

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

VM330 Applied Veterinary Sciences And Diagnostic Laboratories

First Semester 2021-2022

## **Course Catalog**

4 Credit Hours. In this course, students will learn and practice the veterinary samples collections, preparing bacterial films, bacterial staining; Grams stains, capsule staining procedures, spore stain methods and Albert stain. Students will learn different culturing methods; spread agar plate methods, streaking method., stabbing method. spread methods. Staining methods; Grams stains, spore staining methods, capsule staining and Albert stain method. Student should be able to practice bacterial inoculation methods and the objective is to reach bacterial identification following a bacterial identification scheme.

Text Book								
Title	Title Instructor lectures							
Author(s)	Instructure Prof. Yaser tarazi							
Edition	1st Edition							
Short Name	E. learning							
Other Information	All lectures and figures will be uploaded to the on line system							

Instructor					
Name Walla Alsmadi					
Office Location	-				
Office Hours					
Email	wmalsmadi@just.edu.jo				

Instructor					
Name Mrs. Ola Ababneh					
Office Location	-				
Office Hours					
Email	oaababneh0@just.edu.jo				

Instructor			
Name	Dr. Juhaina Ababneh		
Office Location	-		
Office Hours			
Email	jsababneh@just.edu.jo		

## Class Schedule & Room

Section 1:

Lecture Time: Sun, Tue, Thu: 08:30 - 11:30

Room: LAB

Section 2:

Lecture Time: Sun, Tue, Thu: 08:30 - 11:30

Room: LAB

Section 3:

Lecture Time: Sun, Tue, Thu: 08:30 - 11:30

Room: LAB

Section 4:

Lecture Time: Sun, Tue, Thu: 11:30 - 14:30

Room: LAB

Section 5:

Lecture Time: Sun, Tue, Thu: 11:30 - 14:30

Room: LAB

Section 6:

Lecture Time: Sun, Tue, Thu: 11:30 - 14:30

Room: LAB

Section 7:

Lecture Time: Sun, Tue, Thu: 14:30 - 17:30

Room: LAB

Section 8:

Lecture Time: Sun, Tue, Thu: 14:30 - 17:30

Room: LAB

Section 9:

Lecture Time: Sun, Tue, Thu: 14:30 - 17:30

Room: LAB

Prerequisites					
Line Number	Prerequisite Type				
662261	VM226 Serology And Virology Laboratory	Prerequisite / Study			
662381	VM238 Veterinary Entomology And Parasitology	Prerequisite / Study			
662351	VM235 Veterinary Bacteriology And Mycology Laboratory	Prerequisite / Study			

Tentative List of Topics Covered						
Weeks	Topic					
Week 1	biosafety in microbiology laboratories					
Week 2	Collection of Veterinary specimens					
Week 3	Preparation of bacterial film and simple staining techniques					
Week 4	differential staining; Grams stain, spore stain, capsule stains and Albert staining					
Week 5	Culturing methods; Spread plate methods, streaking methods, stapping method and pour plate method					
Week 6	Biochemical reaction tests for Gram positive bacteria					
Week 7	Biochemical reaction tests for Gram negative bacteria					
Week 8	Staphylococcus aureus and Streptococcus species identification					
Week 9	Corynebacterium pyogenes and Bacillus species					
Week 10	Escherichia coli and Klebsiella species identification					
Week 11	Proteus and Pseudomonas aeruginosa identifications					
Week 12	Identification scheme for Grams positive and Grams negative bacteria					

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

Date Printed: 2021-12-09