



**Jordan University of Science and Technology**  
**Faculty of Science & Arts**  
**Basic Sciences And Humanities Department**

HSS115CS Programming In C++

First Semester 2023-2024

**Course Catalog**

3 Credit Hours. This course introduces the student to programming by studying the concepts of program specification and design, algorithm development, and coding and testing using a modern software development environment. Students learn how to write programs in a high-level programming language. Topics covered include fundamentals of algorithms, flowcharts, problem-solving, programming concepts, selection structures, control structures, arrays, and functions. Problem-solving skills will be stressed and applied to solving computing problems throughout the semester.

**Text Book**

<b>Title</b>	C++ Programming: From Problem Analysis to Program Design
<b>Author(s)</b>	D. S. Malik
<b>Edition</b>	6th Edition
<b>Short Name</b>	Textbook
<b>Other Information</b>	

**Course References**

Short name	Book name	Author(s)	Edition	Other Information
Video lectures	Programming in C++	Abedl-Rahman AlModawar	1st Edition	

**Instructor**

Name	Dr. Qanita Bani baker
Office Location	-
Office Hours	
Email	qmbanibaker@just.edu.jo

**Instructor**

Name	Mr. Abedl-Rahman Almodawar
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Office Location	A1 L3
Office Hours	Sun : 11:30 - 12:30 Mon : 13:00 - 15:00 Tue : 11:30 - 12:30 Thu : 11:30 - 12:30 Thu : 14:30 - 15:30
Email	aaalmodawar@just.edu.jo

Class Schedule & Room
<p>Section 1: Lecture Time: Mon : 17:00 - 18:30 Room: 150 منصة الكترونية</p> <p>Section 2: Lecture Time: Mon : 17:00 - 18:30 Room: 150 منصة الكترونية</p>

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	An Overview of Computers and Programming Languages	From <b>Textbook</b> , From <b>Video lectures</b>
Weeks 2, 3	Basic Elements of C++	From <b>Textbook</b> , From <b>Video lectures</b>
Weeks 4, 5	Control Structures I (Selection)	From <b>Textbook</b> , From <b>Video lectures</b>
Weeks 6, 7	Control Structures II (Repetition)	From <b>Textbook</b> , From <b>Video lectures</b>
Weeks 8, 9	User-Defined Functions I	From <b>Textbook</b> , From <b>Video lectures</b>
Weeks 10, 11	User-Defined Functions II	From <b>Textbook</b> , From <b>Video lectures</b>
Weeks 12, 13	Arrays	From <b>Textbook</b> , From <b>Video lectures</b>

Mapping of Course Outcomes to Program Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
The student will learn to use arithmetic operators and Input/Output methods within C++ code. [1SO1, 1SO2]	15%	
The student will learn to use selection statements such as if, if-else, and switch within C++ code. [1SO1, 1SO2]	20%	
The student will learn to use looping statements such as while, for, and do-while within C++ code. [1SO1, 1SO2]	20%	

The student will learn to use several predefined functions (built-in functions) and user-defined functions within C++ code. [1SO1, 1SO2]	25%	
The student will learn to declare 1D and 2D arrays and how to process their elements within C++ code. [1SO1, 1SO2]	20%	

Relationship to Program Student Outcomes (Out of 100%)					
SO1	SO2	SO3	SO4	SO5	SO6
50	50				

Evaluation	
Assessment Tool	Weight
First exam	25%
Second exam	35%
Final exam	40%

Policy	
Attendance	<p>Students will take this course as the following.</p> <ul style="list-style-type: none"> <li>- Out of the three hours, 1.5 hours will be spent watching online videos uploaded on the e-learning panel, and 1.5 hours will be spent participating in a mandatory online meeting using Microsoft Teams.</li> <li>- Besides e-learning panel material and announcements, the instructor will assist students during the weekly meeting.</li> <li>- Attendance at the Microsoft Teams meeting is essential for the course. Following university policy, students who miss more than 20% of total online classes are subject to failure.</li> </ul>
Exams	<ul style="list-style-type: none"> <li>- Students are expected to solve the exams on their own only.</li> <li>- All exams will be CLOSE-BOOK; necessary algorithms/ equations/ relations will be supplied if required.</li> <li>- All exams will be computer-based exams.</li> <li>- The first, Second, and Final exams will be announced for students on the e-learning panel once reserved by the registration unit.</li> </ul>

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