

## Information Technology Course Outline – Trinity Term 2<sup>nd</sup> Form

Week	Topic	Objectives	Content	Evaluation/Activities
<b>1 - Theory</b>	Fundamentals of Hardware and Software	<b>Revision (Advent &amp; Lent Term)</b> i) Identify and describe computers and types of computers ii) Describe the data processing cycle and its components iii) Explain the functions of the major hardware components of a computer system - Input Devices iv) manipulate units of storage; v) Presentation Software vi) Web Page	What is a computer?  Describe the components of a computer system.  What are computer Hardware?  What are computer Software?  Why use a computer system  Types of Computers  What are the advantages of using computer systems?  What are the drawbacks of using computers?  Protecting computer systems  What is the data processing cycle?	1) <b>Interactive Revision Class Activity –</b> Revision Jeopardy  Divide Class into two teams. A Member picks a category to answer a question from.  2) <b>Graded Revision Worksheet 1 &amp; 2</b>

			<p>What are the steps in the cycle?</p> <p>Identify categories of Input Devices</p> <p>Identify common Input Devices and explain how they are used to accomplish a variety of tasks in various organisations.</p> <p>Revise Bit, byte, kilobyte, megabyte, gigabyte, terabyte, word, word size.</p> <p>Revise Microsoft PowerPoint Features</p> <p>Revise Web page Design and related terms</p>	
<b>2 - Theory</b>	Fundamentals of Hardware and Software	Explain the functions of the major hardware components of a computer system – Output Devices (Soft Copy)	<p>Visual display unit: resolution, types, sizes.</p> <p>Audio output devices (for example, speakers, headphones, earphones); microfilm. Also terms such as hard copy, soft copy, human readable and machine-readable.</p>	<p><b>Homework Activity 1 &amp; 2</b> Answer Recap Questions</p> <p><b>Quiz</b></p> <p><b>Individual Project</b></p>

		Explain the functions of the major hardware components of a computer system – Output Devices (Hard Copy)	Printers: impact and non-impact, types: (character, line, page, laser, inkjet, dot matrix). Characteristics: (speed, quality, storage capacity); plotters;	Using the Formatting Features learnt in your practical classes, create and submit a project on Input, Output and Storage Devices. Your Project should have at least 5 examples of each device, pictures of each device and a brief description of how it can be used/or what it is used for.  Projects should be submitted as hard copy
<b>3 - Theory</b>	Fundamentals of Hardware and Software	Distinguish between systems programs and application programs;  Explain the functions of an operating system;  Distinguish between types of user interface.	Systems software: operating systems, translators, utilities: Application software: general purpose, special purpose, custom written. Customization, integrated software.  File management, memory management, security, device management, input/output management, user interface, process management.  Software interface: Command driven, graphical user interface (GUI) (menu driven, pull-down and pop-up menus, icons). Hardware interface: touch screens, non-visual interface,	<b>Homework Activity</b> Answer Recap Questions  <b>Software Worksheet – Graded</b>  <b>Quiz</b>

			sensors, and Braille keyboards.	
<b>4 - Theory</b>	Fundamentals of Hardware and Software	Introduction to Binary	Decimal to binary conversion, Binary to Decimal Conversion, Binary Addition, Binary Subtraction	<b>Conversion Worksheet 1 &amp; 2</b> <b>Binary Addition Worksheet</b> <b>Binary Subtraction worksheet</b> <b>Quiz</b>
<b>5 –Practical</b>	Word Processing	use columns and tables appropriately;	Use Columns, table and previous formatting features to create brochure.	<b>Classroom Activity</b> Produce the brochure provided using the formatting features demonstrated
<b>6- Practical</b>	Word Processing	Use headers, footers, footnotes and endnotes appropriately;	Use headers, footers, footnotes and end notes appropriately in document	<b>Classroom Activity</b> Complete the exercise provided using the formatting features demonstrated.
<b>7- Practical</b>	Word Processing	Use mail-merge facilities;	Creation of primary documents and data files in mail merge application; Field names.	<b>Classroom Activity</b> Create Mail Merge Document Exercise
<b>8- Revision</b>	Fundamentals of Hardware and Software  Word Processing	Revision – Trinity Term Objectives	Discussion, Demonstration & Recap	<b>Classroom Activity</b>