



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

CPE300 Workshop In Computers Maintenance And Operation - JNQF Level: 7

Second Semester 2023-2024

Course Catalog

1 Credit Hours. Overview of computer systems; PCs, laptops, servers, wired and wireless networks, printers, scanners, digital cameras, mobile devices and others; computer anatomy; motherboards and processors, memories, peripherals like mouse, keyboards, digital pads, and other pointing devices; computer assembly; operating systems, and compatibility and connectivity issues; human factors issues; ethics in computing.

Teaching Method: Blended

Text Book

Title	Upgrading and Repairing PCs
Author(s)	Scott Mueller
Edition	20th Edition
Short Name	Ref # 1
Other Information	

Instructor

Name	Dr. Osama Al-Khaleel
Office Location	C5L2
Office Hours	Sun : 12:30 - 13:00 Mon : 09:00 - 13:00 Tue : 13:30 - 15:30 Wed : 08:00 - 08:15
Email	oda@just.edu.jo

Instructor

Name	Mr. Mohammed Hammouri
Office Location	C5 L2
Office Hours	Sun : 13:30 - 14:30 Mon : 10:30 - 11:30 Mon : 12:30 - 13:00 Tue : 09:30 - 10:30 Tue : 13:30 - 14:30 Wed : 12:30 - 13:00 Thu : 11:30 - 12:30
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Instructor

Name	Mrs. Shatha Al Hasan
Office Location	Ch01 L0

Office Hours	Sun : 09:30 - 10:30 Sun : 13:30 - 14:30 Mon : 11:00 - 12:00 Mon : 12:00 - 13:00 Tue : 09:30 - 10:30 Thu : 09:30 - 10:30
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Instructor	
Name	Prof. Abdel Rauf Rjoub
Office Location	E1-L3
Office Hours	Sun : 10:00 - 12:00 Mon : 11:30 - 14:30 Wed : 11:30 - 14:30 Thu : 10:30 - 13:30
Email	abdoul@just.edu.jo

Class Schedule & Room	
Section 1:	Lecture Time: Mon : 14:30 - 16:30 Room: CPE08-E4L2
Section 2:	Lecture Time: Tue : 14:30 - 16:30 Room: CPE08-E4L2
Section 3:	Lecture Time: Thu : 14:30 - 16:30 Room: CPE08-E4L2
Section 4:	Lecture Time: Sun : 14:30 - 16:30 Room: CPE08-E4L2

Prerequisites		
Line Number	Course Name	Prerequisite Type
1712320	CPE232 Digital Logic Design Lab	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	Topic	References
Weeks 1, 2	The Visible PC and all ports naming	From Ref # 1
Week 3	Memory and upgrading and fault diagnosis	From Ref # 1
Week 4	Power Supply + Soldering	From Ref # 1
Week 5	Disk/hard-drive installation, upgrading, fault diagnosis	From Ref # 1
Week 6	Graphics Card installation + bus system (north + south) bridges	From Ref # 1
Weeks 7, 8	Motherboard + Processor + BIOS	From Ref # 1

Week 9	Laptops and PCs Disassembly/Assembly	From Ref # 1
Week 10	Home Network and setting MAC addresses along with Network printer application + Drivers (printer + scanner) installation and upgrading	From Ref # 1
Week 11	Window installation and formatting with Hard-disc partitioning AND Linux (Ubuntu version) installation	From Ref # 1
Week 12	Diagnostics	From Ref # 1

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Be familiar with PC's and laptops' components. [1SO2] [1L7S1]	35%	Mid Exam, Final Exam, Labworks and Quizzes
Ability to troubleshoot and diagnose the problems with the support of appropriate equipment and software. [1SO2] [1L7S2]	25%	Mid Exam, Final Exam, Labworks and Quizzes
Ability to integrate and upgrade PC and laptop systems to higher performance machines. [1SO7] [1L7C4]	20%	Final Exam, Labworks and Quizzes
Ability to install single- and multi-operating systems (Windows and Linux) [1SO6] [1L7S3]	10%	Final Exam, Labworks and Quizzes
Ability to set up simple home networking and configure it for shared devices; such as, networking printer and other shared components. [1SO7] [1L7C4]	10%	Final Exam, Labworks and Quizzes

Relationship to Program Student Outcomes (Out of 100%)																								
A	B	C	D	E	F	G	H	I	J	K	SO1	SO2	SO3	SO4	SO5	SO6	SO7	MSO1	MSO2	MSO3	MSO4	MSO5	MSO6	
											60				10	30								

Relationship to NQF Outcomes (Out of 100%)			
L7S1	L7S2	L7S3	L7C4
35	25	10	30

Evaluation	
Assessment Tool	Weight
Mid Exam	25%
Final Exam	40%
Labworks and Quizzes	35%

Policy	
Attendance	Attendance will be recorded at the beginning of each class, and missing 20% of the classes results in automatic dismissal (No excuses). If a student misses a class, it is his sole responsibility to catchup.
Exams	No books or notes are allowed in the exams or quizzes. The exams and quizzes format may include multiple choice, but the most common is Verilog programs and simulations.
Makeups Exam	Makeup requires online application within two days of the announced date, pending formal approval, makeups are arranged by the faculty for all courses in one day, typically one week after the exams period end.
Cheating	Copying assignments and cheating by any means in the exams and quizzes results in sever penalty .
Participation	You are expected to participate in class. Participation includes asking and answering questions, raising issues, and suggesting solutions to the discussed problems.

Activity	Students are expected to work on an activity within a group of 2-3 students.
Workload	Average work-load student should expect to spend is 4-6 hours/week.

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