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

SE112 Introduction To Object- Oriented Programming
Second Semester 2022-2023

Course Catalog
3 Credit Hours. This course is an introductory course to the Object Oriented Design. Topics covered include the C++ programming concepts, structures, functions, objects and classes, constructors and destructors, operator overloading, virtual and inline functions, friend functions, this pointer, inheritance, pointers and references to objects, streams, command line arguments, binary and text files, random access files, templates and exception handling, the C++ preprocessor. A set of laboratory experiments will provide hands-on experience in related topics.

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

Course References

Short name	Book name	Author(s)	Edition	Other Information
Cisco netacad	Cisco netacad	Cisco Networking Academy	1st Edition	

Instructor	
Name	**Dr. HAMZA ALKOFAHI**
Office Location	-
Office Hours	Sun : 10:30 - 11:30 Sun : 13:30 - 14:00 Tue : 10:30 - 11:30 Tue : 13:30 - 14:00 Wed : 11:30 - 13:00 Thu : 10:30 - 11:30 Thu : 13:30 - 14:00
Email	hoalkofahi@just.edu.jo

Class Schedule & Room
Section 3: Lecture Time: Sun, Tue, Thu : 09:30 - 10:30 Room: A2120

Prerequisites		
Line Number	Course Name	Prerequisite Type
1731012	CS101 Introduction To Programming	Prerequisite / Pass

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Records (structs) & String type	
Week 2	Classes and Abstract Data Type (ADT)	
Weeks 4, 5, 6	Classes and objects	
Week 7	Inheritance, virtual methods and Abstract classes	
Week 8	Exception handling, Operator Overloading and Templates	

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Deal with structures and examine various operations on a struct [1C2]	10%	
Deal with classes and Abstract Data Types (ADT). [1C5]	23%	
Use Object-Oriented Programming (OOP) properties such as inheritance and composition [1C6]	19%	

Deal with pointers and dynamic memory allocation [1C2]	23%	
Use virtual functions efficiently to implement polymorphism in an inheritance hierarchy [1C2]	12%	
Deal with template to design template classes [1C5]	6%	
Use of operators overloading efficiently with classes [1C2]	7%	

																	Relationship to Program Student Outcomes (Out of 100%
SM1p	SM2p	SM3p	EA1p	EA2p	EA3p	EA4p	D1p	D2p	D3p	D4p	D5p	D6p	ET1p	ET2p	ET3p	ET4p	ET5p	ET6p	EP1p	EP2p	EP3p	EP4p	EP5p	EP6p