Dawood Public School
Course Outline 2017-18
Computer Studies
Class VII

Course Book: Right Byte Book-2 Fourth edition
Month: August
Chapter 1: The data processing cycle

Content	Teaching Objectives	Learning outcomes	Teaching strategies	Terminologies
• Data collection, Input, processing, output and storage stages of data collection. • Different forms of processed data • The computer as a data processing system • Manual Vs computerized system • Advantages / limitations of manual system and computerized system	The objectives of this chapter are to: • Introduce the steps involved in data processing • Stages involved in collection and processing of data • Explain that data can be processed in various forms • Difference between manual and computerized system	After completing this chapter, students should be able to : • Explain the data processing cycle and information processing by using appropriate examples • Define and distinguish between data collection, data capture, data transmission and data communication • Identify situations when different processing steps are appropriate • Compare and contrast manual and computerized data processing system	The following strategies will be applied during the discussion /explanation. • Active learning Engaging students in group work and discussions, searching information and making use of appropriate terminologies.	• Automated data capture • CCTV • EPOS • EFTPOS

Course Book: Right Byte Book-2 Fourth edition
Month: September
Chapter 2: System software
Practical in HTML

Content	Teaching Objectives	Learning outcomes	Teaching strategies	Terminologies
• Basic Input Output System(BIOS) • The operating system and its functions • Computers and mobile operating system • Components of an operating • User computer interface • Utility programs and language translators	• Explain system software and its types • Recall the purpose of computers main memory • Explain the functions of Bios • Highlight the important role of an operating system and to distinguish different types of OS • To elaborate the system software	Students should be able to: • Define system software and its components • Explain the booting up process and the role of ROM BIOS • Explain the purpose of utility programs and language translators • Differentiate between the types of OS	The following strategies will be applied during the discussion/explanation Search work • Active learning Engaging students in group discussions, searching information and making use of appropriate terminologies	• Source code • Object code • Device manager • Boot sequence • Boot loader

Course Book: Right Byte Book-2 Fourth edition
Month: October /November
Chapter 4: Application software
Practical in HTML

Content	Teaching Objectives	Learning outcomes	Teaching strategies	Terminologies
• Application software and types of application software • Types of application software	• To clarify the concept of application software • To differentiate between Generic and Custom software • Expand students understanding of application software beyond WP, Spreadsheets, presentation software • Introduce productivity software, educational software, graphics, web authoring software, database management and decision making software	After completing this chapter, students should be able to : • Differentiate system and application software • Generic and Off the shelf software • The application and benefits of variety of application software	The following strategies will be applied during the discussion /explanation. • Active learning Engaging students in group work and discussions, searching information and making use of appropriate terminologies.	• Generic off-the-shelf package • Custom designed • CAD/CAM

Course Book: Right Byte Book-2 Fourth edition
Month: January/Feb
Chapter 5: Binary Computing

Content	Teaching Objectives	Learning outcomes	Teaching strategies	Terminologies
• Various forms of data • Number system and types of number systems • Binary coding schemes • Conversion of number systems • Binary addition and subtraction	• To explain the nature of digital and binary data • Introducing number systems as a set of rules for representing data using numbers • Explain decimal, binary, octal and hexadecimal number system • Explain the conversion of decimal numbers into binary numbers and vice versa • Explain the addition and subtraction of binary numbers • Explain data storage in terms of bits and bytes	After completing this chapter, students should be able to : • explain why and how the computer understand information in binary form • Perform the required conversion using appropriate methods • Perform addition and subtraction • Explain that data is stored in computers memory in terms of bits and bytes	The following strategies will be applied during the discussion /explanation. • Active learning Engaging students in group work and discussions, searching information and making use of appropriate terminologies.	• Repeated division method • Expansion method • EBCDIC codes • ASCII codes • Unicode

Course Book: Right Byte Book-2 Fourth edition Month: February/March Chapter 5: Algorithm and Flow chart				
Content	**Teaching Objectives**	**Learning outcomes**	**Teaching strategies**	**Terminologies**
Programming The Algorithm The flowchart Selection IF ----- Then statements If---- Then ----- Else statements	Explain the importance of programming Explain the advantages of creating step-by-step instructions in the form of algorithm Explain the benefits of creating flow charts highlight the function of different flow chart symbols introduce selection problems Explain the purpose of If ---- Then and If ---- then --- Else statements Explain the function of decision symbol in solving a selection problem	After completing this chapter, students should be able to : Explain the stages involved in problem solving Explain the necessity of creating algorithms to solve problems Identify different flow chart symbols and explain their functions Creating algorithm and flow chart to solve mathematical problems Explain the selection problem with the help of examples of from real life Explain the role played by conditional statements in solving selection problems Compare If ---- then and If Then ---Else statements Create Algorithms and Flowcharts to solve problems using conditional statement.	The following strategies will be applied during the discussion /explanation. • Active learning Engaging students in group work and discussions, searching information and making use of appropriate terminologies.	

Practical Lab Sessions On HTML [Sep-April]				
Content	**Teaching Objectives**	**Learning outcomes**	**Teaching strategies**	**Terminologies**
An introduction to HTML and its tags What is an HTML editor and how to use it? The structure of an HTML program. How to write and save the HTML program. Creating a simple Web Page Using Document Head and Body tags Alignment, formatting, bgcolor, Line breaks , marquee, horizontal ruler. Using Document Head and Body tags with attributes. Tags to create order/unordered lists Use of and tags and their attributes Inserting headings & using Six different levels of headings with attributes. Applying background and text in document Body. Inserting tables , Links with attributes Inserting internal links as Bookmarks	To understand techniques of creating simple web pages To identify elements of a Web page and describe different page layouts To learn and explore the features of web pages To understand the structure of HTML document by applying tags and techniques to save it as web page To create a Web page using basic HTML tags and use storyboard techniques for subsequent Web pages To inculcate the habit of collaboration and team work in students	Students will be able: To learn and identify the various components of web pages that is used in creating web sites and define basic HTML terminologies	Students will start with HTML lab sessions where they will learn the document structure that are required to design a simple “page” This lab session plan will start from September and will be continued till the Final Projects announcement in November. Students will follow the instructor’s directions on Board and on Multimedia in order to create web pages using the text editor Notepad. Students will also learn the techniques of adding graphics that will be housed on the web page. And also creating Internal and external links.	• Web site • WebPages Website addresses • Text editor hypertext • Bookmarks