

## Unit Outline

**COS10026**

### **Computing Technology Inquiry Project**

Semester January, 2023

**Please read this Unit Outline carefully. It includes:**

**PART A:** Unit Summary

**PART B:** Your Unit in more details

**PART C:** Further Information



## PART 1: Unit Summary

<b>Unit Code(s)</b>	COS10026
<b>Unit Title</b>	Computing Technology Inquiry Project
<b>Duration</b>	12 weeks or One semester
<b>Total Contact Hours</b>	04 hours / week
<b>Requisites:</b>	No requisites
<b>Credit Points</b>	12.5
<b>Campus/Location</b>	Ho Chi Minh City
<b>Mode of Delivery</b>	Blended
<b>Assessment Summary</b>	Lab exercises; Assignments.

### Aims

This unit of study is a project-based unit in which students work in teams and aims to provide you with the skills to enquire and solve challenges oriented around computing technologies. You will also be provided with the skills to select and utilise appropriate computing technology tools to address these challenges. An Academic 'facilitator' will guide your learning towards achieving these outcomes.

### Unit Learning Outcomes

On successful completion of this unit students will be able to:

1. Demonstrate the use of database modelling techniques to design a normalised database, based on user requirements
2. Demonstrate the use of mark up and presentation languages in creating web based applications
3. Describe the interaction between components of a web application, and comment on issues related to privacy, security, environmental sustainability, commercial and social issues
4. Conduct a comparative analysis of contemporary approaches to developing Internet applications, their purpose, internal architectures, and related issues
5. Apply project management skills to set goals, manage time, and write project management plans
6. Apply team frameworks and communicate within teams, stakeholders using appropriate verbal, written, and technological approaches.

### Key Generic Skills

You will be provided with feedback on your progress in attaining the following generic skills:

- analysis skills,
- problem solving skills,
- ability to tackle unfamiliar problems, and
- ability to work independently

### Content

- Database modelling techniques
- Internet applications
- Server scripting and database access
- Project planning
- Professional communication
- Teamwork framework
- Finding information and professional referencing
- Environmental sustainability

## PART B: Your Unit in more details

### Unit Teaching Staff

Name	Role	Email	Consultation Times
Dr. Tuan Tran	Lecturer	tuanatran@swin.edu.au	By email appointment

### Learning and Teaching Structure

Activity	Total Hours	Hours per Week	Teaching Period Weeks
Lectures	12 hours	01 hour	Weeks 01 to 12
Facilitator Meetings	12 hours	01 hour	Weeks 01 to 12
Workshops	24 hours	02 hours	Weeks 01 to 12

### Week by week Schedule

Week	Week Beginning	Lecture	Facilitator Meeting	Assessment
1	02 Jan	HTML Part 1	Instruction 01 – Web Server Access	<ul style="list-style-type: none"> <li>• Lab Work</li> <li>• <b>Assignment Part 1</b> released on Canvas</li> </ul>
2	09 Jan	HTML Part 2	Instruction 02 - HTML Markups	<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
TET HOLIDAY (16-29/JAN/2023)				
3	30 Jan	HTML Part 3	Instruction 03 – HTML Forms	<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
4	06 Feb	CSS Part 1	Instruction 04 - CSS Presentation	<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
5	13 Feb	CSS Part 2	Instruction 05 – CSS Page Layout	<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
6	20 Feb	CSS Part 3		<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
7	27 Feb	PHP Part 1	Instruction 06 – PHP Data Types and Operators	<ul style="list-style-type: none"> <li>• Lab Work</li> <li>• <b>Assignment Part 1 due on Canvas and Mercury</b></li> <li>• <b>Assignment Part 2</b> released on Canvas</li> </ul>
8	06 Mar	PHP: Part 2	Instruction 07 – PHP Functions and Passing Data to Server	<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
9	13 Mar	PHP: Part 3	Instruction 08 – PHP Server Side Validation	<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
10	20 Mar	PHP and MYSQL Part 1	Instruction 09 – Database Access	<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
11	27 Mar	PHP and MYSQL Part 2	Instruction 10 – Database Operations	<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
12	03 Apr	PHP and MYSQL Part 3		<ul style="list-style-type: none"> <li>• Lab Work</li> </ul>
13	10 Apr			<ul style="list-style-type: none"> <li>• <b>Assignment Part 2 due on Canvas and Mercury</b></li> </ul>

## Assessment

### a) Assessment Overview

Assessment Task	Individual/ Group Task	Learning Objective(s)	Weighting	Due Date
Lab exercises	Individual	1-4	10%	Weekly
Assignment Part 1	Group	2,3,4,5,6	40%	Week 07 due at 23:59 (VN Time) of Monday 27 Feb 2023
Assignment Part 2	Group	1,3,4,5,6	50%	Week 13 due at 23:59 (VN Time) of Monday 10 Apr 2023

b) **Lab exercises:** each lab exercise will be marked off before the next facilitator meeting. You are encouraged to complete the lab exercises before your facilitator meeting so that you have time to discuss any issues with your facilitator.

c) **Assignment Parts 1 and 2:** are incremental instalments of a web site development task. In Part 1, you will demonstrate your ability to develop and deploy on a web server a wellstructured, linked web pages with text, graphics, tables and forms, styled with CSS. In Part 2, you will use forms to submit and retrieve data from a web server using PHP and MySQL.

### d) Minimum requirements to pass this unit

As the minimum requirements of assessment to pass a unit and meet all Unit Learning Outcomes to a minimum standard, a student must achieve:

- achieve an **overall** mark for the unit of 50% or more.

### e) Examinations

There is no examination for this unit in Semester 1, 2023.

### f) Submission Requirements

- Unless specified otherwise, assignments and other assessments are submitted online through the Canvas assessment submission system which integrates with the Turnitin plagiarism checking service. Please refer to the assignment specification for details.
- Please ensure you keep a copy of the submitted assessments.

### g) Extensions and Late Submission

- Extensions will only be granted in exceptional circumstances on medical or compassionate grounds. Extensions MUST be applied for in advance of the assignment's due date.
- Late Submissions - Unless an extension has been approved from the Unit Convenor, 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. For example, if a student achieves 90/100 on an assessment task but the task was submitted two days late. A late penalty of 20% (of that 90/100 mark) will be applied and the student's final mark will be recorded as 72/100 (being 90 less 09marks/1st day and another 09 mark/2nd day).
- Feedback or comments from the marker will generally not be available on assignments which are submitted after five working days past the published deadline.

### h) Referencing

- To avoid plagiarism, you are required to 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.
- References may appear in the code or on the web page as appropriate.
- Helpful information on referencing can be found at <http://www.swinburne.edu.au/lib/studyhelp/harvard-quick-guide.pdf>

## **i) Groupwork Guidelines**

- A group assignment is the collective responsibility of the entire group, and if one member is temporarily unable to contribute, the group should be able to reallocate responsibilities to keep to schedule. In the event of longer-term illness or other serious problems involving a member of group, it is the responsibility of the other members to notify immediately the Unit Convenor or relevant tutor.
- Group submissions must be submitted with an Assignment Cover Sheet, signed by all members of the group.
- All group members must be satisfied that the work has been correctly submitted. Any penalties for late submission will generally apply to all group members, not just the person who submitted.
- Students need to sign the team agreement and submit a peer review form for each assignment.

## **Recent Unit Improvements**

Due to changing industry practice and feedback from students, HTML is no longer required to be strictly XML compliant.

## **Required Textbook(s)**

Nil

## **Recommended Reading Materials**

There is no prescribed text for this subject. The Library has a large collection of resource materials, both texts and current journals. It is also recommended that you explore other sources to broaden your understanding.



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

## **PART C: FURTHER INFORMATION**

### **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 [Student Charter](#) 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 [Student Academic Misconduct Regulations](#), [Student General Misconduct Regulations](#) and the [People, Culture and Integrity Policy](#). 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 <https://swinburne.instructure.com/>. Canvas is updated regularly with important unit information and communications.

### **Communication**

All communication will be via your 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 will provide further details.

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**

If 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 no later than 5.00pm 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 <https://www.swinburne.edu.au/corporate/feedback/>

### **Advocacy**

Should you require assistance with any academic issues, University statutes, regulations, policies and procedures, you are advised to seek advice from Academic Department and Student HQ.