

FORMAT OF UNIT PLAN/SCHEME OF WORK

Academic year: 2021-2022

Term: First Term

School:

Subject: ICT
period per week: 2

Teacher:

Class: S3

N° of

DATES	UNIT TITLE	LESSON TITLE	Learning objectives + Key Unit competence	Teaching methods& techniques +Evaluation procedures	Resources & References	OBSERVATIONS

WEEK 1 11/10/2021 - 15/10/2021	Unit 1: APPLICATION AND UTILITY SOFTWARE INSTALLATION	<ul style="list-style-type: none"> ▪ Operating system(OS) ▪ Functions of operating systems Application, I/O, memory and CPU management. ▪ Types of license for software Open source and proprietary licence ▪ Download software. 	<ul style="list-style-type: none"> ▪ Explain the basic functions of an operating system. ▪ Describe computer user privileges while installing and uninstalling a program. ▪ Explain the difference between open source and proprietary software. ▪ Allow program access to administrative privileges during program installation. ▪ Download an open source application program from the internet. ▪ Use administrative privileges to install different 	<ul style="list-style-type: none"> ▪ Learners discuss the role of open source applications over proprietary and vice versa. ▪ Learners download different software setups/installer from the internet with the teacher's guidance. ▪ Learners install and uninstall applications provided by a teacher. ▪ Learners download and install add-on and use them. ▪ In groups, learners are given DVDs containing operating systems and are to follow the instructions to install on 	<ul style="list-style-type: none"> ➤ <i>Computers,</i> ➤ <i>projector,</i> ➤ <i>text book,</i> ➤ <i>storage devices,</i> ➤ <i>the internet,</i> ➤ <i>Storage of different applications and operating systems,</i> ➤ <i>installation video</i> 	
Week 2 18/10/2021 - 22/10/2021		<ul style="list-style-type: none"> ▪ Installation of software MS office, antivirus, Skype, browser, media player programs, burning applications, adobe reader/Photoshop, and games. 				

Week 4 01/11/2021- 05/11/2021	Unit 2: TABLE OF CONTENTS AND MAIL MERGE	<ul style="list-style-type: none"> ▪ Table of content(TOC) ▪ List of tables and list of figures 	<ul style="list-style-type: none"> ▪ Identify the role of a table of contents in a document. 	<ul style="list-style-type: none"> ▪ Within a document, learners create and amend a table of contents, list of figures, and tables. 	<ul style="list-style-type: none"> ➤ <i>Computers,</i> ➤ <i>projector,</i> ➤ <i>data(formal letter and list of recipients and their individual details),</i> ➤ <i>textbooks containing both table of contents, list of figures and tables,</i> ➤ <i>the internet.</i> ➤ <i>ICT student book 3</i> 	
Week 5 08/11/2021- 12/11/2021		<ul style="list-style-type: none"> ▪ Mail merge -Concept of mail merge, use new list of recipients, and use existing list ▪ Organize, print and view shortcuts ▪ Protect a document 	<ul style="list-style-type: none"> ▪ Identify the need to write and print a letter to multiple recipients. ▪ Generate a table of contents for a document. ▪ Apply and use mail merge to produce a personalized document for multiple recipients. ▪ Protect a document with a password. ▪ Organize and print a document. ▪ Use a table of contents to indicate document's content. 	<ul style="list-style-type: none"> ▪ Learners write a formal letter and use mail merge features to produce multiple copies to different people. ▪ Learners adjust a document and print different orientations using the school printer, print preview, and PDF writer. ▪ Learners protect a document using a password. 		
Key Unit Competency: <i>Generate a table of contents and use one document to have multiple copies for different recipients.</i>						
SUMMATIVE EVALUATION						
Week 6	Unit 3: CHARTS	<ul style="list-style-type: none"> ▪ Charts 	<ul style="list-style-type: none"> ▪ Know how to 	<ul style="list-style-type: none"> ▪ Learners insert 	<ul style="list-style-type: none"> ➤ <i>Computers,</i> 	<ul style="list-style-type: none"> ▪

15/11/2021 - 19/11/2021	AND ADVANCED OBJECTS	<p>-Role and types of charts.</p> <ul style="list-style-type: none"> ▪ To create a chart or graph ▪ Formatting an object and chart -Styles, adjust image, format an object and others 	<p>present data graphically using charts.</p> <ul style="list-style-type: none"> ▪ Identify procedures to add and read documents added in a document as objects. 	<p>charts and common mathematical equations in a provided document.</p> <ul style="list-style-type: none"> ▪ Learners choose and insert documents, presentations, sheets and PDF files appropriately in a document by displaying the entire file or displaying them in the document as icons. 	<ul style="list-style-type: none"> ➤ <i>projector,</i> ➤ <i>ICT student book 3,</i> ➤ <i>and some interactive materials.</i> 	
Week 7 22/11/2021 - 26/11/2021		<ul style="list-style-type: none"> ▪ Add object from files Document, workbook, presentation, PDF, etc ▪ Add objects Excel, presentation, and equation applications in a document <p>Evaluation</p>	<ul style="list-style-type: none"> ▪ Know how to insert different objects from different programs in a document e.g. ▪ equations, excel and, portable document format (PDFs). ▪ Illustrate information with different charts. ▪ Insert common mathematical equations and symbols into a document. ▪ Add documents to another word processing 	<ul style="list-style-type: none"> ▪ Learners use embedded files in a document by opening them, editing and making a presentation 		

			<p>document.</p> <ul style="list-style-type: none"> ▪ Insert objects of different programs in a document e.g. equations, excel ▪ and, portable document format(PDFs). 			
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Key Unit Competency: Present data graphically and use different objects in a document.

SUMMATIVE EVALUATION

WEEK 8 29/11/2021 - 03/12/2021	UNIT 4: ArcGIS	<ul style="list-style-type: none"> ▪ Query methods (III) -Select features by attributes, select by location, export selected features. ▪ Display of layer (II) -Symbolize layer -Add/remove label of layer 	<ul style="list-style-type: none"> ▪ Know how to query a map using complex selections. ▪ Explain how to export and convert ArcGIS maps. ▪ Query a map using complex selections. ▪ Use advanced symbology and labelling. ▪ Produce a map layout. ▪ Print, export and send a map. 	<ul style="list-style-type: none"> ▪ The teacher helps learners select on a map all the rivers that flow through a predetermined location using the tools they learnt. ▪ Practical exercises on how to select by attributes/by location and on how to export selected features. ▪ The teacher demonstrates how symbology can be given using categories. 	<ul style="list-style-type: none"> ➤ <i>Computers,</i> ➤ <i>projector,</i> ➤ <i>ArcGIS,</i> ➤ <i>interactive board,</i> ➤ <i>and text books.</i> 	
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				<p>Afterwards learners practice symbolising layers according to categories and quantities.</p> <ul style="list-style-type: none"> ▪ The teacher helps learners work with map elements and perform exercises on how to insert a legend, scale, orientation and text. ▪ Under the teacher's guidance, learners perform an exercise on printing, exporting a map as a picture(eg.jpg) and sending a map. 		
Week 9 06/12/2021 - 10/12/2021		REVISION				
Week 10 13/12/2021 - 17/12/2021		EXAMINATION PERIOD				
Week 11		MARKING AND REPORT				

20/12/2021 - 24/12/2021		
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TERM 2

DATES	UNIT TITLE	LESSON TITLE	Learning objectives + Key Unit competence	Teaching methods & techniques + Evaluation procedures	Resources & References	OBSERVATIONS
Week 1 10/01 - 14/01/2022	UNIT 4: ArcGIS	<ul style="list-style-type: none"> ▪ map layout -Work with map elements -Insert: legend, scale, orientation (grid or north arrow), text (title, author, date, sources, etc.). ▪ Use page and print setup menu -Print setup, data frame setup, and print. ▪ Save and send a map -Export map and email it (attach the exported map and send) 	<ul style="list-style-type: none"> ▪ Query a map using complex selections. ▪ Use advanced symbology and labelling. ▪ Produce a map layout. ▪ Print, export and send a map. 	<ul style="list-style-type: none"> ▪ The teacher helps learners select on a map all the rivers that flow through a predetermined location using the tools they learnt. ▪ Practical exercises on how to select by attributes/by location and on how to export selected features. ▪ The teacher demonstrates how symbology can be given using categories. Afterwards learners practice symbolising layers according to categories and quantities. ▪ The teacher helps 	<ul style="list-style-type: none"> ➤ <i>Computers,</i> ➤ <i>projector,</i> ➤ <i>ArcGIS,</i> ➤ <i>interactive board,</i> ➤ <i>and text books.</i> 	

				<p>learners work with map elements and perform exercises on how to insert a legend, scale, orientation and text.</p> <ul style="list-style-type: none">▪ Under the teacher's guidance, learners perform an exercise on printing, exporting a map as a picture(eg.jpg) and sending a map.		
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Key Unit Competency: Query a map using selections (attribute and location). Create a map layout and insert map elements. Use advanced symbology and labeling. Print, export and send a map.

SUMMATIVE EVALUATION

Week 2 17/01 - 21/01/2022	UNIT 5: CHARTS AND OBJECTS IN SPREADSHEET	Charts Create common chart <ul style="list-style-type: none"> ▪ Column, bar, pie, and scatter. Formatting chart <ul style="list-style-type: none"> ▪ Backgrounds, colors and patterns, legend, axis, and labels 	<ul style="list-style-type: none"> ▪ Identify different ways of presenting data graphically. ▪ Identify the different techniques used to organise and to ▪ print content from many sheets. ▪ Use charts and graphics to present data graphically. ▪ Format a range of data cells as a table to improve readability. ▪ Apply basic data manipulation techniques to organise content in many sheets. 	<ul style="list-style-type: none"> ▪ Represent and interpret data graphically using sample data provided by the teacher. ▪ Teacher helps learners to organise and print data from a sheet. 	<ul style="list-style-type: none"> ➤ <i>Computers,</i> ➤ <i>projector,</i> ➤ <i>text books,</i> ➤ <i>and an interactive board.</i> 	
Week 3 24/01 - 28/01/2022		Format cell data as a table <ul style="list-style-type: none"> ▪ Table design and layout, change, 				

		etc. Printable datasheet <ul style="list-style-type: none"> ▪ Set margins, set page numbers, and headers and footers,printing a chart,print area. 				
Key Unit Competency: Use charts and objects in a spreadsheet, use different techniques to organize a printable datasheet.						
SUMMATIVE EVALUATION						
Week 4 31/01 - 04/02/2022	Unit 6: PRESENTATION	<ul style="list-style-type: none"> ▪ Role of presentation applications ▪ Creating, saving and opening a presentation ▪ Components of a presentation environment. Slide <ul style="list-style-type: none"> ▪ Insert slide, slide navigation pane, copy, cut, and paste slides. ▪ Slide title placeholder, and body content holder. 	<ul style="list-style-type: none"> ▪ Identify and explain the role of presentation applications. ▪ Recognize the criteria used for a good presentation. ▪ Understand how to insert objects into slides. ▪ State how to distinguish between different presentation views. ▪ Arrange and format presentation slides. ▪ Insert objects 	<ul style="list-style-type: none"> ▪ Teacher helps learners to organize slides and choose appropriate objects for the audience. ▪ In groups, learners are given the following topics (HIV/AIDS, peace and value, genocide prevention, gender, and the impact of computers in society) and each group makes a presentation (not less than five slides) containing text, images, and sounds. Learners focus on the use of slide transition, layout, design and animations. 	<ul style="list-style-type: none"> ➤ <i>Computers,</i> ➤ <i>projector,</i> ➤ <i>text books,</i> ➤ <i>and an interactive board.</i> 	

			<p>into slides.</p> <ul style="list-style-type: none"> ▪ Explain the importance of each presentation view. ▪ Use animations and transitions to format slides and use various slide presentation modes to display the presentation 			
Week 5 07/02- 11/02/2022		Objects <ul style="list-style-type: none"> ▪ Text, images, table, Clip Art, Word Art, smart Art, shapes, charts, and media clips. Formatting slide <ul style="list-style-type: none"> ▪ Font, theme fonts, change themes and background, slide design, and slide layout. 				
Week 6 14/02- 18/02/2022		Presentation views <ul style="list-style-type: none"> ▪ Normal view, slide sort view, slide show, notes page, reading view, slide 				

		<p>master, handout master, and notes master</p> <p>Animation of presentation</p> <ul style="list-style-type: none"> ▪ Custom animation, slide transition, preview presentation, transition sound, and transition speed. 				
Key Unit Competency: Prepare and make a presentation						
SUMMATIVE EVALUATION						
Week 7 21/02-25/02/2022	Unit 7: INTRODUCTION TO COMPUTER GRAPHICS	<p>Definition of:</p> <ul style="list-style-type: none"> ▪ Computer graphics, model, vector graphics, bitmap graphics, image, 2D, 3D, vector, raster, etc ▪ Graphics file format. ▪ JPEG, GIF, PNG, and TIFF. 	<ul style="list-style-type: none"> ▪ State the value of graphics like logos and explain computer graphics related terms. ▪ Identify places and areas where graphics are mostly used. 	<ul style="list-style-type: none"> ▪ The teacher helps learners to define computer graphics related items. <ul style="list-style-type: none"> ▪ Learners do photo shoot with a digital camera to be familiar with all operation ▪ Learners use scanner to capture some images from papers. <ul style="list-style-type: none"> ▪ Learners are given a sample of every type of graphic and they resize them and discuss and compare the 	<ul style="list-style-type: none"> ➤ <i>Computers,</i> ➤ <i>projector,</i> ➤ <i>graphics application (adobe Photoshop),</i> ➤ <i>text books, and an interactive board.</i> 	
Week 8 28/02-04/03/2022		<p>Area of graphics use</p> <ul style="list-style-type: none"> ▪ Advertisement ▪ Decoration services ▪ Logos ▪ Book illustrations 	<ul style="list-style-type: none"> ▪ State different graphics file formats. ▪ Know and understand 			

		<ul style="list-style-type: none"> Magazines Product packaging Entertainment Graphics software <ul style="list-style-type: none"> Paint Adobe Photoshop 	<p>how to use basic vector graphic elements to create a graphic.</p> <ul style="list-style-type: none"> Demonstrate the difference between vector graphics and bitmap graphics. 	<p>different types.</p> <ul style="list-style-type: none"> Learners are given a sample of every type of graphics and they resize them and discuss and compare the different type. 		
Week 9 07/06- 11/03/2022		Basic graphic element <ul style="list-style-type: none"> Lines, curves, sectors, polygons, circles, ovals, squares, rectangles, brush, spray and fill tools Graphic features <ul style="list-style-type: none"> Copy and paste, duplicate, move and arrange, resize, flip, skew, rotate, group, combine, cut out, trim, weld, and intersect Reshape vector graphics Manipulate nodes and control points. 	<ul style="list-style-type: none"> Creating vector graphics and bitmap graphics using basic graphic elements. Manipulate vector graphics by using graphics features. Manipulate bitmap graphics. 	<ul style="list-style-type: none"> In small groups, teacher facilitates students to create a vector and bitmap graphic using graphic elements 		

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		Graphics formatting <ul style="list-style-type: none"> ▪ Colors for the outlines and fill of objects, and create shading and fill objects with patterns and textures. ▪ Fonts as part of the graphic design ▪ Fit text to path and envelope effect Edit image <ul style="list-style-type: none"> ▪ Crop an image, resize, and magnify an area of a picture, change color, color picker, brightness and contrast, flip, rotate, stretch, changing pixels, brushing tools, and work with layers. 				
Key Unit Competency: Create graphics using basic graphic elements and edit predefined graphics.						
SUMMATIVE EVALUATION						
Week 10 14/03- 18/03/2022	REVISION					
Week 11	EXAMINATION PERIOD					

21/03- 25/03/2022	
Week 12 28/03- 1/4/2022	MARKING AND REPORT

TERM 3

DATES	UNIT TITLE	LESSON TITLE	Learning objectives + Key Unit competence	Teaching methods& techniques +Evaluation procedures	Resources & References	OBSERVATIO NS
WEEK 1 18/04- 22/04/2022	UNIT: 8 INTRODUCTION TO MULTIMEDIA	Introduction <ul style="list-style-type: none"> ▪ Definition, different types of media, media applications, hardware and software requirements, and techniques or steps 	<ul style="list-style-type: none"> ▪ Know and understand multimedia. ▪ Identify the media tools used to create images, audio and video files. ▪ Explain different multimedia tools and applications. ▪ Create an interactive presentation. ▪ Use media tools to create digital images, video and audio files. 	<ul style="list-style-type: none"> ▪ Teacher helps learners to understand and explain the multimedia tools and applications. ▪ In small groups, the teacher facilitates learners to create hyperlinks. ▪ In groups, learners use media tools to capture 	<ul style="list-style-type: none"> ➤ Computers, ➤ projector, ➤ text books, ➤ scanner, ➤ digital cameras, ➤ phone camera, ➤ microphone, ➤ flash media 	
Week 2 24/04- 29/04/2022		An interactive multimedia <ul style="list-style-type: none"> ▪ Create hyperlinks to: a location in the current presentation, another presentation, a file, and an e-mail address. 				
Week 3 02/05- 06/05/2022		Create action buttons <ul style="list-style-type: none"> ▪ Buttons for: play or stop, inserted sound/movie during presentation, playing 				

		a CD during presentation, and adding sound/movie effects to an animation.		images, video, audio or search images on the internet to create interactive media files.	files, and headphones.	
Week 4 09/05-13/05/2022		Create digital images and video audio files <ul style="list-style-type: none"> Create images using media tools, record video and audio, digitize and edit created images by cropping, save created images and video and audio files 				

Key Unit Competency: Explain the different uses of multimedia and interactive multimedia applications. Use multimedia software to create a video.

SUMMATIVE EVALUATION

Week 5 16/05-20/05/2022	Unit9: NETWORK SECURITY	Definition <ul style="list-style-type: none"> Security Threat Authentication Encryption Decryption Firewall Importance of computer security 	<ul style="list-style-type: none"> Explain why security is important. Identify security threats. Identify security procedures. Describe why security is important. 	<ul style="list-style-type: none"> Teacher helps learners to understand computer security. Teachers organize group work where learners apply network security concepts like, authentication, authorization to access equipment and data. 	<ul style="list-style-type: none"> Computers, servers, routers, switches, transmission data cables, projector, 	
Week 6 23/05-27/05/2022		Security threats <ul style="list-style-type: none"> Physical (events/ attacks that steal, damage, or destroy equipment). Data (events/attacks that remove/change, corrupt, deny access, allow access, or steal information). Viruses, worms, spyware and Trojans Social engineering 	<ul style="list-style-type: none"> Describe security threats. Apply security measures to prevent unauthorized access, misuse or modification of data flowing through the network. <ul style="list-style-type: none"> Apply network security concepts to 			

Week 7 30/05- 03/06/2022		Security procedures <ul style="list-style-type: none"> Protect physical equipment Protect data Basic security precautions	prevent unauthorized intruders from intercepting data travelling through the network or to initiate commands <ul style="list-style-type: none"> disrupting the network's normal operation. 		➤ and text books.	
Key Unit Competency: Explain network security and apply basic security measures.						
SUMMATIVE EVALUATION						
Week 8 06/06- 10/06/2022	Unit 10: PLATFORM GAME PROGRAMMING	Concept of platform and its usage <ul style="list-style-type: none"> Create platform sprites Interact with platform sprites Role of platform in scratch 	<ul style="list-style-type: none"> Describe the platform and its role. Apply different colors to produce more interesting backgrounds. Manage the interaction with platform sprites. Identify and add levels to games. Explain the meaning and the role of platform. Practice the creation of platform sprites. Explore the interaction with platform sprites. Add a level to a game. 	<ul style="list-style-type: none"> Individual work on producing platforms. Group discussion on how to associate scratch tools/facilities and produce a planned platform. Practice how to use colors, copy, edit, and build combo blocks. Practice on using commands to add a level of a 	➤ Scratch editor, ➤ digital material, ➤ project or, ➤ and computer.	
Week 9 13/06- 17/06/2022		Create platform sprite <ul style="list-style-type: none"> Pick a color, design a needed item, use (edit, copy, etc.), use fill tool, and build a combo block 				
Week 10 20/06- 24/06/2022		Sample commands for sprite manipulations <ul style="list-style-type: none"> Color is touching, repeat until, change by, when key pressed, switch to costume; if, etc. Sample control <ul style="list-style-type: none"> If, forever, repeat until, point in direction, move 				

		steps, touching, show/ hide, if else, switch to costume, set to, etc.		game.		
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Key Unit Competency: To be able to use complex expressions, operators and controls to design platforms.

SUMMATIVE EVALUATION

Week 11 27/06- 01/07/2022		REVISION
Week 12 04/07- 08/07/2022		EXAMINATION PERIOD
Week 13 11/07- 15/07/2022		MARKING AND REPORT