



Republic of IRAQ

Ministry of Higher Education Scientific Research

Wasit University

College of Veterinary Medicine

Scientific Department: Department of Veterinary Medicine

Academic or professional Programme: Bachelor of Veterinary Medicine

Final Degree or Certificate: Bachelor of Veterinary Medicine and Surgery

Study System: Semester-based

Preparation Date: July 2026

Reviewed by the University Quality Assurance and Academic Performance Division

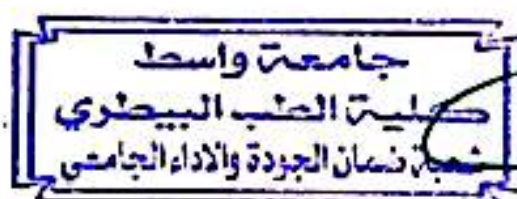
Asst.prof.Dr. Zaid Mohsen Atallah

Director of the University Quality Assurance and Academic Performance Division

Asst. Prof.

Dr. Jabbar Jassim Hamady

Vice Dean



Professor

Dr. Sattar Rashed Suhail

Dean

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1	3	Introduction	Introduction	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
2-5	12	Disease determinants and transmission methods	Disease determinants and transmission methods	
9-6	12	Disease determinants and transmission methods	Disease determinants and transmission methods	
12-9	9	Disease determinants and transmission methods	Disease determinants and transmission methods	
14-12	6	Disease determinants and transmission methods	Disease determinants and transmission methods	
15	3		Exam	

11. Course Evaluation

	Course Exam Marks	Final Exam Marks
Theoretical	40	60
Practical	-	-
TOTAL	40	60

12. Learning and Teaching Resources

Required Textbooks	. An introduction to veterinary epidemiology by Mark Stevenson.
Main References (Sources)	An introduction to veterinary epidemiology by Mark Stevenson.
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:	
Infectious diseases part 1	
2. Course Code:	
VEC4117	
3. Semester / Year:	
1 / 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Theoretical lectures	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
45 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Hasanain A.J. Gharban Email: hghirban@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	- Introduce students to the most important infectious diseases that animals are exposed to in their environment and the causes of these diseases, including bacteria, viruses, and others. - Understand how these diseases cause pests and pathological changes, and the resulting signs of infection in animals. - Learn examination methods to detect these pathogens and recognize the clinical signs appearing in infected animals. - Explain the most important methods for diagnosing the disease, including detecting and isolating these microbial pathogens. - Describe appropriate treatments to eliminate the disease and its causes. - Emphasize the importance of administering various types of vaccines to ensure protection of animals from exposure to various diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.

10.Course Structure

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1	3	Introduction	Introduction	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
2-5	12	Bacterial diseases	Bacterial diseases	
9-6	12	Viral diseases	Viral diseases	
12-9	9	Fungal and parasitic diseases	Fungal and parasitic diseases	
14-12	6	Fungal and parasitic diseases	Fungal and parasitic diseases	
15	3		Exam	

11. Course Evaluation

Course Exam Marks		Final Exam Marks
Theoretical	40	60
Practical	-	-
TOTAL	40	60

12.Learning and Teaching Resources

Required Textbooks	. Straif-Bourgeois, S., Tonzel, J. L., Kretzschmar, M., & Ratard, R. (2023). Infectious disease epidemiology. In Handbook of epidemiology (pp. 1-79). New York, NY: Springer New York.
Main References (Sources)	Smith, B. P. (Ed.). (2014). Large Animal Internal Medicine-E-Book: Large Animal Internal Medicine-E-Book. Elsevier Health Sciences
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:	
Internal medicine part 1	
2. Course Code:	
VEC4110	
3. Semester / Year:	
1 / 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Theoretical lectures	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
45 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Hasanain A.J. Gharban Email: hghirban@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	To provide students with basic knowledge of the anatomy and physiological functions of vital organs in animals. 2. To provide students with a comprehensive understanding of common internal diseases affecting various animals. 3. To familiarize students with the clinical symptoms and pathological changes associated with internal diseases. 4. To provide students with knowledge of modern methods of laboratory and clinical diagnosis of internal diseases. 5. To provide students with sufficient information on the differential diagnosis steps for internal diseases. 6. To familiarize students with appropriate therapeutic and preventive principles for internal diseases. 7. To provide students with knowledge of the potential side effects and complications of veterinary treatments. 8. To provide students with knowledge of modern practices in the management and care of animals with diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos.

5. Laboratories and practical training.

10. Course Structure

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
3-1	2	Digestive system	Introduction	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
3-6	3	Digestive system	General systemic states	
9-6	3	Digestive system	Diseases of the buccal cavity and associated organs, Stomatitis	
12-9	3	Digestive system	Manifestation of alimentary tract dysfunction	
14-12	2	Digestive system	Diseases of the forestomachs of ruminants	
15	1		Exam	

11. Course Evaluation

Course Exam Marks		Final Exam Marks
Theoretical	40	60
Practical	-	-
TOTAL	40	60

12. Learning and Teaching Resources

Required Textbooks	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Main References (Sources)	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:					
Morbid Anatomy Part -1					
2. Course Code:					
VED4111					
3. Semester / Year:					
First semester / 4 th					
4. Description Preparation Date:					
20/6/2025					
5. Available Attendance Forms:					
• Theoretical lectures. • Practical classes					
6. Number of Credit Hours (Total) / Number of Units (Total)					
Theoretical 1 Hours 1 Units Practical 2 Hours 1 Units TOTAL 3 Hours 2 Units					
7. Course administrator's name (mention all, if more than one name)					
Prof. Dr. Sattar Rashid Suhail sattarrashid@uowasit.edu.iq					
Lec. Ghaith Sabah Tuaimah ghaiths.alabedi@uowasit.edu.iq					
8. Course Objectives					
Course Objectives		1. Postmortem diagnostic techniques of diseases 2. Provide students with knowledge gross and microscopically changes in tissue and related them to disease diagnosis 3. Teach the students to diagnosis the causes of death and injuries 4. Writing forensic medical reports and providing evidence for conviction in criminal and legal cases			
9. Teaching and Learning Strategies					
Strategy		1. Theoretical and practical lectures 2. Discussions and dialogues 3. Clinical cases and comparative studies 4. Presentations and educational power point and videos 5. Reports and home works			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3		Strangless	1. Theoretical lectures	
2	3		glanders		

3	3	The ability to diagnose diseases through autopsy	Epizootic lymphangitis and ulcerative lymphangitis	2. Home articles and homework 3. Applied medical case study 4. Motivating students to actively participate	1-The paper examined .2Practical tests .3Questions and direct discussions
4	3		Equine infectious anemia		
5	3		Equine influenza		
6	3		Rabies		
7	3		Canine distemper		
8	3		Canine viral hepatitis		
9	3		Feline parvavirus		
10	3		Tyzzar disease		
11	3		Coccidiosis		
12	3		Shigellosis		
13	3		External parasites		
14	3		External parasites		
15	3		Semester exam		

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	20	30	50
Practical	20	30	50
Total	40	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Veterinary Forensic Pathology
Main references (sources)	Veterinary Forensic Pathology
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	https://www.alibris.com/search/books/subject/Veterinary-forensic-medicine

Course Description Form

1. Course Name:	
Poultry diseases part 1	
2. Course Code:	
VED4114	
3. Semester / Year:	
1/ 2025-2026	
4. Description Preparation Date:	
19-6-2026	
5. Available Attendance Forms:	
• Theoretical lectures. • Practical classes	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Lec. Dr.Sahar Abdulhassan sabdulhasan@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	• Identify the major viral and non-infectious diseases affecting poultry, with emphasis on those causing economic and public health concern. • Describe the etiology, epidemiology, pathogenesis, clinical signs, gross and histopathological lesions of each disease covered. • Differentiate between similar diseases based on clinical presentation, age susceptibility, lesion distribution, and laboratory diagnostics. • Explain the mechanisms of viral-induced immunosuppression and its impact on poultry health and productivity. • Interpret diagnostic findings (clinical, necropsy, and laboratory) to reach a presumptive or confirmatory diagnosis. • Evaluate the effectiveness of different prevention and control measures, including biosecurity, vaccination programs, and environmental management. • Understand the impact of nutritional deficiencies on poultry health and their interaction with infectious disease susceptibility. • Develop a basic framework for field investigation of poultry disease outbreaks and suggest appropriate control strategies. • Appreciate the importance of early detection, accurate diagnosis, and responsible veterinary intervention in disease management and poultry

	welfare
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9. Teaching and Learning Strategies

Strategy	The delivery of this course will employ a variety of integrated teaching and learning strategies to enhance student understanding and application of poultry disease concepts. These include: • Theory: Core concepts and disease mechanisms will be introduced through structured theoretical sessions that emphasize scientific foundations, terminology, and pathophysiological principles. • Lecture: Interactive lectures will be used to present detailed disease profiles, supported by audiovisual materials such as images, videos, and case scenarios to enhance comprehension and retention. • Practical: Hands-on practical sessions will allow students to examine clinical signs, gross lesions, perform necropsies, and interpret diagnostic results in a laboratory or farm setting. • Seminar: Group-based seminars will encourage students to analyze current issues, present case studies, and discuss emerging poultry health challenges and control strategies collaboratively. These strategies are designed to promote active learning, enhance critical thinking, and develop clinical reasoning and diagnostic skills. The integration of real-world cases and farm scenarios aims to prepare students for the practical demands of veterinary and poultry fieldwork.
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	viral Identify poultry diseases and methods of diagnosing and treating	Disease Newcastle	Theoretical lectures	Written exams and daily quizzes

		them			
2	2	viral Identify poultry diseases and methods of diagnosing and treating them	head syndrome swollen	Theoretical lectures	Written exams and daily quizzes
3	2	viral Identify poultry diseases and methods of diagnosing and treating them	bronchitis Infectious	Theoretical lectures	Written exams and daily quizzes
4	2	viral Identify poultry diseases and methods of diagnosing and treating them	influenza Avian	Theoretical lectures	Written exams and daily quizzes
5	2	viral Identify poultry diseases and methods of diagnosing and treating them	leukosis Avian	Theoretical lectures	Written exams and daily quizzes
6	2	viral Identify poultry diseases and methods of diagnosing and treating them	arthritis Viral	Theoretical lectures	Written exams and daily quizzes
7	2	viral Identify poultry diseases and methods of diagnosing and treating them	encephalomyelitis Avian	Theoretical lectures	Written exams and daily quizzes
8	2	viral Identify poultry diseases and methods of diagnosing and treating them	bursal disease Infectious	Theoretical lectures	Written exams and daily quizzes

9	2	viral Identify poultry diseases and methods of diagnosing and treating them	body hepatitis Inclusion	Theoretical lectures	Written exams and daily quizzes
10	2	viral Identify poultry diseases and methods of diagnosing and treating them	Hepatitis/hydropericardium syndrome	Theoretical lectures	Written exams and daily quizzes
11	2	viral Identify poultry diseases and methods of diagnosing and treating them	drop syndrome Egg	Theoretical lectures	Written exams and daily quizzes
12	2	viral Identify poultry diseases and methods of diagnosing and treating them	pox Fowl	Theoretical lectures	Written exams and daily quizzes
13	2	viral Identify poultry diseases and methods of diagnosing and treating them	laryngotracheitis Infectious	Theoretical lectures	Written exams and daily quizzes
– 14 15	2	Identify nutritional deficiency diseases in poultry and methods of diagnosing and treating them	diseases of Nutritional poultry	Theoretical lectures	Written exams and daily quizzes

11. Course Evaluation

	Course Exam Marks	Final Exam Marks
Theoretical	27	40
Practical	13	20
TOTAL	40	60

12. Learning and Teaching Resources

Required textbooks	Swayne, D. E. (2013). Diseases of poultry. J Wiley & Sons.
Main references	Pattison, M., McMullin, P., Bradbury, J. M. Alexander, D. (Eds.). (2007). Poultry disea Elsevier Health Sciences.
Recommended books and references	
Electronic References, Websites	https://www.msdevetmanual.com/poultry

Course Description Form

1. Course Name:		
Surgery part 1		
2. Course Code:		
VEC 4115		
3. Semester / Year:		
1/ Fourth		
4. Description Preparation Date:		
22/6/2025		
5. Available Attendance Forms:		
Theoretical lectures./Practical work in laboratory./Practical classes utilizing live animals		
6. Number of Credit Hours (Total) / Number of Units (Total)		
	Credit Hours	Units
Theoretical	3	3
Practical	2	1
Total	5	4
7. Course administrator's name (mention all, if more than one name)		
Assist. Lec. Ahmed Mohamed Abd El-Reda		
8. Course Objectives		
Course Objectives	Teach students the basic principles of veterinary surgery, how to handle emergency situations, stop bleeding, control animals using various anesthetics, manage various wounds, use sutures, and suture methods	
9. Teaching and Learning Strategies		
Strategy	1. Daily tests for students to demonstrate their understanding and comprehension of course content. 2. Conducting quarterly or mid-year exams, as they are an important assessment criterion. 3. Evaluating students' daily participation.	

10. Course Structure (Theoretical)

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Learn Introduction and classification of Surgery	Introduction and classification of Surgery	Theoretical lectures	Daily and monthly exams and homework
2	3	Learn Sterilization	Sterilization	Theoretical lectures	Daily and monthly exams and homework
3	3	Learn Response to trauma	Response to trauma	Theoretical lectures	Daily and monthly exams and homework
4	3	Learn Wound classification	Wound classification	Theoretical lectures	Daily and monthly exams and homework
5	3	Learn Hemastasis	Hemastasis	Theoretical lectures	Daily and monthly exams and homework
6	3	Learn Abscess	Abscess	Theoretical lectures	Daily and monthly exams and homework
7	3	Learn Ulcer	Ulcer	Theoretical lectures	Daily and monthly exams and homework
8	3	Learn Tumors	Tumors	Theoretical lectures	Daily and monthly exams and homework
9	3	Learn Affection of the bursa, joints	Affection of the bursa, joints	Theoretical lectures	Daily and monthly exams and homework
10	3	Learn Affection of tendon	Affection of tendon	Theoretical lectures	Daily and monthly exams and homework
11	3	Learn History on anesthesia	History on anesthesia	Theoretical lectures	Daily and monthly exams and homework
12	3	Learn Classification of anesthesia	Classification of anesthesia	Theoretical lectures	Daily and monthly exams and homework
13	3	Learn of Local anesthesia	Local anesthesia	Theoretical lectures	Daily and monthly exams and homework
14	3	Learn of Regional anesthesia	Regional anesthesia	Theoretical lectures	Daily and monthly exams and homework
15	3	Learn of Pre-anesthetic consideration	Pre-anesthetic consideration	Theoretical lectures	Daily and monthly exams and

					homework																
10. Course Structure (Practical)																					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method																
1,2	4	Learn of Introduction to surgical theater	Introduction to surgical theater	Practical lectures	Daily and monthly exams and homework																
3,4	2	Learn of Instrumentation	Instrumentation	Practical lectures	Daily and monthly exams and homework																
5,6	2	Learn of Preparation of surgical packs	Preparation of surgical packs	Practical lectures	Daily and monthly exams and homework																
7,8	2	Learn of Preoperative examination	Preoperative examination	Practical lectures	Daily and monthly exams and homework																
9,10	2	Learn of Sutures and ligatures	Sutures and ligatures	Practical lectures	Daily and monthly exams and homework																
11,12	2	Learn of Local anesthesia	Local anesthesia	Practical lectures	Daily and monthly exams and homework																
13,14	2	Learn of Regional anesthesia	Regional anesthesia	Practical lectures	Daily and monthly exams and homework																
15	Examination																				
11. Course Evaluation																					
<table><tr><td></td><td>Course Exam</td><td>Final Exam</td><td>Sum</td></tr><tr><td>Theoretical</td><td>30</td><td>45</td><td>75</td></tr><tr><td>Practical</td><td>10</td><td>15</td><td>25</td></tr><tr><td>Total</td><td>40</td><td>60</td><td>100</td></tr></table>							Course Exam	Final Exam	Sum	Theoretical	30	45	75	Practical	10	15	25	Total	40	60	100
	Course Exam	Final Exam	Sum																		
Theoretical	30	45	75																		
Practical	10	15	25																		
Total	40	60	100																		
12. Learning and Teaching Resources																					
Required textbooks (curricular books, if any)			Small animal surgery, 3 rd edition, 2007 Theresa Welch Fossum																		
Main references (sources)			Textbook of small animal Surgery, 3 rd edition, 2003 Douglas Slatter																		
Recommended books and references (scientific journals, reports...)																					
Electronic References, Websites			https://en.wikivet.net/Category:Surgery																		

Course Description Form

1. Course Name:	
Veterinary clinic part 2	
2. Course Code:	
VEC4112	
3. Semester / Year:	
1/ 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Practical lessons on animals in the animal field of collage	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
60 hours – 2 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Hasanain A.J. Gharban Email: hghirban@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	This course trains students on various methods of clinical examination of all body systems. 2. Evaluate the health status of animals. 3. Identify the clinical signs present in infected animals. 4. Explain the most important methods of disease diagnosis, including detection and isolation of microbial pathogens. 5. Describe appropriate treatments to eliminate the disease and its causes. 6. Emphasize the importance of administering various types of vaccines to ensure protection of animals from exposure to various diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
3-1	12	Clinical examination methods for animals	General approach to the Clinical Examination	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
3-6	12	Clinical examination methods for animals	Clinical Examination of Lymphatic System	
9-6	12	Clinical examination methods for animals	Clinical Examination of the Skin	
12-9	12	Clinical examination methods for animals	Clinical Examination of the head and neck	
14-12	12	Clinical examination methods for animals	Clinical Examination of the head and neck	
15	1	Clinical examination methods for animals	Exam	

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	-	-	-
Practical	40	60	100
Total	40	60	100

12. Learning and Teaching Resources

Required Textbooks	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Main References (Sources)	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:													
Female Fertility													
2. Course Code:													
VED4113													
3. Semester / Year:													
First Semester / Fourth Year													
4. Description Preparation Date:													
1 / 9 / 2025													
5. Available Attendance Forms:													
- Theoretical lectures. - Practical work in laboratory. - Practical classes utilizing live animals.													
6. Number of Credit Hours (Total) / Number of Units (Total)													
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Credit Hours</th> <th style="text-align: center;">Units</th> </tr> </thead> <tbody> <tr> <td>Theoretical</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Practical</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>		Credit Hours	Units	Theoretical	2	2	Practical	2	1	Total	4	3
	Credit Hours	Units											
Theoretical	2	2											
Practical	2	1											
Total	4	3											
7. Course administrator's name (mention all, if more than one name)													
Name: Dr. Mohammedali Jamal Ghafil Email: mohammedalij@uowasit.edu.iq													
8. Course Objectives													
Course Objectives													
9. Teaching and Learning Strategies													
Strategy	- Explanation of scientific subjects through theoretical lectures. - Training of students for practical applications in laboratories. - Student prepare a scientific related reports.												

10. Course Structure

- Theoretical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Female puberty and maturity	Theoretical lectures	Written Exam
2	2		Physiology of the female reproductive system		
3	2		Female reproductive hormones		
4	2		Estrus cycle		
5	2		Seasonality, Ovulation, Luteolysis		
6-8	6		Infertility and sterility		
9-10	4		Reproduction in buffalo cows		
11-12	4		Reproduction in mares		
13	2		Reproduction in she camels		
14	2		Reproduction in ewes and does		
15	2		Reproduction in bitch and queen		

- Practical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Anatomy of the female reproductive system	Practical work in laboratory	Practical Exam
2-3	4		Estrus signs and detection		
4	2		Vaginal examination		
5-7	6		Rectal palpation		
8	2		Clinical uses of hormones		
9-11	6		Female infertility and sterility		
12	2		Abnormalities of the female reproductive system		
13	2		Intrauterine therapy		
14	2		Reproductive performance		
15	2		Records		

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	27	40	67
Practical	13	20	33
Total	40	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:	
Infectious diseases part 2	
2. Course Code:	
VEC4126	
3. Semester / Year:	
2/4 th	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Theoretical lectures	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
45 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Hasanain A.J. Gharban Email: hghirban@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	- Introduce students to the most important infectious diseases that animals are exposed to in their environment and the causes of these diseases, including bacteria, viruses, and others. - Understand how these diseases cause pests and pathological changes, and the resulting signs of infection in animals. - Learn examination methods to detect these pathogens and recognize the clinical signs appearing in infected animals. - Explain the most important methods for diagnosing the disease, including detecting and isolating these microbial pathogens. - Describe appropriate treatments to eliminate the disease and its causes. - Emphasize the importance of administering various types of vaccines to ensure protection of animals from exposure to various diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos.

5. Laboratories and practical training.

10. Course Structure

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1	3	Introduction	Introduction	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
2-5	12	Bacterial diseases	Bacterial diseases	
9-6	12	Viral diseases	Viral diseases	
12-9	9	Fungal and parasitic diseases	Fungal and parasitic diseases	
14-12	6	Fungal and parasitic diseases	Fungal and parasitic diseases	
15	3		Exam	

11. Course Evaluation

Course Exam Marks		Final Exam Marks
Theoretical	40	60
Practical	-	-
TOTAL	40	60

12. Learning and Teaching Resources

Required Textbooks	. Straif-Bourgeois, S., Tonzel, J. L., Kretzschmar, M., & Ratard, R. (2023). Infectious disease epidemiology. In Handbook of epidemiology (pp. 1-79). New York, NY: Springer New York.
Main References (Sources)	Smith, B. P. (Ed.). (2014). Large Animal Internal Medicine-E-Book: Large Animal Internal Medicine-E-Book. Elsevier Health Sciences
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:	
Internal medicine part 2	
2. Course Code:	
VEC4128	
3. Semester / Year:	
2/4 th	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Theoretical lectures	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
45 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Hasanain A.J. Gharban Email: hghirban@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	To provide students with basic knowledge of the anatomy and physiological functions of vital organs in animals. 2. To provide students with a comprehensive understanding of common internal diseases affecting various animals. 3. To familiarize students with the clinical symptoms and pathological changes associated with internal diseases. 4. To provide students with knowledge of modern methods of laboratory and clinical diagnosis of internal diseases. 5. To provide students with sufficient information on the differential diagnosis steps for internal diseases. 6. To familiarize students with appropriate therapeutic and preventive principles for internal diseases. 7. To provide students with knowledge of the potential side effects and complications of veterinary treatments. 8. To provide students with knowledge of modern practices in the management and care of animals with diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos.

5. Laboratories and practical training.

10.Course Structure

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1	3	Diseases of skin	Introduction	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
2	3	Diseases of skin	Disease of skin	
3	3	Diseases of skin	Disease of skin	
4	3	Diseases of skin	Disease of skin	
5-10	18	Diseases of nervous system	Diseases of nervous system	
10- 14	12	Diseases of respiratory system	Diseases of respiratory system	
15	3	Exam		

11. Course Evaluation

Course Exam Marks		Final Exam Marks
Theoretical	40	60
Practical	-	-
TOTAL	40	60

12.Learning and Teaching Resources

Required Textbooks	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Main References (Sources)	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.

Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:					
Morbidity Anatomy Part 2					
2. Course Code:					
VED4121					
3. Semester / Year:					
Second semester /4 th					
4. Description Preparation Date:					
20/6/2025					
5. Available Attendance Forms:					
Theoretical lectures. • Practical classes					
6. Number of Credit Hours (Total) / Number of Units (Total)					
Theoretical 1 Hours 1 Units Practical 2 Hours 1 Units TOTAL 3 Hours 2 Units					
7. Course administrator's name (mention all, if more than one name)					
Prof. Dr. Sattar Rashid Suhail sattarrashid@uowasit.edu.iq Lec. Ghaith Sabah Tuaimah ghaiths.alabedi@uowasit.edu.iq					
8. Course Objectives					
Course Objectives		1. Postmortem diagnostic techniques of diseases 2. Provide students with knowledge gross and microscopically changes in tissues and related them to disease diagnosis 3. Teach the students to diagnosis the causes of death and injuries 4. Writing forensic medical reports and providing evidence for conviction in criminal and legal cases			
9. Teaching and Learning Strategies					
Strategy		1. Theoretical and practical lectures 2. Discussions and dialogues 3. Clinical cases and comparative studies 4. Presentations and educational power point and videos 5. Reports and home works			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1			Strangless	1. Theoretical lectures	
2	3		glanders		

3	3	The ability to diagnose diseases through autopsy	Epizootic lymphangitis and ulcerative lymphangitis	2. Home articles and homework 3. Applied medical case study 4. Motivating students to actively participate	1-The paper examined .2Practical tests .3Questions and direct discussions
4	3		Equine infectious anemia		
5	3		Equine influenza		
6	3		Rabies		
7	3		Canine distemper		
8	3		Canine viral hepatitis		
9	3		Feline parvovirus		
10	3		Tyzzar disease		
11	3		Coccidiosis		
12	3		Shigellosis		
13	3		External parasites		
14	3		External parasites		
15	3		Semester exam		

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	20	30	50
Practical	20	30	50
Total	40	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Veterinary Forensic Pathology
Main references (sources)	Veterinary Forensic Pathology
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	https://www.alibris.com/search/books/subject/Veterinary-forensic-medicine

Course Description Form

1. Course Name:	
Poultry diseases part 2	
2. Course Code:	
VEC4124	
3. Semester / Year:	
2/ 4 th	
4. Description Preparation Date:	
19-6-2025	
5. Available Attendance Forms:	
Theoretical lectures. • Practical classes	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Lec. Dr.Sahar Abdulhassan sabdulhasan@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	1. Identify and classify the major bacterial, fungal, parasitic, and mycotoxic diseases affecting poultry. 2. Describe the etiology, epidemiology, pathogenesis, clinical signs, lesions, and outcomes of these diseases. 3. Differentiate between similar disease conditions based on clinical and post-mortem findings, with a focus on overlapping respiratory and enteric presentations. 4. Understand the interaction between microbial pathogens and predisposing environmental, nutritional, or immunological factors. 5. Interpret laboratory diagnostic methods used for the detection of bacterial, fungal, and parasitic agents in poultry. 6. Evaluate the impact of parasitic infestations and mycotoxins on bird performance, welfare, and flock profitability. 7. Formulate disease prevention and control strategies including biosecurity, medication, mycotoxin binders, hygiene protocols, and vaccination where applicable. 8. Apply learned knowledge to field situations involving outbreaks or subclinical disease presentations.

	9. Communicate key information to poultry producers regarding treatment, zoonotic risk, and long-term control measures.
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9. Teaching and Learning Strategies

Strategy	The course will be delivered using a combination of interactive and student-centered teaching methodologies to ensure effective knowledge acquisition and practical skill development. The strategies include: • Theory: Foundational knowledge will be delivered through structured theoretical sessions that explore the mechanisms of transmission, and classification of diseases. • Lecture: Lectures will focus on comprehensive coverage of each disease, supported by real-world examples, visual aids, case discussions, and outbreak analyses. • Practical: Laboratory and farm-based practicals will include necropsy demonstrations, lesion identification, microscopy of parasites, and hands-on diagnostic interpretation (e.g., bacterial cultures, fecal exams). • Seminar: Student-led seminars will encourage peer learning through the presentation and discussion of assigned diseases, case studies, and current literature on emerging threats and control methods.
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	colibacillosis Avian	Theoretical lectures	Written exams and daily quizzes
2	2	Identify bacterial poultry diseases and methods of	Pullorum disease Fowl typhoid	Theoretical lectures	Written exams and daily quizzes

		diagnosing and treating them			
3	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Arizonosis Paratyphoid	Theoretical lectures	Written exams and daily quizzes
4	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Chronic Respiratory Disease Infectious Synovitis	Theoretical lectures	Written exams and daily quizzes
5	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Fowl cholera Infectious coryza	Theoretical lectures	Written exams and daily quizzes
6	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Necrotic enteritis Ulcerative enteritis	Theoretical lectures	Written exams and daily quizzes
7	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Spirochetosis Bordetellosis Campylobacteriosis	Theoretical lectures	Written exams and daily quizzes

8	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Avian chlamydophilosis Avian tuberculosis	Theoretical lectures	Written exams and daily quizzes
9	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Aspergillosis	Theoretical lectures	Written exams and daily quizzes
10	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Candidiasis, Favus	Theoretical lectures	Written exams and daily quizzes
11	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Mycotoxycosis	Theoretical lectures	Written exams and daily quizzes
12	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	coccidiosis	Theoretical lectures	Written exams and daily quizzes
13	2	Identify bacterial poultry	,Histomoniasis Trichomoniasis	Theoretical lectures	Written exams and daily quizzes

		diseases and methods of diagnosing and treating them			
14	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	Internal parasites	Theoretical lectures	Written exams and daily quizzes
15	2	Identify bacterial poultry diseases and methods of diagnosing and treating them	External parasites	Theoretical lectures	Written exams and daily quizzes

11. Course Evaluation

	Course Exam Marks	Final Exam Marks
Theoretical	27	40
Practical	13	20
TOTAL	40	60

12. Learning and Teaching Resources

Required textbooks	Swayne, D. E. (2013). Diseases of poultry. J Wiley & Sons.
Main references	Pattison, M., McMullin, P., Bradbury, J. M. Alexander, D. (Eds.). (2007). Poultry disease Elsevier Health Sciences.
Recommended books and references	
Electronic References, Websites	https://www.msdevetmanual.com/poultry

Course Description Form

1. Course Name:													
Surgery part 2													
2. Course Code:													
VEC 4125													
3. Semester / Year:													
2/ Fourth													
4. Description Preparation Date:													
22/6/2025													
5. Available Attendance Forms:													
Theoretical lectures./Practical work in laboratory./Practical classes utilizing live animals													
6. Number of Credit Hours (Total) / Number of Units (Total)													
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Credit Hours</th> <th style="text-align: center;">Units</th> </tr> </thead> <tbody> <tr> <td>Theoretical</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Practical</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>		Credit Hours	Units	Theoretical	3	3	Practical	2	1	Total	5	4
	Credit Hours	Units											
Theoretical	3	3											
Practical	2	1											
Total	5	4											
7. Course administrator's name (mention all, if more than one name)													
Assist. Lec. Ahmed Mohamed Abd El-Reda													
8. Course Objectives													
Course Objectives	Teach students the basic principles of veterinary surgery, how to handle emergency situations, stop bleeding, control animals using various anesthetics, manage various wounds, use sutures, and suture methods												
9. Teaching and Learning Strategies													
Strategy	1. Daily tests for students to demonstrate their understanding and comprehension of course content. 2. Conducting quarterly or mid-year exams, as they are an important assessment criterion. 3. Evaluating students' daily participation.												

10. Course Structure (Theoretical)

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Teach how to produce X-Ray and their uses	X-Ray	Theoretical lectures	Daily and monthly exams and homework
2	3	Teach about the risk of radiation and the ways of protection	Radiation hazard and protection	Theoretical lectures	Daily and monthly exams and homework
3	3	Learn how to use in diagnosis of different cases	Diagnostic and procedures of radiology	Theoretical lectures	Daily and monthly exams and homework
4	3	Learn how to treating the X-Ray affection	Processing of X-Ray	Theoretical lectures	Daily and monthly exams and homework
5	3	Learn about another methods in diagnosis	Other Diagnostic imaging	Theoretical lectures	Daily and monthly exams and homework
6	3	Learn about the types of fractures	Fractures classification	Theoretical lectures	Daily and monthly exams and homework
7	3	Learn different methods in fracture treatment	Fracture treatment	Theoretical lectures	Daily and monthly exams and homework
8	3	Learn about the causes of lameness	Lameness	Theoretical lectures	Daily and monthly exams and homework
9	3	Learn Affections of the of hoof and their treatment	Affection of hoof	Theoretical lectures	Daily and monthly exams and homework
10	3	Learn about using endoscopy and laparoscopy in surgery	Endoscopic and laparoscopic surgery	Theoretical lectures	Daily and monthly exams and homework
11	3	Learn about general anesthesia	Stages of general anesthesia	Theoretical lectures	Daily and monthly exams and homework
12	3	Learn using the anesthetic drugs in general anesthesia	Volatile and non-volatile anesthetic agents	Theoretical lectures	Daily and monthly exams and homework
13	3	Learn the complications may occur during anesthesia	Anesthetic accidents	Theoretical lectures	Daily and monthly exams and homework
14	3	Learn hot to deal and treat the anesthetic accidents	Anesthetic accidents treatment	Theoretical lectures	Daily and monthly exams and homework

15	3		Exam	Theoretical lectures	Daily and monthly exams and homework
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10. Course Structure (Practical)

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1,2	4	Learn about X-Ray	Lab 1,2: X-Ray	Practical lectures	Daily and monthly exams and homework
3,4,5,6,7	2	Learn about types of fractures and their treatment	Lab 3,4,5: Orthopedic surgery	Practical lectures	Daily and monthly exams and homework
8,9	2	Learn tendon suturing	Lab 6: Tendon surgery	Practical lectures	Daily and monthly exams and homework
10	2	Learn how to inject drugs in joints	Lab 7: Intra articular injection	Practical lectures	Daily and monthly exams and homework
11,12	2	Learn how can do diagnosis by endoscopy	Lab 8: endoscopic surgery	Practical lectures	Daily and monthly exams and homework
13,14	2	Learn the operation of docking an its procedure	Lab 9,10: Docking	Practical lectures	Daily and monthly exams and homework
15	Examination				

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	30	45	75
Practical	10	15	25
Total	40	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Small animal surgery, 3 rd edition, 2007 Theresa Welch Fossum
Main references (sources)	Textbook of small animal Surgery, 3 rd edition, 2003 Douglas Slatter
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	https://en.wikivet.net/Category:Surgery

Course Description Form

1. Course Name:	
Veterinary clinic part 3	
2. Course Code:	
VEC4123	
3. Semester / Year:	
2/4 th	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Practical lessons on animals in the animal field of collage	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
60 hours – 2 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Hasanain A.J. Gharban Email: hghirban@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	This course trains students on various methods of clinical examination of all body systems. 2. Evaluate the health status of animals. 3. Identify the clinical signs present in infected animals. 4. Explain the most important methods of disease diagnosis, including detection and isolation of microbial pathogens. 5. Describe appropriate treatments to eliminate the disease and its causes. 6. Emphasize the importance of administering various types of vaccines to ensure protection of animals from exposure to various diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
3-1	12	Clinical examination methods for animals	General approach to the Clinical Examination	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
3-6	12	Clinical examination methods for animals	Clinical Examination of Lymphatic System	
9-6	12	Clinical examination methods for animals	Clinical Examination of the Skin	
12-9	12	Clinical examination methods for animals	Clinical Examination of the head and neck	
14-12	12	Clinical examination methods for animals	Clinical Examination of the head and neck	
15	1	Clinical examination methods for animals	Exam	

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	-	-	-
Practical	40	60	100
Total	40	60	100

12. Learning and Teaching Resources

Required Textbooks	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Main References (Sources)	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:	
Zoonotic diseases	
2. Course Code:	
VEC4107	
3. Semester / Year:	
2/4 th	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Theoretical lectures	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
30 hours – 2 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Isa Swadi Touhaili Email: iswadi@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	1- Introduce students to the most important communicable diseases common to humans and animals, especially those that are prevalent locally or regionally. 2. Encourage students to raise awareness of the dangers of these communicable diseases and their impact on human health. 3. Understand the importance of preventive and precautionary measures and taking appropriate vaccinations to limit the spread of these diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1	3	Introduction	Introduction	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
2-5	12	Disease determinants and transmission methods	Disease determinants and transmission methods	
9-6	12	Disease determinants and transmission methods	Disease determinants and transmission methods	
12-9	9	Disease determinants and transmission methods	Disease determinants and transmission methods	
14-12	6	Disease determinants and transmission methods	Disease determinants and transmission methods	
15	3		Exam	
11. Course Evaluation				
		Course Exam Marks	Final Exam Marks	
Theoretical		40	60	
Practical		-	-	
TOTAL		40	60	
12.Learning and Teaching Resources				
Required Textbooks		Bedi, J. S., Vijay, D., & Dhaka, P. (2022). Textbook of Zoonoses. John Wiley & Sons .		
Main References (Sources)		Palmer, S. R. (2011). Oxford textbook of zoonoses: biology, clinical practice, and public health control.		
Recommended Books and References (Scientific Journals, Reports, etc.)		Research articles		
Electronic References, Websites, etc.				

Course Description Form

1. Course Name:

Veterinary Obstetrics

2. Course Code:

VED4122

3. Semester / Year:

Second Semester / Fourth Year

4. Description Preparation Date:

1 / 9 / 2025

5. Available Attendance Forms:

- Theoretical lectures.
- Practical work in laboratory.
- Practical classes utilizing live animals.

6. Number of Credit Hours (Total) / Number of Units (Total)

	Credit Hours	Units
Theoretical	2	2
Practical	2	1
Total	4	3

7. Course administrator's name (mention all, if more than one name)

Name: Dr. Mohammedali Jamal Ghafil

Email: mohammedalij@uowasit.edu.iq

8. Course Objectives

Course Objectives

-
-
-

9. Teaching and Learning Strategies

Strategy

- Explanation of scientific subjects through theoretical lectures.
- Training of students for practical applications in laboratories.
- Student prepare a scientific related reports.

10. Course Structure

- Theoretical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Fertilization	Theoretical lectures	Written Exam
2	2		Physiology of pregnancy		
3	2		Maternal recognition of pregnancy		
4	2		Length of gestation period		
5	2		Maintenance of pregnancy		
6	2		Pregnancy diagnosis		
7-8	4		Problem of pregnancy		
9	2		Parturition		
10	2		Normal uterine involution		
11	2		Uterine defense mechanism		
12-13	4		Dystocia		
14-15	4		Puerperal diseases		

- Practical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Implantation and embryo development	Practical work in laboratory	Practical Exam
2	2		Fetal membrane		
3	2		Position of uterus during pregnancy		
4-5	4		Rectal palpation		
6-7	4		Method of pregnancy diagnosis		
8	2		Induction of abortion and parturition		
9	2		Normal Presentation, Position and Posture		
10-11	4		Abnormal Presentation, Position and Posture		
12	2		Obstetrical instruments		
13	2		Obstetrical maneuvers		
14	2		Fetotomy		
15	2		Caesarian section		

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	27	40	67
Practical	13	20	33
Total	40	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:					
Fish diseases					
2. Course Code:					
VED5110					
3. Semester / Year:					
2 / 2026 -2025					
4. Description Preparation Date:					
2025 -06-18					
5. Available Attendance Forms:					
online excel sheet					
6. Number of Credit Hours (Total) / Number of Units (Total) :					
45 hours – 3 units					
7. Course administrator's name (mention all, if more than one name)					
Lec. Ghaith Sabah Tuaimah ghaiths.alabedi@uowasit.edu.iq					
8. Course Objectives					
Course Objectives			Preparing students at an advanced and specialized scientific level with the ability to understand the most important viral, bacterial, fungal and parasitic fish diseases in detail to prepare them for advanced, more specialized stages in the field of diagnosing and treating fish diseases.		
9. Teaching and Learning Strategies					
Strategy		1. Theoretical lectures to learn about diseases in detail 2. Laboratory practical lectures 3. Field visits 4. Lectures and workshops specialized in fish diseases			
5. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Week 1	4 hours	Introduction to the importance of fish farming and methods of raising fish.	Introduction	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 2	4 hours	The most important administrative and pathological problems facing fish farming.	Fish Farming Problems	Theoretical and practical lectures	Theoretical exams and surprise exams

Week 3	4 hours	Viral diseases and methods of diagnosing and treating them.	Fish Viral Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 4	4 hours	Viral diseases and methods of diagnosing and treating them.	Fish Viral Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 5	4 hours	Bacterial diseases and methods of diagnosing and treating them.	Fish Bacterial Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 6	4 hours	Bacterial diseases and methods of diagnosing and treating them.	Fish Bacterial Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 7	4 hours	Bacterial diseases and methods of diagnosing and treating them.	Fish Bacterial Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 8	4 hours	Parasitic diseases and methods of diagnosing and treating them.	Fish Parasitic Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 9	4 hours	Parasitic diseases and methods of diagnosing and treating them.	Fish Parasitic Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 10	4 hours	Parasitic diseases and methods of diagnosing and treating them.	Fish Parasitic Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 11	4 hours	Fungal diseases and methods of diagnosing and treating them.	Fish Fungal Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 12	4 hours	Fungal diseases and methods of diagnosing and treating them.	Fish Fungal Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 13	4 hours	Fungal diseases and methods of diagnosing and treating them.	Fish Fungal Diseases	Theoretical and practical lectures	Theoretical exams and surprise exams
Week 14	4 hours	Field visit to diagnose diseases in the field, take samples, and discuss what students have learned during the semester.	Application of field methods for diagnosing fish diseases	Theoretical and practical lectures	Theoretical exams and surprise exams

Week 15	4 hours	Field visit to diagnose diseases in the field, take samples, and discuss what students have learned during the semester.	Application of field methods for diagnosing fish diseases	practical lectures	Theoretical exams and surprise exams
6. Course Evaluation					
		Course Exam	Final Exam	Sum	
Theoretical		27	40	67	
Practical		13	20	33	
Total		40	60	100	
7. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			- Fish disease - Diagnosis and Control of Diseases of Fish and Shellfish		
Main references (sources)			Noga, E. J. (2010). Fish disease: diagnosis and treatment. John Wiley & Sons.		
Recommended books and references (scientific journals, reports...)			Austin, B., & Newaj-Fyzul, A. (Eds.). (2017). Diagnosis and control of diseases of fish and shellfish (p. 20220212342). Chichester, UK: Wiley.		
Electronic References, Websites			https://journalofaquaculture.com/index.php/joa		

Course Description Form

1. Course Name:	
Internal medicine part 3	
2. Course Code:	
VEC5113	
3. Semester / Year:	
2 / 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Online excel sheet	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
45 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Assist Prof. Dr. Naqa Salih Mahdi Email: nmahdi@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	Highlighting the importance of normal metabolism and vital functions in animals, and the extent of harm caused by any disruption to these processes. It also highlights the importance of vitamins and minerals for the animal's body and the harms that result from their deficiency.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1-7	21	Metabolic diseases	Metabolic diseases	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
14-7	21	Nutritional deficiency diseases	Nutritional deficiency diseases	
15	3	exam		

11. Course Evaluation

No.	Assessment Method	Score	Percentage	Notes
1	Written Exam	90	90%	
2	Oral Exam or Class Participation	5	5%	
3	Practical Exam	0	0%	
4	Assignments, Projects, or Reports	5	5%	
	Total	100	100%	

12. Learning and Teaching Resources

Required Textbooks	Constable, P. D., Hinchcliff, K. W., Done, S. H., & Grünberg, W. (Eds.) (2017). Veterinary Medicine: A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs, and Goats. (11 ed.) W.B. Saunders Ltd
Main References (Sources)	Smith, B. P. (Ed.). (2014). Large Animal Internal Medicine-E-Book: Large Animal Internal Medicine-E-Book. Elsevier Health Sciences.
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:

Male Fertility

2. Course Code:

VEC5111

3. Semester / Year:

First Semester / Fifth Year

4. Description Preparation Date:

1 / 9 / 2025

5. Available Attendance Forms:

- Theoretical lectures.
- Practical work in laboratory.
- Practical classes utilizing live animals.

6. Number of Credit Hours (Total) / Number of Units (Total)

	Credit Hours	Units
Theoretical	1	1
Practical	2	1
Total	3	2

7. Course administrator's name (mention all, if more than one name)

Name: Dr. Mohammedali Jamal Ghafil

Email: mohammedalij@uowasit.edu.iq

8. Course Objectives

Course Objectives

-
-
-

9. Teaching and Learning Strategies

Strategy

- Explanation of scientific subjects through theoretical lectures.
- Training of students for practical applications in laboratories.
- Student prepare a scientific related reports.

10. Course Structure

- Theoretical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1		Male puberty and maturity	Theoretical lectures	Written Exam
2	1		Hormonal control of male reproductive system		
3	1		Spermatogenesis		
4	1		Composition of semen		
5	1		Sperm metabolism 1		
6	1		Method of semen collection		
7-8	2		Method of semen evaluation		
9-10	2		Method of semen dilution		
11	1		Method of semen storage		
12	1		Artificial insemination and Sperm transport		
13-15	3		Infertility in males		

- Practical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Anatomy of the male genital system	Practical work in laboratory	Practical Exam
2	2		Breeding soundness		
3-4	4		Semen collection		
5-7	6		Semen evaluation		
8	2		Semen dilution		
9-10	4		Semen storage		
11-12	4		Insemination techniques		
13-15	6		Infertility in males		

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	20	30	50
Practical	20	30	50
Total	40	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:		
Surgery - 1		
2. Course Code:		
VEC5115		
3. Semester / Year:		
First Semester / Fifth Year		
4. Available Attendance Forms:		
- Theoretical lectures. - Practical work in laboratory.		
5. Number of Credit Hours (Total) / Number of Units (Total)		
	Credit Hours	Units
Theoretical	2	2
Practical	2	1
Total	4	3
6. Course administrator's name (mention all, if more than one name)		
Name: Khalaf Hussein Ashur Email: kashur@uowasit.edu.iq		
7. Course Objectives		
Course Objectives		
8. Teaching and Learning Strategies		
Strategy	- Explanation of scientific subjects through theoretical lectures. - Training of students for practical applications in laboratories. - Student prepare a scientific related reports.	

9. Course Structure					
- Theoretical Subjects:					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Digestive system: Affection of salivary gland	Theoretical lectures	Written Exam
2	2		Affection of tongue		
3	2		Affection of teeth		
4	2		Affection of esophagus		
5	2		Affection of stomach		

6	2		Affection of small intestine		
7	2		Affection of digestive accessory organs		
8	2		Facial paralysis		
9	2		Respiratory system: Affection of upper tract		
10	2		Affection of larynx and guttural pouch		
11-12	4		Affection lungs and trachea		
13	2		Affection of chest wall		
14	2		Cardiovascular system: cardiac anomalies		
15	2		Pericarditis		

- Practical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	4		Esophagotomy		
3-4	4		Tracheotomy		
5-7	6		Intestinal surgery		
8-9	4		Enterotomy		
10-11	4		Castration		
12-13	4		Gastrotomy		
14-15	4		Mamnectomy		

10. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	27	40	67
Practical	13	20	33
Total	40	60	100

11. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:	
Veterinary clinic part 4	
2. Course Code:	
VEC5112	
3. Semester / Year:	
1/ 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Online excel sheet	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
210 hours – 7 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Hasanain A.J. Gharban Email: hghirban@uowasit.edu.iq Assist Prof. Dr. Naqa Salih Mahdi Email: nmahdi@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	This course trains students on various methods of clinical examination of all body systems. 2. Evaluate the health status of animals. 3. Identify the clinical signs present in infected animals. 4. Explain the most important methods of disease diagnosis, including detection and isolation of microbial pathogens. 5. Describe appropriate treatments to eliminate the disease and its causes. 6. Emphasize the importance of administering various types of vaccines to ensure protection of animals from exposure to various diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
15-1	210	Mastering the diagnosis and treatment of cases admitted to the college, as well as cases seen during field visits to veterinary clinics and rural areas.	Mastering the diagnosis and treatment of cases admitted to the college, as well as cases seen during field visits to veterinary clinics and rural areas.	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions

11. Course Evaluation

No.	Assessment Method	Score	Percentage	Notes
1	Written Exam	90	90%	
2	Oral Exam or Class Participation	5	5%	
3	Practical Exam	0	0%	
4	Assignments, Projects, or Reports	5	5%	
	Total	100	100%	

12. Learning and Teaching Resources

Required Textbooks	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Main References (Sources)	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:					
Meat Hygiene					
2. Course Code:					
VEH5114					
3. Semester / Year:					
5 th / 2026					
4. Description Preparation Date:					
5/8/2026					
5. Available Attendance Forms:					
1/2/2027					
6. Number of Credit Hours (Total) / Number of Units (Total)					
60hrs/ 3 units					
7. Course administrator's name (mention all, if more than one name)					
Name: zeid alsadoon Email: zaidalsadoon@uowasit.edu.iq					
8. Course Objectives					
Course Objectives		1. Classification of meat, their chemical composition, study of modern slaughterhouses, preservation of meat, and its validity 2. Developing the student's ability to examine animals, diagnose diseases that are transmitted through meat to the consumer, and give the appropriate judgment regarding their suitability for consumption. 3. Teaching students how to conduct the necessary laboratory tests to detect contamination of animal products with pathogens and adulterated materials. 4. Teaching the student about modern methods for preserving meat and preventing its contamination. 5. Introducing the student to how to laboratory analyze food ingredients and detect cases of fraud in these ingredients.			
9. Teaching and Learning Strategies					
Strategy		Theoretical and practical scientific lectures Multimedia/interactive presentations A field visit Discussions Positive interaction and participation (from the student) Presentations by students Preparing research and reports			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theoretic	The food animals	Anatomy, meat composition and quality	Lecture and explanation	Daily questions, discussion and exam
2	4 theoretic	Anatomy, meat composition and quality	Meat plant construction and equipment	Lecture and explanation	Daily questions, discussion and exam

3	4 theoretic	Meat plant construction and equipment	Preservation of meat	Lecture and explanation	Daily questions, discussion and exam
4	4 theoretic	Preservation of meat	By- product treatment	Lecture and explanation	Daily questions, discussion and exam
5	2 theoretic	Red meat inspection	Plant sanitation	Lecture and explanation	Daily questions, discussion and exam
6	2 theoretic	Plant sanitation	From farm to slaughter	Lecture and explanation	Daily questions, discussion and exam
7	2 theoretic	From farm to slaughter	Human slaughter	Lecture and explanation	Daily questions, discussion and exam
8	2 theoretic	Human slaughter	Examination	Lecture and explanation	Daily questions, discussion and exam
9	2 theoretic	Meat hygiene practice	Meat hygiene practice	Lecture and explanation	Daily questions, discussion and exam
10	2 theoretic	Poultry slaughter and inspection	Red meat inspection	Lecture and explanation	Daily questions, discussion and exam
11	2 theoretic	Exotic meat production	Poultry slaughter inspection	Lecture and explanation	Daily questions, discussion and exam
12	2 theoretic	Chemical residues in meat	Exotic meat production	Lecture and explanation	Daily questions, discussion and exam
13	2 theoretic	Food poisoning	Chemical residues in meat	Lecture and explanation	Daily questions, discussion and exam
14	2 theoretic	Occupational injuries and infection	Food poisoning	Lecture and explanation	Daily questions, discussion and exam
15	2 theoretic	Viral diseases	Occupational injuries infection	Lecture and explanation	Daily questions, discussion and exam

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretic	27	40	67
Practical	13	20	33
Total	40	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Veterinary Technology of food
Recommended books and references (scientific journals, reports...)	Scientific sites specialized in food health and meat technology
Electronic References, Websites	Journal of food /J. of Dairy science

Course Description Form

1. Course Name:	
Veterinary clinic part 5	
2. Course Code:	
VEC5118	
3. Semester / Year:	
2 / 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Online excel sheet	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
180 hours – 6 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Prof. Dr. Hasanain A.J. Gharban Email: hghirban@uowasit.edu.iq Assist Prof. Dr. Naqa Salih Mahdi Email: nmahdi@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	This course trains students on various methods of clinical examination of all body systems. 2. Evaluate the health status of animals. 3. Identify the clinical signs present in infected animals. 4. Explain the most important methods of disease diagnosis, including detection and isolation of microbial pathogens. 5. Describe appropriate treatments to eliminate the disease and its causes. 6. Emphasize the importance of administering various types of vaccines to ensure protection of animals from exposure to various diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
15-1	180	Mastering the diagnosis and treatment of cases admitted to the college, as well as cases seen during field visits to veterinary clinics and rural areas.	Mastering the diagnosis and treatment of cases admitted to the college, as well as cases seen during field visits to veterinary clinics and rural areas.	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions

11. Course Evaluation

No.	Assessment Method	Score	Percentage	Notes
1	Written Exam	90	90%	
2	Oral Exam or Class Participation	5	5%	
3	Practical Exam	0	0%	
4	Assignments, Projects, or Reports	5	5%	
	Total	100	100%	

12. Learning and Teaching Resources

Required Textbooks	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Main References (Sources)	Nelson, R., Kerby, M., & Remnant, J. (2022). Clinical examination of cattle. Part 1: Adult dairy and beef cattle. In Practice, 44(5), 292-300.
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:	
Forensic medicine	
2. Course Code:	
VED 5122	
3. Semester / Year:	
2 / 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Online excel sheet	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
15 hours – 1 units	
7. Course administrator's name (mention all, if more than one name)	
Prof. Dr. Sattar Rashid Suhail	sattarrashid@uowasit.edu.iq
Lec. Ghaith Sabah Tuaimah	ghaiths.alabedi@uowasit.edu.iq
8. Course Objectives	
Course Objectives	- The skill of gross diagnosis of diseases and distinguishing them from other causes of death, such as animal attacks or poisoning by perpetrators. - The skill of gross diagnosis and examination of carcasses using various methods. - Enabling the student to learn how to describe lesions and write diagnostic scientific reports. - The skill of scientific inquiry and research. - Writing forensic medical reports and presenting them to the courts when necessary.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1–3	3	Ability to diagnose diseases through necropsy	Death, general causes of death, fainting, asphyxia	1. Theoretical lectures 2. Articles and homework assignments 3. Applied case studies 4. Encouraging active student participation
3–6	3	Ability to diagnose diseases through necropsy	Drowning, sudden death, death from starvation, death from cold, death from heat exposure, death by electric shock	<i>Same as above</i>
6–9	3	Ability to diagnose diseases through necropsy	Burns and their types	<i>Same as above</i>
9–12	3	Ability to diagnose diseases through necropsy	Wounds and their types	<i>Same as above</i>
12–14	2	Ability to diagnose diseases through necropsy	Poisons and their types	<i>Same as above</i>
15	1	—	Midterm Exam	—

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	40	60	100
Practical			
Total	40	60	100

12. Learning and Teaching Resources

Required Textbooks	<i>Forensic Medicine and Toxicology</i> by Dr. Talib Abdul Amir Makawi
Main References (Sources)	<i>Forensic Medicine and Toxicology</i> by Dr. Talib Abdul Amir Makawi
Recommended Books and References (Scientific Journals, Reports, etc.)	<i>Veterinary Forensic Medicine</i> and other forensic medicine sciences
Electronic References, Websites, etc.	https://www.alibris.com/search/books/subject/Veterinary-forensic-medicine

Course Description Form

1. Course Name:	
Internal medicine part 4	
2. Course Code:	
VEC5120	
3. Semester / Year:	
2 / 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Online excel sheet	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
45 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Assist Prof. Dr. Naqa Salih Mahdi Email: nmahdi@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	Remind students of the important role of the cardiovascular system and the effectiveness of the kidneys and urinary system in expelling harmful waste from the body, the nature of toxins and their fatal effects, and explain effective treatments for each of these medical conditions.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical and practical lectures. 2. Discussions and dialogues. 3. Clinical cases and comparative studies. 4. Presentations and educational videos. 5. Laboratories and practical training.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1-5	21	Cardiovascular system	Cardiovascular system	1. Theoretical lectures 3. Essays and homework 4. Case studies 5. Motivating students to participate actively 1. Written tests 2. Practical tests 3. Questions and live discussions
5-10	21	Urinary system	Urinary system	
10-15	3	Musculoskeletal system	Musculoskeletal system	

11. Course Evaluation

No.	Assessment Method	Score	Percentage	Notes
1	Written Exam	90	90%	
2	Oral Exam or Class Participation	5	5%	
3	Practical Exam	0	0%	
4	Assignments, Projects, or Reports	5	5%	
	Total	100	100%	

12. Learning and Teaching Resources

Required Textbooks	Constable, P. D., Hinchcliff, K. W., Done, S. H., & Grünberg, W. (Eds.) (2017). Veterinary Medicine: A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs, and Goats. (11 ed.) W.B. Saunders Ltd
Main References (Sources)	Smith, B. P. (Ed.). (2014). Large Animal Internal Medicine-E-Book: Large Animal Internal Medicine-E-Book. Elsevier Health Sciences.
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	

Course Description Form

1. Course Name:	
Milk hygiene	
2. Course Code:	
VEH5121	
3. Semester / Year:	
2/2025	
4. Description Preparation Date:	
18/5/2025	
5. Available Attendance Forms:	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60/3	
Course administrator's name (mention all, if more than one name)	
Name: zeid alsadoon	
Email: zaidalsadoon@uowasit.edu.iq	
Course Objectives	
Course Objectives	1. The chemical composition, preservation of milk, and its validity 2. Developing the student's ability to examine milk and milk product, diagnose diseases that are transmitted through milk to the consumer, and give the appropriate judgment regarding their suitability for consumption. 3. Teaching students how to conduct the necessary laboratory tests to detect contamination of milk products with pathogens and adulterated materials. 4. Teaching the student about modern methods for preserv milk and preventing its contamination
7. Teaching and Learning Strategies	
Strategy	Theoretical and practical scientific lectures Multimedia/interactive presentations A field visit Discussions Positive interaction and participation (from the student) Presentations by students Preparing research and reports
8. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Learn the structure of the mammary gland	Mammary Structure gl	Lectures	Exam participation
2	2	Learn milk synthesis	Milk biosynthesis	Lectures	Exam participation
3	2	Identify milk and colostrum and the difference between them	Milk and colostrum	Lectures and report	Exam participation
4	2	Learn the chemical composition of milk	Chemical composition raw milk	Lectures	Exam participation
5	2			Lectures	Exam participation
6	2	Learn the physical composition of milk	Physical composition raw milk	Lectures	Exam participation
7	2			Lectures and field visits	Exam participation
	2		Exam		
9	2	Learn bacterial control in milk	Microbiological dairy milk	Lectures	Exam participation
10	2		Microbiological dairy milk	Lectures	Exam participation
11	2	Production of milk and its products	Safety and quality dairy products	Lectures	Exam participation
12	2	Learn about diseases transmitted through raw milk	Pathogenic of milk	Lectures	Exam participation
13	2			Lectures	Exam participation
14	2	Learn how and why milk spoils	Milk spoilage	Lectures	Exam participation
15	2			Lectures	Exam participation

9. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	27	40	67
Practical	13	20	33
Total	40	60	100

10. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Milk Hygiene by Dr. Najim Hadi Najim Laboratory manual for milk testing by Dr. Najim

	Standard methods for the examination of dairy products
Recommended books and references (scientific journals, reports...)	Dairy Microbiology <i>Dairy Processing & Quality Assurance</i> Editor Ramesh C. Chandan 2008
Electronic References, Websites	

Course Description Form

1. Course Name:

Reproductive Biotechnology

2. Course Code:

VEC5117

3. Semester / Year:

Second Semester / Fifth Year

4. Description Preparation Date:

1 / 9 / 2025

5. Available Attendance Forms:

- Theoretical lectures.
- Practical work in laboratory.
- Practical classes utilizing live animals.

6. Number of Credit Hours (Total) / Number of Units (Total)

	Credit Hours	Units
Theoretical	1	1
Practical	2	1
Total	3	2

7. Course administrator's name (mention all, if more than one name)

Name: Dr. Mohammedali Jamal Ghafil

Email: mohammedalij@uowasit.edu.iq

8. Course Objectives

Course Objectives

-
-
-

9. Teaching and Learning Strategies

Strategy

- Explanation of scientific subjects through theoretical lectures.
- Training of students for practical applications in laboratories.
- Student prepare a scientific related reports.

10. Course Structure

- Theoretical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1		Ultrasonography-general information	Theoretical lectures	Written Exam
2	1		Ultrasonography in large animals		
3	1		Ultrasonography in small animals		
4	1		Estrus synchronization in bovine		
5	1		Estrus synchronization in ovine and caprine		
6	1		Controlling the age of puberty		
7	1		Superovulation		
8-9	2		Embryo Transfer		
10	1		Laparoscopic intrauterine insemination		
11	1		Methods of oocyte collection and maturation		
12	1		In vitro fertilization		
13	1		Sperm sexing (Gender selection)		
14	1		Cloning and splitting of embryo		
15	1		Suppress of reproductive activity		

- Practical Subjects:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	4		Clinical application of ultrasonography	Practical work in laboratory	Practical Exam
3	2		Estrus synchronization		
4	2		Controlling the age of puberty		
5	2		Superovulation		
6	2		Embryo transfer		
7	2		Intrauterine insemination		
8	2		Methods of oocyte collection and maturation		
9-10	4		In vitro fertilization		
11	2		Sperm sexing (Gender selection)		
12	2		Cloning and splitting of embryo		
13	2		Suppress of reproductive activity		
14-15	4		Ovariectomy and castration		

11. Course Evaluation

	Course Exam	Final Exam	Sum
Theoretical	20	30	50
Practical	20	30	50
Total	40	60	100

12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:					
Surgery - 2					
2. Course Code:					
VEC5123					
3. Semester / Year:					
Second Semester / Fifth Year					
4. Available Attendance Forms:					
- Theoretical lectures. - Practical work in laboratory.					
5. Number of Credit Hours (Total) / Number of Units (Total)					
	Credit Hours	Units			
Theoretical	2	2			
Practical	2	1			
Total	4	3			
6. Course administrator's name (mention all, if more than one name)					
Name: Lecture Khalaf Hussein Ashur					
Email: kashur@uowasit.edu.iq					
7. Course Objectives					
Course Objectives					
8. Teaching and Learning Strategies					
Strategy		- Explanation of scientific subjects through theoretical lectures. - Training of students for practical applications in laboratories. - Student prepare a scientific related reports.			
9. Course Structure					
- Theoretical Subjects:					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Hernia	Theoretical lectures	Written Exam
2	2		Treatment of Fistula whether		
3	2		Affection of male genital system		
4	2		Affection female genital system		
5	2		Treatment Pneumovagina		
6	2		Affection of penis and prepuce		

7	2		Preparation of teaser		
8	2		Castration		
9	2		Urinary system: Affection of kidney		
10	2		Affection of ureter		
1	2		Affection of urinary bladder		
12	2		Affection of urethra		
13	2		Affection of teat and udder		
14	2		Ear surgery		
15	2		Eye surgery		
- Practical Subjects:					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	4		Teat fistula	Practical work in laboratory	Practical Exam
3-4	4		Nephrectomy		
5-6	4		Ovariohysterectomy		
7-8	4		Cystotomy and Cystectomy		
9-10	4		Urethrostomy and Urethrotomy		
11-12	4		Splenectomy		
13-14	4		Rumenotomy		
15	2		Ophthalmic surgery		
10. Course Evaluation					
	Course Exam	Final Exam	Sum		
Theoretical	27	40	67		
Practical	13	20	33		
Total	40	60	100		
11. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)					
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

Course Description Form

1. Course Name:	
Veterinary Ethics	
2. Course Code:	
VEC5119	
3. Semester / Year:	
2 / 2026 -2025	
4. Description Preparation Date:	
2025 -06-18	
5. Available Attendance Forms:	
Online excel sheet	
6. Number of Credit Hours (Total) / Number of Units (Total) :	
45 hours – 3 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Assist Prof Dr, Zaid Muhsein Attallah	
Email: zaidalsadoon@uowasit.edu.iq	
8. Course Objectives	
Course Objectives	1. Introduce students to the principles and foundations of professional veterinary conduct. 2. Understand the laws and regulations governing the veterinary profession in Iraq and the world, including veterinary ethics and laws. 3. Identify animal welfare standards and the veterinarian's obligations toward animals and society. 4. Distinguish between professional and unprofessional behavior in veterinary practice. 5. Understand the role of the veterinarian in public health, food safety, and the control of zoonotic diseases.
9. Teaching and Learning Strategies	
Strategy	1. Theoretical lectures. 2. Discussions and dialogues. 3. Presentations and educational videos.
10. Course Structure	

Week	Hours	Intended Learning Outcomes	Unit/Topic Name	Teaching Methods
1-7	7	Basic Principles of Veterinary Professional Ethics	Cardiovascular system	1. Theoretical lectures 2. Essays and homework 3. Case studies 4. Motivating students to participate actively 5. Questions and live discussions
7-15	8	Veterinary laws and regulations	Urinary system	

11. Course Evaluation

No.	Assessment Method	Score	Percentage	Notes
1	Written Exam	90	90%	
2	Oral Exam or Class Participation	5	5%	
3	Practical Exam	0	0%	
4	Assignments, Projects, or Reports	5	5%	
	Total	100	100%	

12. Learning and Teaching Resources

Required Textbooks	James W. Yeates , 2020, <i>Ethics in Veterinary Practice</i> , CABI (Centre for Agriculture and Bioscience International). 1st Edition
Main References (Sources)	Jerrold Tannenbaum, 1995. <i>Veterinary Ethics: Navigating Tough Cases</i> , Mosby – Elsevier, 1st Edition
Recommended Books and References (Scientific Journals, Reports, etc.)	Research articles
Electronic References, Websites, etc.	