



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

CS112 Introduction To Object- Oriented Programming

First Semester 2021-2022

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++ INSTITUTE
Author(s)	C++ INSTITUTE
Edition	1st Edition
Short Name	cppinstitute
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Textbook	C++ Programming: From Problem Analysis to Program Design	D. S. Malik	5th Edition	
netacad	Cisco netacad	Cisco Networking Academy	1st Edition	

Instructor

Name	Dr. OMAR ALMOUSA
Office Location	A1 L-3

Office Hours	Sun : 11:30 - 13:00 Mon : 11:30 - 13:00 Tue : 11:30 - 13:00 Wed : 11:30 - 13:00
Email	osalmousa@just.edu.jo

Instructor	
Name	Miss Ghadeer Obeidat
Office Location	A1-L3
Office Hours	
Email	gnobiedat@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun : 08:30 - 10:00

Room: G2122

Section 2:

Lecture Time: Sun : 10:00 - 11:30

Room: M2011

Section 3:

Lecture Time: Mon : 08:30 - 10:00

Room: N4202

Section 4:

Lecture Time: Mon : 11:30 - 13:00

Room: A2120

Section 5:

Lecture Time: Tue : 08:30 - 10:00

Room: G2122

Section 6:

Lecture Time: Wed : 08:30 - 10:00

Room: N4202

Section 7:

Lecture Time: Tue : 10:00 - 11:30

Room: M2011

Section 8:

Lecture Time: Wed : 11:30 - 13:00

Room: A2120

Section 9:

Lecture Time: Sun : 10:00 - 11:30

Room: N4201

Section 10:

Lecture Time: Tue : 10:00 - 11:30

Room: N4201

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Pointers	From Textbook , From netacad
Week 2	Classes and Abstract Data Type (ADT)	From Textbook , From netacad
Weeks 3, 4, 5, 6	Classes and objects	From Textbook , From netacad

Weeks 7, 8, 9, 10	Inheritance, virtual methods and Abstract classes	From Textbook , From netacad
Weeks 11, 12, 13, 14	Exception handling, Operator Overloading and Templates	From Textbook , From netacad

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 [1SO1, 1SO2, 1SO3]	10%	
Deal with classes and Abstract Data Types (ADT). [1SO1, 1SO2, 1SO3]	23%	
Use Object-Oriented Programming (OOP) properties such as inheritance and composition [1SO1, 1SO2, 1SO3, 1SO5]	19%	
Deal with pointers and dynamic memory allocation [1SO1, 1SO2, 1SO3, 1SO5]	23%	
Use virtual functions efficiently to implement polymorphism in an inheritance hierarchy [1SO1, 1SO2, 1SO3, 1SO5]	12%	
Deal with template to design template classes [1SO2, 1SO3, 1SO5]	6%	
Use of operators overloading efficiently with classes [1SO1, 1SO2, 1SO3, 1SO5]	7%	

Relationship to Program Student Outcomes (Out of 100%)					
SO1	SO2	SO3	SO4	SO5	SO6
26.25	28.25	28.25		17.25	

Evaluation	
Assessment Tool	Weight
Quizez	20%
Final	50%
MidTerm	30%

Policy	
Attendance	Attendance is very important for the course. 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.
Quizzes	No makeup for quizzes. Every student is expected to do the quizzes in his/her section.