FUTURE UNIVERSITY IN EGYPT جامعة المستقبل

Faculty of Computers and Information Technology

Introduction to Computer

Information :

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

Instructor Information :

Title	Name	Office hours
Professor	Awad Hassballah Khalil Matous	18
Associate Professor	MAHMOUD SAMI ABDELAZIZ OTHMAN	
Lecturer	Mohamed Ahmed Hussein Ali	1
Lecturer	Mohamed Ahmed Hussein Ali	1
Assistant Lecturer	Mahinda Mahmoud Samy Ahmed Zaki Zidan	1
Assistant Lecturer	SALMA RADWAN HASSAN ABDELHAMID	
Teaching Assistant	Ayman Adel Moner Iskandar Matta	
Teaching Assistant	Bayan Elsaeed Bedair Omar Elakhdar	
Teaching Assistant	Salma Essam Eldin Ali Mohamed Mohamed Yassin	

Area Of Study :

Analyze the requirements to understand different components in computer system and operations of the computer systems.
Apply the basic elements of computer hardware and software and their roles in a computer system.
Use modern techniques to use Internet and WWW for searching and browsing information.
Compare, evaluate and select methodologies to solve the algorithmic problems using pseudo code and flow chart.
Apply the basic concepts of 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 -	Demonstrate knowledge and understanding of the basic elements of
2 -	Understand how to use Internet and WWW for searching and browsing
3 -	Understand the basics of software development.
4 -	Describe the different components in computer system and operations of the computer systems.
b.Intellectual Skills: :	
1 -	Demonstrate knowledge and understanding of standard methods and approaches for problem solving
2 -	Design and represent an algorithmic solution for a given algorithmic problem

3 -	Demonstrate knowledge and understanding of the algorithmic approach for problem solving..
c.Professional and Practical Skills: :	
1 -	Ability to develop and produce diversity of computer applications using Word processing, Spreadsheet, Database and PowerPoint Software tools..
2 -	Implement the algorithmic solution using C++ as a programming language
3 -	Realize the different techniques of problem solving such as Pseudo code and flow chart.
4 -	Acquire a set of fundamental research skills from different resources
d.General and Transferable Skills: :	
1 -	Demonstrate knowledge and understanding of using C++ in implementing various problem solutions in different application areas.
2 -	Apply communication skills in presentations and report writing using various methods and tools

ABET Course outcomes :	
1 -	Demonstrate knowledge and understanding of the basic elements of computer hardware and software and their roles in a computer system.
2 -	Demonstrate knowledge and understanding of Computer Networks and the Internet.
3 -	Demonstrate awareness and understanding of emerging Internet applications such as WWW, Email, Online communications services, é etc.
4 -	Demonstrate awareness and understanding of different issues related to computer and Internet security and professional ethical issues.
5 -	Demonstrate understanding of computational problem solving concepts.
6 -	Awareness of security and professional ethical issues related to usage of computers and Internet.
7 -	Demonstrate capacity of designing algorithmic solutions for computational problems.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction To Computer and Information Technology &	2	2	
Computer Hardware Components & The von Neumann Model	2	2	
Computer Hardware Components	2	2	
Computer Software	2	2	
Computer Networks, Internet and WWW	2	2	
Problem Solving Methodologies and Algorithmic Approach	2	2	
Mid Term Exam	1		
Problem Solving Methodologies and Algorithmic Approach	2	2	
Pseudo Code (P1)	2	2	
Pseudo Code (P2)	2	2	
Pseudo Code (P3)	2	2	
Numbering Systems	2	2	
Final Exam	2		

Teaching And Learning Methodologies :

Interactive Lectures including discussion

Self-Study (Project / Reading Materials / Online Material / Presentations)
Problem Solving

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments	20.00	6	
Final Exam	40.00	14	
Midterm Exam (s)	30.00	9	
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 :

Zeltmann, Patt, Patel, Introduction to Computer Architecture and Programming, 2nd Edition, 2009. ISBN: 978-0072376838
Dean, Introduction to Programming with Java: A Problem Solving Approach, 2nd Edition, 2014. ISBN: 978-0073376066
Patt, Patel, Introduction to Computing Systems, 2nd Edition, 2004. ISBN: 978-0072467505
Brian K. Williams, Stacey Sawyer, Using Information Technology: a Practical Introduction to Computer & Communication, 11th Edition, McGraw Hill, 2013. ISBN: 978-0073516882

Web Sites :

http://www.mcgrawhillcreate.com/