Fundamentals of Structured Programming Course Specifications

Course Specifications

Faculty: Computer and Informatics

Department: Computer Science

Course Specifications

Program(s) on which the course is given : Bachelor in Computer and Information Sciences

Major or Minor element of programs : All majors

Department offering the program : Computer Science

Department offering the course : Computer Science

Academic year / Level : 1 th Year/BSc

Date of specification approval :

A. Basic Information

Title: Fundamentals of Structured Programming **Code:** CSW 150

Lecture: 3 hrs/week **Practical:** 2 hrs/week **Tutorial: ---**

Total: 5 hrs/week

B. Professional Information

The course aims at teaching students the basic principles of programming languages which help the students to easily learn high level programming languages. Also, it aims at teaching students the capability of developing programs in C++ for solving small and medium scale problems. This course will also introduce the basic structure of Objects, their behaviors, and their relationships, this basic model will be modeled and these models will be programmed into a functional application that the student will compile, modify, enhance and run.

This course is introduced as a moderate level course where the student is expected to know how to program in C++ using Arrays(sorting and searching), Functions, Pointers, introduction to Object – Oriented Programming, Files manipulation, searching and Sorting.

1. **Contents:**

Topic	No. of hours	Lecture	Tutorial/ Practical
1. **Review on basic of control structures and decisions.**	3	1	1
2. **Functions Basics.**	6	2	2
3. **Advanced Features of Functions**	6	2	2
4. **Single Dimension Arrays**	6	2	2
5. **Single Dimension Arrays (Sort and Search)**	6	2	2
6. **Multidimensional Arrays**	3	1	1
7. **Introduction to Object – Oriented Programming**	3	1	1
8. **Pointers**	3	1	1
9. **Files and C-Strings**	3	1	1