

## Jordan University of Science and Technology Faculty of Medicine Health Management And Policy Department

HMP331 Programming The Medical Information Basis - JNQF Level: 6

Second Semester 2023-2024

## **Course Catalog**

3 Credit Hours. This course introduces the concepts of computer databases related to Health Information Technology (HIT). It provides students with a basic understanding of the methods of healthcare database processing. It explores the tools for collecting, storing, and retrieving healthcare data. It focuses on the design, management, and use of healthcare database systems that form the foundation for health information systems. Students will use the computer lab to practice with the Microsoft Access database.

Teaching Method: On Campus

Text Book			
Title	Database systems: design, implementation, & management. Cengage Learning.		
Author(s)	Carlos Coronel, Steven Morris		
Edition	13th Edition		
Short Name	Ref #1		
Other Information			

Instructor		
Name	Dr. Alaa Dalky	
Office Location	-	
Office Hours	Sun : 11:00 - 13:30 Mon : 10:00 - 13:00 Tue : 14:30 - 16:30 Wed : 14:30 - 15:30	
Email	afdalky@just.edu.jo	

**Class Schedule & Room** 

Section 1: Lecture Time: Sun, Tue, Thu : 13:30 - 14:30 Room: D4202

Tentative List of Topics Covered				
Weeks	Торіс	References		
Week 1	Course Overview. Syllabus review. Introduction to Database Systems in Health Care.	From <b>Ref</b> <b>#1</b>		
Week 2	Database system concepts and architecture. Healthcare Databases: Purpose, Uses, and Benefits.			
Week 3	Primary Medical Record Databases.			
Weeks 4, 5	The Relational Database. Entity Relationship (ER) Modeling			
Weeks 6, 7	Design Objectives. The Design Process.			
Weeks 8, 9	Establishing Table Structures. Table Relationships			
Weeks 10, 11, 12	Structured Query Language (SQL)			
Weeks 13, 14, 15, 16	Microsoft Access			

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Explain what a healthcare database is and why it is relevant. [1SLO 1, 1SLO 2] [1L6K1, 1L6S1, 1L6C3]	15%	
Design and develop relationship diagram based on healthcare database requirements. [1SLO 3, 1SLO 4] [1L6C1, 1L6C3, 1L6C5]	20%	
Identify the logical and physical design of data stored and retrieved from relational databases, and how it applies to healthcare. [1SLO 4, 1SLO 5] [1L6S3, 1L6C1]	20%	
Define database management systems and discuss various models. [1SLO 1, 1SLO 5] [1L6C4, 1L6C5]	15%	
Apply the principles of information integrity, security, and confidentiality to a healthcare database. [1SLO 3, 1SLO 4, 1SLO 5] [1L6K1, 1L6K2, 1L6S1]	15%	
Effectively manage healthcare information using Microsoft Access database tool. [1SLO 1, 1SLO 6] [1L6C4, 1L6C5]	15%	

Relationship to Program Student Outcomes (Out of 100%)					
SLO 1	SLO 2	SLO 3	SLO 4	SLO 5	SLO 6
22.5	7.5	15	25	22.5	7.5

Relationship to NQF Outcomes (Out of 100%)							
L6K1	L6K2	L6S1	L6S3	L6C1	L6C3	L6C4	L6C5
10	5	10	10	16.67	11.67	15	21.67

Policy				
Attendance	Class attendance is mandatory for the purpose of developing scholarly discussion and argumentation skills. If you are unable to attend class, it is your responsibility to inform the instructor before the class meeting. JUST policy requires the faculty member to assign ZERO (Grade: 35) if a student misses 10% of the classes that are not excused.			
Cheating	Standards of JUST policy will be applied: المادة 7 بالغش إذا ضبط الطالب أثناء المتحان أو اللختبار متلبسا فتوقع عليه العقوبات التالية مجتمعة : أ. اعتباره راسبا . في ذلك المتحان أو اللختبار .ب. الغاء تسجيله في بقية المساقات المسجل لها في ذلك الفصل ج. فصله من الجامعة لمدة فصل دراسي واحد وهو الفصل التالي للفصل الذي ضبط فيه			

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