



Jordan University of Science and Technology
Faculty of Pharmacy
Pharmacy Department

PHAR745 Electronic Resources And Secondary Databases - JNQF Level: 9

First Semester 2024-2025

Course Catalog

2 Credit Hours. 2-credit hour course. This course focuses on the importance of secondary data analysis in epidemiology and public health research and practice. The course will introduce major sources of publicly available secondary data, and the skills needed to deal with such data. This course will highlight the important skills needed to deal with secondary economic data (retrospective costing data).

Teaching Method: On Campus

Text Book

Title	Secondary Analysis of Electronic Health Records
Author(s)	MIT Critical Data
Edition	1st Edition
Short Name	Ref # 1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref # 2	Secondary Data Sources for Public Health: A Practical Guide	Sarah Boslaugh	1st Edition	
Ref # 3	Textbook of Pharmacoepidemiology	Brian L. Strom, Stephen E. Kimmel, Sean Hennessy	3rd Edition	Part II
Ref # 4	Understanding Pharmacoepidemiology	Yi Yang, Donna West-Strum	1st Edition	Chapter 4
Ref # 5	Other relevant scientific papers and websites	N	1st Edition	

Instructor

Name	Dr. Fatema Mahmoud
Office Location	-
Office Hours	Sun : 10:30 - 11:30 Sun : 13:30 - 14:30 Tue : 10:30 - 11:30 Wed : 13:30 - 14:30 Thu : 10:30 - 12:30
Email	fmmahmoud@just.edu.jo

Class Schedule & Room

Section 1:
 Lecture Time: Sun, Tue : 11:30 - 12:30
 Room: قاعة الندوات/صيدلة

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2	Introduction to health data: Data types, attributes, and data sources	From Ref # 2 , From Ref # 5
Week 3	Sources of electronic primary health data: opportunities and challenges	From Ref # 3 , From Ref # 4 , From Ref # 5
Weeks 4, 5	Sources of electronic secondary health data: opportunities and challenges	From Ref # 2 , Part II From Ref # 3 , Chapter 4 From Ref # 4 , From Ref # 5
Weeks 6, 7	Data structure and coding in electronic data sources	From Ref # 1 , From Ref # 2 , Chapter 4 From Ref # 4
Week 8	Factors affecting the quality of data from electronic secondary data sources	From Ref # 2

Week 9	Data governance, privacy, and confidentiality using secondary data sources	From Ref # 2, From Ref # 5
Week 10	Workshop: Available electronic data sources for health services utilization research	From Ref # 5
Week 11	The role of electronic data sources in health economic evaluation	From Ref # 1, From Ref # 2, From Ref # 5
Week 12	Using electronic data sources in Jordan: Hakeem system as an example	From Ref # 5
Weeks 13, 14, 15	Electronic data collection, extraction, processing, cleaning, and management (Discussion and practical application)	From Ref # 1, From Ref # 2, From Ref # 5

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Develop knowledge and expertise in the principles and differences between the available electronic data sources for health utilization and health economic research, with a particular focus on secondary data sources, including the principles of data coding and documentation within these sources [1PLO-PE2.1] [1L9K1, 1L9S2]	35%	
Discuss the opportunities and challenges in utilizing secondary data sources for health research, and the essential skills needed to collect, extract, process, and clean data from these electronic resources to ensure the data is suitable for analysis [1PLO-PE2.2] [1L9S1]	35%	
Apply the necessary skills for selecting appropriate data sources to address research questions, along with data cleaning, processing, and management using statistical software [1PLO-PE3.2] [1L9C3]	20%	
Develop knowledge of the factors influencing the quality of data from secondary sources and the ethical considerations related to the use of these sources in health research [1PLO-PE1.1] [1L9K1, 1L9S2]	10%	

PLO1.1	PLO2.1	PLO3.2	PLO3.3	PLO2.2	PLO2.3	PLO2.4	PLO3.1	PLO3.4	PLO3.5	PLO3.6	PLO4.1	PLO4.2	PLO4.3	PLO4.4	PLO5.1	PLO-PT1.1	PLO-PT2.1	PLO-PT2.2	PLO-PT3.

Relationship to NQF Outcomes (Out of 100%)			
L9K1	L9S1	L9S2	L9C3
22.5	35	22.5	20

Evaluation	
Assessment Tool	Weight
Mid Exam	30%
Project	15%
Assignments and in-class workshops	5%
Final exam	50%

Policy	
Communicating with Instructors	- Students should communicate through their official JUST emails. Communication through personal email accounts (yahoo, Gmail, Hotmail, etc.) or social media will NOT be accepted, and no response will be provided. - Students are required to check their emails and the E-learning page of the course regularly for announcements and notifications.
EXAMS	- All exams are closed books and notes. - The final exam is comprehensive (covers all the material). - The first, second, and midterm incomplete exams need approval from the departments heads. - The final incomplete exams need approval from the dean.
Cheating	Prohibited; The commitment of the acts of cheating and deceit such as copying during examinations, altering examinations for re-grade, plagiarism of homework assignments, and in any way representing the work of others as your own is dishonest and will not be tolerated. Standard JUST policy will be applied.
Attendance	- Attendance is mandatory and will be recorded regularly. - Excellent attendance is expected. - Students who miss more than 20% of the classes will be dropped from the course as per JUST policy. - If you miss class, it is your responsibility to find out about any announcements or assignments you may have missed.
Participation	- in-class clinical cases, team-based learning activities, paper review, quizzes / assignments, preparing educational materials for patients and brain storming questions.
Withdraw	- Last day to drop the course is before the twelve (12th) week of the current semester