Jordan University of Science and Technology
Faculty of Computer & Information Technology
Computer Science Department

CS115 Programming In C++
Summer Semester 2022-2023

Course Catalog
3 Credit Hours. This course introduces the student to object-oriented programming through a study of 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 an object-oriented high-level programming language. Topics covered include fundamentals of algorithms, problem solving, programming concepts, methods, control structures, arrays, and strings. Throughout the semester, problem-solving skills will be stressed and applied to solving computing problems.

Text Book	
Title	C++ Programming: From Problem Analysis to Program Design
Author(s)	D. S. Malik
Edition	5th Edition
Short Name	Textbook
Other Information	

Course References

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

Instructor	
Name	**Dr. OMAR ALZOUBI**
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Office Hours	
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Instructor	
Name	**Mr. Abedl-Rahman Almodawar**

Office Location	A1 L3
Office Hours	
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Class Schedule & Room

Section 1:
  Lecture Time: Tue, Wed : 17:00 - 18:30
  Room: 150 منصة الكترونية

Section 2:
  Lecture Time: Tue, Wed : 17:00 - 18:30
  Room: 150 منصة الكترونية

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	An Overview of Computers and Programming Languages	**Ch1** From **Textbook**, From **Video lectures**
Week 2	Basic Elements of C++	**Ch2** From **Textbook**, From **Video lectures**
Week 3	Control Structures I (Selection)	**Ch4** From **Textbook**, From **Video lectures**
Week 4	Control Structures II (Repetition)	**Ch5** From **Textbook**, From **Video lectures**
Week 5	User-Defined Functions I	**Ch6** From **Textbook**, From **Video lectures**
Week 6	User-Defined Functions II	**Ch7** From **Textbook**, From **Video lectures**
Week 7	Arrays	**Ch9** From **Textbook**, **Part 9** From **Video lectures**

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
The student will learn how to use arithmetic operators and Input/Output methods within C++ code. [1SO1, 1SO2]	15%	
The student will learn how to use selection statements such as if, if-else and switch within C++ code. [1SO1, 1SO2]	20%	
The student will learn how to use looping statements such as while, for and do-while within C++ code. [1SO1, 1SO2]	20%	
The student will learn how to use several predefined functions (built-in functions) and user-defined functions within C++ code [1SO1, 1SO2]	25%	

The student will learn how to declare 1D and 2D arrays and how to process its 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**
Mid-term exam	50%
Final Exam	50%

Policy	
Attendance	Students will take this course as the following. Out of the three hours, two will be spent watching online videos uploaded on the e-learning panel, and one will be spent participating in a mandatory online meeting using Microsoft Teams. In addition to e-learning panel announcements, the instructor will assist students during the weekly meeting. Attendance at the Microsoft Teams meeting is essential for the course. Following university policy, students miss more than 20% of total online classes are subject to failure.
Exams	Students are expected to solve the exams by their own only. All exams will be CLOSE-BOOK; necessary algorithms/ equations/ relations will be supplied if required. Mid-term and Final exams will be announced for students on the e-learning panel once reserved by the registration unit.

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