Week 3 Workshop

COS10025 – Technology in an Indigenous context project

SWINBURNE UNIVERSITY OF TECHNOLOGY

Acknowledgement of Country

We respectfully acknowledge the Wurundjeri People of the Kulin Nation, who are the Traditional Owners of the land on which Swinburne's Australian campuses are located in Melbourne's east and outer-east, and pay our respect to their Elders past, present and emerging.

We are honoured to recognise our connection to Wurundjeri Country, history, culture, and spirituality through these locations, and strive to ensure that we operate in a manner that respects and honours the Elders and Ancestors of these lands.

We also respectfully acknowledge Swinburne's Aboriginal and Torres Strait Islander staff, students, alumni, partners and visitors.

We also acknowledge and respect the Traditional Owners of lands across Australia, their Elders, Ancestors, cultures, and heritage, and recognise the continuing sovereignties of all Aboriginal and Torres Strait Islander Nations.
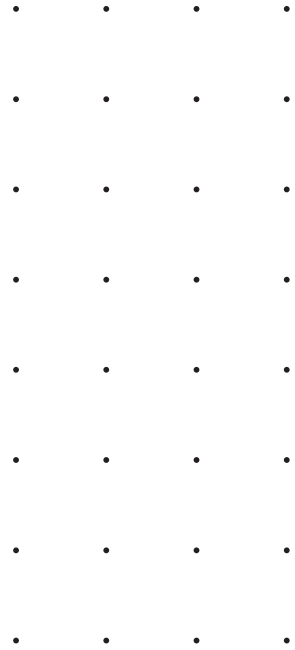
Workshop 2 Check-ins

- Team Agreement (email to facilitator) – Please make sure to submit your Team Agreement with appropriate details to be covered

- Team - Check your names under team/group page in Canvas, if you missed last weeks Workshop, please request to join a team asap

- Meetings - Lock in facilitator meeting timings (MS Teams or on-campus)

Workshop 3

The aim of today's class is to consider individual learning issues within your team and how it builds your research problem.

Activity 1: Initial research on Townships/community challenges

Activity 2: Emerging Technologies

Learning and Academic Skills Centre (LAS)

LAS Drop-in Advice – Higher Education Sem 1 2022, Week 1 – Week 15; no need to book.
On campus:
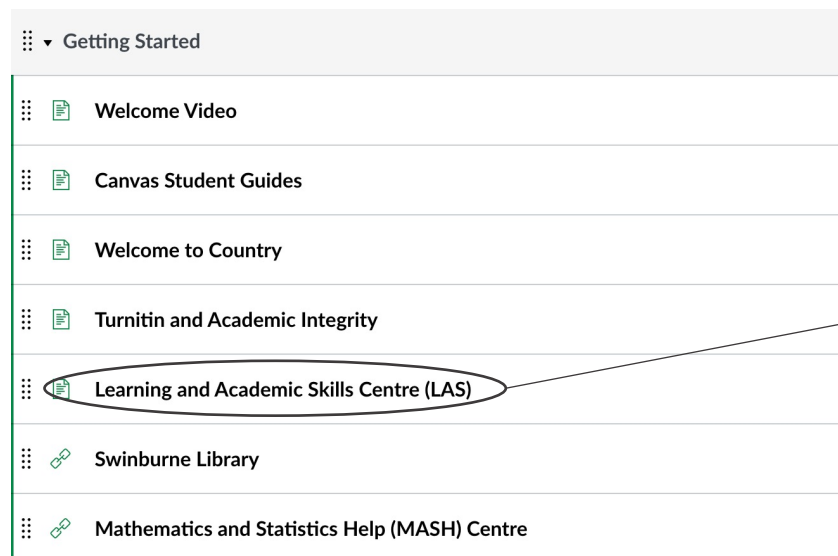*Hawthorn* Monday – Thursday 11.30am - 1.30pm, **desk J2**
Online: Tuesday-Thursday 1.30pm - 5.30pm

Go to **swi.nu/ssonline** to access **Online Drop-ins**, self-enrol and click on the link under the heading **LAS Drop-in Advice**.

LAS appointments – face-to-face/Teams/phone/Zoom. Book here: swi.nu/las-booking
LAS email: las@swin.edu.au
LAS Webpage – for more information on LAS activities: **swi.nu/las**

Projects – Not in Scope

- Mental health

- Smoking problems

- Poverty

- Family violence

- Housing

- Funding

- Business

- Inequality

- Building infrastructure

- Education

Projects – In Scope

- Water supply and storage

- Strom water management

- Energy generation and distribution

- Emergency services (example: disaster)

- Internet connection and access

- Agriculture

- Waste management

- Healthcare

Note: If you have more questions, discuss with your facilitator regarding project – In Scope

Example 1 - Connecting a Community to Each Other and the World

Wingellina or Irrunytju Community is a small Indigenous community located in remote part of Western Australia.

An organisation empowering remote communities of Western Australia through use of multimedia proposed a solution.

A wireless network system that they can utilize to broadcast digital radio services and deliver WiFi access to Wingellina community.

The team built a system that provides connectivity to the entire community and allows them manage portal content and internet connectivity.

Example 1 - Connecting a Community to Each Other and the World

Large coverage area – small pricetag

Backhauled with a community provided satellite system connected to the NBN, the team designed and built a mesh network covering the whole Wingellina community.

Cambium point to multipoint wireless equipment was installed on a centrally located communications tower connecting with WiFi Access Points throughout the community.

Use of Cambium equipment throughout means the entire network can be managed through a single interface and the equipment's low pricepoint made for cost effective coverage of the community.

Network Design and implementation managed service

1ˢᵗ Activity

Aim   :   **<u>Initial research on Townships/community challenges</u>**

Instructions   :   1. Find five different Townships (Indigenous and remote only) located in Australia?

2. For each Township collect information on

- What is the geography of the region?

- How spread out is the community (population, land size)?

- What information can you find out about the people who live in the township (tribes, languages, lifestyle)?

- Any current challenges for the community (every needs water supply, electricity, health etc..)

- Can you find out any information on current digital infrastructure?

3. Record details on a team shared document and share it with facilitator (for on-spot assessment)

4. Submit it in canvas as a separate document.

Teamwork: **20-40 minutes**

2nd Activity

Aim   :   **<u>Emerging Technologies</u>**

Instructions   :   1. What is meant by emerging technologies?

2. Find ten different emerging technologies for different applications (use of technology)?

3. For each Technology collect information on

- What is the technology for?

- How useful it is for an application or multipurpose?

- What is the costing per user?

- Any maintenance challenges?

- Can anyone operate it or does it need a knowledge?

4. Record details on a team shared document

5. Share it with facilitator (for on-spot assessment)

6. Submit it in canvas as a separate document.

Teamwork: **20-30 minutes**

Next week

- Finalise a Township and a community problem for your team

- Read through the available resources in week 3 and 4 modules