Government of **Western Australia**
School Curriculum and Standards Authority

SAMPLE COURSE OUTLINE

APPLIED INFORMATION TECHNOLOGY
GENERAL YEAR 11

Disclaimer

Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course.

Sample course outline

Applied Information Technology – General Year 11

Semester 1 – Unit 1 – Personal communication

Week	Syllabus content	
	Knowledge	**Skills**

1–2	**Course introduction**
	• overview of Unit 1
	• assessment requirements
	Design concepts
	• the elements of design
	  ▪ line
	  ▪ shape
	  ▪ space
	  ▪ texture
	  ▪ colour
	• the principles of design
	  ▪ balance
	  ▪ emphasis (contrast and proportion)
	  ▪ dominance
	• typography
	  ▪ typeface
	  ▪ size
	  ▪ alignment
	  ▪ format
	  ▪ spacing
	• compositional rules
	  ▪ rule of thirds
	  ▪ grid and alignment
		Design concepts
		• identify the elements of design and the principles of design in an existing digital product and/or solution
		• apply the elements of design and the principles of design to page layouts

3–4	**Application skills**
	• considerations for document design and development, including:
	  ▪ purpose
	  ▪ target audience
	• features of word processing applications for personal use, including:
	  ▪ formatting text
	  ▪ tables
	  ▪ headers and footers
	  ▪ drawing objects
	• considerations for the layout and design of documents, including:
	  ▪ typography
	  ▪ alignment
	  ▪ white space
	  ▪ insertion and placement of images
	  ▪ compositional rules
	  ▪ bulleted lists
	  ▪ readability
	  ▪ usability
		Application skills
		• use application software of word processing for personal use
		• apply a design strategy to ensure:
		  ▪ usability
		  ▪ visual design
		  ▪ accessibility

Week	Syllabus content	
	Knowledge	**Skills**

5–6	**Impacts of technology**
	• work health and safety (WHS) considerations for a personal work area, including:
	  ▪ lighting
	  ▪ ventilation
	  ▪ ergonomics
	• responsibilities of users when storing and maintaining private/personal information
	• the concept of digital citizenship
	• consequences of different methods of disposal of outdated technologies
	• recycling of technology products
	• consequences of using digital media compared to traditional methods of communication
	• implications of placing information and images online, including:
	  ▪ identity theft
	  ▪ cyber stalking
	• impact of changes in digital technology on:
	  ▪ personal values
	  ▪ productivity in the workplace
	  ▪ lifestyle	

7–8	**Hardware**
	• types of computer systems
	  ▪ desktop systems
	  ▪ mobile devices
	  ▪ server
	• purpose of the central processing unit
	• purpose of memory
	  ▪ primary memory
	  ▪ secondary memory
	• purpose of input devices
	• purpose of output devices
	• types of peripheral devices
	  ▪ printer/scanner/photocopier (multi-function devices)
	  ▪ microphone
	  ▪ speakers
	  ▪ webcam
	  ▪ cameras – video and still
	• troubleshooting techniques to resolve common computer system faults
		Hardware
		• apply troubleshooting techniques to the following situations:
		  ▪ faulty monitor
		  ▪ no power to computer
		  ▪ printer not working

9–11	**Application skills**
	• features of spreadsheet applications for personal use, including:
	  ▪ simple formulas (addition, subtraction, multiplication and division)
	  ▪ functions (sum, average, max, min)
	  ▪ formatting and graphs
		Application skills
		• use spreadsheet software for personal budgets

Week	Syllabus content	
	Knowledge	**Skills**

12	**Application skills**
	• features of email and webmail for personal use, including:
	  ▪ attachments
	  ▪ storage
	  ▪ sorting
	  ▪ address book
	• types of collaborative software tools
		Application skills
		• use email software for personal use
		• use appropriate collaborative software tools for personal communication

13	**Project management**
	• considerations for the development of a digital product and/or digital solution, including:
	  ▪ purpose
	  ▪ target audience
	  ▪ content
	  ▪ presentation medium
	  ▪ design concepts
	• criteria and methods for evaluating a digital product and/or digital solution, including:
	  ▪ peer
	  ▪ self
	  ▪ target audience	

14–16		**Application skills** • apply layout and design considerations for the construction of digital product and/or digital solution **Project management** • identify the purpose and intended audience for a digital product and/or digital solution • apply selected design elements and principles to create a personal digital product and/or digital solution • evaluate the completed product and/or solution

Semester 2 – Unit 2 – Working with others

Week	Syllabus content	
	Knowledge	Skills
1–2	**Course review** • review Unit 1 • overview of Unit 2 • review assessment requirements **Managing data** • personal data organisation methods, including: ▪ files and folders ▪ appropriate file and folder naming ▪ version control • characteristics of the accuracy and reliability of sources of data, including: ▪ currency ▪ author ▪ purpose • characteristics of internet search engines • internet search strategies, including the use of Boolean search operators (AND, OR, NOT) • difference between data and information • awareness of common file formats for: ▪ documents ▪ graphics ▪ audio ▪ video	**Managing data** • apply personal data organisation methods • create and save data using different file types • use a variety of search engines to locate similar data • use Boolean search operators for detailed searches
3–4	**Impacts of technology** • types of computer crime, including: ▪ development of computer viruses ▪ hacking ▪ identity theft ▪ cyber stalking • introduction to the relevant regulations that apply to personal ICT use, including: ▪ copyright acknowledgement ▪ slander ▪ cyber bullying ▪ piracy • purpose of the fair dealing amendment of the *Copyright Act 1968* (Australia) for educational purposes • purpose of the *Spam Act 2003* (Australia), including appropriate use • responsible digital citizenship related to cyber bullying • impact of digital technology on: ▪ the health of individuals ▪ communication methods	
5–6	**Networks** • components of a personal wireless network, including:	**Networks** • connect to a wireless network • check connectivity of a wireless network

Week	Syllabus content	
	Knowledge	**Skills**
	▪ network interface card (NIC) ▪ router ▪ access point • considerations for selecting hardware for a personal wireless network, including: ▪ hardware compatibility ▪ usability ▪ internet service providers (ISP) • considerations for network security, including: ▪ use of a firewall ▪ virus protection	
7–8	**Application skills** • features of presentation software, including: ▪ design layout ▪ transitions ▪ animation ▪ hyperlinks • features of audio software, including: ▪ editing ▪ effects	**Application skills** • use presentation software • use audio software
9–10	**Application skills** • features of image manipulation software, including: ▪ select ▪ copy ▪ paste ▪ crop ▪ rotate/flip ▪ resize ▪ filters	**Application skills** • use image manipulation software
11	**Application skills** • features of online database tools, including: ▪ data input ▪ data submission ▪ data searching • strategies for troubleshooting software issues and undertaking online training, including: ▪ manuals ▪ online help ▪ peer assistance ▪ online tutorials	**Application skills** • use online databases • apply software troubleshooting and training options

Week	Syllabus content	
	Knowledge	Skills

12–13	**Project management**
	• components of a design process to develop a digital product and/or digital solution
	  ▪ identify a need
	  ▪ schedule of tasks (timeline)
	  ▪ research ideas
	  ▪ specifications
	  ▪ develop ideas
	  ▪ develop solutions
	  ▪ test solutions
	  ▪ modify and adapt
	  ▪ evaluate
	• time management skills
	  ▪ scheduling of events
	  ▪ prioritisation of tasks
	  ▪ development of timelines
	  ▪ following up of tasks
	  ▪ backup of data
	• techniques for representing the design of a digital product and/or digital solution, including:
	  ▪ annotated diagrams/sketches
	  ▪ storyboards
	  ▪ wireframe and grid
		Application skills
		• plan, design and present an interactive project
		• use word processing software

14–16		**Project management** • apply a design process to create a digital product and/or digital solution • apply time management skills • apply the elements of design and the principles of design to create a digital solution to meet user requirements • present a completed project for user evaluation