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

HSS101CS Introduction To Programming - JNQF Level: 7
Second Semester 2024-2025

Course Catalog
2 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, methods, control structures, arrays, and strings. Problem-solving skills will be stressed and applied to solving computing problems throughout the semester. Weekly laboratory experiments will provide hands-on experience in topics covered in this course.

Teaching Method: On Campus

Text Book	
Title	C++ Programming: From Problem Analysis to Program Design
Author(s)	D. S. Malik
Edition	8th Edition
Short Name	Ref #1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref #2	Netacad / Introduction to Programming	Cisco Networking Academy	1st Edition	

Instructor	
Name	**Miss Noor Zaghal**
Office Location	A1 L3

Office Hours	Sun : 08:00 - 09:00
	Sun : 12:00 - 12:30
	Mon : 08:00 - 09:00
	Mon : 10:00 - 10:30
	Mon : 11:30 - 12:00
	Tue : 08:00 - 09:00
	Tue : 12:00 - 12:30
	Wed : 08:00 - 09:00
Email	noorzaghal@just.edu.jo

Instructor	
Name	**Mr. Abedl-Rahman Almodawar**
Office Location	A1 L3
Office Hours	Sun : 11:00 - 12:00
	Sun : 14:00 - 15:00
	Mon : 09:00 - 10:00
	Tue : 11:00 - 12:00
	Tue : 14:00 - 15:00
	Wed : 09:00 - 10:00
Email	aaalmodawar@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Sun, Tue : 09:00 - 10:00 Room: SG17 Section 2: Lecture Time: Sun, Tue : 12:00 - 13:00 Room: SF08 Section 3: Lecture Time: Mon, Wed : 10:30 - 11:30 Room: C5024 Section 4: Lecture Time: Sun, Tue : 10:00 - 11:00 Room: M2011 Section 7: Lecture Time: Sun, Tue : 13:00 - 14:00 Room: G2121

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Weeks 1, 2, 3	Introduction to computer programming: C++ basics, variables, and data types	**Chapter 2** From **Ref #1**, **Chapter 1** From **Ref #2**
Weeks 3, 4	Input and Output: operators, expressions, and priorities	**Chapter 3** From **Ref #1**, **Chapter 1** From **Ref #2**

Weeks 5, 6	Relational operators and one-way decisions	**Chapter 4** From **Ref #1**, **Chapter 1** From **Ref #2**
Weeks 6, 7	Selection statements	**Chapter 4** From **Ref #1**, **Chapter 2** From **Ref #2**
Weeks 7, 8	Repetition (Loops): while, for, and nested loops	**Chapter 5** From **Ref #1**, **Chapter 2** From **Ref #2**
Weeks 9, 10	Pre-defined functions and user-defined functions (Value-returning)	**Chapter 6** From **Ref #1**, **Chapter 3** From **Ref #2**
Weeks 11, 12	Void functions and functions issues	**Chapter 7** From **Ref #1**, **Chapter 3** From **Ref #2**
Weeks 13, 14	Arrays	**Chapter 9** From **Ref #1**, **Chapter 2** From **Ref #2**
Week 14	Strings	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	**Course Outcome Weight (Out of 100%)**	**Assessment method**
Identifying the hardware components of a computer and will describe how they act together to form a complete system including the scientific principles on which they are based. [1SO1] [1L7K1]	10%	
Understanding the C++ arithmetic operators, input/output methods and appropriate manipulators for formatting. [1SO1] [1L7K1]	17%	
Practicing the decision control using appropriate selection statements such as if, if-else and switch, as well as the repetition control with appropriate looping statements, such as while, for, and do-while. [1SO1] [1L7K1]	20%	
Using both one-dimensional, multi-dimensional arrays, and strings as an array of characters. [1SO1] [1L7K1]	20%	
Defining and calling functions with parameters passed by value and by reference. [1SO1] [1L7K1]	13%	
Designing, implementing, and running programs using the essential programming statements, selections, repetitions, arrays, strings, and functions. [1SO2] [1L7S1]	20%	

Relationship to Program Student Outcomes (Out of 100%)										
SO1	SO2	SO3	SO4	SO5	SO6	MSO1	MSO2	MSO3	MSO4	MSO5
80	20									

Relationship to NQF Outcomes (Out of 100%)	
L7K1	L7S1
80	20

Evaluation	
Assessment Tool	**Weight**
First	15%
Second	25%
Lab work	20%

Policy	
Attendance	Attendance is very important for the course: LECTURE and LAB. In accordance with university policy, students missing more than 20% of total classes are subject to failure. Penalties may be assessed without regard to the student's performance. Attendance will be recorded at the beginning or end of each class.
Exams	All exams will be CLOSE-BOOK; necessary algorithms/equations/relations will be supplied if required.

Date Printed: 2025-03-04