Jordan University of Science and Technology
Faculty of Veterinary Medicine
Veterinary Medicine And Surgery Department

VM563 Vet Epidemiology And Herd Health
First Semester 2021-2022

Course Catalog
3 Credit Hours. 1. Describe disease and mortality distribution in animal population 2. Understantand and apply basic statistical techniques 3. Know basic design and statistical analysis of epidemiological studies. 4. Know vaccination programs in different animal species applied in Jordan. 5. Apply epidemiological techniques for investigation of an outbreak.

Text Book	
Title	Veterinary epidemiology
Author(s)	Michael Thrusfield
Edition	3rd Edition
Short Name	Veterinary epidemiology
Other Information	

Instructor	
Name	**Prof. Labib Al-Sharif**
Office Location	G1L2
Office Hours	
Email	sharif@just.edu.jo

Class Schedule & Room

Section 1:
 Lecture Time: Mon : 13:00 - 14:30
 Room: A2122

Section 2:
 Lecture Time: Wed : 13:00 - 14:30
 Room: A2122

Prerequisites		
Line Number	**Course Name**	**Prerequisite Type**
664700	VM470 Infectious Diseases And Hred Health Clinic 1	Prerequisite / Study
664020	VM402 Veterinary Biostatistics	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Week 1	? Introduction, definition and scope of veterinary Epidemiology	
Week 2	Descriptive Epidemiology: Animal, time and place	
Week 3	Measurements of animal diseases and mortalities	
Week 4	Confidence Interval for: ? one population mean; difference between two population means, z-te	
Week 5	Chi squared test for 2x2 table	
Week 6	Exercises	
Week 7	Screening program: Principles and design	
Week 8	Types of epidemiological studies: Cross-sectional study	
Week 9	Case-Control study	
Week 10	Prospective study	
Week 11	Clinical Trial	

Week 12	Risk Analysis: ? Risk Assesment ? Risk Management ? Risk communication ? Quantitative risk assessment	
Week 13	? Field investigation of an outbreak	
	Strategies for diseases control	
Week 14	Strategies for diseases control	
Week 16	final exam	

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Define and uses of epidemiology [11, 110, 12, 13, 14, 15, 16, 17, 18, 19]	5%	
Listing the criteria concerning describing animal disease distribution	5%	
Descriptive Epidemiology According to Time	5%	
Determinants of disease and Herd Immunity	5%	
Measurements of animal diseases	10%	
Screening program: sensitivity, specificity, false negative, false positive and predictive positive rate.	10%	
? Confidence Interval for: ? one population mean: when population standard deviation is known z-test ? Two population means: when the two population standared deviations are known z-test	5%	
Cross-sectional study Case-Control study ? Prospective study ? Clinical Trial:	10%	
? Risk Assesment ? Risk Management ? Risk communication ? Quantitative risk assessment	10%	
? Field investigation of an outbreak: common source epidemic ? Propagated epidemic	10%	
? Strategies for diseases control ? Vaccination prgrams against animal diseases in Jordan	10%	
Epidemiology of Infectious Diseases	15%	

Relationship to Program Student Outcomes (Out of 100%)									
1	2	3	4	5	6	7	8	9	10
0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50

Evaluation	
Assessment Tool	Weight

First Exam	30%
Second Exam	30%
Final Exam	40%

Policy	
grade distribution	First Exam. 30 Second Exam. 30 Final Exam. 40 ------------------------------ Total 100
New grade Distribution on 2021/2022	Midterm Exam. 50% Final Exam. 50% Total=100%

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