

Faculty of Computers & Information Technology

Computer Programming 2

Information :

Course Code : CSC 213 **Level :** Undergraduate **Course Hours :** 3.00- Hours

Department : Faculty of Computers & Information Technology

Instructor Information :

| Title | Name | Office hours |
|--------------------|---------------------------------------|--------------|
| Lecturer | HEBA MOHSEN MOHAMED MOSAAD HUSSIEN | 7 |
| Lecturer | HEBA MOHSEN MOHAMED MOSAAD HUSSIEN | 7 |
| Assistant Lecturer | Hadeer Khalid Tawfik El Zayat | 6 |
| Assistant Lecturer | Hadeer Khalid Tawfik El Zayat | 6 |
| Teaching Assistant | Mahinda Mahmoud Samy Ahmed Zaki Zidan | |
| Teaching Assistant | YASMIN AMR AHMED ANWAR ALI BADR | 2 |

Area Of Study :

Object-oriented programming: data abstraction, encapsulation, classes, objects, templates, operator overloading, function overloading, inheritance, polymorphism, exception handling, and streams language to develop computer programs.

Description :

Object-oriented programming: data abstraction, encapsulation, classes, objects, templates, operator overloading, function overloading, inheritance, polymorphism, exception handling, and streams

Course outcomes :

a.Knowledge and Understanding: :

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| 1 - | To understand the principles of the object oriented programming paradigm specifically including abstraction, encapsulation, inheritance and polymorphism |
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b.Intellectual Skills: :

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| 1 - | Construct appropriate diagrams and textual descriptions to communicate the static structure and dynamic behavior of an object oriented solution |
| 2 - | Describe and explain the factors that contribute to a good object oriented solution, reflecting on your own experiences and drawing upon accepted good practices |

c.Professional and Practical Skills: :

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| 1 - | Use an object oriented programming language, and associated class libraries, to develop object oriented programs |
| 2 - | Design, develop, test, and debug programs using object oriented principles in conjuncture with an integrated development environment- |

Course Topic And Contents :

| Topic | No. of hours | Lecture | Tutorial / Practical |
|-------------------------------------|---------------------|----------------|-----------------------------|
| Introduction to Java | 4 | 2 | 2 |
| Primitive Data Types and Operations | 4 | 2 | 2 |
| Control Statements | 4 | 2 | 2 |
| Methods | 4 | 2 | 2 |
| Arrays & Strings | 4 | 2 | 2 |
| Objects and Classes | 4 | 2 | 2 |
| Midterm -1 | 3 | 1 | 2 |
| Class Inheritance & Polymorphism | 4 | 2 | 2 |
| Abstract & Interface classes | 4 | 2 | 2 |
| Midterm-2 | 3 | 1 | 2 |
| Exception Handling | 4 | 2 | 2 |
| Final Exam | 4 | 2 | 2 |

Teaching And Learning Methodologies :

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| Lectures |
| Exercises |
| Practical training |
| Self-Study |
| Open Discussion |
| Presentation |
| Project |
| Web site searches |
| E-learning |
| Case Study |

Course Assessment :

| Methods of assessment | Relative weight % | Week No | Assess What |
|------------------------------|--------------------------|----------------|--------------------|
| Assignment | 5.00 | 11 | |
| Attendance | 5.00 | 2 | |
| Final Exam | 40.00 | 12 | |
| Mid-Term Exam1 | 15.00 | 7 | |
| Mid-Term Exam2 | 15.00 | 10 | |
| Project | 20.00 | 11 | |

