



Grade 9 Information Technology Course Outline



September (2024) -July (2025)

IMPORTANT DATES

1. Christmas Midterm: **October 21 - 23**
2. 1st Sixth week test: **October 14 - 18**
3. 2nd Sixth week test: **December 9 – 13**
4. Prize Giving: **December 18**
5. 3rd Sixth week test: **February 17- 21**
6. Easter Mid Term: **March 5-7**
7. 4th Sixth week test: **May 12- 16**
8. Summer Mid Term: **May 21-23**

Department Name:	Computer Studies
Grade Level:	9
Title of Course:	Grade 9 Information Technology
Duration:	September 4 (2024) - July 4 (2025)
Description of the Course:	<p>The Grade 9 Information Technology course is designed to prepare students for the Information Technology CSEC external examinations. Each topic is directly aligned with the CSEC Information Technology 2020 Syllabus. There is a focus on both practical and theory topics.</p> <p><u>Practical topics</u> to be covered at this level include:</p> <ul style="list-style-type: none"> • Spreadsheet • MS Word <p><u>Theory Topics</u> to be covered at this level include:</p> <ul style="list-style-type: none"> • Health & Safety • Foundations of Hardware & Software <p>There will be a total of one (1) teaching session for each week:</p> <ul style="list-style-type: none"> • Single Sessions: Theory and Practical
Course Objective: (General Objectives)	<p style="text-align: center;"><u>TERM 1</u></p> <p>Unit 1: Health and Safety</p> <p><i>Upon Completion of this course, students should be able to:</i></p>

COMPUTER STUDIES DEPARTMENT

- Investigate and resolve basic computer hardware problems
- Explain how Government Agencies with responsibility for Health and Safety Acts carry out their mandate in relation to ICT/IT industry
- Discuss the impact of the use of computer usage on health, safety and environment
- Revise judgments and change behavior in light of health and safety
- Practices when using computer system

Upon Completion of this course, students should develop an awareness of:

UNIT 2: FOUNDATIONS OF HARDWARE AND SOFTWARE

Upon Completion of this course, students should be able to:

- Define the terms 'file' and 'file management'
- Categorize files based on their file extensions
- Solve the path to a file, with the tree directory structure
- Perform file management related tasks in a directory folder
- Discuss the role of drivers in device management
- Explain and justify the need for database management systems
- Compare electronic databases and manual databases
- Design and populate a database table
- Create simple queries and reports from single tables
- Apply the concepts of importing and exporting database objects to a word processor or spreadsheet
- Perform mail merge using a spreadsheet or database table as the source
- Perform simple binary operations such as addition and subtraction

TERM 2 & 3

WORD-PROCESSING

- Hardware (Device management)
- Software (File management)
- Data representation (Data management)
- Database management software
- Integration across Word-processors, Spreadsheets, and Database Management Software
- have hands-on experience in the use of Word-Processing in the development of computer-generated documents.

SPREADSHEETS

- develop expertise in the use of spreadsheet packages in the development of computer applications.
- Insert/ delete rows and columns.
Set row height and Column width.
- Explain the difference between Formula & Function.

COMPUTER STUDIES DEPARTMENT

	<ul style="list-style-type: none">• Basic Formulae -All arithmetic operations (+, -, *, /).• Functions - Sum, Average, Minimum, Maximum. <p>SOFTWARE</p> <ul style="list-style-type: none">• Identify the categories of Software. (System and Application)• Define System Software.• Define Operating System.• Explain the functions of an Operating System Software.• State the types of System Software.• Define basic terms and concepts: booting; software control; hardware control etc. User Interface
<p>Student Learning Outcomes: <i>(Specific Objectives)</i></p>	<p>Students will be able to:</p> <p>COMPUTER FUNDAMENTALS AND INFORMATION</p> <ul style="list-style-type: none">• Define the terms ‘file’ and ‘file management’• • Categorize files based on their file extensions• • Solve the path to a file, with the tree directory structure• • Perform file management related tasks in a directory folder <p>SPREADSHEETS</p> <ul style="list-style-type: none">• explain the purpose of a spreadsheet• use appropriate terminologies commonly associated with spreadsheets• manipulate columns and rows• manipulate data in a spreadsheet• use basic pre-defined systems functions• create advanced arithmetic formulae• replicate (copy) formulae into other cells• perform charting operations• Manipulate <i>one or more</i> worksheets <p>WORD-PROCESSING</p> <ul style="list-style-type: none">• create a document• use appropriate document formatting features• use appropriate editing features to structure and organize a document• use the review feature of a word processor to enhance document readiness• use mail merge feature in the preparation of a document for a variety of situations• use mail merge feature in the preparation of a document for a variety of situations <p>SOFTWARE</p> <ul style="list-style-type: none">• Identify the categories of Software. (System and Application)• Define System Software.• Define Operating System.• Explain the functions of an Operating System Software.• State the types of System Software.• Define basic terms and concepts: booting; software control; hardware control etc. User Interface

COMPUTER STUDIES DEPARTMENT

Topical Outline of the Course Content:	<p>COMPUTER FUNDAMENTALS AND INFORMATION</p> <ul style="list-style-type: none"> • Hard Copy • Soft Copy • Types of Monitor <p>SPREADSHEETS</p> <ul style="list-style-type: none"> • Definition and Purpose of Spreadsheets • Appropriate terminologies associated with Spreadsheets • Manipulate Columns and Rows in a Spreadsheet (<i>insert , delete etc</i>) • Numeric and Data Formats • REVIEW of formulae and functions (Sum, <i>avg, max, min, date, count, counta, countIF, IF</i>) • Absolute and Relative Cell addressing • VLookup and PMT functions • Sorting • Simple and Advanced Filtering • Data Visualization (Charts) • Summarize Data in a Spreadsheet (PivoT Table) <p>SOFTWARE</p> <ul style="list-style-type: none"> • Application Software • System Software • OS • Utility program • User Interface <p>WORD-PROCESSING</p> <ul style="list-style-type: none"> • Page Layout • Mail Merge • Typing of documents (business letter etc.) • Brochure
Guidelines/Suggestions for Teaching Methods and Student Learning Activities:	<p>Lectures: Provide contextual background and detailed analysis of each topic.</p> <p>Group Discussions: Facilitate discussions on the computer system.</p> <p>Research Projects: Assign research on a topic related to the components of a computer system.</p> <p>Differentiated Instruction: Tailoring instruction to meet the needs, strengths, and interests of each student.</p> <p>Lecture-Demonstration: Combining lectures with demonstrations to enhance understanding through verbal and visual learning</p> <p>Peer Teaching: Students teach their peers, which can reinforce their own learning and enhance their understanding.</p>
Guidelines/Suggestions for Methods of Student Evaluation:	<p>Quizzes and Tests: Regular assessments to check understanding of key concepts.</p>

COMPUTER STUDIES DEPARTMENT

	<p>Classwork: Assignments completed during class that help monitor ongoing student progress and understanding.</p> <p>Homework Assignments: Tasks assigned for completion outside of class, reinforcing concepts taught and promoting independent study.</p> <p>Class Participation: Assessment based on engagement in discussions and activities.</p> <p>Presentations: Students present their research findings to the class.</p> <p>Final Exam: A comprehensive exam covering all course material.</p> <p>Group Projects: Team assignments that assess collaborative and interpersonal skills along with individual contributions.</p> <p>Peer Reviews: A process where students evaluate each other's work, providing feedback and gaining insights from peers.</p> <p>Reflections: Written insights by students on their learning experiences, often discussing what they learned and areas for improvement.</p> <p>Self-Grading: Allowing students to evaluate their own work, fostering self-reflection and critical thinking about their performance.</p> <p>Online Quizzes and Exams: Digital tests that make use of technology to assess students' understanding in a more flexible or remote setting</p>
<p>Suggested Readings, Texts, Objects of Study:</p>	<ul style="list-style-type: none"> • CSEC Information Technology Syllabus with Specimen Papers • Oxford Information Technology for CSEC • Information Technology for CSEC 2nd Edition (CXC Study Guide)
<p>Bibliography of Supportive Texts and Other Materials</p>	<p style="text-align: center;">Bibliography</p>