FUTURE UNIVERSITY IN EGYPT جامعة المستقبل

Faculty of Engineering & Technology

Introduction to Computer

Information :

Course Code :	CSC 101	**Level :**	Undergraduate	**Course Hours :**	2.00- Hours
Department :	University Requirments				

Area Of Study :

Upon completion of this course, students will be able to:
Analyze the requirements to understand different components in computer system and operations of the computer systems.
Demonstrate knowledge and understanding of the basic elements of computer hardware and software and their roles in a computer system.
Combine and evaluate different tools and facilities.
Use modern techniques to use Internet and WWW for searching and browsing information.
Comprehend deeply the basic concepts of software development.
Compare, evaluate and select methodologies to solve the algorithmic problems using pseudo code and flow chart.
Comprehend the Computer Language and different number systems.

Description :

Introduction to computer hardware, computer software and computer networks. Data internal representation in computer memory. Numbering systems. Problem solving techniques using Pseudocode (Structured English).

Course outcomes :

a.Knowledge and Understanding: :	
1 -	a1. Describe the basics of software development.
2 -	a2. Define the basics of application software.
3 -	a3. Identify basic computer terminology.
4 -	Understand different components in computer system and operations of the computer systems.
b.Intellectual Skills: :	
1 -	Analyze and design a solution for computing problems considering limitations and constrains.
2 -	Solve the algorithmic problems using pseudo code and flow chart.
c.Professional and Practical Skills: :	
1 -	c1. Run computing equipment in different physical environment.
2 -	c2. Install and maintain different supporting tools for construction and documentation software systems.
3 -	Realize information storage and retrieval skills in computing software systems.
4 -	Acquire a set of fundamental research skills from different resources.
d.General and Transferable Skills: :	
1 -	Exploit a range of learning resources.
2 -	Apply communication skills in presentations and report writing using various methods and tools.

Course Topic And Contents :			
Topic	**No. of hours**	**Lecture**	**Tutorial / Practical**
Introduction To Computer and Information Technology & Computer Hardware Components	2	1	
Computer Hardware Components & The von Neumann Model	2	1	
Computer Hardware Components	2	1	
Computer Software	2	1	
Computer Networks, Internet and WWW	2	1	
Problem Solving Methodologies and Algorithmic Approach	2	1	
Problem Solving Methodologies and Algorithmic Approach	2	1	
Pseudo Code	2	1	
Pseudo Code	2	1	
Pseudo Code	2	1	
Numbering Systems	2	1	

Teaching And Learning Methodologies :
Interactive Lectures including discussion
Tutorials
Practical Lab Sessions
Self-Study (Project / Reading Materials / Online Material / Presentations)
Seminars
Case Studies
Problem Solving
Others (Specify)

Course Assessment :			
Methods of assessment	**Relative weight %**	**Week No**	**Assess What**
Assignments	20.00		
Final Exam	40.00		
Midterm Exam (s)	30.00		
Others (Participation)	10.00		

Books :		
Book	**Author**	**Publisher**
Computer fundamentals for technical students (Ebook)	Heisserer, Nick	LibreTexts

Course Notes :

Course Notes are available with all the slides used in lectures in electronic form on Learning Management System (Moodle)

Recommended books :

Introduction to Computer Architecture and Programming, Second Edition by Zeltmann, Patt, Patel, 2009

Introduction to Programming with Java: A Problem Solving Approach, Second Edition by Dean, Dean, 2014

Introduction to Computing Systems, Second Edition by Patt, Patel, 2004

Brian K. Williams, Stacey Sawyer, "Using Information Technology: a Practical Introduction to Computer & Communication," 11th International Edition, McGraw Hill, 2013.

Web Sites :

http://www.mcgrawhillcreate.com/