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 :

The main aims of this course are:
1. To widen the student's knowledge about the basic elements of computer hardware and software and their roles in a computer system.
2. To deep the student's comprehension of the basic concepts of software development.
3. To enhance the student's ability to use Internet for searching and browsing information.

˝Understand how to use Internet and WWW for searching and browsing information.
˝Understand the basics of software development.
˝Ability to develop and produce diversity of computer applications using Word processing, Spreadsheet, Database and Powerpoint Software tools.
˝Demonstrate knowledge and understanding of standard methods and approaches for problem solving.
˝Demonstrate knowledge and understanding of the algorithmic approach for problem solving.
˝Design and represent an algorithmic solution for a given algorithmic problem.
˝Implement the algorithmic solution using C++ as a programming language.
˝Demonstrate knowledge and understanding of using C++ in implementing various problem solutions in different application areas.

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.

b.Intellectual Skills: :

1 -	b1. Design a solution for computing problems considering limitations and constrains.
2 -	b2. Implement the solutions of computing and information.
3 -	b3. Determine measurement criteria for computer systems.

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 -	c3. Maintain software systems.

http://www.fue.edu.eg

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d.General and Transferable Skills: :

1 -	d1. Search for data.
2 -	d2. Work in a team.
3 -	d3. Communicate effectively.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction To Computer and Information Technology & Computer Hardware Components	3	2	1
Computer Software	6	4	2
Problem Solving Methodologies and Algorithmic Approach	6	4	2
Program development in C++	6	4	2
Basic Elements & Data Types of C++	6	4	2
Program development in C++ - Arithmetic C++ & Selection Control Structures	6	4	2
Program development in C++ - Repetitive C++ Structures (Loops)	6	4	2
Project presentation	6	4	2

Teaching And Learning Methodologies :

| Interactive Lectures including discussion |
| Practical Lab Sessions |
| Self-Study (Project / Reading Materials / Online Material / Presentations) |

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
˝ÁFinal exam	40.00		
˝ÁParticipation (Team work project)	10.00		
o First Mid Term Exam	20.00		
o Practical Exam	10.00		
o Second Mid Term Exam	20.00		

Course Notes :

Course notes
Lecture notes to be handed out

Recommended books :

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

Web Sites :

www.ekb.eg