMATION



For further information on any of these topics, refer to Swinburne's Current Students web page <a href="http://www.swinburne.edu.au/student/">http://www.swinburne.edu.au/student/</a>.

### Student behaviour and wellbeing

All students are expected to: act with integrity, honesty and fairness: be inclusive, ethical and respectful of others; and appropriately use University resources, information, equipment and facilities. All students are expected to contribute to creating a work and study environment that is safe and free from bullying, violence, discrimination, sexual harassment, vilification and other forms of unacceptable behaviour.

The <u>Student Charter</u> describes what students can reasonably expect from Swinburne in order to enjoy a quality learning experience. The Charter also sets out what is expected of students with regards to your studies and the way you conduct yourself towards other people and property.

You are expected to familiarise yourself with University regulations and policies and are obliged to abide by these, including the <u>Student Academic Misconduct Regulations</u>, <u>Student General Misconduct Regulations</u> and the <u>People, Culture and Integrity Policy</u>. Any student found to be in breach of these may be subject to disciplinary processes. Examples of expected behaviours are:

- conducting yourself in teaching areas in a manner that is professional and not disruptive to others
- following specific safety procedures in Swinburne laboratories, such as wearing appropriate footwear and safety equipment, not acting in a manner which is dangerous or disruptive (e.g. playing computer games), and not bringing in food or drink
- following emergency and evacuation procedures and following instructions given by staff/wardens in an emergency response

# **Canvas**

You should regularly access the Swinburne learning management system, Canvas, which is available via the Current Students webpage or <a href="https://swinburne.instructure.com/">https://swinburne.instructure.com/</a> Canvas is updated regularly with important unit information and communications.

#### **Communication**

Please post your technical questions to Ed Discussion board via Canvas. For personal matters, email your tutor or convenor via their Swinburne email address. If you access your email through a provider other than Swinburne, then it is your responsibility to ensure that your Swinburne email is redirected to your private email address.

#### **Academic Integrity**

Academic integrity is about taking responsibility for your learning and submitting work that is honestly your own. It means acknowledging the ideas, contributions and work of others; referencing your sources; contributing fairly to group work; and completing tasks, tests and exams without cheating. Swinburne University uses the Turnitin system, which helps to identify inadequate citations, poor paraphrasing and unoriginal work in assignments that are submitted via Canvas. Your Unit Convenor COS10005 UnitOutline Sem Jan 2024

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will provide further details on the type of submissions. Only original works will be assessable for marking.

Plagiarising, cheating and seeking an unfair advantage with regards to an exam or assessment are all breaches of academic integrity and treated as academic misconduct.

Plagiarism is submitting or presenting someone else's work as though it is your own without full and appropriate acknowledgement of their ideas and work. Examples include:

- · using the whole or part of computer program written by another person as your own
- using the whole or part of somebody else's written work in an essay or other assessable work, including material from a book, journal, newspaper article, a website or database, a set of lecture notes, current or past student's work, or any other person's work
- poorly paraphrasing somebody else's work
- using a musical composition or audio, visual, graphic and photographic work created by another
- using realia created by another person, such as objects, artefacts, costumes, models
- submitting assessments that have been developed by another person or service (paid or unpaid), often referred to as contract cheating
- presenting or submitting assignments or other work in conjunction with another person or
  group of people when that work should be your own independent work, This is regardless of
  whether or not it is with the knowledge or consent of the other person(s). Swinburne
  encourages students to talk to staff, fellow students and other people who may be able to
  contribute to a student's academic work but where an independent assignment is required,
  the work must be the student's own
- enabling others to plagiarise or cheat, including letting another student copy your work or by giving access to a draft or completed assignment

The penalties for academic misconduct can be severe, ranging from a zero grade for an assessment task through to expulsion from the unit and, in the extreme, exclusion from Swinburne.

#### **Student support**

Swinburne offers a range of services and resources to help you complete your studies successfully. Your Unit Convenor or studentHQ can provide information about the study support and other services available for Swinburne students.

#### **Special consideration**

During your studies have been adversely affected due to serious and unavoidable circumstances outside of your control (e.g. severe illness or unavoidable obligation), you may be able to apply for special consideration (SPC).

Applications for Special Consideration will be submitted via the SPC online tool normally <u>no later than 5.00pm</u> on the third working day after the submission/sitting date for the relevant assessment component.

#### Accessibility needs

Sometimes students with a disability, a mental health or medical condition or significant carer responsibilities require reasonable adjustments to enable full access to and participation in education. Your needs can be addressed by Swinburne's AccessAbility Services by negotiating and distributing an 'Education Access Plan'. The plan makes recommendations to university teaching and examination staff. You must notify AccessAbility Services of your disability or condition within one week after the commencement of your unit to allow the University to make reasonable adjustments.

#### **Review of marks**

An independent marker reviews all fail grades for major assessment tasks. In addition, a review of assessment is undertaken if your final result is between 45 and 49 or within 2 marks of any grade threshold.

If you are not satisfied with the result of an assessment, you can ask the Unit Convenor to review the result. Your request must be made in writing within 10 working days of receiving the result. The Unit Convenor will review your result to determine if your result is appropriate.

If you are dissatisfied with the outcomes of the review, you can lodge a formal complaint. **Feedback**, **complaints and suggestions** 

In the first instance, discuss any issues with your Unit Convenor. If you are dissatisfied with the outcome of the discussion or would prefer not to deal with your Unit Convenor, then you can complete a feedback form. See <a href="https://www.swinburne.edu.au/corporate/feedback/">https://www.swinburne.edu.au/corporate/feedback/</a> <a href="https://www.swinburne.edu.au/corporate/feedback/">Advocacy</a> Should you require assistance with any academic issues, University statutes, regulations, policies and procedures, you are advised to seek advice from an Independent Advocacy Officer at Swinburne Student Life.

For an appointment, please call 03 9214 5445 or email <a href="mailto:advocacy@swin.edu.au">advocacy@swin.edu.au</a> For more information, please see <a href="https://www.swinburne.edu.au/current-students/student-servicessupport/advocacy/">https://www.swinburne.edu.au/current-students/student-servicessupport/advocacy/</a>