



Republic of Zambia

**MINISTRY OF EDUCATION, SCIENCE, VOCATIONAL TRAINING  
AND EARLY EDUCATION.**

# **Computer Studies Syllabus**

## Grade 8 and 9



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## **VISION**

Quality, lifelong education for all which is accessible, inclusive and relevant to individual, national and global needs and value systems.

## **PREFACE**

The syllabus was produced as a result of the Curriculum review process carried out by the Ministry of Education, Science, Vocational Training and Early Education under the auspices of the Curriculum Development Centre (CDC). The curriculum reform process started way back in 1999 when the Ministry of Education commissioned five (5) curriculum studies which were conducted by the University of Zambia. These studies were followed by a review of the lower and middle basic and primary teacher education curriculum. In 2005 the upper basic education National survey was conducted and information from learners, parents, teachers, school managers, educational administrators, tertiary institutions traditional leaders civic leaders and various stakeholders in education was collected to help design a relevant curriculum ,.

The recommendations provided by various stakeholders during the Upper Basic Education National survey of 2005 and National symposium on curriculum held in June 2009 guided the review process.

The review was necessitated by the need to provide an education system that would not only incorporate latest social, economic, technological and political developments but also equip learners with vital knowledge, skills and values that are necessary to contribute to the attainment of Vision 2030.

The syllabus has been reviewed in line with the Outcome Based Education principles which seek to link education to real life experiences that give learners skills to access, criticize analyze and practically apply knowledge that help them gain life skills. Its competences and general outcomes are the expected outcomes to be attained by the learners through the acquisition of knowledge, skills, techniques and values which are very important for the total development of the individual and the nation as a whole.

Effective implementation of Outcome Based Education requires that the following principles be observed: clarity of focus, Reflective designing, setting high expectations for all learners and appropriate opportunities.

It is my sincere hope that this Outcome Based syllabus will greatly improve the quality of education provided at Grade 8 and 9 level as defined and recommended in various policy documents including Educating Our Future`1996 and the `Zambia Education Curriculum Framework `2013.

Chishimba Nkocha

Permanent Secretary

**MINISTRY OF EDUCATION, SCIENCE, VOCATIONAL TRAINING AND EARLY EDUCATION.**

## **Acknowledgement**

The syllabus presented here is a result of broad-based consultation involving several stakeholders within and outside the education system.

Many individuals, institutions and organizations were consulted to gather their views on the existing syllabus and to accord them an opportunity to make suggestions for the new syllabus. The Ministry of Education wishes to express heartfelt gratitude to all those who participated for their valuable contributions, which resulted in the development of this syllabus.

The Curriculum Development Centre worked closely with other sister departments and institutions to create this document. We sincerely thank the Directorate of Teacher Education and Specialized Services, the Directorate of Planning and Information, the Directorate of Human Resource and Administration, the Directorate of Open and Distance Education ,the Examinations Council of Zambia, the University of Zambia, schools and other institutions too numerous to mention, for their steadfast support.

We pay special tribute to co-operating partners especially JICA and UNICEF for rendering financial technical support in the production of the syllabus.

C.N.M Sakala (Mrs)

Director-Standard and Curriculum

**MINISTRY OF EDUCATION, SCIENCE, VOCATIONAL TRAINING AND EARLY EDUCATION**

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## **Introduction**

### **Suggested Teaching Methodology**

This first ever Computer Studies (CS) syllabus for Zambia offers a wide perspective of the subject. It is not restricted to computers but rather usage and application of a variety of technologies and its impact on society. The nature of the CS subject is such that it will best be learnt within the context of application. As such, activities, projects and problems that replicate real life should form an integral part of the teaching and learning methodologies.

The junior secondary computer studies syllabus is meant to prepare learners for the world of work, further education within the discipline and simply lifelong learning. Since CS is extremely dynamic and also significantly always impacting on the way we live, learners should be encouraged to grapple with its complexities if they are to become competitive citizens in today's globalised world.

The assessment framework in this syllabus should utilise various types of continuous assessment strategies. This is meant to determine learners' competences in the CS outcomes presented here. It is desired that the teacher as much as possible utilise assessment strategies that promote active learning by the learner. The case in point include portfolios, observation sheets (to gauge certain competences), written assignments and reports, presentations, projects and experiments

The indicator of the achievement of these General outcomes will be based on acquisition of the skills through Assessment of the learner's competence on practical outcomes.

### **Time and Period Allocation:**

This syllabus covers a two-year course in Computer Studies and will require at least four 40 minute periods per week to complete (one double for practical and two single periods for theory). Sequence of the syllabus does not necessarily dictate the order in which topics are to be taught.

### **Assessment Scheme**

Computer Studies is a practical subject and as such this syllabus places a lot of emphasis on the use of common application packages as well as object oriented programming languages. It will therefore be the schools' responsibility to ensure that relevant equipment and facilities needed by learners to meet the minimum requirements for assessment purposes are acquired.

There will be two modes of assessments namely: Theory and a practical. Thus the examination of Computer Studies will be divided into two sections.

1. Theory (external assessment by the examinations board): 60%
2. Practical (Paper 2) (External – Examination board): 40%
- 3.



PAPER 1		PAPER 2	
SKILLS	PERCENTAGE (%)	SKILLS	PERCENTAGE (%)
Knowledge	15	Report	15
Comprehension	5	System Product	20
Application	10	Demonstration (Presentation)	5
Analysis	5		
Synthesis	10		
Evaluation	15		
<b>TOTAL</b>	<b>60</b>	<b>TOTAL</b>	<b>40</b>

## **Rationale**

Computer Studies is about how computers compute -it is not about learning how to use the computer. It is much more than computer programming. Computer Studies is the study of ways of representing objects and processes. It involves defining problems; analysing problems; designing solutions; and developing, testing, and maintaining programs. The term computer studies refers to the study of computer science, meaning computer and algorithmic processes, including their principles, hardware and software designs, their applications, and the impact they have on society.

The major focus of this subject is the development of programming skills, which are important for success in future postsecondary studies. Computer Studies is relevant for all students because it incorporates a broad range of transferable problem-solving skills and techniques, including logical thinking, creative design, synthesis, and evaluation. It also teaches generically useful skills in such areas as communication, time management, organization, and teamwork.

Computer Studies will provide students with the knowledge and skills to understand the underpinnings of current computer technology and prepare them for emerging technologies. A foundation in this discipline will introduce students to the excitement and opportunities afforded by this dynamic field and will begin to prepare them for a range of rewarding careers.

The subject will build a strong foundation for those who wish to move on to further study and training in specialized areas such as computer programming, database analysis, computer science, education, computer engineering, software engineering, information technology, and game development.

## **General Outcomes**

- Computer Studies is relevant for all students because it incorporates a broad range of transferable problem-solving skills and techniques, including logical thinking, creative design, synthesis, and evaluation.
- Computer Studies teaches generically useful skills in such areas as communication, time management, organization, and teamwork.

## GRADE 8

### General Outcomes

- Demonstrate an understanding of the concept of **safety and misuse** when using technology
- **Operate and take care** of a computer and its common peripherals
- Use a computer to **accomplish given tasks**
- **Appreciate** the role computers play in everyday life.
- **Demonstrate** understanding and operating skills required for a variety of CS
- **Communicate** using appropriate multimedia to interact with others.
- Enable learners attain **Entrepreneurship** skills for survival

### Key Competences

- Understand and apply requirements of CS ethics and security.
- Share their knowledge and skills through the internet
- Create posters and other advertisement materials for the school events.
- Ensure appropriate email address is used for formal communications.
- Carry out a detailed research programme related to computing.
- Collaborate and share knowledge and ideas with others.

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
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TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
8.1 Introduction to Computer Studies	8.1.1 Terminologies 8.1.2 Parts of a computer 8.1.3 Input-process-output operations	8.1.1.1 Explain the meaning of the terms hardware, software, Information, communication and communications technology 8.1.1.1 Describe the main parts of a computer 8.1.3.1 State the three basic operations in a computer system. 8.1.3.2 Identify a computer as a general purpose machine that operates under different sets of instructions for various uses 8.1.3.3 Relate computer parts to the basic operations	<ul style="list-style-type: none"> <li>• Hardware (Monitor, Keyboard, Mouse, Central Processing Unit-CPU, Uninterruptible Power Supply-UPS, printer, scanner), Software (Various programmes such as the Operating system, Word processors)</li> <li>• Difference between data and information</li> <li>• Computer as a general purpose machine</li> <li>• Components of a computer system (i.e. central processing unit – CPU, input devices, storage devices &amp; output devices)</li> <li>• Uses of main parts of computer</li> <li>• Advantages and disadvantages of a computer system</li> <li>• Appreciating different types of storage media</li> </ul>	<ul style="list-style-type: none"> <li>• Observation</li> <li>• <b>Identification</b> of computer parts</li> <li>• Switching on and switching off a computer system.</li> <li>• <b>Comparing</b> roles of the computer parts.</li> <li>• <b>Connecting</b> a computer to a power cable and peripherals</li> <li>• <b>Interpretation</b> of some computer system acronyms</li> </ul>	<ul style="list-style-type: none"> <li>• Computer <b>appreciation</b></li> <li>• Team work in <b>identifying</b> parts of the computer.</li> <li>• Safety <b>consciousness</b> in handling computer.</li> </ul>

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
8.2 Basic Operations	8.2.1 Health & safety 8.2.2 Care for Computer Systems 8.2.3 Computers & peripherals 8.2.4 Security & Viruses 8.2.5 Types of user interfaces	8.2.1.1 Assume correct posture to avoid injuries. 8.2.2.1 Demonstrate the need to take care of computer and storage media to prevent data loss 8.2.3.1 Power up and down of computers and various technologies and peripherals correctly 8.2.3.2 Perform basic computer operations 8.2.4.1 Explain the consequences of theft of computers or other portable ICT devices and computer viruses. 8.2.5.1 Interact with icons and menus in a Graphic User Interface (GUI) environment.	<ul style="list-style-type: none"> <li>Assuming correct posture to avoid injuries.</li> <li>Safety issues associated with ICT use( e.g. securing power cables and avoiding liquids and dust near computers.)</li> <li>Sequence of powering up and down of various technologies(i.e. TV, cell phone, printer, scanner, etc)</li> <li>Basic computer operations (e.g. Moving cursor, clicking on icon, using pull-down menus, ejecting disks etc)</li> <li>Consequences of theft of computers or other portable ICT devices</li> <li>Using different types of user interfaces</li> <li>Pros and cons of different types of interface (command driven</li> </ul>	<ul style="list-style-type: none"> <li><b>Manipulation</b> of the keyboard efficiently.</li> <li><b>Identification</b> of home keys on the keyboard.</li> <li><b>Connecting</b> computers to power cables and peripherals.</li> <li><b>Comparing</b> and contrasting roles of the computer system.</li> <li>Securing computers</li> </ul>	<ul style="list-style-type: none"> <li><b>Team work</b> in identifying computer peripherals.</li> <li><b>Appreciation</b> of antiviruses.</li> </ul>

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
			and graphical user interfaces)		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
8.3 Computers in everyday life	8.3.1 Household, Entertainment and recreation appliances 8.3.2 Office Equipment 8.3.3 Industrial and Commercial Applications of computers 8.3.4 Computer based learning	8.3.1.1 Identify and demonstrate the use of household appliances and devices that are controlled by embedded microprocessors 8.3.2.1 State common uses of office equipment 8.3.3.1 Exhibit knowledge of using computers in Industry 8.3.4.1 Identify the role computers play in aiding learning 8.3.4.2 Identify social and economic effects of computers	<ul style="list-style-type: none"> <li>Household appliances and devices that are controlled by embedded microprocessors (e.g. Washing machines, microwave ovens, digital watches &amp; cameras)</li> <li>Common uses of office equipment (Computers, Printers, Fax machines, Telephone systems, Liquid Computer Device - LCD projectors, scanners etc)</li> <li>Computers in Industry (e.g. chemical processing plants i.e. Indeni, Mining, Liming and Cement, beverage manufacturing / Financial institutions i.e. LUSE, Health, Ticket reservation systems, defence and security etc)</li> <li>Computers as aids for learning (e.g.</li> </ul>	<ul style="list-style-type: none"> <li><b>Identification</b> use of household appliances and devices that are controlled by embedded microprocessors</li> <li><b>Manipulation</b> of computer related appliances.</li> <li><b>Demonstration</b> of use of household appliances and devices that are controlled by embedded microprocessors.</li> <li><b>Identification</b> of social and economic effects of computers</li> </ul>	<ul style="list-style-type: none"> <li><b>Appreciation</b> of use of computer in industries and home.</li> <li><b>Skilfulness</b> in using computers in everyday life.</li> <li><b>Inquisitiveness</b> in using computers.</li> </ul>



TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
			<p>Self placed interactive lessons that effectively use multimedia)</p> <ul style="list-style-type: none"> <li>• Social and economic effects of computers (e.g. security concerns, deskilling, failure of systems, dependability on systems, human rights violation and computer misuse)</li> </ul>		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
8.4 Productivity Tools (Word Processing)	8.4.1 Introduction to Windows 8.4.2 Key in and Edit Text 8.4.3 Text Manipulation and Formatting 8.4.4 Proof Reading 8.4.5 Print Preview and Printing 8.4.6 Saving Files 8.4.7 Drawing Simple Graphics	8.4.1.1 Demonstrate how to operate Windows 8.4.1.2 Demonstrate how to start and quit a program 8.4.2.1 Demonstrate text input, type over, insertion of words & symbols, deletion and reformatting 8.4.3.1 Demonstrate copying, deleting and moving blocks of text within a document 8.4.3.2 Illustrate the use of a clipboard 8.4.3.3 Use the undo command to reverse the effect of the last action 8.4.3.4 Use the redo command to reverse the undo action 8.4.4.1 Check the spelling of words in a document against a built-in dictionary 8.4.4.2 Describe the limitations of the spelling checker 8.4.5.1 Use the print preview and print a document 8.4.6.1 Demonstrate how to save a file to a specific location or media 8.4.7.1 Create graphics using basic graphic elements	<ul style="list-style-type: none"> <li>Starting Windows, the start button and taskbar, starting with the start menu, Familiarise with the main functions of the keyboard, shift and control keys</li> <li>start and quit a program</li> <li>Text input, type over, insertion of words &amp; symbols, deletion and reformatting</li> <li>Copying, deleting and moving blocks of text within a document</li> <li>Clipboard ( temporary storage area in the memory)</li> <li>Undo command to reverse the effect of the last action</li> <li>Redo command to reverse the undo action</li> <li>Spelling of words in a document against a built-in dictionary (ie Thesaurus)</li> </ul>	<ul style="list-style-type: none"> <li><b>Inputting</b> data correctly in a word processor.</li> <li>Icon <b>identification</b> of productivity tools.</li> <li><b>Manipulation</b> of text in the word processor.</li> <li><b>Agility</b> in typing text</li> <li>Text <b>management</b> (inputting of text, formatting of text)</li> <li><b>Accuracy</b> in entering data in a word processor.</li> </ul>	<ul style="list-style-type: none"> <li><b>Productivity</b> in using word processor.</li> <li><b>Efficiency</b> in text manipulation and editing.</li> <li><b>Effectiveness</b> in the use of productivity tools.</li> <li><b>Entrepreneurship</b> in using productivity tools.</li> <li><b>Appreciation</b> of productivity tools.</li> </ul>

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
			<ul style="list-style-type: none"> <li>• Limitations of the spelling checker</li> <li>• Print preview and print a document</li> <li>• Saving a file to a specific location or media</li> <li>• graphics using basic graphic elements (e.g. lines, curves, sectors, polygons, circles, ovals, squares and rectangles)</li> </ul>		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE	
8.5 Productivity Tools (Spread Sheets)	8.5.1	Introduction to Spreadsheet.	8.5.1.1	Demonstrate an understanding of the concept of worksheet and workbook	<ul style="list-style-type: none"> <li>Worksheet and workbook</li> </ul>	<ul style="list-style-type: none"> <li><b>Accuracy</b> in using spreadsheet.</li> <li><b>Appreciation</b> of use of spreadsheet in making calculations.</li> <li><b>Quality work</b> in the use of spreadsheet.</li> </ul>
	8.5.2	Entering and editing data	8.5.1.2	Explain the common features of a spreadsheet	<ul style="list-style-type: none"> <li>Common features of a spreadsheet (cells, formula bars)</li> </ul>	
	8.5.3	Adding Formula	8.5.1.3	Demonstrate the application of a spreadsheet in everyday life	<ul style="list-style-type: none"> <li>Application of a spreadsheet in everyday life (i.e. Student records, business stock, accounting, invoices)</li> </ul>	
	8.5.4	Saving and Printing	8.5.2.1	Enter and manipulate data using spread sheets for a specific purpose	<ul style="list-style-type: none"> <li>Entering and manipulating data using spread sheets</li> </ul>	
			8.5.2.2	Illustrate the skill of entering text & numbers in specified cells	<ul style="list-style-type: none"> <li>Deleting and editing text and numbers in cells as required</li> </ul>	
			8.5.2.3	Delete and edit text and numbers in cells as required	<ul style="list-style-type: none"> <li>Entering text and numbers in specified cells</li> </ul>	
	8.5.3.1	Enter data, numbers and apply simple formula with a range not more than ten cell addresses	<ul style="list-style-type: none"> <li>Entering data, numbers and applying simple formula with a range not more than ten cell addresses (i.e. addition, subtraction, multiplication and division)</li> </ul>	<ul style="list-style-type: none"> <li><b>Switching</b> between worksheets and between workbooks</li> <li><b>Application</b> of addition, subtraction, multiplication and division symbols with formulae</li> <li>Manipulation</li> <li><b>Application</b> of quick numerical computations</li> <li><b>Accuracy</b> in the use of spreadsheet.</li> <li><b>Designing</b> of a required spreadsheet.</li> </ul>		
	8.5.3.2	Design, create and modify a spread sheet for a specific purpose with a maximum of five cell addresses	<ul style="list-style-type: none"> <li>Designing, creating</li> </ul>			
	8.5.4.1	Save to specified folder and print a spread sheet				
	8.5.4.2	Change magnification to appropriate percentage to print a given spread sheet				

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
			<p>and modifying a spread sheet for a specific purpose (using functions like sum, product, average and quotient) with a maximum of five cell addresses</p> <ul style="list-style-type: none"> <li>• Saving to specified folder and print a spread sheet</li> <li>• Changing magnification to appropriate percentage to print a given spread sheet formulae</li> </ul>		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
8.6 Productivity Tools (Desktop publishing)	8.6.1 Publishing basics and Features 8.6.2 Pre-designed layouts or Templates 8.6.3 Fonts 8.6.4 Elementary Graphics 8.6.5 Colours and Fonts 8.6.6 Clip art/Re-designed graphics	8.6.1.1 Define desktop publishing 8.6.1.2 Identify the two types of a publication 8.6.1.3 Compare different features of desktop publishing and word processing software 8.6.1.4 Generate frames in which text and graphics are placed 8.6.1.5 Edit the layout of a publication 8.6.2.1 Input text directly into a publication 8.6.2.2 Import text from word processing document into a publication 8.6.3.1 Apply the three elements of fonts; namely typeface, style and point size 8.6.4.1 Create graphics using basic graphic elements 8.6.5.1 Select colours for the outlines and fill of objects from the palette 8.6.5.2 Integrate Text into graphic design 8.6.6.1 Retrieve and edit pre-designed graphics to compose a picture 8.6.6.2 Identify how productivity tools complement each other	<ul style="list-style-type: none"> <li>Desktop publishing (i.e. typesetting, and layout designs using desktop computers)</li> <li>Types of a publication (i.e. text and graphics)</li> <li>Features of desktop publishing and word processing software</li> <li>Frames in which text and graphics are placed</li> <li>Editing the layout of a publication</li> <li>Inputting text into a publication</li> <li>Importing text from word processing document into a publication</li> <li>Three elements of fonts; namely typeface, style and point size</li> <li>Graphics using basic graphic elements (e.g. lines, curves, sectors, polygons, circles, ovals, squares and</li> </ul>	<ul style="list-style-type: none"> <li><b>Identification</b> of productivity tools.</li> <li><b>Manipulation</b> of productivity tools</li> <li><b>Accuracy</b> in the use of productivity tools.</li> <li><b>Loading</b> a publishing package</li> <li><b>Switching</b> between two or more loaded publishing packages</li> </ul>	<ul style="list-style-type: none"> <li><b>Entrepreneurship</b> in the use of productivity tools.</li> <li><b>Accuracy</b> in the use of productivity tools.</li> <li><b>Teamwork</b> in designing graphics.</li> <li><b>Quality work</b> in using desktop publishing.</li> <li><b>Appreciation</b> of the use of desktop publishing.</li> </ul>

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
			rectangles) <ul style="list-style-type: none"> <li>• Colours for the outlines and fill of objects from the palette</li> <li>• Integrating Text into graphic design</li> <li>• Retrieving and editing pre-designed graphics to compose a picture</li> <li>• Identify how productivity tools compliment each other</li> </ul>		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
8.7 s	Network	8.7.1.1 networking computers in different locations (i.e. share software, documents, databases & other resources) 8.7.1.2 Differentiate between Wired and wireless networks 8.7.2.1 Display proficiency in accessing information using a local area network (LAN), and a Wide area network (WAN) 8.7.2.2 Upload and download text, image, audio and video files 8.7.2.3 Illustrate ability to search the web for specific information. 8.7.3.1 Recognise web browsers as a tool to accessing web pages on the internet (e.g. Firefox, Safari, Internet Explorer etc) 8.7.3.2 Demonstrate how to open a web browser and go to specific Universal Resource Locator (URL) 8.7.4.1 Define a search engine and what it is used for 8.7.4.2 Use a search engine to look for information on the internet 8.7.5.1 Explain what email is used for	<ul style="list-style-type: none"> <li>8.7.1.1 networking computers in different locations (i.e. share software, documents, databases &amp; other resources)</li> <li>8.7.1.2 Differentiate between Wired and wireless networks</li> <li>8.7.2.1 Display proficiency in accessing information using a local area network (LAN), and a Wide area network (WAN)</li> <li>8.7.2.2 Upload and download text, image, audio and video files</li> <li>8.7.2.3 Illustrate ability to search the web for specific information.</li> <li>8.7.3.1 Recognise web browsers as a tool to accessing web pages on the internet (e.g. Firefox, Safari, Internet Explorer etc)</li> <li>8.7.3.2 Demonstrate how to open a web browser and go to specific Universal Resource Locator (URL)</li> <li>8.7.4.1 Define a search engine and what it is used for</li> <li>8.7.4.2 Use a search engine to look for information on the internet</li> <li>8.7.5.1 Explain what email is used for</li> </ul>	<ul style="list-style-type: none"> <li><b>Connecting</b> a network cable to a computer</li> <li><b>Accessing</b> different media files from external storage devices and internal storage devices</li> <li><b>Launching</b> a web browser</li> <li><b>Entering</b> default web sites and edit the sites to different ones</li> <li><b>Retrieving (Searching)</b> specific information from the Internet</li> </ul>	<ul style="list-style-type: none"> <li><b>Understanding</b> of types of ports (connection points)</li> <li><b>Appreciation</b> of internal storage media and external storage media</li> <li><b>Appreciation</b> that information is also stored on remote computers which require internet connection to access information</li> </ul>



TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
			<p>ise web browsers as a tool to accessing web pages on the internet (e.g. Firefox, Safari, Internet Explorer etc)</p> <ul style="list-style-type: none"> <li>• 8.7.3.2 Demonstrate how to open a web browser and go to specific Universal Resource Locator (URL)</li> <li>• 8.7.4.1 Define a search engine and what it is used for</li> <li>• 8.7.4.2 Use a search engine to look for information on the internet</li> <li>• 8.7.5.1 Explain what email is used for</li> </ul>		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
8.8 Multimedia Files	8.8.1 Introduction to multimedia files 8.8.2 Graphics 8.8.3 Video and Audio	8.8.1.1 Introduction to multimedia files. 8.8.2.1 Create a multimedia presentation incorporating visual image features (i.e. clip art, video clips, sound and animated images) 8.8.3.2 Access available databases for images, sound clips or recorded voice to support communication 8.8.3.3 Support communications by controlling the flow of a presentation (i.e. screen transitions, animating text & graphics)	<ul style="list-style-type: none"> <li>• Differences between various types of media (video, sound, animations)</li> <li>• Search for locally available multimedia files on the computer</li> <li>• Controlling presentations using arrow keys</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Loading</b> a multimedia package</li> <li>• <b>Adding</b> media clips to a presentation</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Value enhancing</b> to physically challenged learners</li> <li>• <b>Productivity</b> in using multimedia files.</li> <li>• <b>Efficiency</b> in the use of</li> <li>• <b>Effectiveness</b> in the use video and audio on the computer system.</li> </ul>

## GRADE 9

### General Outcomes

- Demonstrate an understanding of the concept of **safety and misuse** when using technology
- **Operate and take care** of a computer and its common peripherals
- Use a computer to **accomplish given tasks**
- **Appreciate** the role computers play in everyday life.
- **demonstrate** understanding and operating skills required for a variety of ICTS
- **Communicate** using appropriate multimedia to interact with others.
- Enable **learners attain** Entrepreneurship skills for survival

### Key Competences

- Understand and apply requirements of ICT ethics and security.
- Share their knowledge and skills through the internet
- Create posters and other advertisement materials for the school events.
- Ensure appropriate email address is used for formal communications.
- Carry out a detailed research programme related to computing.
- Collaborate and share knowledge and ideas with others.

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
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TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
9.1 Introduction to Computers	9.1.1 Terminology 9.1.2 Peripheral devices 9.1.3 Input-process-output operations	9.1.1.1 Define the terminologies of a computer system. 9.1.2.1 Connecting peripheral devices to their appropriate computer ports 9.1.2.1 Recognise that the speed of a CPU is measured in Megahertz (MHz) or Gigahertz (GHz) 9.1.3.1 Identify meaningful information as a result of processed input data by the computer 9.1.3.2 Appreciate that certain devices are both input as well as output (e.g. touch screens)	<ul style="list-style-type: none"> <li>Computer terminology; peripheral device PDAs, GB, MHz, GHz, BIT, BYTES, Megabytes etc</li> <li>Defining basic computer terminology</li> <li>Peripheral devices</li> <li>Units of the processing speed and their relationship</li> <li>Units of storage – BIT, Byte, Megabyte, Gigabyte and their conversions.</li> <li>Input, process and output devices</li> </ul>	<ul style="list-style-type: none"> <li><b>Connecting</b> peripheral devices to their appropriate computer ports</li> <li><b>Converting</b> of bytes into Bits and converting Bits into Bytes, Kilobytes &amp; Megabytes</li> <li><b>Interpreting</b> the various files sizes</li> <li><b>Relating</b> file size to storage space</li> </ul>	<ul style="list-style-type: none"> <li><b>Appreciating</b> the various types of ports (serial, parallel &amp; USB)</li> <li><b>Relation</b> between processing speed and file size</li> <li><b>Appreciation</b> of limitations of storage media regarding size</li> </ul>
9.2 Basic Operations	9.2.1 Unresponsive computer 9.2.2 Security & Viruses 9.2.3 Copyright 9.2.4 Storage media	9.2.1.1 Identify how to shut down an unresponsive computer 9.2.2.1 Understand why usernames and passwords are used on computers 9.2.2.2 Identify and apply safety procedures, such as antivirus scans and virus checks in maintaining data integrity 9.2.3.1 Know how to check the ID number for a software product 9.2.3.2 Define the terms freeware, share-ware and end-user licence	<ul style="list-style-type: none"> <li>How to rectify program failure of booting and shutting down.</li> <li>Security issues associated with ICT use</li> <li>Identify licensed software installed on a computer</li> <li>Understand the difference between open source software and proprietary software</li> <li>Identify types of memory (Include: primary and</li> </ul>	<ul style="list-style-type: none"> <li><b>Shutting</b> down unresponsive computer system.</li> <li><b>Installation</b> and launching of Antivirus software</li> <li><b>Verifying</b> the authenticity of software</li> <li><b>Inserting</b> memory cards in computers, digital cameras, cell phones &amp; related devices.</li> <li><b>Converting</b> memory size from one type to the other.</li> <li><b>Calculation</b> of memory sizes and their implications on storage.</li> </ul>	<ul style="list-style-type: none"> <li><b>Minimizing</b> the effects of computer system failure</li> <li><b>Avoiding</b> compromising the system integrate</li> <li><b>Enhancement</b> of computer system</li> <li><b>Appreciating</b> copyright laws</li> <li><b>Appreciating</b> the vulnerability of memory cards on portable and hand-held devices</li> </ul>

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
		agreement 9.2.4.1 Describe the relationship between different measures of storage media capacities (i.e. kilobyte, megabyte, gigabyte)	secondary memory)		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
9.3 Information technology in everyday life	9.3.1 Household appliances	9.3.1.1 Describe particular technologies being used for specific purposes in the home	<ul style="list-style-type: none"> <li>How to connect household equipment (connecting a decoder, DVD player, Hi-Fi system to a TV)</li> <li>How to connect office equipment (connecting LCD projectors, scanners, printers, digital cameras, cell phones to computers)</li> <li>Appreciating the various communication technologies</li> <li>Examples of CBL Software</li> <li>Knowledge of social networks</li> <li>Knowledge of directory, folders and files</li> <li>How to conduct online transaction</li> <li>Discussing the pro and cons of e-commerce</li> <li>Appreciate the use of bar codes</li> <li>Fundamental information contained on the bar code</li> <li>The link between the price list and the bar</li> </ul>	<ul style="list-style-type: none"> <li><b>Connecting</b> of household equipment (connecting a decoder, dvd player, Hi-Fi system to a TV)</li> <li><b>Connecting</b> of office equipment ( connecting LCD projectors, scanners, printers, digital cameras, cell phones to computers)</li> <li><b>Making</b> calls &amp; Saving phone numbers on cell phones</li> <li><b>Starting</b> a skype conversation</li> <li><b>Signing</b> oneself to a particular social network (e-mail, Skype, Facebook, Twitter)</li> <li><b>Creating, changing, editing and deleting</b> user accounts</li> </ul>	<ul style="list-style-type: none"> <li><b>Avoiding</b> damage to household and office equipment.</li> <li><b>Maximising</b> the use of household equipment</li> <li><b>Avoiding</b> damage to office equipment</li> <li><b>Knowledge</b> of record keeping</li> <li><b>Communicating</b> using internet technologies</li> <li><b>Managing</b> access to computer resources (stocks &amp; price lists)</li> <li><b>Integration</b> of Computers in other learning areas.</li> </ul>
	9.3.2 Computer based learning (CBL)	9.3.1.2 Illustrate, using examples, how information & communication networks create a global community (e.g. cell phones, internet, <u>skype</u> etc.)			
	9.3.3 Computers in banking and e-commerce	9.3.1.3 Demonstrate an understanding of new and emerging communication systems			
	9.3.4 Point of Sale	9.3.2.1 Identify different types of CBL software (e.g. drill practice, tutorial, simulation, problem solving etc.)			
	9.3.5 Magnetic and smart cards	9.3.3.1 Recognise the use of computers to organise, retrieve and process data			
		9.3.3.2 Appreciate the linking of computers in different locations to enable electronic fund transfer (e.g. GIRO, NETS, Automated Teller Machines-ATMs etc.)			
		9.3.3.3 Describe e-commerce and the process of purchasing goods and services online			
		9.3.3.4 List advantages & disadvantages of e-commerce			
		9.3.4.1 State common uses of			

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
		<p>computers in the supermarket</p> <p>9.3.4.2 Identify the significance of using bar codes in the super market (i.e. identifying products, statistics and keeping track of sold items)</p> <p>9.3.5.1 Recognise the use of PIN (personal identification number) as a security measure to initiate transaction using magnetic card</p> <p>9.3.5.2 Describe the benefits of the trend towards cashless electronic transaction</p>	<p>code</p> <ul style="list-style-type: none"> <li>• Security in business transactions among workers</li> <li>• Appreciate stock management</li> </ul>		



TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE	
9.4 Productivity Tools (Word Processing)	9.4.1	Keyboard skills	9.4.1.1 Exhibit mastery of the keyboard keys including function keys and touch typing	<ul style="list-style-type: none"> <li>How to use function keys (F1 to F12) and combination keys</li> </ul>	<ul style="list-style-type: none"> <li><b>Using</b> function keys (F1 to F12) and combination keys</li> </ul>	<ul style="list-style-type: none"> <li><b>Productivity</b> (letter writing, minutes, assignments etc)</li> <li><b>Efficiency</b> in the use of productivity tools.</li> <li>Entrepreneurship (letter and document writing, minutes, assignments etc)</li> <li><b>Effectiveness</b> in the use of productivity tools.</li> </ul>
	9.4.2	Document setup and layout	9.4.2.1 Use the tab key to indent the first line of the paragraph	<ul style="list-style-type: none"> <li>How to create paragraphs in word processing</li> </ul>	<ul style="list-style-type: none"> <li><b>Creating</b> paragraphs in word processing</li> <li><b>creating, editing and deleting</b> tables using the table insert</li> </ul>	
	9.4.3	Search and replace	9.4.2.2 Demonstrate competence in creating tables, inserting and deleting rows & columns	<ul style="list-style-type: none"> <li>How to create, edit and delete tables using the table insert</li> </ul>	<ul style="list-style-type: none"> <li><b>Integrating</b> clip art and mathematical formulae in word processing document</li> </ul>	
	9.4.4	Copying text from other document windows	9.4.2.3 Insert objects (e.g. Clip art, mathematical formula etc)	<ul style="list-style-type: none"> <li>How to Integrate clip art and mathematical formulae in word processing document</li> </ul>	<ul style="list-style-type: none"> <li><b>Finding</b> or <b>searching</b> command to locate a specified word</li> </ul>	
	9.4.5	Pagination	9.4.3.1 Use the search command to locate specified text quickly in a document	<ul style="list-style-type: none"> <li>How to use find or search command to locate a specified word</li> </ul>	<ul style="list-style-type: none"> <li><b>Replacing</b> a located word</li> </ul>	
	9.4.6	Page formatting	9.4.3.2 Use the search and replace command to carry out replacement of specified text quickly in a document	<ul style="list-style-type: none"> <li>How to replace a located word</li> </ul>	<ul style="list-style-type: none"> <li><b>Correctly</b> using the copy, cut and paste commands</li> </ul>	
	9.4.7	Finding and file retrieval	9.4.4.1 Copy blocks of text from one document window to another	<ul style="list-style-type: none"> <li>How to use copy / cut and paste</li> </ul>	<ul style="list-style-type: none"> <li><b>Inserting</b> roman numerals and denary page numbers in a word document</li> </ul>	
			9.4.5.1 Demonstrate insertion of page numbers of any given format	<ul style="list-style-type: none"> <li>How to insert roman numerals and denary page numbers in a word document</li> </ul>	<ul style="list-style-type: none"> <li><b>Inserting</b> page breaks</li> </ul>	
			9.4.5.2 Insert page and section breaks to organise text in a document	<ul style="list-style-type: none"> <li>How to insert page breaks</li> </ul>	<ul style="list-style-type: none"> <li>Inserting page margins, paper size and page orientation before printing a document</li> </ul>	
			9.4.6.1 Use the page set up command to set margins, paper size and page orientation	<ul style="list-style-type: none"> <li>How to set page margins, paper size and page orientation before printing a document</li> </ul>	<ul style="list-style-type: none"> <li><b>Saving</b> and <b>saving as</b> commands when saving a file to a specified storage external or internal storage devices</li> </ul>	
			9.4.8.1 Demonstrate ability to save file to a specified storage drive or device	<ul style="list-style-type: none"> <li>How to use save and save as when saving a file to a specified storage external or internal storage</li> </ul>	<ul style="list-style-type: none"> <li><b>Deleting</b> a file and a folder containing files and how to retrieve a deleted file that was on the computer from the recycle bin</li> </ul>	

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
		9.4.8.2 Navigate to a particular drive and retrieve a specific file 9.4.8.3 Delete file(s) and retrieve from the recycle bin	devices <ul style="list-style-type: none"> <li>• How to delete a file and a folder containing files and how to retrieve a deleted file <i>on the computer</i> from the recycle bin</li> <li>• Import the drawn pie chart from a spreadsheet into a word processor</li> </ul>		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE	
9.5 Productivity Tools (Spread Sheets)	9.5.2	Amending a spread sheet	9.5.2.1 Insert and delete columns and rows as required	<ul style="list-style-type: none"> <li>• How to draw pie chart using a spreadsheet.</li> <li>• How to insert and delete columns and rows as required</li> <li>• How to change column width and row height</li> <li>• How to change decimal places in cells</li> <li>• How to change text orientation in a particular cell or a group of cells</li> <li>• How to apply advanced functions ( e.g. SUM, AVERAGE, IF, MAX, MIN, COUNT, COUNTA, SUMIF, )</li> <li>• How to change percentage specification using zoom facility</li> <li>• How to use chart wizard</li> <li>• How to link spreadsheet to word document using hyperlinks</li> <li>• How to export the drawn pie chart from a spreadsheet into a word processor</li> <li>• How to print preview</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Drawing</b> pie chart using a spreadsheet.</li> <li>• <b>Linking</b> spreadsheet to word document using hyperlinks</li> <li>• <b>Importing</b> the drawn pie chart from a spreadsheet into a word processor</li> <li>• <b>Sorting</b> data in a pre-determined sequence</li> <li>• <b>Filtering</b> of data in a spreadsheet</li> <li>• <b>Interpreting</b> numerical data into graphs or charts</li> <li>• <b>Application</b> of mathematical concepts.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Productivity</b> in budgeting, accounting, sales forecasting, stock management.</li> <li>• <b>Efficiency</b> in using spreadsheet.</li> <li>• <b>Entrepreneurship</b> in the use of spreadsheet in tracking a business.</li> <li>• <b>Effectiveness</b> of spreadsheet.</li> </ul>
	9.5.3	Formatting cells	9.5.3.1 Change column width and row height as required			
	9.5.4	Sorting data	9.5.3.2 Change number of decimal places displayed in cells as required			
	9.5.5	Entering and applying formula	9.5.3.3 Change text orientation within a cell			
	9.5.7	Charts	9.5.4.1 Sort and filter data as specified			
			9.5.5.1 Enter data, numbers and apply more advanced formula (i.e. multiplication, sum & average functions)			
			9.5.6.1 Change percentage specification to print a given spread sheet			
			9.5.7.1 Use chart wizard to create bar, line and pie charts of selected data			
			9.5.7.2 Print a chart			

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
			and print <ul style="list-style-type: none"><li>• How to paginate using page break preview</li></ul>		

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
9.6 Productivity Tools (Desktop publishing)	9.6.1 Charts , Diagrams and pictures 9.6.2 Text wrapping 9.6.3 Importing Text 9.6.4 Manipulation of pre-designed templates 9.6.5 Colours and Fonts	9.6.1.1 Add charts, diagrams and pictures 9.6.1.2 Edit, resize & crop charts, diagrams and pictures 9.6.2.1 Demonstrate how to wrap text around charts , diagrams & pictures 9.6.2.2 Generate frames in which charts, diagrams & pictures are placed 9.6.3.1 Import text from other programs (word processor & spreadsheet ) 9.6.3.2 Import charts, diagrams & pictures from other programs 9.6.4.1 Create calendars, notices, fliers, brochures, newsletters, resumes using templates 9.6.4.2 Edit manipulated templates 9.6.5.1 Select colours for the outlines and fill of objects from the palette	<ul style="list-style-type: none"> <li>Identifying how productivity tools compliment each other</li> <li>Demonstrating wrapping of text around charts, diagrams &amp; pictures</li> <li>Understanding how to generate charts, diagrams &amp; pictures</li> <li>Distinguishing between importing and exporting of publications</li> <li>Differentiating the use of various templates</li> <li>Modifying created publications</li> <li>Enhancing objects in a publication through the use fonts &amp; colours</li> </ul>	<ul style="list-style-type: none"> <li><b>Identifying</b> pre-designed layouts or template for appropriate tasks</li> <li><b>Modifying</b> already created publications</li> <li><b>Enhancing</b> objects in publications</li> <li><b>Saving</b> and <b>printing</b> previewing publications</li> </ul>	<ul style="list-style-type: none"> <li><b>Entrepreneurship</b> in the use of Desktop publishing.</li> <li><b>Effectiveness</b> use of Desktop publishing.</li> </ul>
9.7 Networking & the Internet	9.7.1 Networking 9.7.2 The Internet 9.7.3 Web browsers 9.7.4 Using search engines 9.7.5 Email	9.7.1.1 List the advantages of group working (i.e. shared files, applications and printers) 9.7.2.1 Display understanding of the terms local area network (LAN) and Wide area network (WAN), Personal Area Network (PAN), Storage Area Network (SAN), Metropolitan Area	<ul style="list-style-type: none"> <li>Managing of shareable resources (files, applications, &amp; printers)</li> <li>Distinguishing various types of networks using examples (e.g. computer network, cellular network (hotspots), satellite</li> </ul>	<ul style="list-style-type: none"> <li><b>Sharing</b> resources using <i>sharing facility</i></li> <li><b>Deriving</b> appropriate web addresses from institution/organisation/company names based on services provided (e.g. org, edu, ac, co, gov etc)</li> <li><b>Starting, refreshing</b> and <b>terminating</b> web search</li> <li><b>Utilising</b> internet</li> </ul>	<ul style="list-style-type: none"> <li><b>Reduction</b> in computer hardware and software costs</li> <li><b>Sourcing</b> of information from a broader scope</li> <li><b>Reduction</b> in communication costs through email and other free internet services.</li> </ul>

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
		<p>Network (MAN), Wifi.</p> <p>9.7.2.2 Describe the difference between an intranet and an extranet</p> <p>9.7.2.3 Differentiate between World Wide Web and the internet</p> <p>9.7.3.1 Recognise components of a Universal Resource Locator (URL)</p> <p>9.7.3.2 Show how to stop a web page from downloading</p> <p>9.7.3.3 Illustrate how to refresh, move back and forward</p> <p>9.7.4.1 Appreciate various services available on the internet (e.g. On-line news, shopping etc.)</p> <p>9.7.5.1 Explain the make up and structure of an email address</p> <p>9.7.5.2 Send and reply to an email message</p>	<p>network.</p> <ul style="list-style-type: none"> <li>• Distinguishing between the two main types of Local Area Networks (Intranets &amp; Extranets)</li> <li>• Relating the World Wide Web (global web pages) to the Internet (technologies, infrastructure &amp; protocols)</li> <li>• The relationship between URL and Internet surfing</li> <li>• Understanding the navigation patterns of web pages</li> <li>• Appreciating the communication and information services provided by the Internet</li> <li>• Understanding the syntax of email addresses</li> </ul>	<p>communication tools (Skype, twitter, facebook,</p> <ul style="list-style-type: none"> <li>• <b>Creating</b> of an email address</li> <li>• <b>Sending</b> and <b>receiving a message</b> through email.</li> </ul>	

TOPIC	SUB TOPIC	SPECIFIC OUTCOME	KNOWLEDGE	SKILLS	VALUE
9.8 Multi media files	9.8.1 Digitising images 9.8.2 Video & Audio	9.8.1.1 Create digital images using a scanner and or a digital camera 9.8.1.2 Edit digitised images by cropping, enhancing pixels, colour etc 9.8.1.3 Saving created images 9.8.2.1 Record video & audio 9.8.2.2 Save video and audio files	<ul style="list-style-type: none"> <li>• Creating digital images using scanners &amp; cameras</li> <li>• Editing and enhancing scanned and digitised images</li> <li>• Saving images with appropriate file extensions</li> <li>• Recording Video &amp; Audio using digital camera &amp; or microphone</li> <li>• Naming audio and video files with appropriate file extension</li> <li>• Appreciate the different media file extensions</li> <li>• Understanding the syntax of media file naming</li> </ul>	<ul style="list-style-type: none"> <li>• Creating digital images using scanners and cameras</li> <li>• <b>Editing</b> and <b>enhancing scanned</b> and digitised images</li> <li>• <b>Appropriately</b> saving of file names and file extensions</li> <li>• <b>Recording</b> video &amp; audio using multimedia related technology</li> <li>• <b>Naming</b> audio &amp; video files with appropriate file names &amp; extension.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Entrepreneurship</b> in the use of multimedia.</li> <li>• <b>Productivity</b> in the use of multimedia.</li> <li>• <b>Efficiency</b> in the use of multimedia.</li> <li>• <b>Inquisitiveness</b> in the use of multimedia.</li> </ul>

## **Terminologies**

**Arithmetic and Logic Unit**

**(ALU)**

**Cell address**

**Cell pointer**

**Copy**

**Central Processing Unit (CPU)**

**Cursor**

**Cut**

**Database**

**Desktop Publishing (DTP)**

**Document**

**Email**

**Extranet**

**File**

**Font**

**Graphic**

**Icon**

**Information technology**

**Input device**

**Internet**

**Intranet**

**LAN**

**Menu**

**Mouse**

**Multimedia**

**Navigate**

**Output device**

**Paste**

**Peripheral**

**Port**

**Presentation**

**Printer**

**Programme**

**Retrieve**

**Scanner**

**Search engines**

**Software**

**Spell Checker**

**Spreadsheet**

**Storage device**

**Telecommunication**

**Text**

**WAN**

**Word processing**

**World Wide Web**







## **GRADES 8 AND 9 COMPUTER STUDIES SCOPE AND SEQUENCE**

The table below shows the coverage of the syllabus in Computer Studies in Grades 8 and 9. It is important for a teacher to refer to this table from time to time to know the knowledge that the learners already have or need to have at various levels of learning of the subject.

	<b>GRADE 8</b>	<b>GRADE 9</b>
• Introduction to Computer Studies	<ul style="list-style-type: none"> <li>• Terminology of computer hardware.</li> <li>• Parts of a computer</li> <li>• Input-process-output operations</li> </ul>	<ul style="list-style-type: none"> <li>• Terminology of a computer system.</li> <li>• Peripheral devices</li> <li>• Input-process-output operations</li> </ul>
Basic Operations	<ul style="list-style-type: none"> <li>• Health &amp; safety</li> <li>• Care for Computer Systems</li> <li>• Computers &amp; peripherals</li> <li>• Security &amp; Viruses</li> <li>• Types of user interfaces</li> </ul>	
Generic Application Software	<ul style="list-style-type: none"> <li>• Introduction to Windows</li> <li>• Key in and Edit Text</li> <li>• Manipulation and Formatting</li> <li>• Proof Reading</li> <li>• Print Preview and Printing</li> <li>• Saving Files</li> <li>• Drawing Simple Graphics</li> </ul>	<ul style="list-style-type: none"> <li>• Keyboard skills</li> <li>• Document setup and layout</li> <li>• Search and replace</li> <li>• Copying text from other document windows</li> <li>• Pagination</li> <li>• Page formatting</li> <li>• Finding and file retrieval</li> </ul>

	GRADE 8	GRADE 9
	<ul style="list-style-type: none"> <li>• Introduction to Spreadsheet</li> <li>• Entering and editing data</li> <li>• Adding Formula</li> <li>• Saving and Printing</li> </ul>	<ul style="list-style-type: none"> <li>• Amending a spread sheet</li> <li>• Formatting cells</li> <li>• Sorting data</li> <li>• Entering and applying formula</li> <li>• Charts</li> </ul>
	<ul style="list-style-type: none"> <li>• Publishing basics and Features</li> <li>• Pre-designed layouts or Templates</li> <li>• Fonts Elementary Graphics</li> <li>• Colours and Fonts</li> <li>• Clip art/Re-designed graphics</li> </ul>	<ul style="list-style-type: none"> <li>• Charts , Diagrams and pictures</li> <li>• Text wrapping</li> <li>• Importing Text</li> <li>• Manipulation of pre-designed templates</li> <li>• Colours and Fonts</li> </ul>
Systems and Communications	<ul style="list-style-type: none"> <li>• Introduction to multimedia files</li> <li>• Graphics</li> <li>• Video and Audio</li> </ul>	<ul style="list-style-type: none"> <li>• Digitising images</li> <li>• Video &amp; Audio</li> <li>•</li> </ul>
Types of Computer System		<ul style="list-style-type: none"> <li>• Networking</li> <li>• The Internet</li> <li>• Web browsers</li> <li>• Using search engines</li> <li>• Email</li> </ul>
Computer Application	<ul style="list-style-type: none"> <li>• Household, Entertainment and recreation appliances</li> <li>• Office Equipment</li> <li>• Industrial and Commercial Applications of computers</li> <li>• Computer based learning</li> </ul>	<ul style="list-style-type: none"> <li>• Household appliances</li> <li>• Computer based learning (CBL)</li> <li>• Computers in banking and e-commerce</li> <li>• Point of Sale</li> <li>• Magnetic cards and smart cards</li> </ul>

	GRADE 8	GRADE 9
Social and Economic Implications of the use of Computers		<ul style="list-style-type: none"> <li>• Unresponsive computer</li> <li>• Security &amp; Viruses</li> <li>• Copyright</li> <li>• Storage media</li> <li>•</li> </ul>
Logic Gates and Circuits		