

CONTENT DISTRIBUTION FOR TTC IN SCHOOL YEAR 2022-2023

SUBJECT: ICT

Number of period per week: 3

Class: S4

Term I

Note: The first lesson of each unit has more than one period. This is done in order to consider the time for the introductory activity.

UNIT 1: Computer maintenance (Periods: 18)		
Key unit Competence: Assemble and disassemble a computer & Fix identified hardware issues and install software in a computer		
Week	Contents	Periods
1	Elements of the computer system unit and their roles: Power supply, Video card, Hard disk, Mother board, CPU, RAM	3
2	• Computer maintenance principles	1
	• computer capacity : Storage size (bit, byte,...), computer processing speed	2
3&4	Identifying and addressing hardware issues	1
	Assembling and Disassembling a computer	3
4	Software installation principles	2
5	Computer software issues: OS issues, Applications issues and Viruses	1
	Computer software installation: Installation of an OS	2
6	Computer software installation: Installation of an Application software	2
	End unit assessment	1

UNIT 2: Advanced word processing (Periods:18)		
Key Unit Competency: Apply advanced skills to create suitable word documents		
Week	Contents	Periods
7	Formatting a document: Change fonts	3
8	Paragraph group (Indent, spacing, bullets, numbering, alignment)	3

9	Referencing a word document: Header and footer, Creating and inserting footnotes and endnotes	2
	Referencing a word document: converting footnotes to endnotes	1
10	Creating and updating a table of content	3
11	Page layout tab command: Page set up group: Margin, Orientation, Column	2
12	Protecting a document from unauthorized changes: setting a password to open and modify a document	2
	End unit assessment	1

Term 2

UNIT 3: Advanced Spreadsheet I (Periods: 15)		
Key Unit Competence: Arrange data in a meaningful way by using Excel advanced functionalities		
Week	Contents	Periods
1	Conditional Formatting (highlight cell rule, top/bottom rule,...)	3
2	Charts	3
3	Data organization (sorting, filter)	3
4	Freeze panes: freeze top row, freeze first column	2
	Workbook view: normal, page break preview, page layout, custom view, and split the worksheet.	1
5	Integrating with other applications: Exporting data to another file type (pdf, xps, ...)	2
	End unit assessment and remediation	1

UNIT 4: Searching the internet (Periods:21)		
Key unit Competence: Use the internet ethically in doing researches		
Week	Contents	Periods
6	Internet ethics	2
	Web security(spyware, hacking, firewall)	1
7	URL and its parts (protocol, host name, domain name, sub domain)	2
7&8	Search on the internet Strategies for better search results: simple search techniques (keyword searching)	3
8&9	Search on the internet Advanced search techniques (Boolean operators, quotation marks, tilde sign...)	3
9&10	Search on the internet <ul style="list-style-type: none"> Searching for documents, books, images, video on the internet 	3

10&11	Searching by image	3
11&12	Browser's Techniques for remembering (Cookies, Bookmark, Cache and Browser history)	2
	End unit assessment	2

Term 3

UNIT 5: Online google applications tools (Periods:27)		
Key unit Competence: Use different google application tools in solving real life problems		
Week	Contents	Periods
1	Google Account / Gmail	3
2	Google drive: Introduction, role, getting started, uploading files	3
3	Google docs: Introduction, role of google docs tool, starting google doc,	3
4	Google sheets: Introduction, role of google sheet tool, starting google sheet,	3
5	Google slides: Introduction, role of google slides tool, starting google slides, Google slides working Environment, share the contents created using google slide	3
6	Google form: introduction, google form creation, working environment of google form, content sharing using google form	3
7	Google classroom: Google classroom creation, Add students, add collaborators, assignments, or quiz in Google classroom	3
8	Google calendar	3
9	YouTube	3
10	End unit assessment	2

CONTENT DISTRIBUTION IN SCHOOL YEAR 2022/2023

Number of period per week: 3 periods

Class: Senior 5

Term 1

UNIT 1: Advanced Spreadsheet II(20)		
Key Unit Competence: Use the full potential of the spreadsheet to manipulate data		
Week	Contents	Periods
1	Logical functions: AND, IF, FALSE, NOT, OR)	3

2	Advanced Math Spreadsheet function: ABS, ARABIC& ROMAN, BASE, MOD, SQRT	2
2&3	Advanced Statistical Spreadsheet functions: AVERAGE, AVERAGEIF, LARGE, MAXIFS, MEDIAN, MINIF, MODE	3
3&4	Text spreadsheet functions: CHAR, CONCATENATE, LOWER, UPPER	2
4	Using formula & functions from different sheets	2
5	Protecting & unprotecting worksheet,	2
5&6	Data validation	3
6&7	Using other excel templates	2
7	End unit assessment	1

UNIT 2: Advanced power point presentation (16)		
Key Unit Competence: Create a power point presentation to address a bigger audience		
Week	Contents	Periods
7&8	Create and Manage presentations	2
8	Managing slides	2
9	Apply design themes and format background	2
9&10	Adding Notes and Comments, Inserting Header and Footer	2
10	Add Sound and Animation to Slides	2
11	Add audio and video content to slides	2
	Add and manage slide transitions (add sound and timing)	1
12	Presenting using PowerPoint:	2
	End Unit assessment	1

Term II

UNIT 3: Computer Graphics tools (32)		
Key Unit Competence: Use graphic tools in capturing and editing images		
Week	Contents	Periods
1	Introduction to computer Graphics (Concepts: pixel, morphing, 2D&3D image, raster scan, random scan)	2
2	Image format (TIFF, JPEG, GIF, PNG,) Examples and application used to compress an image	2
3	Image capturing tools o digital camera *Parts of a digital camera *Using a digital camera (taking pictures and sending them to a computer) o Scanner *Parts of a scanner *Using a scanner	3
4	Screenshots capturing o Using the print screen key (PrSc) o Using the snipping tool Graphics software - Paint o Starting and saving a paint file o Select, Cut, Copy, Paste, Crop Paint tools (pencil, Fill color, Text, Eraser, Color picker, Magnifier)	3

	o Insertion of shapes	
5	Graphics software Photoshop Photoshop working environment	3
6	Understanding what Photoshop does · selecting and moving images, viewing and arranging layers. editing image and file saving	2
7	Photoshop image Editing Basic color painting · Image color correction	3
8	Basic Photoshop Text Tools (Text Tool, font, size, Alignment, warped text)	3
9	End Unit assessment	2

Term 3

UNIT 4: E commerce, social media and online services(21)		
Key Unit Competence: Use e-commerce websites and social media platforms to request for online services and access social media		
Week	Contents	Periods
1	E commerce: Understanding e commerce, models, history, advantages vs. disadvantages	2
1&2	Online Payment methods	2
2&3	Social media (Facebook,)	3
3&4	Social media (twitter)	3
4&5	Social media (Instagram)	3
5&6	Social media (WhatsApp)	3
6	Online Services: E Banking& E payment (credit card, Mobile Money,)	2
7	Online Services: Irembo local online services	2
	End unit assessment	1

5. Database basics(12)		
Key Unit Competence: Explain the different concepts used in database management		
Week	Contents	Periods
8&9	Introduction to database (database, Data, Information)	2
	Database approach: Traditional File Processing, DBMS	2
	Area where database can be applied	2
10	Database Access Levels and Users: Access levels, users, data independence	3
11	Relational model: Concepts (table, primary key, ...)	2
	End Unit assessment	1

CONTENT DISTRIBUTION IN SCHOOL YEAR 2022-2023

Number of period per week: 3 periods

Class: Senior 6**Term 1**

UNIT 1: Database design (periods :18)		
Key Unit Competence: Identify important entities and their attributes from a given real life situation and create a related database		
Week	Contents	Periods
1	Database Models (Hierarchical, Relational, Network model, ...)	2
1&2	Database relational model	2
2	Database ERD model	2
3	Database design steps: - Investigation, Identification of important entities	2
3&4	Database design steps: Identification of relationships between entities	2
4	Database optimization through Normalization: Definition, Database anomalies	2
5	Data types in Access	1
	Database Creation	2
6	Data entry and manipulation	2
	End Unit assessment	1

UNIT 2: SQL and Database project (periods:18)		
Key Unit Competence: Apply Structured Query Language in managing a relational database and create a simple database project		
Week	Contents	Periods
7	Introduction to SQL	2
7&8	SQL Language Data Definition Language	2
8	SQL constraints application to Ms Access table	2
9	SQL Language Data Manipulation Language	3
10	Operators in the Where clause	2
10&11	SQL aggregate functions	2
11	String expression in SQL	2
12	SQL Language Data Control Language	2
	End unit assessment	1

Term 2

UNIT 3: Introduction to Visual Basic 6.0 (periods:33)		
Key Unit Competence: Describe a Visual Basic Integrated Development Environment (VB-IDE) and connect a simple form to a database		
Week	Contents	Periods
1	Event Oriented Programming using Visual Basic: introduction, terms, desktop vs web applications	3
2	Features of visual basic: Installation, features	3
3	Visual basic Integrated development Environment (VB IDE)	3
4	Controls in VB: Form, Label, Textbox and Radio button	3
5	Controls in VB: Check box, Command button, Image, Timer calendar	3
6	Controls in VB: ComboBox, ListBox and Drive	3
7	Controls in VB: Frame, Picture Box, File system and director list box	3
8	Planning and Developing a Visual Basic program	3
9	VB Project Planning	3
10	Connecting a VB 6.0 project to a database by using ADO	3
11	Connecting ADODC control to the tables within Access database	3
12	Building the interface and accessing the database (friendly and ergonomic interface)	1
	End Unit assessment	2

Term III

UNIT 4: Introduction to web designing (Periods: 36)		
Key Unit Competence: Build a standard static website using HTML		
Week	Contents	Periods
1	Introduction to web designing Key terms: Website, Web page, Web application, Static web page, Dynamic web page	2
1&2	Introduction and evolution of HTML	2
2	HTML tags and Syntax	2
3	HTML Syntax and HTML Page Structure	3
4	Design a static web page using html tags and hyperlinks	3
5	Tags that identify and name documents	3
6	Tags that organize web page contents: HTML lists	3
7	Tags that organize web page contents: Definition List and Nested list	3
8	Tags that organize web page contents: HTML Frame and Table tags	3

9	Tags that organize web page contents: HTML Forms	3
10	Particularities of HTML5	3
11	Creation of links	3
12	Back end vs Front end	2
	End unit assessment	1