DIGITAL LITERACY

UNIT CODE: 0611441 01B

TVET CDACC UNIT CODE: ENG/CU/MDE/BC/01/5/MA

UNIT DURATION: 40 Hours

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Apply Digital Literacy

Duration of Unit: 40 Hours

Unit Description

This unit covers the competencies required to demonstrate digital literacy. It involves operating computer devices, solving tasks using the Office suite, managing data and information, performing online communication and collaboration, applying cyber-security skills, performing jobs online and applying job entry techniques.

Summary of Learning Outcomes

S/No	Learning Outcome	Duration in hours.
1.	To operate computer devices	6
2.	To solve tasks using office suite	14
3.	To manage data and information	6
4.	To perform online communication and collaboration	4
5.	To apply cyber-security skills	4
6.	To perform online jobs	4
7.	To apply job entry techniques	2
	TOTAL	**40**

Learning Outcomes, Content, and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods

1. Operate computer devices	1.1. Meaning and importance of digital literacy
	1.2. Functions and Uses of Computers
	1.3. Classification of computers
	1.4. Components of a computer system
	1.5. Computer Hardware
	    1.5.1. The System Unit E.g. Motherboard, CPU, casing
	    1.5.2. Input Devices e.g. pointing, keying, scanning, voice speech recognition, direct data capture devices.
	    1.5.3. Output Devices e.g. hardcopy output and softcopy output
	    1.5.4. Storage Devices e.g. main memory e.g. RAM, secondary storage (Solid state devices, Hard Drives, CDs & DVDs, Memory cards, Flash drives
	    1.5.5. Computer Ports e.g. HDMI, DVI, VGA, USB type C
	1.6. Classification of computer software
	1.7. Operating system functions
	1.8. Procedure for turning off a computer
	1.9. Mouse use techniques
	1.10. Keyboard Parts and Use Techniques
		• Practical Assessment
		• Project
		• Third Party Report
		• Portfolio of Evidence
		• Written Assessment
		• Oral Questioning

Learning Outcome	Content	Suggested Assessment Methods

	1.11. Desktop Customization
	
	1.12. File and Files Management using an operating system
	
	1.13. Computer Internet Connection Options
	
	    1.13.1. Mobile Networks Data Plans
	
	    1.13.2. Wireless Hotspots
	
	    1.13.3. Cabled (Ethernet Fiber)
	
	    1.13.4. Dial-Up
	
	    1.13.5. Satellite
	
	1.14. Computer external devices management
	
	    1.14.1. Device connections
	
	    1.14.2. Device controls (volume controls and display properties)	

2. Solve tasks using Office suite	2.1. Meaning and Importance of Word Processing
	
	2.2. Examples of Word Processors
	
	2.3. Working with word documents
	
	    2.3.1. Open and close word processor
	
	    2.3.2. Create a new document
	
	    2.3.3. Save a document
	
	    2.3.4. Switch between open documents
	
	2.4. Enhancing productivity
	
	    2.4.1. Set basic options preferences
	
	    2.4.2. Help resources
	
	    2.4.3. Use magnification zoom
		• Practical Assessment
		• Project
		• Third Party Report
		• Portfolio of Evidence
		• Written Assessment
		• Oral Questioning

Learning Outcome	Content	Suggested Assessment Methods
	tools	
	2.4.4. Display, hide built-in tool bar	
	2.4.5. Using navigation tools	
	2.5. Typing Text	
	2.6. Document editing (copy, cut, paste commands, spelling and Grammar check)	
	2.7. Document formatting	
	2.7.1. Formatting text	
	2.7.2. Formatting paragraph	
	2.7.3. Formatting styles	
	2.7.4. Alignment	
	2.7.5. Creating tables	
	2.7.6. Formatting tables	
	2.8. Graphical objects	
	2.8.1. Insert object (picture, drawn object)	
	2.8.2. Select an object	
	2.8.3. Edit an object	
	2.8.4. Format an object	
	2.9. Document Print setup	
	2.9.1. Page layout,	
	2.9.2. Margins set up	
	2.9.3. Orientation.	
	2.10. Word Document Printing	
	2.11. Meaning & Importance of electronic spreadsheets	
	2.12. Components of Spreadsheets	
	2.13. Application areas of spreadsheets	

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Learning Outcome	Content	Suggested Assessment Methods
	2.14. Using spreadsheet application	
	2.14.1. Parts of Excel screen: ribbon, formula bar, active cell, name box, column letter, row number, Quick Access Toolbar.	
	2.14.2. Cell Data Types	
	2.14.3. Block operations	
	2.14.4. Arithmetic operators (formula bar (-, +, *,).	
	2.14.5. Cell Referencing	
	2.15. Data Manipulation	
	2.15.1. Using Functions (Sum, Average, SumIF, Count, Max, Max, IF, Rank, Product, mode)	
	2.15.2. Using Formulae	
	2.15.3. Sorting data	
	2.15.4. Filtering data	
	2.15.5. Visual representation using charts	
	2.16. Worksheet printing	
	2.17. Electronic Presentations	
	2.18. Meaning and Importance of electronic presentations	
	2.19. Examples of Presentation Software	
	2.20. Using the electronic presentation application	
	2.20.1. Parts of the PowerPoint screen (slide navigation pane, slide pane, notes, the ribbon, quick	

Learning Outcome	Content	Suggested Assessment Methods
	access toolbar, and scroll bars).	
	2.20.2. Open and close presentations	
	2.20.3. Creating Slides (Insert new slides, duplicate, or reuse slides.)	
	2.20.4. Text Management (insert, delete, copy, cut and paste, drag and drop, format, and use spell check).	
	2.20.5. Use magnification zoom tools	
	2.20.6. Apply or change a theme.	
	2.20.7. Save a presentations	
	2.20.8. Switch between open presentations	
	2.21. Developing a presentation	
	2.21.1. Presentation views	
	2.21.2. Slides	
	2.21.3. Master slide	
	2.22. Text	
	2.22.1. Editing text	
	2.22.2. Formatting	
	2.22.3. Tables	
	2.23. Charts	
	2.23.1. Using charts	
	2.23.2. Organization charts	
	2.24. Graphical objects	
	2.24.1. Insert, manipulate	
	2.24.2. Drawings	
	2.25. Prepare outputs	

Learning Outcome	Content	Suggested Assessment Methods

	2.25.1. Applying slide effects and transitions
	
	2.25.2. Check and deliver
	
	    2.25.2.1. Spell check a presentation
	
	    2.25.2.2. Slide orientation
	
	    2.25.2.3. Slide shows, navigation
	
	2.26. Print presentations (slides and handouts)	

3. Manage Data and Information	3.1. Meaning of Data and information
	3.2. Importance and Uses of data and information
	3.3. Types of internet services
	
	    3.3.1. Communication Services
	    3.3.2. Information Retrieval Services
	    3.3.3. File Transfer
	    3.3.4. World Wide Web Services
	    3.3.5. Web Services
	    3.3.6. Automatic Network Address Configuration
	    3.3.7. NewsGroup
	    3.3.8. Ecommerce
	
	3.4. Types of Internet Access Applications
	3.5. Web browsing concepts
	
	    3.5.1. Key concepts
	    3.5.2. Security and safety
		• Practical Assessment
		• Project
		• Third Party Report
		• Portfolio of Evidence
		• Written Assessment
		• Oral Questioning

Learning Outcome	Content	Suggested Assessment Methods

	3.6. Web browsing
	    3.6.1. Using the web browser
	    3.6.2. Tools and settings
	    3.6.3. Clearing Cache and cookies
	    3.6.4. URIs
	    3.6.5. Bookmarks
	    3.6.6. Web outputs
	3.7. Web based information
	    3.7.1. Search
	    3.7.2. Critical evaluation of information
	    3.7.3. Copyright, data protection
	3.8. Downloads Management
	3.9. Performing Digital Data Backup (Online and Offline)
	3.10. Emerging issues in internet	

4. Perform online communication and collaboration	4.1. Netiquette principles
	4.2. Communication concepts
	    4.2.1. Online communities
	    4.2.2. Communication tools
	    4.2.3. Email concepts
	4.3. Using email
	    4.3.1. Sending email
	    4.3.2. Receiving email
	    4.3.3. Tools and settings
	    4.3.4. Organizing email
	4.4. Digital content copyright and licenses
	4.5. Online collaboration tools
	    4.5.1. Online Storage (Google
		• Practical Assessment
		• Project
		• Third Party Report
		• Portfolio of Evidence
		• Written Assessment
		• Oral Questioning

Learning Outcome	Content	Suggested Assessment Methods
	Drive)	
	4.5.2. Online productivity applications (Google Docs & Forms)	
	4.5.3. Online meetings (Google Meet Zoom)	
	4.5.4. Online learning environments	
	4.5.5. Online calendars (Google Calendars)	
	4.5.6. Social networks (Facebook Twitter - Settings & Privacy)	
	4.6. Preparation for online collaboration	
	4.6.1. Common setup features	
	4.6.2. Setup	
	4.7. Mobile collaboration	
	4.7.1. Key concepts	
	4.7.2. Using mobile devices	
	4.7.3. Applications	
	4.7.4. Synchronization	
5. Apply cybersecurity skills	5.1. Data protection and privacy	• Practical Assessment
	5.1.1. Confidentiality of data information	• Project
	5.1.2. Integrity of data information	• Third Party Report
	5.1.3. Availability of data information	• Portfolio of Evidence
	5.2. Internet security threats	• Written Assessment
	5.2.1. Malware attacks	• Oral Questioning
	5.2.2. Social engineering attacks	

Learning Outcome	Content	Suggested Assessment Methods
	5.2.3. Distributed denial of service (DDoS) 5.2.4. Man-in-the-middle attack (MitM) 5.2.5. Password attacks 5.2.6. IoT Attacks 5.2.7. Phishing Attacks 5.2.8. Ransomware 5.3. Computer threats and crimes 5.4. Cybersecurity control measures 5.4.1. Physical Controls 5.4.2. Technical Logical Controls (Passwords,PINs, Biometrics) 5.4.3. Operational Controls 5.5. Laws governing protection of ICT in Kenya 5.1.1. The Computer Misuse and Cybercrimes Act No. 5 of 2018 5.1.2. The Data Protection Act No. 24 Of 2019	
6. Perform Online Jobs	6.1.Introduction to online working 6.2.Types of online Jobs 6.3.Online job platforms 6.3.1. Remotask 6.3.2. Data annotation tech 6.3.3. Cloud worker 6.3.4. Upwork 6.3.5. Oneforma 6.3.6. Appen	• Practical Assessment • Project • Third Party Report • Portfolio of Evidence • Written Assessment • Oral Questioning

Learning Outcome	Content	Suggested Assessment Methods
	6.4. Online account and profile management 6.5. Identifying online jobs job bidding 6.6. Online digital identity 6.7. Executing online tasks 6.8. Management of online payment accounts.	
7. Apply job entry techniques	7.1. Types of job opportunities 7.1.1. Self-employment 7.1.2. Service provision 7.1.3. product development 7.1.4. salaried employment 7.2. Sources of job opportunities 7.3. Resume curriculum vitae 7.3.1. What is a CV 7.3.2. How long should a CV be 7.3.3. What to include in a AC 7.3.4. Format of CV 7.3.5. How to write a good CV 7.3.6. Don'ts of writing a CV 7.4. Job application letter 7.4.1. What to include 7.4.2. Addressing a cover letter 7.4.3. Signing off a cover letter 7.5. Portfolio of Evidence 7.5.1. Academic credentials 7.5.2. Letters of commendations 7.5.3. Certification of participations 7.5.4. Awards and decorations 7.6. Interview skills	• Practical Assessment • Project • Third Party Report • Portfolio of Evidence • Written Assessment • Oral Questioning

Learning Outcome	Content	Suggested Assessment Methods
	7.6.1. Listening skills 7.6.2. Grooming 7.6.3. Language command 7.6.4. Articulation of issues 7.6.5. Body language 7.6.6. Time management 7.6.7. Honesty 7.7.Generally knowledgeable in current affairs and technical area	

Suggested Methods Instruction

- Instructor-led facilitation using active learning strategies
- Demonstration by trainer
- Practical work by trainees
- Viewing of related videos
- Group discussions
- Project
- Role play
- Case study

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	Learning Materials			

9.	Textbooks	Digital Literacy: Concepts and Applications by Ben Brow	10 pcs	1:3
10.	Printed training materials	Sample CVs	5 pcs	1:5
		Sample job applications	5 pcs	1:5
11.	Online Resources	Khan Academy, Coursera, and YouTube for supplementary video content.	Accessible in 25 computers	1:1
B	**Learning Facilities & infrastructure**			
12.	Lecture/theory room	$60m^2$	1	1:25
13.	Computer workshop	$160 \ m^2$	1	1:25
14.	Computers	Operating System: 64-bit Windows 11 or 10 version 1809 or above Processor: 2.5 GHz (3+ GHz recommended), Memory: 8 GB (32GB recommended)	25 pcs	1:1

		Disk space: 10 GB Display: 1920 x 1080 resolution Display Card: 2 GB GPU (8 GB recommended) and DirectX 11 compliant (DirectX 12 recommended)		
15.	Projector	high-resolution projectors with HDMI input	1	1:25
16.	Smartboard/Smart TV	Specifications: 77-inch interactive whiteboard with touch and pen functionality.	1	1:25
17.	Whiteboard	Traditional whiteboard	1	1:25
18.	External storage media	USB flash drives (32GB), External HDD/SSD	25 pcs	1:1
19.	Webcams	HD (1080p)	25 pcs	1:1
20.	Printers	With Print, Copy, Scan and Fax	2	1:13
21.	Over-ear headphones	Large diaphragm	25 pcs	1:1
C	**Software**			

22.	Operating systems	Windows/Linux/Macintosh Operating System	For 25 computers	1:1
23.	Office	Microsoft Office Software	For 25 computers	1:1
24.	Workspace	Google Workspace Account	For 25 computers	1:1
25.	Antivirus Software		For 25 computers	1:1
26.	Photo editing software	Adobe Photoshop, Canva, GIMP	For 25 computers	1:1
27.	Video editing software	Adobe Premiere Pro, iMovie, DaVinci Resolve	For 25 computers	1:1
28.	Web Browsers	Chrome, Firefox, Edge, Safari	For 25 computers	1:1
D	**Consumables**			
29.	Pens, pencils, rulers and paper	Whiteboard markers, 2H pencils, plastic rulers, A2 white papers	Enough	
30.	Printing papers	A4 and A3	Enough	