	Hashemite University	
	Prince Al-Hussein bin Abdullah II Faculty for Information Technology	
	Department of Computer Information Systems	

Course Syllabus

Year: 2018-2019 **Semester: (2)**

Course No.	Course Title	Designation	Prerequisite	Co-requisite	Credit Hours Lectures /Lab.
151001100	Introduction to Programming	Compulsory	-	-	3 / 0

Instructor Name	E-mail	Office No.	Office ext.	Office Hours
Dr. Bashar Khawaldeh	bashar.igried@hu.edu.jo	-	-	
Dr. Mohammad kharabsheh	mohkh86@hu.edu.jo	-	-	

Coordinator's Name:	Dr. Bashar Alkhawaldeh

Course Description	This course is an introduction to computer programming, and to the C++ programming language. No previous programming experience is required. The course allows students to learn about the language of a computer, and the evolution of programming languages. The course gives an idea about the role of compilers, and examine real c++ programs. Topics will include variable types, operators, control flow, functions, program structure, input and output, arrays, classes. These topics make students familiar with the basic components of a C++ program, including functions, special symbols, and identifiers. During the course, the students will learn Discover how to input data into memory using input statements, and become familiar with the use of increment and decrement operators. Students will learn also about control structures, examine relational and logical operators, and explore how to form and evaluate logical (Boolean) expressions. Thoughout the course, students will explore how to construct and use count-controlled, sentinel-controlled, flag-controlled, and EOF-controlled repetition structures. In the mean time, they will learn about standard (predefined) functions and discover how to use them in a program, learn about user-defined functions, and examine value-returning functions, including actual and formal parameters. At the end of this course, students will learn about arrays, explore how to declare and manipulate data into arrays, learn about "array index out of bounds", and become familiar with the restrictions on array processing.

Learning References:

1- Textbook (s):
1. C++ Programming: from Problem Analysis to Program Design, 5th edition, D.S. Malik, 2011
2- References:
1. C++ How to Program, 8th edition, Deitel&Deitel ------ Printice Hall

Course Learning Outcomes CLOs
1. Demonstrate a solid understanding and ability to design, implement, and evaluate real problems using C++ programming language (2).
2. Demonstrate ability to debug and trace C++ programs, and discover syntax and logical errors (2).
3. Compare and differentiate between several repetition statements, and different branching techniques (2).
4. Explain and analyze algorithms, and convert them into C++ codes (2).
5. Analyze and solve assignments using C++ programming language (2).
Addressed Student Learning Outcomes (SLOs)

2

Topic to be covered	No. of Weeks	Contact hours*
1. Introduction to Computers and programming languages.	2	6
2. Basic elements of C++.	2	6
3. Input / Output.	2	6
4. Control structures- [selection].	2	6
5. Control Structures-[repetition].	1	3
6. User-defined Functions 1.	3	9
7. User-defined Functions 2.	1	3
8. Arrays.	2	6
Total	15	45

Assessment method	Grade	Comments
First Exam	25%	Covers Chapters 1, 2, 3, and 4.
Second Exam	25%	Covers Chapters 5, 6 and 7.
Assignments	10%	There are several assignments measure student ability to analyze and solve problems using C++ language.
Final Exam	40%	Covers all topics that were discussed during the semester
Total	100%	