**Course Outline**

|  |  |
| --- | --- |
| **Unit Code & Name** | **BCS 2114/2117 Introduction to Computer systems/Foundation of computer systems** |
| **Prerequisite** | None |
| **Cohort** | Y1S1 2020/2021 |
| **Lecturer** | Josephine Muniu (Mrs.) |
| **Contact** | [Muniujosephine@gmail.com, cell phone](mailto:Muniujosephine@gmail.com,%20cellphone) 0721655646 |

**Purpose**

To enable student understand concepts, skills and practices of computing.

**Learning outcomes:**

By the end of this course the student should be able to:

Describe the basic elements of a computer system and purpose. The characteristics of computers that makes them an essential part of every technology. Computer system, which includes components such as central processing unit & I/O devices. Concepts of data processing, various technology used in different generations, computer crimes, detection and prevention. Network, internet and intranet.

**Delivery Methodology**

* Lecturers,
* Presentations and demonstrations

**Learning Resources**

Books, Computers, Internet, Journals

**Course Content**

|  |  |  |
| --- | --- | --- |
| **WEEK** | **CHAPTER TOPICS** | **OUTLINE** |
| WK1  **Lecture 1** | **What is a computer?** | Introduction to Computers, Anatomy of Computers, Input and Output Devices Generations of Computers 1st2nd3rd4th and 5thgeneration |
| WK2  **Lecture 2** | **Parts of the computer** | Units of Memory, Hardware, Software and Classification of Computers |
| WK3  **Lecture 3** | **Personal computers** | Personal Computers, Types of Processors, Booting of Computer-warm and cold booting |
| WK4  **Lecture 4** | **Computer viruses** | Computer Viruses, Worms and Vaccines |
| WK5  **Lecture 5** | **Operating Systems** | Basics of Operating System  Definition of Operating System  Objectives, types and functions of Operating Systems  Working with Windows Operating System |
| WK6 | **CAT 1** | CAT 1 |
| WK7  **Lecture 6** | **WINDOWS** | GUI, Desktop and its elements, Windows Explorer, Working with files and folders, Setting time and date, Starting and Shutting down Windows |
| WK8  **Lecture 7** | **NETWORKS** | Define Network, Types of Network, Topology, Cables equipment. |
| WK9  **Lecture 8** | **INTERNET** | History of internet, internet services, benefits from the use of internet.  Assignment 2 |
| WK10  **Lecture 9** | **DATA and INFORMATION** | Define data, information  Data processing |
| WK11  **Lecture 10** | **COMPUTER SECURITY** | Types of computer attack, computer crimes |
|  | **CAT 2**  **REVISION** | CAT 2 |
|  | **Course Assessment**  Continuous Assessment Tests  **Final exam** | CAT 1,CAT2,ASSESMENT 1,ASSESSMENT 2  30%  70% |
|  | **Course Textbooks** | Sinha, P.K. (2005). *Computer Fundamentals* (4th Ed.).  BPB Publications.  O’Leary, T.J. & O’Leary, L.I (2010).*Computing Essentials* (5thEdition).McGraw Hill.  Moffat,S.(2012).*Front Page 2003*(1st Edition).Mouse Training Company & Ventus Publishing |
|  | **Course Journals** | Journal of Computing and Information Technology International Journal of Computing & Information Technology (IJCIT) is published bi-annually by Research Science Press (New Delhi).  Evolutionary Computation |