

School of Mathematics and Computing

Course Outline Form

Day Class

Lecturer: Namugabo Lydia

Course Title: computer fundamentals

Code : UCC1100

Academic Year 2021/2022

Year 1 - Sem 1

Overall Description of the Course	This course is aimed at giving students an introduction about the computer systems, how they work , how they are used in society and for what purpose.
Overall Learning Outcomes	By the end of this course unit students will be able to know the basic skills of using a computer as central tool for pursuing their studies, the will understand the general introduction to the broad aspect of computer system, how it works, brief history of computers and basic components of a computer. In addition students will be grounded in the proper use of internet for research and understand the commonly used applications soft wares that relate to daily routines i.e Microsoft word, PowerPoint, Microsoft excel.
General Description of Teaching/Learning Methods and Modes of Assessment	Intensive theoretical and practical lectures, discussions and presentations.. The final 3-hour exam will require students to apply theory in dealing with the practical challenges.

Details

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Topic	Teaching and Learning Methods to be Employed	Learning Outcomes
1. Introduction to computer systems	Lecture and discussion notes	Be able to understand what a computer system is, basic functions of a computer, advantages and disadvantages of a computer, characteristics of a computer, limitations of a computer, uses of a computer in society, components of a computer and health-computer safety precautions,
2. History /types of computers	Lecture and discussion notes	Understand the five generations of computers, classifications of computers like classification by processing power, capacity, function and purpose.
3. computer system	Lecture and discussion notes	To understand what a computer system is, components of a computer system i.e hardware, software, data, procedures and users. Hardware categories
5. computer operations and data loss	Lecture and practical exercise in the computer lab	<p>To understand the basic operations of a computer i.e inputting data, processing data, outputting data and storing of data plus the devices used.</p> <p>Understand Causes of data loss from a computer and how we can prevent from losing data.</p> <p>Booting a computer, key board operations, mouse operations, important key board short cuts.</p>
6. computer soft wares	Lecture and practical exercise in the computer lab	<p>To understand the different soft wares used both application and system soft wares, software considerations.</p> <p>operating system as the main software used plus its functions, operating system installation methods, how operating system works, functions and types of operating system.</p> <p>Computer virus, types of viruses, symptoms of a virus, sources of viruses, prevention of viruses.</p>

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7 Internet and Networking	Lecture and practical exercise in the computer lab	<p>To know what we mean by internet and networking, merits and demerits of internet and networking, network devices, network components and protocols, internet service providers and what to look for when choosing a service provider.</p> <p>To know the meaning of search engine and browser as terms used in networking, types of web browsers, the services provided by internet .</p> <p>To understand what an Email is, merits and demerits of Emails.</p>
8. Network Topologies and Network Architecture	Lecture and discussion notes	<p>To understand what a topology is , the different topologies used in networking i.e Bus, Star, Ring, mesh topologies,</p> <p>To understand the different types of Network architecture (peer.peer and client server)</p>
9. Files and folders	Lecture and practical exercise in the computer lab	To know the difference between a file and folder, how to manage files and folders, steps to create folders and files, renaming of files and folders, moving of files and folders, how to delete files and folders.
10. Microsoft office word	Lecture and practical exercise in the computer lab	To understand how to open Microsoft word, create and save document, saving document using password, orientation(portrait or land scape), formatting text, navigating a document, formatting paragraphs, moving text, find and replace text, spell check, inserting items, printing basics, headers and footers, auto shapes, drop caps, using borders in a document
10. Microsoft office Excel	Lecture and practical exercise in the computer lab	To understand how to enter data into a spread sheet, entering of formula into spread sheet, calculating the basic math operations, making changes to the content of spread sheet cell, saving a spread sheet, printing spread sheet, formatting a cell, format height of a row, formatting the width of a column, format a sheet, sorting data, to keep row and column labels visible

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		as you scroll, inserting hyperlinks, navigating a spread sheet, inserting rows and columns,
11. Microsoft office power point	Lecture and practical exercise in the computer lab	To understand how to create a new presentation, slide layouts, sorting of slides, navigating a document, inserting of images , moving and resizing images, deleting images, creating text boxes, inserting of sound files and videos, choosing of designs, transitions, file format, starting the show, action button, adding notes, key board short cuts,

Assessment

Continuous Assessment test (CAT)	20%
Presentation/practical	20%
Final Examination	60%

Reading Materials

Timothy O' Leary, Linda O' Leary (2005). Computing Essentials 2005 Complete Edition, McGraw-Hill Companies, Inc., NY

Sanghera (2005). Fundamentals of Computing, Kendall/Hunt Publishing Co., USA

Larry E. Long, Nancy Long., (1996). Introduction to Computers & Information System, Internet Edition, Prentice Hall College Div.

Shelly O'Hara, Paul Wray., (2001). Introduction to Computers and the Internet for seniors, DD C Publications