

REPUBLIC OF GHANA

MINISTRY OF EDUCATION SCIENCE AND SPORTS



Republic of Ghana

TEACHING SYLLABUS FOR INFORMATION AND COMMUNICATIONS TECHNOLOGY
(JUNIOR HIGH SCHOOL)

Enquiries and comments on this syllabus should be addressed to:

The Director
Curriculum Research and Development Division (CRDD)
P. O. Box 2739
Accra
Ghana.

September, 2007

TEACHING SYLLABUS FOR INTRODUCTORY ICT (JUNIOR HIGH SCHOOL)

RATIONALE FOR TEACHING AND LEARNING ICT

ICT is so important in the world today that it makes it imperative for every young person to be competent in the use of ICT for the many tasks that he/she will have to accomplish. This syllabus is designed to provide basic skills in Information and Communications Technology (ICT) for Junior High School (JHS) students. The syllabus covers basic topics in ICT and offers hands-on activities that will help students acquire basic skills in ICT.

GENERAL AIMS

The syllabus is designed to help the pupil to:

1. acquire basic ICT literacy
2. develop interest and use ICT in learning other subjects
3. use the Internet effectively for information
4. follows basic ethics in the use of ICT
5. acquire keyboarding skills

SCOPE OF CONTENT

The content of this course has been designed to offer basic knowledge and skills to students to afford them the opportunity to explore the use of ICT as a foundation for further study of the subject. For enhancing teaching and learning, the course is based on the following themes to be covered in three years of Junior High School (JHS):

- Ø Introduction to ICT
- Ø Word Processing
- Ø Spreadsheet
- Ø Internet
- Ø Keyboarding skills. These themes are to be covered in three years of Junior High School (JHS).

PRE-REQUISITE SKILLS

Students of this course might have acquired good reading, writing, numeracy and keyboarding skills, and should have gone through the Primary ICT Syllabus. In addition, students should acquire responsible behaviour in following rules, regulations and performing task according to procedure.

ORGANISATION OF THE SYLLABUS

This syllabus has been structured to cover the three years of Junior High School (JHS). The year's work has been divided into three terms. Each term has sections and a number of units. The structure is presented in the table below.

STRUCTURE AND ORGANIZATION OF THE SYLLABUS

JUNIOR HIGH SCHOOL ONE

TERM 1	TERM 2	TERM 3
<p style="text-align: center;">SECTION 1</p> <p>INTRODUCTION TO PERSONAL COMPUTER</p> <p>Unit 1 Information processing</p> <ul style="list-style-type: none">• Stages of information processing cycle <p>Unit 2 Parts of a personal computer</p> <ul style="list-style-type: none">• Main hardware components of a personal computer• Functions of the main hardware components of a personal computer• Types of main software• Uses of the main software• Application software	<p style="text-align: center;">SECTION 1</p> <p>BASIC TYPING SKILLS DEVELOPMENT</p> <p>UNIT 1 Typing keyboard symbols</p> <ul style="list-style-type: none">• The use of punctuation keys which do not involve the shift key• Using common keyboard symbols• Typing short passages using punctuation keys which do not involve the shift key	<p style="text-align: center;">SECTION 1</p> <p>WORD PROCESSING APPLICATION</p> <p>Unit 1 Formatting text Word Processing Document</p> <ul style="list-style-type: none">• Opening an existing file• Formatting document using the common formatting tools• Renaming formatted document using the 'Save As' command

TERM 1	TERM 2	TERM 3
<p>UNIT 3 Keyboarding and mouse skills review</p> <ul style="list-style-type: none"> Improving speed in typing using a typing software Using mouse skills in document creation <p>Unit 4 Turning On and Off the Computer</p> <ul style="list-style-type: none"> Turning on the computer Opening Application Turning off the computer <p style="text-align: center;">SECTION TWO</p> <p>HEALTH AND SAFETY IN USING ICT TOOLS</p> <p>UNIT 1 Health and safety in using ICT tools</p> <ul style="list-style-type: none"> Possible health hazards associated with long term exposure to ICT tools Safety precaution for the use of ICT tools 	<p style="text-align: center;">SECTION 2</p> <p style="text-align: center;">GRAPHICAL USER INTERFACE</p> <p>Unit 1 Introduction to the Desktop</p> <ul style="list-style-type: none"> Features of the Desktop Icons Navigating through the features on the Desktop <p>UNIT 2 Launching Application</p> <ul style="list-style-type: none"> Launching Application using start menu button Launching Application using desktop icons <p>Unit 3 Windows Management</p> <ul style="list-style-type: none"> Features of Title bar Functions of the Title bar Use of features of Title bar 	<p>UNIT2 Managing files</p> <ul style="list-style-type: none"> Renaming and Deleting files Restoring and emptying files from the recycle bin <p style="text-align: center;">SECTION TWO</p> <p style="text-align: center;">ETHICS OF USING ICT'S</p> <p>UNIT 1 Computer Viruses</p> <ul style="list-style-type: none"> Sources of computer viruses Effect of viruses on computer <p>UNIT 2 Copyright Ethics</p> <ul style="list-style-type: none"> Concept of copyright and copyright infringement Reasons for Copyright protection Copyright laws in Ghana Effects of breaking Copyright laws

	TERM TWO	TERM THREE
	<p style="text-align: center;">SECTION THREE</p> <p style="text-align: center;">INTRODUCTION TO WORD PROCESSING APPLICATION (1)</p> <p>UNIT 1 Creating a Word Processing document</p> <ul style="list-style-type: none"> • Identification of commonly used icon of a Word Processing Window • Typing short passages • Naming and saving Word Processing document using the 'Save As command. <p>UNIT 2 Editing Word Processing document</p> <ul style="list-style-type: none"> • Opening and editing an existing Word Processing using the common editing tools • Re-saving an edited document with the same file name using the 'Save' command 	<p style="text-align: center;">SECTION THREE</p> <p style="text-align: center;">INTERNET</p> <p>UNIT 1 Internet and World Wide Web</p> <ul style="list-style-type: none"> • Concept of the internet and world wide web (www) • Identification of features of a web browser • Launching and exiting a web page • Advantages and disadvantages of the internet <p>UNIT 2 Technology used to access the internet</p> <ul style="list-style-type: none"> • Technology used to access the internet

JUNIOR HIGH SCHOOL TWO

TERM 1	TER M 2	TERM 3
<p style="text-align: center;">SECTION 1</p> <p style="text-align: center;">PARTS OF PERSONAL COMPUTER 2</p> <p>UNIT 1 Basic Storage Devices</p> <ul style="list-style-type: none"> • Types of Basic Storage Devices • Uses of basic storage devices • Importance of storage devices <p>UNIT 2 Basic Input and Output Devices</p> <ul style="list-style-type: none"> • Types of Basic Input and Output Devices • Functions of Input and Output Devices 	<p style="text-align: center;">SECTION 1</p> <p style="text-align: center;">USING THE INTERNET TO COMMUNICATE</p> <p>UNIT 1 Internet Etiquette</p> <ul style="list-style-type: none"> • Rules and regulations in using the internet • Developing rules and regulations for using the computer laboratory <p>UNIT 2 Creating e-mail account</p> <ul style="list-style-type: none"> • Concept of the E-mail • Importance of E-mail • Creating E-mail account • Logging into E-mail account 	<p style="text-align: center;">SECTION 1</p> <p style="text-align: center;">WORD PROCESSING APPLICATION (4)</p> <p>UNIT 1 The use of the drawing toolbar in Word Processing Document</p> <ul style="list-style-type: none"> • Tools on the Drawing Toolbar • Drawing in Word Processing Document Using the Tools on the Drawing Toolbar <p>UNIT 2 Inserting pictures in Word Processing Document</p> <ul style="list-style-type: none"> • Copying and Pasting Pictures in Word Processing Document using the Copying and Paste Method <p>UNIT 3 Printing a Word Processing Document</p> <ul style="list-style-type: none"> • Previewing and editing printable area • Printing a Word Processing Document

TERM 1	TER M 2	TERM 3
<p style="text-align: center;">SECTION TWO</p> <p style="text-align: center;">FILE AND FOLDER MANAGEMENT</p> <p>UNIT 1 Creating Folders</p> <ul style="list-style-type: none"> • Creating folders • Moving folders from one location to another • Moving files into folders • Renaming folders using right mouse click • Differences between files and folders <p style="text-align: center;">SECTION THREE</p> <p style="text-align: center;">KEYBOARD SYMBOLS</p> <p>UNIT 2 Typing of keyboard symbols</p> <ul style="list-style-type: none"> • The use of keyboard symbols in typing • Typing short passages involving keyboard symbols 	<p style="text-align: center;">SECTION TWO</p> <p style="text-align: center;">WORD PROCESSING APPLICATION (3)</p> <p>UNIT 1 Editing Word Processing Document</p> <ul style="list-style-type: none"> • Selecting text (highlighting text) • Copying /cutting and pasting text/document • Resaving edited document <p>UNIT 2 Formatting Text in Word Processing Document</p> <ul style="list-style-type: none"> • Creating and naming a new document file • Formatting Word Processing Document Using Formatting Tools • Typing in double line spacing • Aligning text • Saving file in a folder 	<p style="text-align: center;">SECTION TWO</p> <p style="text-align: center;">ACCESSING INFORMATION</p> <p>UNIT 1 Browsing through websites using hyperlinks</p> <ul style="list-style-type: none"> • Navigating through web pages using the hyperlinks • Managing webpages in browsing <p>UNIT 2 Access information using Website address</p> <ul style="list-style-type: none"> • Features of a website address • Typing correct website address • Navigating through website to access information <p>UNIT 3 Accessing Information from Educational Software</p> <ul style="list-style-type: none"> • Sources of educational software • Browsing information from educational software - Encarta • Using the Search Facility in Encarta

		TERM 3
		UNIT 4 Transferring Information from Website to Word Processing document <ul style="list-style-type: none">• Locating information from website• Copying and pasting information from a Website to Word Processing document• Saving information in a Word Processing document

JUNIOR HIGH SCHOOL THREE

TERM 1	TER M 2	TERM 3
SECTION ONE E-MAILING AND SHARING INFORMATION UNIT 1 Locating and transferring information from website to a Word Processing document <ul style="list-style-type: none"> • Locating information from a website • Copying and pasting information from website to Word Processing document • Saving copied information in Word Processing UNIT 2 Compose and send e-mail messages <ul style="list-style-type: none"> • Composing and sending E-mail messages UNIT 3 Access and Reply e-mail messages <ul style="list-style-type: none"> • Importance of E-mail • Accessing and replying E-mail messages 	SECTION ONE WORD PROCESSING APPLICATION UNIT 1 Toolbars <ul style="list-style-type: none"> • Features of the formatting and standard toolbars • Uses of the scroll bars • Using the help facility UNIT 2 Finding files and Folders using the Search Tool <ul style="list-style-type: none"> • Using the Search Tool to find files and folders SECTION TWO INTEGRATION OF ICT INTO EDUCATION UNIT 1 Integrating ICT into learning <ul style="list-style-type: none"> • Integrating of ICT into specific learning areas • Benefits of ICT in teaching and learning 	SECTION ONE REVISION AND PRACTICAL SKILLS UNIT 1 Project Work 1 Creating a Word Processing Document <ul style="list-style-type: none"> • Typing, editing, formatting and printing a one-page Word Processing document using editing and formatting tools on a given topic • Saving document in a folder on the desktop UNIT 2 Project Work 2 Creating file in Paint Application <ul style="list-style-type: none"> • Use Paint Application to design a card Saving and printing Paint Application file in a named folder

TERM 1	TERM 2	TERM 3
<p>UNIT 4 Ways of Sharing Information</p> <ul style="list-style-type: none"> • Sharing information <p style="text-align: center;">SECTION TWO</p> <p style="text-align: center;">SPREADSHEET APPLICATION</p> <p>UNIT 1 Introduction to Spreadsheet Application</p> <ul style="list-style-type: none"> • Identifying features of the Spreadsheet Application window • Identifying cell names • Adjusting columns and rows • Entering data in Spreadsheet Application • Adding figures using the AutoSum • Editing, formatting and saving a workbook using editing and formatting tools. 	<p>UNIT 2 Search Engines</p> <ul style="list-style-type: none"> • Types of search engines • Skills in using search engines to access information from the internet • Accessing Information using Search Engines 	

TIME ALLOCATION

ICT is allocated 3 periods of 35 minutes per period per week. The periods should be put into two double periods and one single period.

SUGGESTIONS FOR TEACHING THE SYLLABUS

The three years work has been divided into sections. Each term has sections with their general objective(s).

GENERAL OBJECTIVES

General Objectives have been listed at the beginning of each section of the syllabus. The general objectives flow from the general aims for teaching English listed on page 4 of this syllabus. The general objectives form the basis for the selection and organization of the unit topics. Read the general objectives very carefully before you start teaching. After teaching all the units, go back and read the general aims and general objectives again to be sure you have covered both of them adequately in the course of your teaching.

To make it user friendly, the syllabus has been structured into five columns. Column one is the Unit topic, Column two consists of the Specific Objectives of each units, Column three provides the content to be covered, Column four provides Teaching Learning Activities for the achievement of the Specific Objectives, while Column five provides some exercises that will be useful for assessing the knowledge and skills gained in the lesson.

COLUMN 1 - UNITS

This column presents the sub topics of the major topic(s) of the section. The unit topics have been arranged sequentially to enhance skill building. However if a teacher finds at some point that teaching and learning in his/her class will be more effective he/she can skip that unit to another unit and come back later to the unit.

COLUMN 2 - SPECIFIC OBJECTIVES

Column 2 shows the Specific Objectives for each unit. The specific objectives begin with numbers such as 1.3.5 or 2.2.1. These numbers are referred to as "Syllabus Reference Numbers". The first digit in the syllabus reference number refers to the section; the second digit refers to the unit, while the third digit refers to the rank order of the specific objective. For instance, 1.3.5 means: Section 1, Unit 3 (of Section 1) and Specific Objective 5. In other words, 1.3.5 refers to Specific Objective 5 of Unit 3 of Section 1. Similarly, the syllabus reference number 2.2.1 simply means Specific Objective number 1 of Unit 2 of Section 2. Using syllabus reference numbers provides an easy way for communication among teachers and other educators. It further provides an easy way for selecting objectives for test construction. Let's say for instance, that Unit 2 of Section 2 has five specific objectives: 2.2.1 - 2.2.5. A teacher may want to base his/her test items/questions on objectives 2.2.3 and 2.2.4 and not use the other three objectives. In this way, a teacher would sample the objectives within units and within sections to be able to develop a test that accurately reflects the importance of the various skills taught in class.

You will note also that specific objectives have been stated in terms of the student i.e., *what the student will be able to do after instruction and learning in the unit*. Each specific objective hence starts with the following, "The student will be able to." This in effect, means that you have to address the learning problems of each individual student. It means individualizing your instruction as much as possible such that the majority of students will be able to master the objectives of each unit of the syllabus.

COLUMN 3 - CONTENT

The "content" column of the syllabus presents a selected body of information, skills and competencies that you will need in teaching the particular unit.

COLUMN 4 - TEACHING AND LEARNING ACTIVITIES (TLA)

T/L activities that will ensure maximum student participation in the lessons are presented in Column 4. Try to de-emphasize the theory and emphasize the practicals. You are encouraged to re-order the suggested teaching and learning activities and also add to them where necessary in order to achieve optimum student learning. As we have implied already, the major purpose of teaching and learning is to make students acquire basic literacy skills and integrate their knowledge and skills to enhance learning. The teacher should therefore be a facilitator by guiding students in doing more practical work.

COLUMN 5 - EVALUATION

Suggestions and exercises for evaluating the lessons of some units are indicated in Column 5. Evaluation exercises can be in the form of oral questions, quizzes, class exercises and assignments, project work etc. Try to ask questions and set tasks and assignments that will challenge your students to apply their knowledge and skills to issues and problems. The suggested evaluation tasks are not exhaustive. You are encouraged to develop other creative evaluation tasks to ensure that students have mastered the skills implied in the specific objective(s) of each unit. For evaluation during class lessons, determine the mastery level you want students to achieve in their answers and responses. If for instance, you take 80% as the mastery level, ensure that each student's answer to questions asked in class achieve this level of mastery.

DEFINITION OF PROFILE DIMENSIONS

The concept of profile dimensions was made central to the syllabuses developed from 1998 onwards. A 'dimension' is a psychological unit for describing a particular learning behaviour. More than one dimension constitutes a profile of dimensions. A specific objective may be stated with an action verb as follows: The pupil will be able to describe..... etc. Being able to "describe" something after the instruction has been completed means that the pupil has acquired "knowledge". Being able to explain, summarize, give examples, etc. means that the pupil has understood the lesson taught.

Similarly, being able to develop, plan, solve problems etc. means that the pupil can "apply" the knowledge acquired in some new context. Each of the specific objectives in this syllabus contains an "action verb" that describes the behaviour the pupil will be able to demonstrate after the instruction. "Knowledge", "Application", etc. are dimensions that should be the prime focus of teaching and learning in schools.

ICT is a practical subject and the learning required is best achieved by application of the skills learnt. The profile dimensions required at the JHS level are as follows:

Knowledge and understanding	60
Application of knowledge	40

At the JHS level, pupils should be involved in solving problems using the various ICT techniques they have learnt. The application dimension has now been given a weight of 40%.

FORM OF ASSESSMENT

The assessment of ICT should be based on more practical work than theory. In developing assessment procedures, try to select specific objectives in such a way that you will be able to assess a representative sample of the syllabus objectives. Each specific objective in the syllabus is considered a criterion to be achieved by the pupils. The assessment procedure you use i.e. class tests, homework, projects etc. must be developed in such a way that it will consist of a sample of the important objectives taught over a period.

The assessment will be based on one paper scored over 100%. The assessment should be a practical test based essentially on knowledge and understanding. Pupils will be expected to solve problems using the following; Introduction to ICT, Word Processing Application, Spreadsheet Application and Internet.

GUIDELINES FOR SCHOOL BASED ASSESSMENT

A new School Based Assessment system (SBA), formally referred to as Continuous Assessment, will be introduced into the school system from September 2008. SBA is a very effective system for teaching and learning if carried out properly. The new SBA system is designed to provide schools with an internal assessment system that will help schools to achieve the following purposes:

- Standardize the practice of internal school-based assessment in all schools in the country
- Provide reduced assessment tasks for each of the primary school subjects
- Provide teachers with guidelines for constructing assessment items/questions and other assessment tasks
- Introduce standards of achievement in each subject and in each class of the school system
- Provide guidance in marking and grading of test items/questions and other assessment tasks
- Introduce a system of moderation that will ensure accuracy and reliability of teachers' marks
- Provide teachers with advice on how to conduct remedial instruction on difficult areas of the syllabus to improve pupil performance

The new SBA system will consist of 12 assessments a year instead of the 33 assessments in the previous continuous assessment system. This will mean a reduction by 64% of the work load compared to the previous continuous assessment system. The 12 assessments are labeled

as Task 1, Task 2, Task 3 and Task 4. Task 1-4 will be administered in Term 1; Tasks 5-8 will be administered in Term 2, and Tasks 9-12 administered in Term 3. Task 1 will be administered as an individual test coming at the end of the first month of the term. The equivalent of Task 1 will be Task 5 and Task 9 to the administered in Term 2 and Term 3 respectively. Task 2 will be administered as a Group Exercise and will consist of two or three instructional objectives that the teacher considers difficult to teach and learn. The selected objectives could also be those objectives considered very important and which therefore need pupils to put in more practice. Task 2 will be administered at the end of the second month in the term. Task 3 will also be administered as individual test under the supervision of the class teacher at the end of the 11th or 12 week of the term.

Task 4 (and also Task 8 and Task 12) will be a project to be undertaken throughout the term and submitted at the end of the term. Schools will be supplied with 9 project topics divided into three topics for each term. A pupil is expected to select one project topic for each term. Projects for the second term will be undertaken by teams of pupils as Group Projects. Projects are intended to encourage pupils to apply knowledge and skills acquired in the term to write an analytic or investigative paper, write a poem 9 (as may be required in English and Ghanaian Languages), use science and mathematics to solve a problem or produce a physical three-dimensional product as may be required in Creative Arts and in Natural Science.

Apart from the SBA, teachers are expected to use class exercises and home work as processes for continually evaluating pupils' class performance, and as a means for encouraging improvements in learning performance.

The marks derived from projects, the end of month tests and home work specifically designed for the SBA should together constitute the School Based Assessment component marked out of 60 per cent. The emphasis is to improve pupils' learning by encouraging them to do more practice in ICT. The SBA will hence consist of:

- Ø End-of-month tests
- Ø Home work assignments (specially designed for SBA)
- Ø Project

Other regulations for the conduct of SBA will reach schools from GES.

Combining SBA marks and End-of-Term Examination Marks

The new SBA system is important for raising pupils' school performance. For this reason, the 60 marks for the SBA will be scaled to 50. The total marks for the end of term test will also be scaled to 50 before adding the SBA marks and end-of-term examination marks to determine pupils' end of term results. The SBA and the end-of-term test marks will hence be combined in equal proportions of 50:50. The equal proportions will affect only assessment in the school system.

GRADING PROCEDURE

In marking your class examination scripts, it is very important that you develop a marking scheme. A marking scheme, as you may be aware, consists of the points for the best answer you expect for each essay question or structured question, and the mark(s) allocated for each point raised by the pupil as well as the total marks for the question. For instance, if a question carries 10 marks and you expect 4 points in the best answer, you could allocate 2 marks (or part of it, depending upon the quality of the point raised by the pupil) to each point raised, totaling 8 marks, and then give the remaining 2 marks or part of it, for organization of answer. For objective test papers, you may develop an answer key to speed up the marking.

To improve assessment and grading and also introduce uniformity in schools, it is recommended that schools adopt the following grade boundaries for assigning grades:

Grade A:	80 - 100%	-	Excellent
Grade B:	70 - 79%	-	Very Good
Grade C:	60 - 69%	-	Good
Grade D:	45 - 59%	-	Credit (Satisfactory)
Grade E:	35 - 44%	-	Pass
Grade F:	≤ 34%	-	Fail

The grading system presented above shows the letter grade system and equivalent grade boundaries. In assigning grades to pupils' test results, or any form of evaluation, you may apply the above grade boundaries and the descriptors. The descriptors (Excellent, Very Good etc) indicate the meaning of each grade. For instance, the grade boundary for "Excellent" consists of scores between 80 - 89. Writing "80%" for instance, without writing the meaning of the grade, or the descriptor for the grade i.e. "Excellent", does not provide the pupil with enough information to evaluate his/her performance in the assessment. You therefore have to write the meaning of the grade alongside the score you write. Apart from the score and the grade descriptor, it will be important also to write a short diagnosis of the points the pupil should consider in order to do better in future tests etc. Comments such as the following may also be added to the grades:

- Keep it up
- Has improved
- Could do better
- Hardworking
- Not serious in class
- More room for improvement, etc.

Note that the grade boundaries above are also referred to as grade cut-off scores. When you adopt a fixed cut-off score grading system as in this example, you are using the criterion-referenced grading system. By this system a pupil must make a specified score to earn the appropriate grade. This system of grading challenges pupils to study harder to earn better grades. It is hence very useful for achievement testing and grading.

JHS ONE - TERM ONE

SECTION ONE

INTRODUCTION TO PERSONAL COMPUTER (1)

General Objective: The student will:

1. understand how data is transformed into information
2. be aware of the main components and uses of the personal computer
3. acquire basic skills in using the personal computer

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 INFORMATION PROCESSING	The student will be able to: 1.1.1 identify the various stages of information processing cycle	Stages of information processing cycle: e.g. Data - Processing - Information	Discuss the stages the computer transforms raw data into a meaningful form. Discuss the devices used at every stage.	
UNIT 2 PARTS OF A PERSONAL COMPUTER	1.2.1 identify the main components of a personal computer 1.2.2 identify the main hardware components and state their functions	Main components of a personal computer: <ul style="list-style-type: none"> • Hardware • Software Main hardware components of a personal computer: <ul style="list-style-type: none"> • System Unit • Monitor • Keyboard • Mouse Functions of the main hardware components of a personal computer	Discuss the main components of a personal computer Students identify the main hardware components (refer to content 1.1.2) Discuss the basic functions of hardware components of a personal computer.	Class Exercise Students draw and label the parts of a Personal Computer and state their functions.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 3</p> <p>KEYBOARDING AND MOUSE SKILLS (REVIEW)</p>	<p>The pupil will be able to:</p> <p>1.2.3 identify the types of main software</p> <p>1.2.4 state the uses of the main software</p> <p>3.1.1. type 30 – 35 words per minute</p> <p>3.1.2 use mouse skills in document creation</p>	<p>Types of main software e.g.</p> <ul style="list-style-type: none"> • Operating System, • Application software <p>Uses of the main software e.g.</p> <p>Operating system : controls the basic input and out devices</p> <p>Application software: used to perform a specific task. e.g. Word Processing</p> <p>Improving speed in typing using a typing software: e.g. Typing Tutor or Mavis Beacon</p> <p>Using mouse skills in document creation.</p>	<p>Discuss the main types of software</p> <p>Teacher should not be too technical</p> <p>Discuss the uses of the main software</p> <p>Students use the drills in the typing software to improve upon their speed</p> <p>NOTE: Teacher should insist on the use of the nine fingers in typing.</p> <p>Guide students to practise mouse skills e.g. Single clicking, Double clicking , Right click, Drag and drop in document creation</p>	<p>Exercise: Students to type a given passage.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 4</p> <p>TURNING ON AND OFF THE COMPUTER</p>	<p>The pupil will be able to:</p> <p>1.4.1 turn on the computer</p> <p>1.4.2. open Applications</p> <p>1.4.3 turn off the computer</p>	<p>Turning on a Computer:</p> <ul style="list-style-type: none"> • Check cables connected to the system unit • Check main socket connection • Remove all removable storage devices (if any) from the system unit • Press on the power button of the system unit • Press the power button of the Monitor <p>Opening Applications</p> <p>Turning off a Computer:</p> <ul style="list-style-type: none"> • close all Application windows • click start menu • click turn off /shut down • select turn off on the dialogue box • wait for the screen to go off • turn off the monitor • switch off main socket 	<p>Students practise how to turn on the computer using the correct procedure</p> <p>Students to practise opening of Application</p> <p>Students practise how to turn off the computer using the correct procedure</p> <p>NOTE: (Some system units automatically turn off) There is no need to press the power button of such computer otherwise it will restart the computer)</p>	<p>Let students write down the procedure they used in turning on/off the computer</p>

SECTION TWO

HEALTH AND SAFETY IN USING ICT TOOLS

General Objective: The student will:

1. be aware of the hazards and safety precautions in the use of ICT tools
2. appreciate the use of ICT in learning

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>HEALTH AND SAFETY IN USING ICT TOOLS</p>	<p>The student will be able to:</p> <p>2.1.1 identify possible health hazards associated with long-term exposure to ICT tools</p> <p>2.1.2 state safety precautions for the use of ICT tools</p>	<p>Possible health hazards associated with long-term exposure to ICT tools e.g.</p> <ul style="list-style-type: none"> • Television - affects vision • Computer - affects vision, back ache, wrist pain • Mobile phone - radiation which can cause cancer, loud ringing tones - damage hearing • Radio - high volume damages hearing • Public address system - high volume damages hearing <p>Safety precaution for the use of ICT tools e.g.</p> <ul style="list-style-type: none"> • Do not answer or receive calls when charging mobile phone • Correct body position when using the computer • Avoid plugging ICT tools in damaged sockets • Do not overload socket 	<p>Revise ICT tools and their uses through questions and answers</p> <p>Students brainstorm and discuss the possible health hazards associated with long-term exposure to the use of ICT tools</p> <p>Discuss the risk involved in receiving a call while the mobile phone is on charge.</p> <p>Discuss the safety precautions for the use of ICT tools. i.e. holding the mouse, typing, looking at the computer, etc; and the risks of injury to one's neck, back, eyes, etc</p> <p>Demonstrate the correct body posture for working with a personal computer and let students practise correct sitting position</p>	<p>Pupils describe the effect of long term exposure to ICT tools</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 INTRODUCTION TO MANIPULATIVE KEYS	The student will be able to: 2.2.1 use commonly used keys on the keyboard to create a document	Using some commonly used keys on the keyboard <ul style="list-style-type: none"> • Shift • Tab • Enter • Insert • Backspace • Delete 	Assist students to type selected passages and letters using the following keys: <ul style="list-style-type: none"> • Shift • Tab • Enter • Insert • Backspace • Delete 	Assignment Students to use the shift, insert, tab and enter keys on a given passage.
UNIT 3 LEARNING WITH ICT TOOLS	2.3.1 explain how ICT tools are used to support learning	Learning with ICT tools <ul style="list-style-type: none"> • Accessing information • Sharing ideas • Calculation • Illustrations etc 	Students in groups discuss how ICT tools can be used in learning which support learning Demonstration lesson using ICT tools e.g. Recording a lesson from TV and play back in class.	Assignment Students look for information on a given topic from Encarta or any educational software and present in class.

JHS ONE - TERM TWO

SECTION ONE

BASIC TYPING SKILLS DEVELOPMENT

S General Objectives: The student will:

1. recognise the keys on the keyboard and acquire skills in typing

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>COMMON KEYBOARD SYMBOLS</p>	<p>The student will be able to:</p> <p>1.1.1 use of punctuation keys which do not involve the shift key to create document</p> <p>1.1.2 type short passages using punctuation keys which do not involve the shift key</p>	<p>Using punctuation keys which do not involve the shift key to create document</p> <ul style="list-style-type: none"> • Comma(,) • Slash (/) • Full Stop (.) • Semi-Colon (;) <p>Typing short passages using punctuation keys which do not involve the shift key</p>	<p>Guide students to punctuate their essays and passages using the punctuation keys to create document.</p> <p>Students type a passage using punctuation keys which do not involve the shift key</p>	<p>Exercise: Students type a given passage involving the use of punctuation marks learnt.</p>

SECTION TWO

GRAPHICAL USER INTERFACE

General Objectives: The student will

1. acquire knowledge and skills in basic Graphical User Interface (GUI)

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 INTRODUCTION TO THE DESKTOP	The student will be able to:			
	2.1.1 identify Desktop features	Features of the Desktop <ul style="list-style-type: none"> • Icons: <ul style="list-style-type: none"> - Programmes - Folders - Files • Taskbar: <ul style="list-style-type: none"> - start menu button - clock etc 	Guide students to identify and discuss the features of the Desktop	
	2.1.2 navigate through the features on the Desktop	Navigating through the features on the Desktop	Assist students to navigate through the features on the Desktop	
UNIT 2 LAUNCHING APPLICATION	2.2.1 launch Application using Start Menu button	Launching Application using Start Menu button e.g. <ul style="list-style-type: none"> • Encarta • Mavis Beacon • WordPad etc. 	Students go through the process of launching Application using Start Menu button.	Exercise: Students launch and close Application
	2.2.2 launch Application using Desktop Icons	Launching Application using Desktop Icons	Guide students through the process of launching Applications using Desktop Icons	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 WINDOWS MANAGEMENT	The student will be able to: 2.3.1 state the functions of the features on the Title bar	Features of Title bar <ul style="list-style-type: none"> • Control box <ul style="list-style-type: none"> - Minimize - Maximize/Restore - Close • Window title etc. Functions of the Title bar: <ul style="list-style-type: none"> • Control menu - resize, move • Minimize – drop window on taskbar • when switching between two windows • Maximize - enlarging a window • Restore – bringing window from the taskbar • Close – ending Application • Window title- shows name of Application and the title name 	Let students open two windows and navigate through them Assist students to use features of the Title bar to navigate through windows Guide students to identify and discuss the functions of the features of the Title bar	Oral Work: Students to tell the functions of the features of the titlebar

SECTION THREE

INTRODUCTION TO WORD PROCESSING

General Objectives: The student will:

1. be able to create Word Processing Documents

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p style="text-align: center;">UNIT 1</p> <p style="text-align: center;">CREATING WORD PROCESSING DOCUMENT</p>	<p>The student will be able to:</p> <p>3.1.1 identify commonly used features of a Word Processing Window</p> <p>3.1.2 type a short Word Processing document and save it with a name using the 'Save As' command</p>	<p>Identification of commonly used features of a Word Processing Window e.g. zoom, print, print preview, font, font size font colour, save, open, new, etc.</p> <p>Typing of short passage and saving with a name in Word Processing using the 'Save As' command</p>	<p>Assist students to identify and discuss the common icons of the Word Processing Window</p> <p>Revise procedure for naming and saving document.</p> <p>Assist students to type a Word Processing document</p> <p>Guide students to name and save document in Word Processing document</p>	<p>Exercise: Students to create a Word Processing document and save it with a name</p>
<p style="text-align: center;">UNIT 2</p> <p style="text-align: center;">EDITING WORD PROCESSING DOCUMENT</p>	<p>3.2.1 open and edit an existing Word Processing document using the common editing tools</p> <p>3.2.2 Re-save edited file with the same name using the 'Save ' command in Word Processing</p>	<p>Opening and editing an existing Word Processing document using the common editing tools e.g. –Spelling and Grammar, Undo, Redo etc.</p> <p>Re-saving edited document with the same file name using the 'Save ' command</p>	<p>Assist students to open an existing Word Processing document</p> <p>Guide students to edit Word Processing document using the common editing tools e.g. Spell Check , Undo, Redo etc</p> <p>Guide students to re-save edited file with the same file name using the 'Save' command in Word Processing</p>	<p>Exercise: Students to open existing document and edit it using Spell Check , Undo, Redo and resave it.</p>

JHS ONE - TERM THREE

SECTION ONE

WORD PROCESSING APPLICATION

General Objectives: The student will:

1. acquire more skills in creating document
2. acquire basic skills in managing files.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>FORMATTING TEXT IN WORD PROCESSING DOCUMENT</p>	<p>The student will be able to:</p> <p>1.1.1 open and format text in Word Processing document file</p> <p>1.1.2 re-name formatted document using the 'Save As' command in the File Menu</p>	<p>Opening an existing file in Word Processing</p> <p>Formatting text using common formatting tools e.g.</p> <ul style="list-style-type: none"> • Font Size • font Type • Bold • Italic • Underline <p>Re-naming formatted document using the 'Save As, command in the File Menu</p>	<p>Guide students to open and format a Word Processing document file using the common formatting tools</p> <p>Assist students to re-name a formatted document using the 'Save As' command and discuss the condition under which 'Save As' and 'Save' commands are used.</p>	<p>Exercise: Students to produce a Word Processing document applying the formatting tools.</p> <p>Exercise: Students rename an existing file using the 'Save As' command in the File Menu</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT2 MANAGING FILES	The student will be able to: 1.2.1 rename remove or delete files 1.2.2 restore and empty file from the recycle bin	Renaming and deleting /removing of files Restoring and emptying Files from the recycle bin	Assist students to rename, remove or delete files Guide students to restore and delete or remove file into the recycle bin. Students to restore deleted files to their original location Assist students to empty the recycle bin.	Class Exercise: Students to state when or why a file will be: 1. rename 2. deleted 3. emptied from the Recycle Bin

SECTION TWO

ETHICS OF USING ICTs

General Objective: The student will:

1. become aware of ethics in using ICT tools

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>COMPUTER VIRUSES</p>	<p>The student will be able to:</p> <p>2.1.1 outline the sources of computer viruses</p> <p>2.1.2 analyse the effects of sharing removable storage devices</p>	<p>Sources of computer viruses removable storage devices e.g.</p> <ul style="list-style-type: none"> • floppy diskette, pen drive • Internet e.g. Downloading information – music, video <p>Effects of viruses on computers e.g. Corruption of programmes, files, operating system, hard drives</p>	<p>Brainstorm on the sources of computer viruses</p> <p>Students in groups analyse and report in class the effects of viruses on computers in sharing removable storage devices and downloading information from the Internet.</p>	<p>Exercise: Students to list the main sources of viruses and explain the effects of virus on computer</p>
<p>UNIT 2</p> <p>COPYRIGHT ETHICS</p>	<p>2.2.1 explain the concepts of copyrights and copyright infringement</p> <p>2.2.2 State the reasons for copyright protection</p>	<p>Concept of copyrights and copyright infringement.</p> <p>This may include the following: illegal copies of software (Operating System and Application Software), along with unauthorized copies of audio - music, video - films</p> <p>Reason for copyright protection e.g. to protect the works of people – software, music, books, films</p>	<p>Brainstorm on the concept of copyright and copyright infringement</p> <p>Discuss with students the reasons for copyright protection and list some products that have copyright protection</p>	<p>Assignment: Students to find out from various sources the following:</p> <ol style="list-style-type: none"> 1. some copyright laws in Ghana 2. consequences of breaking the Copyright Law

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
	<p>The student will be able to :</p> <p>2.2.3 outline some copyright laws in Ghana</p> <p>2.2.4 explain the effects of breaking copyright laws</p>	<p>Copyright laws in Ghana</p> <p>Effects of breaking Copyright laws Sanctions: imprisonment and fines</p>	<p>In groups students discuss and report on how copyright laws and practices in the country relate to ICT's. (e.g. Musicians Association of Ghana (MUSIGA), Copyright Law, Patent and Trademark Laws) etc</p> <p>Brainstorm the effects of breaking a copyright law and associate it with using and distributing materials stored in removable media</p>	

SECTION THREE

THE INTERNET

General Objective: The student will:

1. acquire basic skills in using the Internet

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>THE INTERNET AND WORLD WIDE WEB</p>	<p>The student will be able to :</p> <p>3.1.1 explain the concept of the Internet and world wide web (www)</p> <p>3.1.2 identify the features of a web browser and their uses</p> <p>3.1.3 launch and exist a web page</p>	<p>Concept of the Internet and world wide web (www)</p> <p>Identification of features of a Web Browser e.g.</p> <ul style="list-style-type: none"> • Address bar • Forward, • Back • Stop • Reload/refresh, • Print <p>Launching and exiting a web page.</p>	<p>Discuss the concept of Internet and the World Wide Web</p> <p>Discuss the common features of the web browser and their uses</p> <p>Assist students to launch a web page and use some of the features.</p>	<p>Class Exercise</p> <p>Students to identify the features of a Web Browser on a printed page</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 3</p> <p>TECHNOLOGIES USED TO ACCESS INTERNET</p>	<p>The students will be able to:</p> <p>3.1.4 outline the advantages and disadvantages of the internet</p> <p>3.1.5 identify the technologies used to access the internet</p>	<p>Advantages and disadvantage of the Internet:</p> <p>Advantages</p> <ul style="list-style-type: none"> • in teaching and learning e.g. access to more information • to the individual e.g. communication • to the Community e.g. shopping • to Ghana or the nation e.g. International Relations <p>Disadvantages:</p> <ul style="list-style-type: none"> • computer fraud (419) • virus infect computers through Internet • expensive – connectivity and subscription • no barriers – confidential information can be tapped <p>Technologies used to access internet:</p> <ul style="list-style-type: none"> • Computers • Mobile devices • Satellite • Telephones • GPRS • EDGE 	<p>Students in groups discuss the advantages and disadvantages of the internet</p> <p>Students identify the tools used in accessing internet</p>	<p>Class Exercise</p> <p>Students to :-</p> <ol style="list-style-type: none"> 1. State 4 advantages of the internet 2. State 5 technologies used to access internet

JHS TWO - TERM ONE

SECTION ONE

INTRODUCTION PERSONAL COMPUTER (2)

General Objective: The student will:

1. recognize the basic parts of the personal computer and their functions

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>BASIC STORAGE DEVICES OF A COMPUTER</p>	<p>The student will be able to:</p> <p>1.1.1 identify types and uses of basic storage devices</p> <p>1.1.2 state the uses and importance of storage devices</p>	<p>Types of basic storage devices</p> <ul style="list-style-type: none"> • hard drive • CD ROM • Floppy disk drive • pen drive <p>Uses and importance of storage devices</p> <ul style="list-style-type: none"> • Storing information • Used as backups 	<p>Assist students to identify and discuss the uses of the basic storage devices.</p> <p>Group students to discuss and report on why information should be stored and the device used to store different types of information</p>	
<p>UNIT 2</p> <p>TYPES OF BASIC INPUT AND OUTPUT DEVICES</p>	<p>1.2.1 identify types of basic Input and Output devices</p> <p>1.2.2 outline the functions of Input and Output devices</p>	<p>Types of basic Input and Output Devices</p> <ul style="list-style-type: none"> • keyboard, mouse, monitor, printer <p>Functions of Input and Output devices</p> <ul style="list-style-type: none"> • Input devices – feed computer with data • Output devices – display information 	<p>Students identify input and output devices</p> <p>Discuss the functions of Input and Output devices</p>	<p>Let students label a computer indicating the storage, input and output devices</p>

SECTION TWO

FILE AND FOLDER MANAGEMENT

General Objective: The student will:

1. acquire the basic skills in file and folder management

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 CREATING FOLDERS	The student will be able to: 2.1.1 Create folders 2.1.2 move folders from one location to another using the copy and paste method 2.1.3 move files into folders using the cut and paste method 2.1.4 rename folders using the right mouse click 2.1.5 understand the differences between files and folders	Creating of folders Moving folders from one location to another Moving files into folders using the cut and paste method Renaming folders using the right mouse click Differences between files and folders	Assist students to create folders on the desktop Students move folders from one location to another using copy and paste method Guide students to move files into folders using cut and paste method. Assist students to apply the right mouse click to rename folders Discuss the differences between files and folders	Group Work Students create folders and copy their files on the desktop into the folders

SECTION THREE

KEYBOARD SYMBOLS (2)

General Objective: The student will:

1. acquire skills in manipulating keys on the keyboard

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>TYPING OF KEYBOARD SYMBOLS</p>	<p>The student will be able to:</p> <p>3.1.1 identify keyboard symbols and their uses in typing</p> <p>3.1.2 type short passages involving keyboard symbols</p>	<p>The use of keyboard symbols in typing</p> <ul style="list-style-type: none"> • Question mark (?) • Exclamation sign (!) • Open and close brackets. () • @ sign • And (&) • Percentage (%) • Double inverted comas (") etc <p>Typing short passages involving keyboard symbols</p>	<p>Guide students to identify and use punctuation keys which involve the use of the shift key</p> <p>Students to type short passages involving keyboard symbols and save their folder.</p>	<p>Exercise Students to type a given passage involving keyboard symbols .</p>

JHS TWO - TERM TWO

SECTION ONE

USING INTERNET TO COMMUNICATE

General Objective: The student will:

1. acquire basic skills in using the internet to communicate

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 INTERNET ETIQUETTE	The student will be able to : 1.1.1 apply the rules and the regulations in using the Internet 1.1.2 develop rules and regulations for using the computer laboratory	Rules and regulations in using the Internet (Netiquette) <ul style="list-style-type: none"> • spam- intrusion into people's privacy, pornography, intellectual property rights etc Developing rules and regulations for using the computer laboratory	In groups students discuss and report on the rules and regulations in the use of the Internet. In groups, students develop rules and regulations for responsible use of the computer laboratory for class discussion	Exercise Students to type the rules and regulations in the use of the Internet and the computer for their own use.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 CREATING E-MAIL ACCOUNT	The students will be able to: 1.2.1 understand the concept of E-mail 1.2.2 state the importance of E-mail 1.2.3 create E-mail account 1.2.4 outline the procedure for logging into E-mail account	Concept of the E-mail <ul style="list-style-type: none"> • open to e-mail account • internet connectivity • transmit data from one computer • to another over an the internet Importance of E-mail <ul style="list-style-type: none"> • for sending and receiving information :e.g. data, text files, digital photos, or audio and video files from one computer to another over the internet Creating E-mail account. Logging into E-mail account	Discuss the concept of E-mail Let students brainstorm and report on the importance E-mail Assist students to create their own e-mail accounts Stress the importance of user-name/user identification and password. Guide students to log in their E-mail account and review their page.	 Exercise Students to create their own personal e-mail account and practise how to log-in

SECTION TWO

WORD PROCESSING APPLICATION (3)

General Objective: The student will:

1. acquire basic skills in editing and formatting Word Processing Document

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>EDITING WORD PROCESSING DOCUMENT</p>	<p>The student will be able to :</p> <p>2.1.1 Select texts</p> <p>2.1.2 copy/cut and paste texts/ full document in the same and new document</p> <p>2.1.3 Re-save edited document</p>	<p>Selecting Text (Highlighting text)</p> <p>Copying /cutting and pasting text/document</p> <p>Re-saving edited document</p>	<p>Assist students to select text.</p> <p>Discuss the importance of selection of text before effecting changes</p> <p>Guide students to copy/cut and paste texts/ full document in the same and new document</p> <p>Assist students to re-save an edited document file</p>	
<p>UNIT 2</p> <p>FORMATTING TEXT IN WORD PROCESSING</p>	<p>2.2.1 create and name a new Word document file</p> <p>2.2.2 format a Word Processing document using bullets and numbering</p> <p>2.2.3 align texts appropriately</p>	<p>Creating and naming a new document in Word Processing</p> <p>Formatting Word Processing document using bullets numbering</p> <p>Aligning text</p> <ul style="list-style-type: none"> • centre • left align • right align • justify 	<p>Assist students to create and name a new document file in Word Processing</p> <p>Guide students to format the new Word Processing document file using Bullets and Numbers</p> <p>Assist students to open an existing document and use the alignment tools to format</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 FORMATTING TEXT IN WORD PROCESSING (CONTD)	The student will be able to : 2.2.4 type on double line spacing 2.2.5 save file in folder	Typing in double line spacing Saving file in a folder	Assist students to type in double line spacing using the Enter key Students to save file in a folder	Exercise Students to type a given passage involving bullets, numbering and text alignment

JHS TWO - TERM THREE

SECTION ONE

WORD PROCESSING APPLICATION (4)

General Objective: The student will:

1. acquire basic skills in the use of the drawing toolbar in document creation
2. acquire skills in printing Word Processing document

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 THE USE OF THE DRAWING TOOLBAR IN WORD PROCESSING	The student will be able to : 1.1.1 identify and locate the different drawing tools on the drawing toolbar 1.1.2 draw in Word Processing document using the tools on the drawing toolbar	Tools on the drawing toolbar <ul style="list-style-type: none"> • circle • square • oval • arrows • lines Drawing in Word Processing document using the tools on the drawing toolbar	Students identify the drawing toolbar in the Word in Processing document and state their uses Let students practise drawing using the drawing tools in Word Processing document	Exercise: Student type a document and apply the use of some of the drawing tools



UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 INSERTING PICTURES IN WORD PROCESSING DOCUMENT	The student will be able to : 1.2.1 inserting pictures in Word Processing document using copy and paste method	Copying and pasting pictures in Word Processing document using the copy and paste method from <ul style="list-style-type: none"> • copying form a file • copy from Clip Art 	Let students open a new document, copy and paste pictures and save the file created with the pictures	
UNIT 3 PRINTING A WORD PROCESSING DOCUMENT	1.3.1 preview and edit Word Processing document	Previewing and editing printable area	Discuss the importance of previewing of document before printing. Students open preview window and view the document created NOTE: Teacher should stress “What You See Is What You Get” (WYSIWYG)	Assignment: Students to produce and printed document with pictures inserted.
	1.3.2 print a Word Processing document using the print icon	Printing a Word Processing document	Assist students to print Word Processing document using the Print icon.	

SECTION TWO

ACCESSING INFORMATION

General Objective: The student will:

1. acquire knowledge and skills in accessing information from the internet and educational software.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 BROWSING THROUGH WEBPAGES USING HYPERLINKS	The student will be able to : 2.1.1 browse through webpage using hyperlinks	Browsing through websites	Students open websites e.g. www.edughana.net browsing through them Guide students to navigate through web pages through the use of hyperlinks NOTE: <ul style="list-style-type: none"> • where there is no internet, teacher can use educational software eg. Encarta • Teacher draws students attention to the changes in mouse pointer e.g. <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  Harrow.cur for Hyperlink </div> <div style="text-align: center;">  Larrow.cur for pointing </div> </div>	Student learn how to type website addresses
	2.1.2 Manage web pages in browsing	Managing web pages in browsing	Assist students to manage the pages visited applying skills in windows management i.e. minimize and maximize NOTE: <ul style="list-style-type: none"> • Windows Explorer opens different pages at a time • Mozilla and Opera use a default window for all the pages opened 	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 ACCESS INFORMATION USING WEBSITE ADDRESS	The student will be able to : 2.2.1 identify features of a website address 2.2.2 type correct website address	Features of a website address <ul style="list-style-type: none"> • numbers • letters • full stop • slash (/, //) • questions mark (?) • colon (:) etc. • dwindle (-) Typing correct website address e.g. http://62.193.88.141/moodle/mood/resource/view.php?id=83	. Discuss with students the need to type correct website address Let students practise typing of website addresses . Discuss sources of educational software and assist student to browse for information Students use the Encarta search facility to search information on a given topic.	Exercise: Students to practise how to type correct website addresses
UNIT 3 ACCESSING INFORMATION FROM EDUCATIONAL SOFTWARE	2.3.1 identify and browse for information from educational software 2.3.2 use the Search facility in Encarta	Identifying and browsing from sources of educational software eg. Encarta, Wikipedia, Grolier, software on CDs Using the search facility in Encarta		Give students topics from various subject areas to browse the Encarta search facility

JHS THREE - TERM ONE

SECTION ONE

E-MAILING AND SHARING INFORMATION

General Objective: The student will:

1. acquire skills in communication through e-mail
2. recognise ways of sharing information
3. acquire knowledge and skills in transferring information from the internet to other Application

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>LOCATING AND TRANSFERRING INFORMATION FROM WEBSITE TO WORD PROCESSING DOCUMENT</p>	<p>The student will be able to:</p> <p>1.1.1 locate information from websites</p> <p>1.1.2 copy and paste information from Websites to Word Processing document</p> <p>1.1.3 save copied information in Word Processing</p>	<p>Locating information from websites</p> <p>Copying and pasting information from Website to Word Processing document</p> <p>Saving copied information in Word Processing</p>	<p>Give students an educational websites address to navigate and access information</p> <p>Assist students to locate information from a given website</p> <p>Students to apply copy and paste skills to transfer information from website to Word Processing document</p> <p>Students to apply saving skills to name and save the Word Processing document created</p>	<p>Assignment: Students to compose and send E-mail messages to friends.</p>
<p>UNIT 2</p> <p>COMPOSE AND SEND E-MAIL MESSAGES</p>	<p>1.2.1 compose and send E-mail messages</p>	<p>Composing and sending E-mail messages</p>	<p>Revise the procedure for logging into E-mail account</p> <p>Guide students to composed and send E-mail message.</p> <p>NOTE: Ensure that message is edited before sending</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 3</p> <p>ACCESS AND REPLY E-MAIL MESSAGES</p>	<p>The student will be able to</p> <p>1.3.1 explain the importance of E-mail</p> <p>1.3.2 access and reply e-mail messages</p>	<p>Importance of e-mail: Used:</p> <ul style="list-style-type: none"> • to send Job Application • for Official information • for Communication etc. <p>Accessing and replying E-mail messages</p>	<p>Discuss the importance of email</p> <p>Assist students to access and reply their E-mail messages from their friends.</p>	<p>Students to reply E-mail messages received from friends.</p>
<p>UNIT 4</p> <p>WAYS OF SHARING INFORMATION</p>	<p>1.4.1 share information through the internet</p>	<p>Sharing information:</p> <ul style="list-style-type: none"> • Through E-mails • Websites • Personal blogs • Joining online collaborative projects 	<p>Guide students to access information from the internet and share with friends, families and relatives.</p>	<p>Give students websites to access and share information with friends and relatives.</p>

SECTION TWO

SPREADSHEET APPLICATION

General Objective: The student will:

1. acquire basic skills in Spreadsheet Application

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 INTRODUCTION TO SPREADSHEET APPLICATION	The student will be able to 2.1.1 identify features of the Spreadsheet Application 2.1.2 identify Cell names in Spreadsheet Application 2.1.3 adjust columns and rows 2.1.4 enter data to create a file in Spreadsheet Application 2.1.5 apply AutoSum icon to add figures	Identifying features of the Spreadsheet Application window: <ul style="list-style-type: none"> • Toolbars(formula, standard, formatting etc) • Name box • Rows • Column • Cell • Active cell • Auto Sum • Worksheet • Workbook etc. Identifying names of cell A Letter representing column and a number representing row are combined to form a new of a cell e.g. A1, B4, A20, H10, T6 etc. Adjusting columns and rows Entering data Spreadsheet Application to create a file Adding figures using the AutoSum icon	Assist students to open Spreadsheet Application window to identify the different features. Discuss the functions of the features of the Spreadsheet Application Students click on different cells and observe their names in the Name Box. Assist students to adjust columns and rows by using the mouse to drag the boarders. Guide students to enter data in the columns and rows to create a file. Assist students to add figures using the AutoSum icon	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 INTRODUCTION TO SPREADSHEET APPLICATION (CONTD)	The student will be able to 2.1.6 Edit, format and save a workbook.	Editing, formatting and saving a workbook using some editing and formatting tools. e.g. <ul style="list-style-type: none"> • underline • bold, • Italics • adjusting columns and rows, • alignment • merge and center etc 	Guide students to apply the editing, formatting and saving skills to save worksheet.	Students to create a file in Spreadsheet Application and save in a folder.

JHS THREE - TERM TWO

SECTION ONE

WORD PROCESSING APPLICATION

General Objectives: The student will:

1. recognize and use toolbars
2. acquire skills in the use of Paint Application
3. acquire skills in finding missing and misplaced files and folders

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p style="text-align: center;">UNIT 1 TOOLBARS</p>	<p>The student will be able to:</p> <p>1.1.1 identify and state the uses of the features on the formatting and standard toolbars and the use of scroll bar</p>	<p>Features of the formatting standard toolbars and the use of the scroll bars</p> <ul style="list-style-type: none"> • formatting toolbar: Cut, copy, paste, B, I, U, font, font size etc. • Standard toolbar: redo, undo, print, print preview etc. • Scroll bar- vertical and horizontal 	<p>Assist students to open Word Processing window and identify the features on the Formatting and Standard toolbars. Discuss the uses of the features and the use of the horizontal and vertical scroll bars</p> <p>Students type a short passage and practise the Undo and Redo icons on the Standard toolbar</p>	<p>Oral Exercise</p> <p>1. Students to state the uses of the features of the formatting and standard toolbars</p> <p>2. Describe how to use the help facility to solve basic problems e.g. Missing file</p>
<p style="text-align: center;">UNIT 2 FINDING FILES AND FOLDERS USING THE SEARCH TOOL</p>	<p>1.1.2 use of the Help facility</p> <p>1.2.1 use the search tool to find missing and misplaced files and folders</p>	<p>Using the help facility:</p> <ul style="list-style-type: none"> • finding solutions to basic problems in the use of software <p>Using the Search Tool to find files and folders</p>	<p>Students discuss and practise the use of the help facility.</p> <p>Guide students to use the search procedure to locate missing and misplaced files/folders</p> <ol style="list-style-type: none"> 1. Click start menu 2. click on search icon 3. In the search dialogue box click all files and folders 4. type filename or word or phrase in the file 6. select location 7. click on search 	

SECTION TWO

INTEGRATION OF ICT INTO EDUCATION

General Objectives: The students will:

1. become aware of the impact of integrating ICT into learning
2. acquire skills using search engines to access information

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 INTEGRATING ICT INTO LEARNING	<p>The student will be able to:</p> <p>2.1.1 integrate ICT tools in specific learning areas</p>	<p>Integrating ICT into specific learning areas. E.g. <u>Maths</u>, Spreadsheet and calculator– for calculations</p> <p>Television- Brilliant Science and Maths quiz, PSI on Maths</p> <p><u>English</u> Word Processor – vocabulary, spelling, synonyms and antonyms Radio – Everyday English</p> <p><u>Science</u> Television- Brilliant Science and Maths quiz</p> <p>Encarta – for searching for information on various topics</p>	<p>Students to do lessons in specific learning areas using ICT e.g. use Word Processing to learn Synonyms and Antonyms in English</p>	<p>Homework: Students to access information on the various subject areas using search engines and report</p>
	<p>2.1.2 state the benefits of using ICT in teaching and learning</p>	<p>Benefits of using ICT in teaching and learning e. g. makes learning easy and interesting, students learn at their own pace</p>	<p>Discuss the benefits of using ICT in teaching and learning</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 SEARCH ENGINES	<p>The student will be able to:</p> <p>2.2.1 identify the different types of search engines</p> <p>2.2.2 acquire skills in using search engines</p> <p>2.2.3 access information using search engines</p>	<p>Types of search engines</p> <p>Skills in using search engines to access information from the internet</p> <ul style="list-style-type: none"> • Topics should not be too broad • Relevant information always appear at the top of the search results <p>Accessing information using search engines e.g.</p> <ul style="list-style-type: none"> • ask.com • google.com • yahoo.com 	<p>Assist students to identify the different search engines.</p> <p>Discuss the skills involved in using search engines to access information</p> <p>Students access information using the different search engines</p> <p>NOTE: Teacher should insist on applying the skills in accessing information to avoid unwanted materials.</p>	<p>Exercise: Students to use search engines to search for information on a given topics</p>

JHS THREE - TERM THREE

SECTION ONE

REVISION AND PRACTICAL SKILLS

General Objectives: The student will;

1. be able to apply Word Processing skills to produce a document
2. be able to apply Paint Application skill for designing

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p style="text-align: center;">UNIT 1</p> <p>PROJECT WORK</p> <p>CREATING A WORD PROCESSING DOCUMENT</p>	<p>The student will be able to:</p> <p>1.1.1 type, edit, Format and print a one-page Word Processing document on a given topic.</p> <p>1.1.2 save Word Processing document typed in a folder on desktop</p>	<p>Typing, editing, formatting and printing a one-page Word Processing document using editing and formatting tools on a given topic:</p> <p>editing tools e.g.</p> <ul style="list-style-type: none"> • spell check • line spacing • Paragraphing etc. <p>formatting tool e.g</p> <ul style="list-style-type: none"> • Bold • Underline • Italics • font • font size • alignment etc) <p>Saving document in a folder on Desktop</p>	<p>Students to type, edit, format and print a one- page document.</p> <p>Students to use their names to save the folder</p>	<p><u>PROJECT WORK</u></p> <p>Produce document on the following topics: e.g.</p> <p>HIV/AIDS</p> <p>Poverty Reduction</p> <p>Child Abuse</p> <p>Road Safety</p> <p>Environment</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 PROJECT WORK 2 CREATING FILE IN PAINT APPLICATION	The student will be able to: 1.2.1 apply the skills in Paint Application to design a card 1.2.2 save and print Paint Application file in a named folder	Use Paint Application to design a card Saving and printing Paint Application file in a named folder	Students to apply the skills (e.g. drawing tools and colours) in Paint Application to design a card. Students to save Paint Application file in a named folder. NOTE: Let students save the file in the folder they created with their names	<u>PROJECT WORK</u> Students to design and print the following cards using Paint Application: e.g. Republic day Farmers day Mother/Father's Day Birthday Card Invitation Card Success card