

Faculty of Commerce & Business Administration

Structured Programming

Information :

Course Code : BIT 302

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Business Information Technology

Instructor Information :

Title	Name	Office hours
Lecturer	Elshimaa Ahmed Ramadan Ibrahim Elgendi	
TEACHING ASSISTANT	Mohamed Mahmoud Hassan Hamada	1

Area Of Study :

To introduce programming principles, with emphasis on good programming style, structured approach to program development, testing and documentation.
On completion, students should be able to use a high-level programming language to develop a structured program, with an awareness of the importance of programming style, programming testing and documentation, and program development methodology.

Description :

The design of GUI applications that can be utilized in a Client/Server environment, event-driven programming, professionalism of design, code, documentation, and usability of programs.

Course outcomes :

a.Knowledge and Understanding: :

1 -	Describe programming methodologies
2 -	Explain the basic concepts of programming principles, including programming style, developing approach, implementation, testing and maintenance
3 -	Identify programming data structures

b.Intellectual Skills: :

1 -	Build up analytical thinking and a habit of detailed documentation
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c.Professional and Practical Skills: :

1 -	Design and develop structured computer programs
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d.General and Transferable Skills: :

1 -	Formulate problems as steps so as to be solved systematically
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Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction	4	3	1
Algorithms Design-Write algorithms	4	3	1
Flowcharts and Pseudo Codes-Design a flowchart	4	3	1
Evaluation of Algorithms-Test the algorithms	4	3	1
Program Design and development cycle	4	3	1
Mid-Term 1	4	3	1
Data Types and Declarations, Operators and Expressions-Develop a first program using high level language	4	3	1
Input and Output-Develop a programs for In/Out	4	3	1
Program Control Structures-Develop a programs for conditional statements	4	3	1
Looping-Develop a programs for looping	4	3	1
Mid-Term 2	4	3	1
Arrays, Strings, and Unions-Develop a programs for Arrays	4	3	1
Program Testing and Debugging	4	3	1
Program Documentation and Maintenance	4	3	1
Revision	4	3	1

Teaching And Learning Methodologies :

Data show and computer in lectures.

Demonstration videos.

Group discussion

Self-learning

Practical.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
1st Mid-Term Exam	20.00	6	
2nd Mid-Term Exam	20.00	11	
Final Exam	40.00	16	
Semester Work	20.00	13	

Books :

Book	Author	Publisher
Visual C# 2010 How to Program	Paul Deitel, Harvey Deitel	PEARSON

Course Notes :

Handouts.

Recommended books :

- Alice E. Fischer, David W. Eggert and Stephen M. Ross, Applied C: An Introduction and More, McGraw Hill, 2001.
- Anany Levitin, Introduction to the Design and Analysis of Algorithms, Pearson Addison Wesley, 2003.

Web Sites :

- <http://www.wikipedia.org/>
- www.codeproject.com/